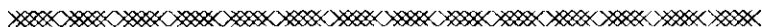


Corporation Finance

REVISED EDITION



By
FLOYD F. BURTCHETT
and
CLIFFORD M. HICKS



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CORPORATION FINANCE, REVISED EDITION

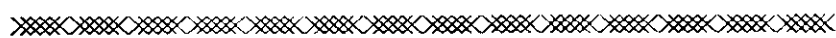
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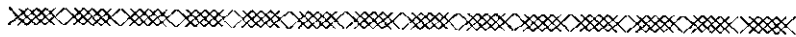
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Preface to the Revised Edition



This edition of *Corporation Finance* is created basically upon the original outline and makes use of much of the original approach. While the volume has been reduced in size, its value has been enhanced by a large increase in the number of tables and figures in order to give substance to the ideas presented. The new chapters for the introduction, investment banking and its regulation, and the capitalization practices in the several fields—industrials, public utilities, and transportation—have all been supplied by me. All statements of fact are assumed by me, for I had the final editing responsibility because Professor Burtchett has been serving in Europe with the American army as a financial adviser.

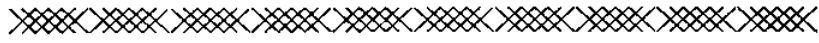
I have added many features to the revised edition in order to make the volume more usable and at the same time more interesting to the student. Photographic illustrations are included in this text for the first time in the history of the field. Ample bibliography is supplied for each chapter, including current articles which help to give the subject a realism that the material may not otherwise assume for the student. The questions and projects supply real teaching aids. The projects, which constitute a new feature not usually found in this field, call upon the student to use library research, statistical analysis, and report writing as devices for training in business as well as in the subject matter of finance.

I wish to express my appreciation to the many persons who read the manuscript. Special thanks are due Victor Z. Brink, Arnold Johnson, and Professor W. P. Calhoun for their valuable aid and criticism. Mrs. Faith Dahlstedt's conscientious supervision of all clerical and library work also deserves particular thanks.

CLIFFORD M. HICKS

September, 1948

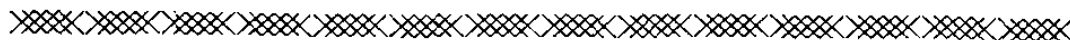
PART ONE



Introduction

CHAPTER I

Introduction to Finance



Divisions in Finance

The subject of finance will be found by students to be a broad field. But by the simple act of reviewing a day of American business operations some of these problems may be outlined. For January 7, 1948, financial transactions like the following occurred:

Bank clearings, daily average	\$3,700,000,000
Wholesale and retail trade, daily average	{ 350,000,000
	{ 300,000,000
Manufacturing cost of material and labor, daily average	300,000,000
Tax payments accrued, daily average	160,000,000
Stock and bond transactions (actual)	{ 8,000,000
	{ 5,700,000
Services sold, including public utility, transport, daily average	33,000,000
Volume of daily trade and commerce	\$1,156,700,000
Total all financial transactions	\$4,856,700,000

The first fact which is obvious from this résumé is the very extensive ramification of the financial system. The bank clearings of about $3\frac{3}{4}$ billion dollars evidence the convenience supplied by our banking system as it clears these credit transactions arising from many trading or exchange activities. The 600-million-dollar sum involved in daily trading of the wholesale and retail establishments gives some evidence of the financial preparations these firms must make to have the inventories in stock, pay the wages of the workers, and deliver goods to the customer upon the promise of future payment. This flow into and out of the hands of trading firms must go on day after day, a consistently important financial operation.

In the case of all manufacturers, the 300-million-dollar volume of daily production flowing through these plants makes us conscious of the plant and equipment with which each factory must begin. Plant investments are capital outlays for which preparation must be made before a wheel of daily production can turn. Special financial problems arise in the provision of plant and equipment and are distinctly apart from the daily operation problems. But daily, too, the dollars or credit for the volume of materials needed and wage pay rolls must be regularly met with a balance of considerable

nicety. These facts demonstrate the task which the manufacturer has in financing working operations. The problems of financing plant installation and daily operations are common alike to the public utilities, the transportation and communication industries of the nation, which provide services at the daily rate of 33 million dollars.

Further, there is the 160-million-dollar sum of average daily tax payments included in the list of daily transactions. True, these payments may not purchase anything directly for the business, but they are none the less a problem of finance for the enterprise. The business must prepare to part with such sums yet not impair its own operations and continued existence. In the process of the government's receiving these tax payments and expending them a wide range of fiscal problems arises, creating in fact a whole field of finance.

Public Finance. The government fiscal problems are not, however, quite the same as for business. Two obvious things appear by way of contrast. First, the government can acquire its income by the power to tax; a business must find a buyer in the market willing to make his purchase at the price quoted. Moreover, the government may for considerable periods fail to keep costs balanced with income, for it can meet these deficits by borrowing which is backed by its compelling power of taxation. The business enterprise, on the other hand, must keep a balance in almost every period and over the long run establish a margin or a profit. For these very apparent differences, the divisions of public and private finance appear, and each subject is best treated separately.

Private Finance. Thus the division between public and private finance allows us to concentrate on the fiscal problems of the private transactions in our economy. But a brief sampling of private fiscal operations will indicate that a business must operate on a different basis from that of an individual. If for no other reason, business is clearly distinguishable from the personal situation by its prime functional test—a profit from its operations. Since this is not the objective of personal finance, it is clear that the field can be wisely subdivided at this point. Our subject, then, is to be confined to that of business finance. This subject will be exemplified by firms in the corporate form, for information is more accessible from these concerns and the corporation as a business form dominates American business finance.

Major Tasks

To see the field of business finance in the large may help us understand the relationships of its parts and give us some landmarks toward which detailed discussions may be guided before we are lost in their volume. Well we may, therefore, inquire of our experience and observations just what comprises the major problems for the financial phase of a business. In other words, what does the field encompass; what should we expect to find in a development of the subject?

Points of View. There are several possible points of view to be considered in the development of financial principles and practices. The one which may appear as most obvious is that of *business management*. Management is charged with the employment of capital so as to produce income with regularity, adequacy, and consistency. Tests for such a record will be constantly submitted to the management by stockholders, bankers, and creditors.

Those who provide funds for business represent an *investment interest*. The investors as one group are concerned with the needs and practices of business in handling its financial problems, for their funds are at risk. Another group in this field are the bankers who make their business by serving firms in the sale of securities for investment to the savers. A business management must be concerned not only with its daily operations but with the final results which will determine investment interest of both bankers and savers in the enterprise.

Finally, *society* has a general interest in business finance, for business is a part of the social scheme. Students of sociology, economics, law, and politics need to explore this important field, for how effectively business is financed determines to an important degree its ability to provide efficient production and distribution.

Relation to Law and Accounting. The administration of business operations is steadily dependent upon managerial controls, one of the most important of which is accounting. Many questions of finance turn upon the adequacy of accounting information, for these facts test the alternate courses of action. Production and use of the income of the business require accurate recording and analysis which only accounting systems can give.

Many of the steps taken in the management of a business involve legal decisions as much as financial ones. Questions concerning the extent to which a firm may borrow may be a legal matter quite as controlling as financial policy, or the extent to which surplus may be drawn upon for the declaration of current dividends. This close affiliation of questions in finance with the legal procedures and accounting practices is good reason for each student to understand these interrelationships.

Basic Divisions of Financial Management

The problems of financial management are primarily concerned with *capital* for the business and the use of the *net income* by the business. The general problems of management concerning sales, production costs, and personnel are not considered within the field of finance, but the results achieved by those responsible for them do condition the needs and methods by which the financial management approaches its task. Let us look specifically, therefore, at the management questions, concerning (1) capital funds and (2) income management. High as hopes may be, all business enterprises will not be successful. Peculiar problems of settlement or reorganization grow out of this truth. An important phase of any study in the field must include, therefore, (3) failure and reorganization.

CAPITAL FUNDS

Raising Capital

As one mentally surveys a business life, his first thoughts go naturally to the question of its capital. With what capital will the business begin? How much is needed; where and how will it be obtained; under what terms can it be obtained? Securing the capital of a business enterprise may well be considered, therefore, as one of the first phases of its life cycle.

Kinds of Capital

Fixed. The invested capital in a business enterprise is, of course, of two different kinds. Some of it must go into fixed assets; a long-time plan is required to raise such capital. It will need to be provided over long periods of time, approximating the time which these assets will be used by the business. That is to say, the length of the life of the assets precludes an early change of their form; the business will use them to obtain value from them and will not resell them. It follows rather naturally, therefore, that the source from which the funds are derived should also be a long-time or permanent one. In Table 1 we have a picture of the division of the

TABLE 1. TOTAL ASSETS, FIXED AND CURRENT
IN MAJOR BUSINESS FIELDS, 1942¹
(in billions)

	Public Utilities		Railroads		Industrials	
Current assets	\$ 1.3	7%	\$ 1.1	4%	\$18.0	30%
Fixed assets	16.6	93	26.2	96	42.0	70
	\$17.9	100%	\$27.3	100%	\$60.0	100%

IN SPECIFIC FIRMS, 1946
(in millions)

	Public Service Co. of Colorado		Chesapeake & Ohio Railroad		United States Steel Company	
Current assets	\$ 10	9%	\$ 71	11%	\$ 954	49%
Fixed assets	104	91	545	89	1012	51
	\$114	100%	\$616	100%	\$1966	100%

assets for the industrials, public utilities, and railroads. Each particular concern would not be identical with this pattern but would tend to conform to its own field in these characteristics.

It is apparent that for the railroads and public utilities the importance of these fixed assets is extreme. To raise such large sums of capital is a major challenge. While the industrials show a large percentage of current assets which will need attention by the financial manager, special problems

¹Sources: *Moody's Public Utilities*, 1944, p. 210; *Moody's Railroads*, 1943, p. 18; annual reports of companies.

as to their fixed assets arise from competitive pressures. Modernization of such assets is a constant problem, both to the engineer and to the financial manager.

Current. On the contrary, current capital, involving such assets as inventory, cash, and accounts receivable, is constantly subject to change month by month. These kinds of assets offer opportunity for managing such capital within a relatively short time, and thus the manager may control a change either in their kind or in their amount. If this ability to make considerable change in both volume and kind of current working capital assets

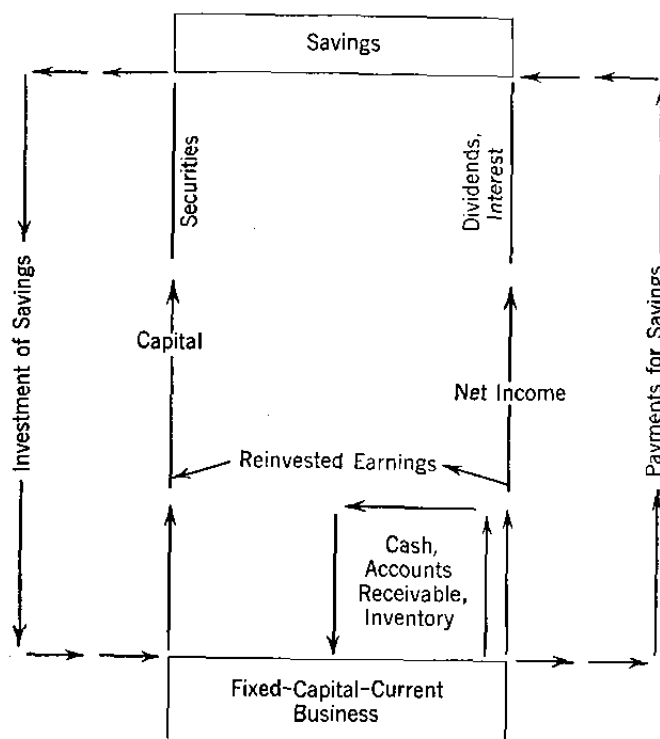


FIG. 1. Capital Funds for Business Flow from Savings and Payments Are Made for Use of the Capital.

is present, it would seem to follow that the sources from which the funds are derived should also be subject to quick and easy change. These obvious facts point the contrast in these two capital problems. Figure 1 diagrams the inflow of capital funds in exchange for securities, for which payments are made out of net income. The cycle operation of the current capital is also pictured, and out of net income some of the flow is directed back to the enterprise by reinvestment of earnings.

Instruments for Capital Needs

A moment's reflection will suggest that the instruments used in the market places for deriving such capital funds differ quite as much as the

assets themselves between those for fixed capital and those for working capital. Since fixed capital is obtained by contracts running for a long time into the future, these legal agreements tend to become formal and extensive in their details and terms. This would seem natural in view of the fact that once the agreement has been executed no control is possible except as it has been provided for in the contract. By contrast, the sources of working capital need not be so insistent upon formal and detailed agreements since they will survive but a short time, and when they mature new agreements may be executed with new terms. As a matter of fact, accounts receivable, that is, book accounts, represented by no formal contract at all, account for more than 33 per cent of the current assets of our corporate enterprises. In Table 2 appears a summary of this statement as to twenty major industrial

TABLE 2. ACCOUNTS RECEIVABLE OF TWENTY MAJOR INDUSTRIAL FIRMS

	Per Cent of Current Assets		
	1925	1930	1940
Median	37%	28%	33%

firms. This fact merely emphasizes the legal informality by which such types of contracts permit the debtor of the account to obtain temporary capital or working capital.

Instruments and Legal Organization

Now, granted that these facts are apparent, what are the mechanics of the business structure and of the financial instruments to be used? To mention these matters makes us immediately aware that they are real problems. The first thought as to the form of the business enterprise brings into relief the full significance of the legal variations. The enterprise may find the legal form influencing the methods of raising the capital, as well as regular operations.

One may be tempted to pass over the question of financial instruments with the phrase, "Oh, yes, stocks and bonds." But wait a minute. There is an appalling array of stocks as well as bonds. There are common stocks, classified stocks, preferred stocks, prior preferred stocks, first lien preferred stocks, guaranteed stocks—too many to suggest that they can be lumped under the title "stocks" and be forgotten with that. But if there are so many, then why? And just how far can this variation go? The answers to those questions make it obvious that a study of the instruments and the circumstances surrounding their creation is a part of the subject of finance. And not an unimportant one, either.

Investment Banking

The suggestion of this much of the problem seems to provoke further thought. Who can know all this? How would one seeking capital gain help in all this? And where a business is seeking many thousands of dollars, and

not infrequently millions, to whom can it turn for such sums of money? The task suggests that no one business or person would be competent to undertake the matter. Here is an opportunity for an institutional structure that can offer this service to many business firms. Such is the nature of the investment banking system, a structure of specialists whose business it is to obtain capital from those who have it, upon terms mutually agreeable to both buyer and seller, for those enterprises which seek capital. The fact that American business now has some 350 billion dollars of capital, raised for some 20 million enterprises and derived from possibly as many as 28 million different sources, indicates that the investment banking system has a place in the economic structure of our times.

Maintenance of Capital

The mere acquisition of capital does not end the problems of any financial manager. Wise use of this capital is essential if the business is to survive. Implicit in such use is a constant program for preventing the loss of the capital originally invested. That is, it is quite as important to a business to maintain its capital fund as to obtain it originally. What are the problems inherent in this question? One of the most obvious is the physical destruction of the property or value itself. This, of course, we recognize is commonly covered by insurance, but many of the risks of capital do not fall within the field of insurable risks. These will have to be prepared for by each business manager.

Some of the risks involved are the physical loss of value through depreciation, the loss of economic efficiency through obsolescence, and the inability to replace the physical equipment at the price levels effective when such replacements are to be provided.

Price Changes

Some who have encountered such capital risk matters in an accounting course may have come to accept the existence of these risks and assume that the preparation for meeting them is automatically accomplished by the application of certain accounting principles. But it is worthy of note that no accounting principle is involved in the preparation for a possible increase in price level for replacement of assets. This fact, however, is of more than academic interest, for the price level in the United States, as shown in Table 3, has been increasing since 1895, with minor variations interrupting this trend. On the whole the trend has constantly made an increase of capital funds essential to replacing an equal volume of product capacity. It should be pointed out, too, that the mere presence of an allowance for depreciation in a series of accounting records in no way makes it possible for the firm to actually meet expenditures at the time of necessary replacement purchases. This offers an additional problem for management, perhaps to be solved by the segregation of funds from each year's current earnings account and their reservation for the specific task of supplying

CORPORATION FINANCE

TABLE 3. WHOLESALE PRICES, BY GROUPS OF COMMODITIES²
(Index numbers of the Bureau of Labor Statistics, 1926=100)

Year	All Commodities	Year	All Commodities
1895	48.8	1937	86.3
1900	56.1	1938	78.6
1905	60.1	1939	77.1
1910	70.4	1940	78.6
1915	69.5	1941	87.3
1920	154.4	1942	98.8
1925	103.5	1943	103.1
1930	86.4	1944	104.0
1935	80.0	1945	105.8
1936	80.8	1946	121.1

funds for at least the principal portion of the cost of capital replacement. This is likewise true of any preparation to meet obsolescence.

Allocation of Current Income

It follows, of course, that any preparation for maintaining the capital funds in the business must be made incident to each year's current income. This fact obviously suggests that the policy of maintaining capital closely involves the use of annual operating income. The problem may present the choice of reducing dividends or postponing the capital maintenance.

The maintenance of working capital is not quite so conspicuous a problem, or perhaps it is more easily understood. The risks involved in the maintenance of fixed capital seem rather remote because their ultimate effects may be postponed many years to come. The errors in depreciation calculation may appear only when replacement is undertaken. In the case of working capital, however, its mere existence or lack of it is immediately obvious in the current operations of the business. Any mention, therefore, of maintaining working capital becomes somewhat self-explanatory. Yet there are problems beyond the mere supplying of current capital that are truly questions of maintenance. For example, what shall be the policy of a firm in respect to future inventory losses or possible losses, to unusual losses upon accounts receivable, and to variations upon prices for raw materials? It may become necessary as these risks are heavy accentuated in the down turn of the cycle to prepare in a manner similar to that for fixed capital—in other words, to prepare regular reserves and funds to assume any risks of this type when they actually develop. This is not an uncommon practice in the meat packing industry and in the rubber industry, where the total cost of inventory represents a very large portion of the working capital.

² Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1932, p. 229, and *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, August, 1947, p. 1032.

In the balance sheet statement of Swift and Company a reserve account for inventory losses has appeared since 1937, which at last reports amounted to \$7,500,000. It has varied from an amount over 16 million dollars to slightly under 6 million dollars, but this price risk has been consistently provided for by the reserve.

INCOME MANAGEMENT

Relation to Capital Use

The acquisition and maintenance of the capital position of a company is not, however, the only financial problem of a business. It is all too evident that income and the production of a profit from operations is both a problem and an essential of business existence. Capital investment without an income produced from it would, of course, be ultimately worthless. All the preparation for maintaining capital is impossible without the production of current income. It is significant, however, that here the problems of the financial management are linked with those of production and sales. The financial manager has his prime interest in the production of income as his sole source of funds with which to meet the capital costs, except for brief emergency periods. But the immediate task of producing sales and controlling costs of sales are in the hands of other divisions within the business. While the financial manager, therefore, has a keen interest in prices, volume, and cost of production, it is somewhat apart from his immediate field of control.

TABLE 4. EARNINGS,
UNITED STATES STEEL AND CAROLINA POWER & LIGHT COMPANY³
(after taxes and depreciation)
(in millions)

Year	U.S. Steel	Carolina Power	Year	U.S. Steel	Carolina Power
1932	d \$72.2	\$3.6	1940	\$102.2	\$6.1
1933	d 36.5	3.5	1941	116.2	4.6
1934	d 27.2	3.9	1942	71.2	3.8
1935	1.1	4.0	1943	62.6	4.1
1936	50.5	4.4	1944	60.8	4.0
1937	94.9	4.9	1945	58.0	4.0
1938	d 7.7	4.8	1946	88.6	5.5
1939	41.1	4.6	1947	127.1	5.3

d=deficit

This interest, however, in prices, volume, and costs is more real than academic. It follows that where the business is engaged in selling into markets which absorb highly variable volumes of products, and products subject to wide price variations, such factors create great uncertainty as to the net income produced for capital charges. The financial manager

³ Source: Annual reports of the companies.

would obviously, therefore, be concerned with raising all the capital he could from sources not requiring fixed annual charges for its use. Instead, in an instance of this sort the manager would wisely seek his capital from sources like stocks, where the charges might be postponed in periods of heavy shrinkage in the operating income. A complete reversal of this picture, in which operating income remains essentially stable or is even increasing, because both volume and prices hold, relieves the financial management of the necessity of seeking capital in a market which does not demand fixed rates. In these cases it may even be a wise policy to acquire large sums of capital upon the basis of low fixed charges, which though constant would not be in large proportion to the regular operating income.

An inspection of the net operating earnings report of the United States Steel Corporation in Table 4 will illustrate the point as to the instability of operating net income. This occurs in this field by reason of both price and volume changes which violently affect the sales figure. By contrast, inspection of the next column in Table 4 shows the operating net earnings record over the same period for the Carolina Power and Light Company which reveals the stable and even upward trend. It will be no surprise, therefore, to find the utilities using large quantities of borrowed money whereas in the case of the industrial company less than 25 per cent of its capital funds is derived from this source.

Income Determination

The determination of the operating income of a firm is usually regarded as strictly a matter for the accounting department, but there are many questions of policy involved. Although the accountant may have recommendations to make, it still remains for the manager to decide as to those policies controlling the reserves to be entered and the allowances made.⁴ These questions of policy, therefore, have an important connection to the financial management of the concern. As already indicated, they are closely allied with the policies of maintaining the capital investment in the business. But it is worth the warning that, these being matters of policy, we should not expect the determination of income for all firms to be identical. To make proper comparisons, however, between one business and others in the same field, these policies would have to be examined to make certain whether a particular firm was even with, higher, or lower than the general group in the portions of income so applied. This, of course, would be a significant item of information to use as an investor, a creditor, or a business stockholder.

Income Distribution

Quite as important as these general questions on the creation and determination of the amount of income are the policies involved in the distribu-

⁴ See the discussion, for example, of the current debate on representing depreciation allowances so as to reflect present high replacement costs, *Journal of Accountancy*, October, 1947, pp. 265, 289-290, 333-336; December, 1947, pp. 453-460.

tion or application of the income. Most significant here is the matter of dividend declaration. Table 5 gives the composite record of all United States corporations for the period 1935-1946, which reveals some very

TABLE 5. NET PROFITS, DIVIDENDS, PROFITS RETAINED IN ALL UNITED STATES CORPORATIONS, 1935-1946⁵
(in millions)

Year	Profit Before Tax	Profit After Tax	Dividends	Retained	Per Cent Profit in Dividends
1935	\$ 5,423	\$ 4,688	\$5,941	d \$1,253	126.73
1936	7,771	6,580	7,379	d 799	112.14
1937	7,830	6,554	7,514	d 960	114.65
1938	4,131	3,271	5,013	d 1,742	153.26
1939	7,178	5,946	5,747	199	96.64
1940	9,348	6,800	6,089	711	89.54
1941	16,675	9,507	6,701	2,806	71.54
1942	23,389	11,132	5,607	5,525	50.38
1943	24,516	10,363	4,477	5,886	42.20
1944	23,841	9,928	4,689	5,239	47.23
1945	20,222	8,939	4,765	4,174	53.31
1946	21,140	12,539	5,614	6,925	44.77

d = deficit

interesting data on these policies. It is striking to see that the payments of dividends in each year 1935 to 1938 were more than the profits reported. This clearly arose out of the need, in the opinion of management, to give the stockholder some return and emphasizes the need for accruing profits of better years for this purpose.

We should be reminded further that a firm which shows a \$100,000 profit in the past year is not necessarily considered to be in a position to declare all or any part of it as a dividend. Perhaps this seems confusing since many people have the impression that profits represent an acquisition of cash by the business. This, of course, is a false impression, for profits are more likely to represent an accrual within the period to the total assets of the business. These increases may be found in any of the asset accounts; conceivably, they may not be confined to the cash account. Thus the problem before a financial management may be whether or not the business can afford to pay a dividend though it has a profit. This is largely a matter of management, of course, to handle the working capital but it has significance beyond that point alone.

It is usually true that if the firm expects to obtain capital from its stockholders it must show some record of disbursements which would induce these persons to retain or even increase their stockholdings. If no such record

⁵ Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1936, p. 340 (years 1935-1942), and *National Income, Supplement to Survey of Current Business*, United States Department of Commerce, July, 1946, pp. 30-32 (years 1942-1946).

can be pointed to, it goes without saying that the business will find it difficult to raise capital funds by the sale of its securities in the public market. Whenever the business reaches this point, it is well started toward a possible financial failure, since its only avenue left for capital increases beyond its annual earnings is in the form of debt. A continuous increase in this class of capital contracts would in the end overload the firm's ability to discharge the capital costs.

Expansion Plans

But apart from this problem may be the problem of how much of the income should be disbursed. What are the firm's plans for the future as to the use of retained earnings? This will have a bearing on the question. Other considerations also enter into the wise application of a firm's current operating income. All are closely correlated to the firm's current ability to raise capital in proper amounts and upon favorable terms. As indicated in Table 5, firms in recent years have been holding substantially larger portions of their income for use by the company. Not only have demands for capital for plant additions increased but also further investment in current assets is required. Volume of business and rising prices produce a double-barreled effect upon the demand for working assets. Reluctant to borrow heavily, most firms have resorted to the heavier reinvestment of their profits in the business, as is shown by the retention of more than 50 per cent of earnings in the period 1943-1946.

Problems of many kinds appear, therefore, even though a firm has produced a profit in the last period. No business can stand still. It must continue to operate and it must meet constantly changing conditions. New conditions will call for decisions in finance quite as much as in sales and in production.

FAILURE AND REORGANIZATION

Unfortunately all business is not a success. Special evidence on this point appears from the fact that even in the most prosperous years a considerable number of failures are reported. In Table 6 the record of failures is shown for 1925-1945, and it is clear from the number of dollars in liabilities that such cases create a very important area in finance, unpleasant as it may be for those involved in the consequences of the failure.

The legal procedure involved in these problems will need special attention by the student of finance. But primarily from the financial point of view the job is one of guiding the concern back to safe ground and installing good financial policies. If this cannot be done, liquidation is the final answer.

Sequence of Study

Finance in the field of business is a problem in the birth of the business, in its daily operation, and in its growth. A never ending series of decisions has to be made. The tools, the institutions, and the policies with which the manager handles his financial matters need exploration in the many ways,

TABLE 6. FAILURES, 1925-1945⁶

Year	Industrials		Railroads	
	No. at End of Year	Liabilities (in millions)	No. at End of Year	Liabilities and Stock for Year (in millions)
1925	21,214	\$443	53	\$ 680
1926	21,773	409	45	2
1927	23,146	520	40	45
1928	23,842	489	33	.5
1929	22,909	483	29	30
1930	26,355	668	30	277
1931	28,285	736	55	432
1932	31,882	928	78	626
1933	20,207	502	80	1,750
1934	19,859	457	80	51
1935	12,091	333	87	2,168
1936	12,244	310	91	165
1937	9,607	203	109	199
1938	9,490	183	109	730
1939	12,886	246	108	78
1940	17,878	168	103	....
1941	11,848	136	91	97
1942	9,405	100	87	83
1943	3,221	45	82	6
1944	1,222	32	76	98
1945	810	30	72	....

including their ramifications, suggested in this chapter as phases of finance for business.

The sequence of study followed in the remaining chapters will amplify step by step the major topics of:

- Legal Organization
- Instruments of Finance
- Policies of Capitalization
- Sale of Securities
- Accounting for Financial Control
- Current Financing
- Growth and Expansion
- Corporate Reconstruction and Dissolution
- Social Aspects of Finance

QUESTIONS

1. Do the bond and stock transactions reported for daily trading represent new funds for companies? How are these activities of importance to the investor?

⁶ Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1947, pp. 460, 513.

2. If the kinds of capital in a business vary in nature, why should the sources differ also?
3. Explain why all business does not employ the same distribution of assets for each company. Is this a choice of management or is it dictated by other factors?
4. Why does the sale of securities require institutions to help in the selling?
5. Explain the meaning of "maintaining" the capital of a business. How does depreciation differ from other risks for capital?
6. Why must management, when attempting to maintain its capital position, be concerned with movements of the price level?
7. Would you say that retained profits are a less important avenue of capital for business now than formerly? Why is the tax procedure connected with this question?
8. How do you relate proper income determination to good management both within the company and for one studying the field?

PROJECTS

1. Construct charts of national income and business profits for the period 1925 to 1945. How well correlated do you find the factors?
2. Chart the total profits for the period 1925 to 1945 as a per cent return on the net worth of industrials, public utilities, and railroads.

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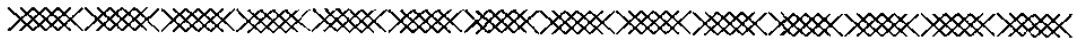
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CHAPTER II

Legal Organization as a Financial Problem



AMONG the first questions concerning the financial problems of a business is the legal form in which the concern shall be established. A second question for the manager concerns the raising of capital. There follows the question of what, if anything, the form of legal organization can offer for the solution of the capital-raising problem and successful use of the capital by the firm.

Generally speaking, all legal organization¹ for business purposes falls into one of two categories: (1) individual ownership and (2) organized ownership. The former "concentrates all rights, privileges, and powers of control in one person, who has also the complete duty, full responsibility, and entire risk connected with the property owned"; the latter "is the result of an agreement of some kind between individuals whereby rights, powers and privileges are apportioned in a definite relation to duties, responsibility, and risk."²

The ease of access to capital is a most important consideration for the business, and if the legal organization can contribute to solving this question it is worth study. State control or regulation will be of interest, too. The possibility of dividing control of a business and delegating management is a factor important to successful enterprises. Prominent in the eyes of anyone establishing a business and seeking capital for it is the problem of assuring the continued existence of the business as a unit. Disruption in the determination of policy and in efficient operation, which might result from the death of the manager or the owner, is one of the events a business needing large sums of capital must avoid. This matter becomes of increasing significance in almost direct ratio to the amount of capital involved in the enterprise.

A comparison of the various legal forms upon such questions as (a) management and control, (b) finance—including the lifetime of the unit,

¹ Any evaluation of business structure must carefully distinguish between financial and operating organization. They both describe the business, one as a series of relations between properties (assets) and debts (liabilities), the other as a series of responsibilities for accomplishment and direction. Neither dominates or will long continue without the other. Financial organization provides technical equipment; operation organization takes that equipment and directs it toward the achievement of a specified goal. Unfortunately, in some discussions of financial organization and of operating organization the two are hopelessly confused, neither being clearly delineated.

² L. P. Alford (editor), *Management's Handbook*, p. 1228.

the liability for debts, and the tax burdens—and (c) state regulation will outline the reasons for careful study of the choices. The legal form of the business should be a tool by which the administrator can best implement the operations of the enterprise.

The point may be briefly illustrated by a small service business, in which the simplicity of the creation of the unit would be quite important. In such a field, where capital requirements are small, the long-continued existence of the unit need not be insured. Since the enterprise is based substantially on the owner's labor and knowledge, there is advantage in having the simplest of legal forms. But if the needs of the business require sizable capital investment to furnish a plant with full equipment for which a technical manager may also be required, a study of legal forms can help with such problems. Permanence of the unit, a division between those who supply capital and those who operate the technical production, and an assurance of a limitation of liabilities for the owners are some of the needs in this latter case. Some of the legal forms fit this situation much better than others, though the solution might not be the same in all states because of their peculiar provisions governing legal organizations. The enterpriser cannot purchase a book with all the right answers, at this point or any other, for many individual facts of each case are cause for different answers though the business may be in the same state and in the same kind of field.

There are at least four basic forms of structural organization available to the businessman with which the student of modern business finance should become acquainted. They are: the individual enterprise; the partnership forms—the general partnership, the special partnership, the voluntary association, and the joint-stock company; the corporation; and the Massachusetts trust. The distinction is clear enough from a legal point of view but difficult to apply in actual practice, for there are corporations which amount to individual enterprises and individual enterprises and partnerships so involved by contracts as to have an organization which in effect approaches a corporation.³

PROPRIETORSHIP

Management and Control

Creation of the Business Form. In a proprietorship, it is unnecessary to get permission from the state to allow the business to come into being. This is true because, when an individual determines to set up a business in the proprietorship form, he is deciding to use some of his property in a particular manner. The investment which he makes in the business becomes merely a particular type of property owned by the proprietor. Ease of creation, therefore, is one of the outstanding advantages of using a proprietorship form. It is in the fields of agriculture, service, and the trades that this form outnumbers any of the other legal forms.

³ Closed corporations are examples of corporations which amount to individual enterprises in many instances, except from a legal point of view.

Control of the Business. Since the proprietorship represents only the election of the proprietor to put his property into a particular kind of assets, his control is complete. Thus, the proprietor faces no division of authority; he has full control of the business unit without need for consulting anyone. He may employ anyone whom he wishes to have serve in his business. But, of course, full responsibility rests upon him alone. Thus, by the nature of his responsibility for the property employed, the proprietor needs to keep all decisions under his own direct control.

Finance

Lifetime of the Business Unit. The period of time for which the proprietorship may exist is of considerable doubt. This may have a great deal to do with the credit rating and capacity of the proprietorship to raise capital. Long-term capital would be especially restricted. Since the creditor would have little assurance as to the continued existence of the management and the continuity of its policy over a long period of time, he would limit credit extensions.

A creditor for a proprietorship is likely, therefore, to insist upon something less than a ten-year term of credit. In the case of construction of buildings or of equipping a sizable plant, this will probably be a period much shorter than the useful life of the building and equipment. Therefore, the proprietor may face the task of handling the loan at an intermediate period and before the business has had the chance to earn sufficient sums to fully discharge such an obligation. This fact, coupled with the uncertainty of the life of the proprietor, casts considerable doubt on this form as a good risk for long-term credit.

Liability for Business Debts. Liability of a proprietor for the debts incurred in his business is complete—so complete as to include all of his property. "All of his property" means not only that which was committed to his business but all other assets, including his home and general property. This is a serious risk for any proprietor. Any mistake in judgment or misunderstanding of general competitive conditions which creates unusual losses for a business may also involve, as a result, the personal holdings of the proprietor. The extensive liability, of course, justifies a certain amount of credit for the business unit.⁴ But the exposure of all the property of the proprietor to business risks makes it very dangerous to create a large unit in this form. A sizable unit creates large risks and large potential liability.

Tax Burdens of the Unit. Other than general license fees no special taxes are levied upon a proprietorship business. The property is, of course, subjected to the usual property taxes but these are not different whether the property is owned and used by the business unit or by the individual himself as a personal holding only. For the income taxes of the federal govern-

⁴This liability might be discontinued by the taking of bankruptcy, but many individuals do not care to have such an act in their record.

ment, the profits of this business unit are taxed at individual rates which are established as shown in Table 7.

TABLE 7. COMPARISON OF COMBINED NORMAL TAX AND SURTAX FOR INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS⁵
(Effective April 24, 1948)

Net Income	Individuals	Partnership (Computation—the amount of tax <i>each</i> partner would pay if two partners and each shares equally in profits)	Corporations
\$ 2,000	\$ 315.40	\$ 157.70	\$ 420.00
4,000	634.24	315.40	840.00
5,000	851.60	358.36	1,050.00
7,000	1,319.76	542.28	1,510.00
9,000	1,854.80	742.92	1,970.00
11,000	2,456.72	960.28	2,430.00
13,000	3,133.88	1,194.36	2,890.00
25,000	8,417.40	2,954.14	5,750.00
50,000	22,353.52	8,417.40	19,000.00
80,000	41,915.92	16,434.64	30,400.00
100,000	56,211.52	22,353.52	38,000.00
150,000	83,851.67	43,088.72	57,000.00
200,000	122,432.64	56,211.52	76,000.00

Note 1: Calculations are made on the basis of a single personal exemption.

Note 2: If the corporation pays a dividend to its stockholders, then they are subject to the individual tax on the dividend.

EXAMPLE: The corporation pays half of its \$9000 income in a dividend (\$4500).

The corporation will pay \$1970 on its income; and assuming the dividend is paid to one individual, he will pay an additional \$742.92 as personal tax. Total tax, corporation \$1970 and individuals \$742.92, equals \$2712.92. This may be compared to the other tax burdens at the same level.

State Regulation

Control of Form and Power. No specific regulation of an individual proprietorship exists on the part of the state government or of the federal government. This is explained by the fact that the business is regarded as part of the personal property of the proprietor. If the proprietor stays within the general law of his state, he may engage in any business or any combination of business under his proprietorship unit.

In summary, the proprietorship is easily the most convenient for an individual to use in inaugurating a small business. Its freedom from state regulation and the absence of any need to make full and complete reports relieves the proprietorship from considerable burden. The liability for the debts incurred in the enterprise is, of course, severe, resting entirely upon the proprietor himself. The tax burden is no different from that of an individual.

⁵ Source: Revenue Act, 1948.

The questionable period of existence and the fact that the proprietor cannot assure its continuity puts a severe limitation upon the credit capacity of such business, especially for long-term capital.

PARTNERSHIP

Three forms of partnership may be examined as possibilities for the business unit: (1) simple partnership, (2) limited partnership, and (3) joint-stock company. The last two are based on special statutes. The particular statutory provisions for any one state would have to be examined. For the simple partnership, certain general rules of the common law determine the relationship. We shall examine these rules and state the special features of the other two forms in contrast to the usual relationship of the partners.

Management and Control

Creation of the Business Form. In a simple partnership no special legal documents need be created nor the permission of the state secured. The agreement requires two persons who, orally or in writing, have agreed to establish a business enterprise and to mutually engage in its operations. This agreement should state the understanding of the parties as to the furnishing of capital to the business, the sharing of the profit and losses, and the arrangement of powers of each of the parties to act for the partnership. This relationship, however, is defined by the law and will rule in all cases, even though the persons have agreed as partners to different specifications, unless these special agreements are drawn to the attention of the third person. The third person has the right otherwise to presume that the general rule of partnership law is applicable. Although it would be wise if the agreements were in writing as the best evidence of the partnership understanding, this is not a requirement. It is impossible to file partnership agreements and thereby give notice to the public at large, except as the state has special recording provisions. An interesting example is found in the Articles of Copartnership of the old J. P. Morgan & Company.

ARTICLES OF COPARTNERSHIP⁶

J. P. Morgan & Company

This agreement made the 31st day of March, 1916, between John Pierpont Morgan and others, witnesseth: That the parties hereto have this day formed a partnership for the transaction of a general foreign and domestic banking business in the cities of New York and Philadelphia, upon the following terms and conditions:

First: The business shall be conducted in New York under the firm name of "J. P. Morgan & Co.," and in Philadelphia under the firm name of "Drexel & Co.," and shall commence on the first day of April, 1916.

Second: The capital of the partnership shall be as follows:

⁶ Source: Senate Banking and Currency Committee, *Record*, June 1, 1933.

- Third: The net profits and losses shall be divided and borne as follows:
- Fourth: Interest at the rate of 5% per annum shall be allowed or charged on all partners' accounts including capital and undivided profits.
- Fifth: No transaction shall be made which shall be objected to by any member of the partnership.
- Sixth: In case of a difference or dispute between members of the partnership, the same shall be submitted to the decision of Mr. John Pierpont Morgan, which shall be final.
- Seventh: The partnership may be dissolved at any time by Mr. John Pierpont Morgan, subject to the liquidation thereof: provided that partners representing a majority in interest in the profits of the partnership shall consent to such dissolution.
- Eighth: Any partner may withdraw from the partnership upon giving three months' written notice of his intention so to do
- Ninth: It is further agreed that Mr. Morgan may, at any time, compel any partner at once to withdraw and retire from the partnership, upon giving him written notice to that effect, and in that event, the amount due such retiring partner shall be forthwith fixed by Mr. Morgan
- Tenth: In case of the death of any partner other than Mr. Morgan, if, within 30 days after such partner's death, such of the surviving partners . . . shall give . . . written notice that they desire an extension
- Eleventh: In case of the death of Mr. John Pierpont Morgan, the partnership shall be dissolved on the 31st day of December next ensuing
- Twelfth: Upon the dissolution of the partnership following the death of Mr. Morgan, the good will of the business and the right to use the firm names of J. P. Morgan & Co. and Drexel & Co. shall belong to the then surviving partners
- Thirteenth: It is further agreed not only with respect to the partnership hereby formed, the good will of the business and the right to use the firm names shall belong to the surviving or continuing partners
- Fourteenth: The books of the partnership shall be settled on the 31st of December in each year
- Fifteenth: It is understood and agreed that no partner shall engage in any other business or be a general or special partner in any other firm.
- Sixteenth: The firm name shall not be used by any partner except in the partnership business.
- Seventeenth: Speculation in stocks or anything else, by the individual members of the partnership is prohibited; but this clause shall not be construed so as to prohibit any partner from investing his private means in such way as he may see fit.
- Eighteenth: No member of the partnership shall become security or endorse, except in the partnership business, without the consent of the parties hereto.
- Nineteenth: The firm of J. P. Morgan & Co. and Drexel & Co. being partners in the firms of Morgan, Grenfell & Co., of London, and Morgan, Harjes & Co., of Paris, their proportion of the capital thereof shall be supplied out of the partnership capital mentioned in article second thereof,

and the profit or loss therein shall be included in the partnership accounts hereunder.

Witness our hands and seals the day and year first above written in the presence of December 31st, 1916.

Control of the Business. In the simple partnership, each of the partners is regarded as a general agent for the partnership. In any matter concerning which the partnership may care to do business one partner may act for all. The third person may rely upon this as the general rule in dealing with the partnership. It may be in the agreement of the partners that one of them cannot deal with certain matters, but this will not operate to deprive the partner of his ability to bind the partnership so far as the general law is concerned, unless actual notice has been given the third person. Partnerships do have the definite advantage of allowing several men of different capabilities to join for their common purpose in an enterprise. This is a distinct advantage over the proprietorship.

Finance

Lifetime of the Business Unit. The partnership is subject to the general limitations under which the proprietorship operates, namely, the possibility of the business being brought to an end by the death or withdrawal of any one of the partners. This event requires the determination of the property status of the deceased or withdrawing partner. The partnership will thus be terminated because of the necessity of determining all the liabilities of the partner. These must be discharged with his assets, some of which will be found in the partnership business.⁷

The partnership agreement may provide for the purchase of the interest of the deceased or withdrawing partner in order to provide for the continuation of the business. The exercise of this contract right is subject, however, to the full satisfaction of creditors.

Liability for Business Debts. Each of the partners assumes the liabilities jointly with the others for the entire debt of the partnership business. In addition he is made liable by statutes in most states for this same debt individually as well as jointly with his partner. Liability is complete against any of his property. Its extent is similar to that of proprietorship, but it has the added risk of unusual liabilities created by the act of one of the partners in his capacity of agent for the entire partnership. Exceptional risks may arise, therefore, for a partner by virtue of the acts of his other partners. The liability for these acts may become a partner's personal liability good against all of his estate though he himself is not consulted in the act.⁸

⁷ Where it can be afforded, life insurance policies on the partners may be purchased which will provide the value of the partnership interest and allow the remaining partner to buy the interest of the deceased partner with the insurance proceeds. Since statutes usually make the partners severally liable, care should be taken in these cases to obtain the release of the deceased's estate from partnership debts.

⁸ Right of contribution entitles the partner who pays a partnership liability to a recovery of the pro rata share from other partners.

This extensive liability upon the partners gives a basis for an added credit extension which the creditor might not consider for a single proprietorship. But there is still the problem of the continuity of the partnership. Since this is as much under question as that of the proprietorship, the term of credit is not apt to be long. The same problems of need for long-term capital may plague a partnership as greatly, therefore, as any proprietorship.

Tax Burden of the Unit. The partnership has no special taxes levied against it as a business unit. The profits made by an enterprise in this form are considered as income of the several partners on which they pay at the usual individual income tax rate. Property of the partnership is, of course, subjected to the usual property taxes. If the business is engaged in that type of enterprise requiring licenses, the requirements, of course, are no different from those in any other case.

State Regulation

Since the partnership agreement is a personal private contract the state does not presume to inject any requirement as to the activities engaged in or the method by which they are undertaken. This permits a partnership to carry on extensive operations or a wide variety of operations all within the terms of a single agreement. No special reports are required of a partnership to be filed with the state concerning its business transactions. This affords relief from both an expensive and a time-taking procedure.

Usual Licenses. The partnership which engages in any of those activities coming under police or health regulations requiring a special state license is, of course, as much subject to these regulations as any business unit. In a few cases, some states require that licenses be issued only where there is personal responsibility for the use of the license. So far as this requirement exists either the partnership or the proprietorship would have an advantage over the incorporated enterprise.

Limited Partnership

Under the provisions of special statutory acts a hybrid form of partnership may be created. Its object is to encourage the creation of a business unit which may raise invested capital and limit the liabilities of those who contribute this capital. The requirements of the statutes in general are as follows: (1) The agreement must be written and a copy filed in the proper recording office of the state in which the partnership is to do business. (2) The provision must appear in the agreement by which at least one person assumes general liability for all the debts of the partnership. Coupled with this provision may be the stipulation of limited liability for others named as limited partners in the agreement. It must be specified that the limited partner has no rights to contract for the partnership and no power of control over its assets. (3) Notice that the business operates under a limited partnership is to be given the public in the course of a business transaction. Where a person seeking to use the partnership form possesses

great capabilities for operating the business but lacks capital, it is apparent that this form of enterprise offers considerable opportunity for raising capital. The inability of the partnership to gain considerable capital from any source other than loans by creditors is considerably relieved by the *limited partnership form*. But the inability to freely transfer interests is of some disadvantage. The right to conduct the limited partnership outside of the original state does not exist, except as the articles are filed under the proper statute of the second state. This confines the range of the form to local business units.

Joint-Stock Company

Another and much older form of the partnership is known as the joint-stock company. This is created by a contractual agreement of the organizing parties which is not required to be filed. It usually provides for a board of directors and officers to conduct the business and issuance of certificates for capital units which may be freely transferred or sold; but unlimited liability remains for each capital contributor. By contractual stipulation liability limited to the assets of the company is a provision binding on creditors when notice is given or expressed in the contract made with the creditor. The uncertainty of full relief from the contingency of such liability is a deterrent to use of the organization.

The joint-stock company has been a form of long standing in England, designated with the term "limited" or "Ltd.," and the reader may recall references to it in the course of reviewing the colonizing history of the English Empire. This organization form offers the possibility of raising large capital sums by the sale of units which are freely transferable, while management is vested in managers who continue in office and carry forward the regular operations. The enterprise, too, survives for the contract period, independent of the lives of the certificate owners. This division of management and control offers a further attraction. However, the potential liability has deterred most enterprises from using the form in this country.

For the purpose of the *federal income tax the regulations classify the joint-stock company as a corporation*. State taxes on organization, on certificates, and on transfers may still be minimized by use of the form.

CORPORATIONS

Management and Control

Creation of the Business Form. The corporation requires a special grant of power from the state. Persons interested in forming this type of enterprise must agree upon the general outline of powers and relations and create an application in the form of articles of incorporation. These articles are to be presented to the proper state office with the request for a charter. The states have enacted general incorporation laws, setting forth the general requirements with which applications for charters must comply. Upon the payment of the proper fee and the showing of qualification by the articles

with the requirements of the state statutes a charter is automatically created, and a certificate is issued by the proper state officer. The articles are recorded, and become the official framework or structure within which the corporate powers are to be exercised.

Control of the Business. A corporation gives an opportunity for a unique division between those who have contributed capital and those who may manage the business operation. Each stockholder is given one vote per share to cast in stockholders' meetings for the board of directors. The general policies of the corporation do not pass before the stockholders' meeting except as they involve portions of the charter or the by-laws under which the corporation operates. These contractual stipulations of the rights of the stockholders and the powers of the officials of the company, once declared in their written form, are not regularly considered at each stockholders' meeting. They constitute a contractual agreement among the stockholders which cannot be readily changed except by formal amendment procedures. The stockholders cast their ballots for particular individuals to serve as directors, but leave policy decisions and methods of procedure to the directors. The directors, having declared the policies and procedural methods, in turn delegate the actual execution to the officers of the corporation whom they have selected. The control of this business unit is complete, therefore, through a series of related steps in which the stockholder is removed from the direct managerial decisions. The ultimate control of relationships as expressed in the charter and the by-laws is the province of the stockholder.

One of the distinct advantages of the corporate form is the possibility of dividing the ownership and the operating staff. It has already been pointed out how the directors are charged with the determination of general policy. They in turn select the officers who are given the power of direct and daily management of the concern. By this division of management powers, many persons may be drawn to serve upon the board of directors who have wide business connections and important general business knowledge. Such businessmen serving on the board may give the benefit of their judgment and wide experience to the business unit. This is something that the partnership and proprietorship does not enjoy.

The officers represent, in turn, a further specialization in business management. Many of these men are experts in highly specialized phases of management. The official family of the corporation may, therefore, represent a very important group of experts in the business field. Often these executives have very little capital and could not have earned their position by contribution to the capital of the firm. In a business unit of size which has already acquired capital from many sources a different problem is to be found. A large unit already amply financed is faced with a need for well-trained, widely experienced chief executives. Only a large organization needs such especially trained experts, and only such an organization can afford to pay the price for them. By the combination of better financing for the business unit and allowing for the division of management powers,

the corporation furnishes a unique organization. The corporation is a most modern and useful business form to meet the problems created by the mechanization and the technological type of industry, the products of a scientific age. Specialization in management functions is most advantageously created by the corporate form.

Finance

Lifetime of the Business Unit. Once a corporation is chartered, it is the legal conception that this unit is an artificial, legal person. In other words, we have now created a new person capable of owning property, doing business, making contracts, and disposing of property rights. Since it is an artificial person, its life is, of course, dependent upon no act of any natural person, and under the laws of the states it may be granted a life term of a specified number of years; or, in some instances, the charter may specify no limit on the lifetime of the unit. Thus we have created a business unit which may serve an enterprise for an indefinite period into the future. This continuity is especially important to the raising of capital funds and making plans for long-term utilization of heavy property investments. With the lifetime of the corporation independent of any of those persons who have joined to create it, we have an important reason for its use, particularly from the financial point of view. Creditors will be especially interested in this fact. Each shareholder, too, acquires a contract with the corporate person and such contract can be freely transferred by the shareholder to any other person. The freedom to resell the capital interest gives the shareholder great mobility or liquidity for his capital. This fact, together with the assurance of corporate life, is obviously attractive to an owner of capital, for it offers the opportunity to withdraw from the risk, to diversify his investments, and to relieve himself of direct personal management.

Liability for the Business Debts. Whereas the proprietorship and partnership created a full personal liability for all property of the individual in order to discharge any business obligations, the corporate stockholder is free from this burden. He is bound to pay in full all the value for which he has subscribed, and on par stock up to the par sum if creditors require it. But this is a known amount beyond which he has no further risk. This is a clear inducement for one to contribute a small sum to the corporation: there is the assurance of freedom from further liability, yet if the firm is successful a share in the profits may bring large returns. This limitation the contributor cannot gain from any of the other business forms.

Tax Burden of the Unit. As for the usual property and license taxes of the states, these will not differ for the corporate property and business. The chartering state, however, will assess not only the original charter fee but a continuing annual fee, usually based on the amount of capital stock. Further, each state in which the corporation is admitted to do business may assess the business on a portion of the capital stock value.

The federal income tax originally set the rates at a higher level than on the

same amount of income to an individual—in a proprietorship or partnership. This was a real burden and, during the war years, with the excess profits tax, absorbed large portions of the total profits. The advantage is now with the corporate form under the 1948 Revenue Act, as was explained earlier in the chapter.

Under the federal revenue law, however, two additional points should be considered. The dividends paid out of the corporate income have already been taxed, but as the payments flow into the hands of the stockholder he is responsible to report the dividends again as personal income. Thus they bear another federal income tax. Moreover, the law provides that the corporation may be assessed a 27½ per cent tax or larger if it retains too great a portion of its profit. The law allows the Bureau of Internal Revenue to determine what constitutes too great a retention of profits. In other words, there are no well-defined statements or qualifications, and each case can be treated within the discretion of the bureau. This may easily become an unusual burden upon corporate management as well as an additional tax liability.

State Regulation

The chartering state prescribes the general terms on which the corporation can be created. Reports and regulations which the corporate unit has to prepare may be specifically required as a condition of enjoying the chartered rights. The conditions may become burdensome.

Various requirements as to security issues may be set up in the chartering state and the corporation must comply with them in order to legalize the issues. Restrictions on the type of securities to be issued sometimes appear in the general incorporation laws which may limit the choice of contract to be offered. In general these conditions are not imposed upon the proprietor or partner, but because the corporation is an artificial being, the subject of the state, it must submit to a variety of such requirements.

To conduct the type of business requiring a license creates no special situation for the corporation, since the license is upon the business, not upon the form utilized. Franchises or certificates of necessity for the conduct of public utility enterprises are usually possessed by corporations, though some may have been issued to individuals. Such franchises may express additional terms of performance if their rights are to be maintained, including probably special taxes. In such circumstances, additional powers both of control and of taxation may exist.

BUSINESS TRUST

Management and Control

Creation of the Business Form. In England, which is generally accepted as its place of origin, the common law trust has been called "common law company," "joint-stock association," "unincorporated association," and "unincorporated company." In the United States it is thought that the common

law trust originated in Massachusetts about 1827.⁹ At first it attracted but slight attention.

The expression "Massachusetts trust" arose by reason of the more complete development of the trust form of business organization and operation in that state than in most others, which, in turn, is reported to have been the result of corporations' being prohibited from owning real estate.¹⁰ The common law trust arrangement was used to circumvent the statutes which regulated corporations, and these organizations have spread to practically every state in the Union. In recent years there has appeared a decided tendency to look upon common law trusts as mere corporations in disguise,¹¹ or as partnerships.

The agreement constituting a business trust is a private one in which the creators agree to surrender property to trustees to be operated as a business by the trustees. The consent of the state is not required since it is a personal contract. At this point the form has an advantage. Massachusetts trusts may be formed either under the common law in most states or under special statutes in the few states which have legislation dealing directly with them. In any event two things must be achieved: (1) A trust must be created with two or more trustees having power to conduct the affairs of the organization, and (2) complete alienation of the beneficiaries from control over the trust must be brought about, usually by means of a deed or declaration of trust. A good description is found in the case, *Hecht v. Malley*, 265 U.S. 144, 146 (1924):

The Massachusetts Trust is a form of business organization, common in that state, consisting essentially of an arrangement whereby property is conveyed to trustees, in accordance with the terms of an instrument of trust, to be held and managed for the benefit of such persons as may from time to time be the holders of transferable certificates issued by the trustees showing the shares into which the special interest in the property is divided. These certificates, which resemble certificates for shares of stock in a corporation and are issued and transferred in like manner, entitle the holders to share ratably in the income of the property, and, upon termination of the trust, in the proceeds.¹²

⁹ The first court decision apparently is *Alvord v. Smith and Morgan*, 5 Pick. 232 (1827), although this involved an association more nearly akin to a limited partnership with transferable shares.

¹⁰ The theory was that if corporations were deemed to possess perpetual existence, landowning corporations might grow and become more powerful than the state.

¹¹ For comment, see 27 *Mich. L. Rev.* 881, note. The tendency to regard trusts as mere disguised corporations and to render them liable for all the legislation and regulation affecting corporations seems to be carrying the reasoning beyond the point of logical establishment. But it would be only fair to regard the trust as subject to some regulation.

¹² The State of Texas has persisted in treating these business trusts as partnerships, supposedly on the ground that the state has a limited partnership law, as well as a general partnership law and a corporation law, and that the trust should be placed under one of three forms.

The declaration of trust is somewhat akin to the trust indenture used in the issuance of bonds by corporations. The board of trustees is analogous to the board of directors in an ordinary corporation; the declaration of trust would roughly correspond to the charter and the by-laws. The trustees agree on their part to operate the business and distribute the profits, after the usual expenses and salaries have been paid to the creators of the trust.¹³

Control of the Business. Under the trust agreement, the control is usually vested in the trustees for the lifetime of the trust. During this time the creators (or beneficiaries) do not have the right to vote upon policies or for new trustees. If a trustee dies usually the survivors select his successor. Thus a continuity of control is assured and it is held within bounds by the specific terms of the trust indicating what the trustees can do and what they are limited in undertaking.

It may be noted that early California decisions stated that mining ventures organized along these lines were deemed to be partnerships. Since then, with revision of the laws, the courts have placed the trust, when properly formed, in the position of a distinctive form of business organization.

¹³The following list in 1947 of some currently operating Massachusetts trusts will give sufficient evidence of the breadth of their use. The list is not exhaustive, but only suggestive.

- A. Real estate, mortgage, finance companies and affiliates
 - 1. Congress Street Associates (voluntary association)
 - 2. Motor Mart Trust (voluntary association)
 - 3. Western Real Estate Trustees
- B. Investment trusts and affiliates
 - 1. Aldred Investment Trust
 - 2. Bankers Investment Trust of America (Pa.)
 - 3. Bond Investment Trust of America
 - 4. Boston Personal Property Trust
 - 5. Century Shares Trust
 - 6. Massachusetts Investors Trust (voluntary association)
 - 7. Shawmut Association
 - 8. Shawmut Bank Investment Trust
- C. Public utility companies and affiliates
 - 1. Boston Consolidated Gas Company
 - 2. Eastern Gas & Fuel Associates (voluntary association)
 - 3. Eastern Utilities Associates
 - 4. International Hydro-electric System (voluntary association)
 - 5. Massachusetts Utilities Associates
 - 6. New England Gas & Electric Association
 - 7. New England Power Association (voluntary association)
 - 8. North Boston Lighting Properties
 - 9. Suburban Electric Securities Company (voluntary association)
- D. Industrial trusts and affiliates
 - 1. American Optical Company (voluntary association)
 - 2. Amoskeag Company (voluntary association)
 - 3. Central Aguirre Associates (voluntary association)
 - 4. Great Northern Iron Ore Properties
 - 5. Pepperell Manufacturing Company (voluntary association)

Ordinarily the trustees would not operate the trust property but employ others to manage, equivalent to the officers of the corporation, though all policy would be the decision of the trustees. Thus the form permits the hiring of experts and the distribution of management functions without regard to capital contribution.

Finance

100 yrs -

Lifetime of the Business Unit. A trust must state a definite time for termination under certain legal rules of the law of trusts. Thus a grant for *perpetuity is impossible and in practice the number of years is probably within one hundred years.*¹⁴ This assures continuity, however, far beyond the lives of the creating parties. Thus freed from the dependence upon the lifetime of the creators, the trust may have a better credit status for long-term credit. Common and preferred stocks, classified common stocks, debenture bonds, mortgage bonds, stock purchase warrants, convertible securities, and all the frills of corporations appear to have been used. It appears that the sale, but not the issue, of trust securities is controlled quite as adequately by the blue-sky laws as it is in the case of corporations.

Liability for Business Debts. A provision will be included in the trust that the limit of liability will be the property granted to the trust by its creators. This is effective only if notice is given to persons contracting with the trustees. It is not insurmountable but may involve some risk. Failing the proper notice, a general partnership liability will be incurred. With the

¹⁴ A recent Wisconsin case passed upon a method by which substantially perpetual existence may be achieved in the trust. In this case, *Baker v. Stern*, 216 N.W. 147 (1927), the *cestui que trustee* could, by joining with the trustees at any time, terminate the trust and convey absolute title to the assets of the concern. However, the reasoning is not entirely satisfactory, and it is doubtful if courts would generally uphold such an arrangement.

In 1929 a study covering 4480 industrial corporations showed the distribution of length of life to be:

Less than 10 years	2055
10 to 19 years	874
20 to 29 years	840
30 to 39 years	382
40 to 49 years	172
50 to 59 years	63
60 to 69 years	49
70 to 79 years	20
80 to 89 years	13
90 to 99 years	9
100 years and over	3
Total	<u>4480</u>

If this study is a proper criterion of the actual longevity of corporations, the limitation to "lives in being and 21 years" is no handicap in the trust form. In constructing the table, forced reorganizations were considered as the beginning of the existing company. However, mere change of name or reincorporation was *not considered as the beginning* of a new company. Since the compilation was prepared only from corporations listed in *Moody's Manual of Industrial Corporations*, it is faulty by omission of small concerns. A careful study of this phase of corporation would be of interest and value.

exception of those states in which all trusts are considered as partnerships,¹⁵ knowledge on the part of the creditor that he is dealing with a trust is sufficient to eliminate the unlimited liability.¹⁶ In addition, the creators must refrain from voting on business matters and leave these completely to the trustees, for the conduct of control implies the situation of a partnership.

The boards of directors of corporations are generally liable only in case of fraud, malfeasance, or neglect. The corresponding bodies in trusts, the boards of trustees, occupy a much more insecure position. Trustees bind themselves personally unless they specifically provide to the contrary; but when acting in good faith they have the right to be indemnified from the trust estate.¹⁷

Tax Burden of the Unit. When the burden of taxation for corporations, for their charter and capital stock, and the federal income tax seemed to be great, the trust form offered attraction. On the first point the advantage may still remain, but generally the trusts would be treated as corporate units for income taxes. This has lost them a valuable advantage, which if not restored will deter any use of the form for general business units.

State Regulation

Since the trust is a private agreement wherever the statutes have not interfered, the state has no special power to control it. The powers to be exercised will be all of those which are generally legal acts. This may be advantageous where the corporate charter would limit the range of acts which might be empowered within a single charter. Special reports due the state would also be avoided by this form.

SUMMARY

The Individual Enterprise

This is the oldest and the simplest of all forms of business organization.¹⁸ Borrowing capacity is likely to be particularly limited where the success of the business is largely dependent upon the life and peculiar abilities of a single individual.¹⁹ The capital of such a business is restricted to what is owned by

¹⁵ Texas. Cf. *Thompson v. Schmitt*, 115 Tex. 53 (1925).

¹⁶ *Roberts v. Aberdeen-Southern Pines Syndicate*, 151 S.E. 865 (1930); *Carpenter v. Elmer R. Sly Co.*, 293 Pac. 162 (1930), and cases cited.

¹⁷ For an excellent discussion of this phase of trusts, see 28 *Harv. L. Rev.* 725-741.

¹⁸ The argument has been raised that the individual enterprise is not an "organization." Technically, the argument is logical; pragmatically, it is mere quibbling over words.

¹⁹ Life insurance is often used to overcome this difficulty and to enhance or guarantee the credit of such individuals. Thus an individual may have unusual capacity to operate a cafeteria; his capital is insufficient and he has an opportunity to acquire a site available only to him where he may be successful. He may borrow money to acquire the assets, giving insurance on his own life as collateral. Banks, especially when lending to individuals, place considerable emphasis upon the insurance of the individual. It may be added that insurance is often used in partnerships and in corporations to accomplish financing. Cf. Ralph Sanborn, *Business Life Insurance*.

the individual or may be borrowed by him. The financial instruments are usually simple mortgages, notes, and the current finance instruments. The credit of the concern is limited by the property assets, the ability of the management, and the moral standing of the individual in the community, with his banker, and in the trade.²⁰ The individual enterprise is easily formed, operates with a minimum of state interference and regulation,²¹ is easily terminated, is easily changed in its operations, and contains a maximum of flexibility. Only the owner has any control over its affairs; hence there need be no fear of internal politics, malfeasance of office, or manipulation of control.

The General Partnership

The general partnership, like the individual enterprise, is an old form of business organization. As compared to the individual enterprise, it has these advantages: greater capital by reason of the combined capital of the partners; greater management ability on the theory that two heads are better than one; specialization of function between the several partners; larger scale of operation; more intense application of capital in small-scale operations, hence a decrease in the cost of doing business in some types of enterprise; extension of credit of the concern beyond the assets and the personal credit of the single person, to the assets and personal credit of all the partners; better accounting methods because of the legal relationship of partners and the necessity of dividing profits. There is great difficulty, if not impossibility, in securing a sufficient quantity of capital to conduct large businesses in competition with the corporation.

Special Forms of the Partnership

In many states agreements known as limited partnerships are permitted under special statutes. Most states require *limited partnerships to file their articles of agreement with some public official*. If these limited partnerships conduct business in states other than that in which they are organized, they are usually treated the same as general partnerships by the courts, especially if they operate in a state which does not have statutes permitting limited partnerships.²²

²⁰ Assets, equipment, or even entire businesses are sometimes leased. Whether or not credit, in the proper meaning of that term, may be said to be involved is an unagreed-upon phase of finance. Such assets may not be the basis of further financing, though the income therefrom may provide a basis of borrowing. Railroads have issued income bonds against the revenues from leased lines and rolling stock.

²¹ The only public regulation or control applicable to the individual enterprise is that of *license to do business, or registration of fictitious names* if used.

²² The mining partnership is apparently a contradiction to almost all the usually accepted ideas of partnerships. This type of business and financial structure has many useful characteristics; if developed, it would find considerable use in modern business.

The Joint-Stock Association

The joint-stock association or company is an arrangement which occupies a middle ground between the corporation and the general partnership.²³ The control of the joint-stock company theoretically rests in the shareholders, though in practice their representatives, the directors, perform the *actual work of management* and the individual shareholders have no right to bind the association.

In its financing operations the joint-stock association approaches the corporation and is vastly superior to the partnership arrangement as far as raising capital is concerned; it is not equal to the corporation, however, by reason of the large liability upon individual shareholders.²⁴ Most tax laws regard joint-stock associations as corporations *de facto* if not *de jure*.

Business Trust

As a general proposition, the trust is least expensive and troublesome to start. The facility with which it may be formed and with which its nature may be changed and its existence terminated is greatly superior to the corporation. Once it has been organized, there is a more permanent management control, for trustees will have the power of appointing or electing their successors.²⁵ Dishonesty of management may be more directly attacked in the trust by mere application to the *proper court*.²⁶ Both the corporation and the trust are capable of indefinite expansion with about the same facility, with, perhaps, a slight advantage in the trust, which does not have to seek state approval for a proposed change in capitalization or capital

²³ Although it is legally possible for a joint-stock company or association to be formed under the common law without any sanction of the state, public offering of its securities will be subject to the regulation and control of the state in almost all cases. It is, therefore, fallacious to state that joint-stock companies or associations are free of state control. Moreover, they are usually taxed as corporations.

²⁴ Sometimes the liability upon shareholders of joint-stock companies appears to be limited, though the courts have not definitely passed upon the point, and such laws as exist are somewhat indefinite on the subject. The Adams Express Co. has attempted to limit the liability of its shareholders, though the effectiveness of its notices limiting liability is somewhat uncertain.

²⁵ If one applies the usual tests of management and administration to the trust, it compares fairly with the corporation. These tests generally include: (1) continuity of existence; (2) motivation to action; (3) flexibility of proceedings; (4) authority for action; and (5) responsibility for reactions. Only in the matter of flexibility does the trust arrangement usually appear inferior to the corporation. Even this deficiency may be largely avoided if the declaration of trust is carefully constructed.

²⁶ It should be noted that in a capital structure under the trust arrangement the same sharp line of demarcation between creditors and owners does not obtain as is found in capital structures of corporations. Although there may appear to be both "bonds" and certificates outstanding, the "bondholders" of the trust occupy much the same position as the certificate holders. They may demand statements of the financial condition and operation of the trusts much the same as ordinary beneficiaries under the trust. For a clear and concise statement of the position of ordinary creditors of trusts, see A. H. Stockder, *Business Ownership Organization*, p. 226.

structure. But when a public offering is made of the securities of the trust, the blue-sky laws apply.

At best, there is a great diversity of decisions on the position of trusts. Some states absolutely deny them any legal status,²⁷ others tolerate them but class them as partnerships, etc., from time to time,²⁸ and some appear well on the way to the development of a definite status for them.²⁹ The increased recognition by courts of the substantialities of the business, rather than mere interpretation of forms and agreements, is a hopeful omen.

Corporation

The corporate form of organization affords the capacity to aggregate capital, limit the liability for those who contribute, and yet give ready transferability to the contributor. Together with the continued life of the organization apart from its creators, the division of its control from its ownership makes it an attractive legal form, which is evidenced by its use in large-scale enterprise. The burden of taxes is usually its greatest disadvantage. More extensive development of its operations follows in the next chapter.

QUESTIONS

1. Outline briefly the several considerations which bear upon the choice of the possible legal organization for a business.
2. Indicate those situations in which the proprietorship form is most likely to meet the needs of a business.
3. Explain why a limited partnership is not adequate for a large business enterprise.
4. Indicate why the lifetime of a business organization has any connection with the kind and term of credit which it may obtain.
5. Trace the difference in the general tax burden upon the several legal forms of organization. How does the income tax burden fall?
6. While it is apparent that the corporation may aid in the raising of capital, how does it aid the concern in the management factor?
7. Explain the theory of a business trust as a legal form. Why do you think it is not more widely adopted? Do current tax laws encourage its use?

²⁷ Typical of this attitude is the State of Washington. In a recent case the court said: "Our corporation laws are sufficiently broad to include every desirable form of organization, and there is no reason for resorting to this form of organization, except for the purpose of avoiding the payment of fees, assessments, and taxes imposed upon corporations in general, and to avoid our statutory regulation. . . . The plaintiffs [trust] have no legal status in this state and are without legal standing in this court." *State v. Hinkle*, 126 Wash. 581 (1923).

²⁸ Texas is typical of this group. In 1925 the Texas Supreme Court decided that trusts involved the same liability as partners but did not take up a discussion of the difference between Massachusetts trusts and partnerships. *Thompson v. Schmitt*, 115 Tex. 69 (1925); *Victor Ref. Co. v. Nat'l Bank*, 115 Tex. 71 (1925). It may be added that Texas has a law governing limited partnerships, and the court took the stand that the organization should have been under that law if limited liability was desired.

²⁹ Massachusetts, Oklahoma, and Wisconsin.

8. Explain what is meant by the double tax on corporate earnings. What is your proposal in this regard?

PROJECTS

1. For the years 1932 to 1945 construct a table showing the number of firms, corporate and non-corporate, in the fields of manufacturing and trade; show the percentage distribution.
2. Compare gross income and profits for business units, corporate and non-corporate, as to percentage distribution in the period 1925 to 1945. Comment upon the probable cause and extent of any trends which you find.

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CHAPTER III

The Corporation: Its Development and Operation in Modern Industry



The Origin of the Corporation

Two centuries ago economic activity was largely a hand-process operation carried out in individually owned businesses; today the activity is dominated by the operation of complex mechanical integrations under the control and ownership of corporations. In the days of Adam Smith one began a business with a few hundred dollars of one's own capital, or with an equally modest amount of capital contributed jointly by friends and acquaintances who became partners. Today a business is often begun by incorporation; it may obtain perhaps millions of dollars of capital by selling stocks and bonds to an investment banking house, which, in turn, resells them to any stranger.¹

Stages in the Economic Development of the Corporation

Just as the corporation did not suddenly bloom in the well-developed form in which we now know it, so, too, it did not reach the position now occupied in the business world by a single step or in a short period of time. As the application of the corporation was developed, extended, and made known to the population as a whole, its field of utilization steadily expanded. There are several fairly distinctive eras in the business utilization of the corporation. First are two broad and general stages: (1) the formative period, which lasted until the opening of the New World, and (2) the adaptive stage, which extended from the end of the fifteenth century to about the date of World War I.

The assumption is made that the corporation had its beginnings in the ancient guilds. In a sense these guilds were incorporations of producers, traders, merchants, professionals, etc. Later the villages, the churches, and the municipalities utilized the principles of the corporation to secure the permanence and individuality which were more or less essential to the complete exploitation of their spheres.

The opening of the Western Hemisphere late in the fifteenth century

¹ Kaiser-Frazer began in 1945 with the sale of 1,700,000 shares at \$10, and \$5,000,000 personal investment of its founders.

made possible an extension and development of the known world scarcely imagined before that time. Trading vessels, spanning the Atlantic, opened a trade reservoir and a market outlet almost beyond comprehension. There was a large amount of capital being created; yet there were few opportunities, especially for the great middle classes, to employ it.

The conditions of the day and the natural outcome have been aptly described by Macaulay:

In the seventeenth century, a lawyer, a physician, a retired merchant, who had saved some thousands and who wished to place them safely and profitably, was often greatly embarrassed. Three generations earlier, a man who had accumulated wealth in a profession generally purchased real property, or lent his savings on mortgage. But the number of acres in the kingdom had remained the same; and the value of these acres, though it had greatly increased, had by no means increased so fast as the quantity of capital which was seeking for employment. Many, too, wished to put their money where they could find it at an hour's notice and looked about for some species of property which could be more readily transferred than a house or a field.

An institution which could meet some of these needs was found in the corporation.

The second general stage in the development of the corporation should be noted for the many refinements now accepted as a matter of course and for the wide use of the corporate form in general business.² The first of these applications was in transportation. After the beginnings of the railroad, there was what might be quite accurately called a "railroad" era of the corporation. Practically speaking, no railroads were constructed and operated except under the corporate form of business organization. From 1830 to 1870 the railroad occupied the very center of American financial problems. The corporation received many refinements of financing at the hands of the railroad men; indeed, there are very few moves in financial strategy which were not first tried out in the railroad era.

The last state of adaptation of the corporation to general economic affairs occurred after the Civil War, and may be called the general industrial and commercial stage. The spread of the corporate form was coincidental with further improvements in this type of enterprise. The refinements of the convertible security, the holding company, the investment trust, and underwriting organization and syndicates, as well as other institutions in the field of corporate activity, were added.

Position of the Corporation in Modern Economic Structure

Coincidental with the development of the corporation as a business structural type there has been a marked change in the position of the corporation

² Even as lucid a thinker as Adam Smith was of the opinion that only where the operations were capable of being reduced to routine could the corporate enterprise succeed. To him, there were four trades which could be successfully so reduced: (1) banking; (2) insurance—fire, marine, etc.; (3) making and maintaining navigable cuts or canals; and (4) bringing water for the supply of a great city.

in the modern economic structure. Our business had to "grow up"; and as it has become a healthy adult the corporation has steadily increased its sphere of influence until today practically all big business is in corporation form, and small business is following suit more and more. While the corporation is not the cause of the increased scale of production, there can be no doubt of the mutual dependence of large-scale production and the evolution of the corporation. In many industries modern methods of production require an enormous capital investment; and the corporation, because it makes possible the concentration of capital from many sources under circumstances that place but a limited liability upon the individual, dominates all such industries.

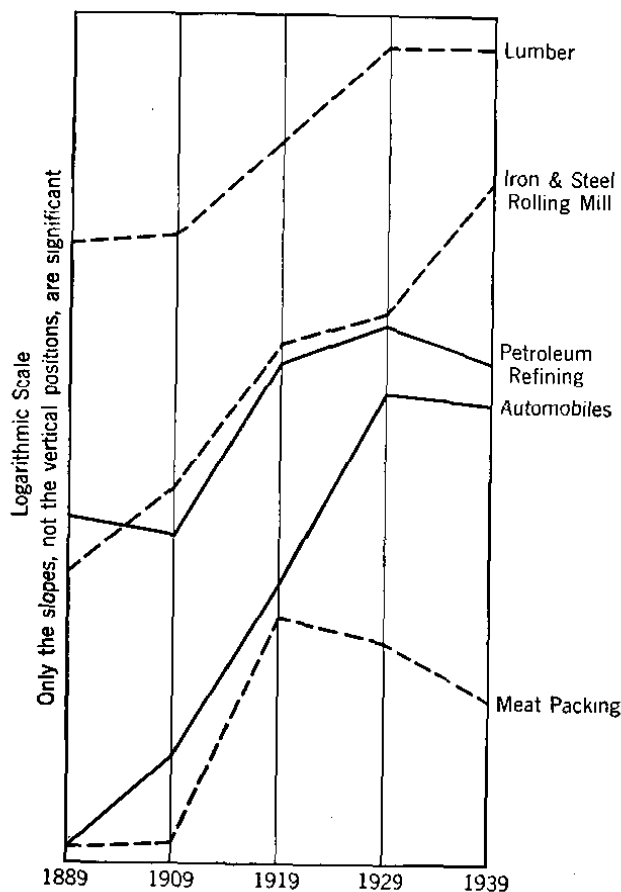


FIG. 2. Growth of Some Common Industries as Reported by the United States Department of Commerce.³

Progress in the Size of the Business Establishment

Business is big, but it appears to be growing bigger. And, as was suggested previously the corporate form of enterprise is peculiarly adapted to large-

³Source: *Thirteenth Census of the United States and Statistical Abstract of the United States*, United States Department of Commerce.

scale enterprise. New industries seem to increase in size more rapidly than old industries; and all industries appear ultimately to approach a limiting size, determined to a large extent by fairly well-known principles in economic analysis. In Figure 2 is shown the rate of growth in the size of some common industries for periods extending back to 1899. These selected

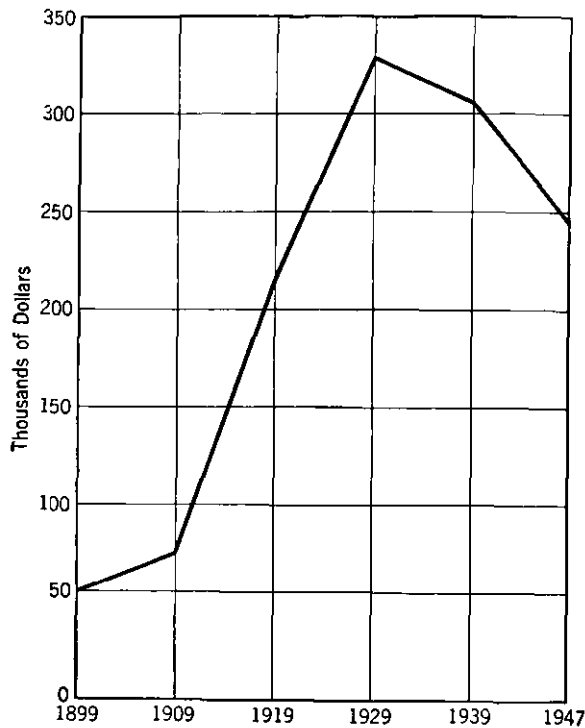


FIG. 3. Average Value of Products per Producing Unit in Manufacturing from 1899 to 1947.⁴

industries fall into three groups: (1) industries which appear to be near maturity; (2) industries that show the approach of a maximum size; and (3) industries which are progressing in size at nearly a constant rate of increase.

The average value per establishment for the products of all industrial concerns in the United States since 1899 is shown in Figure 3. The most important points of interest are the large increases from 1909 to 1929. In this instance scarcity and expensiveness of labor, which necessitated the substitution of capital, played a major role. Since capital acts more favorably as a substitute for labor under the intensive than under the extensive use, this period was of importance. Comparing the number of laborers per estab-

⁴Source: *Statistical Abstract of the United States*, United States Department of Commerce; *Thirteenth Census of the United States, Manufactures*, United States Department of Commerce; *Survey of Current Business*, United States Department of Commerce.

lishment to the amount of capital employed further bears out this contention.

At the present time certain types of business activity are more nearly non-corporate in form. In general, these are typified by industries with a localized, limited demand, or by those making non-standardized products of perishable products or requiring highly skilled labor, etc., such as baking, engraving and plate printing, tobacco and cigarettes, fur goods, etc. Among industries in which the proportion of corporations as measured by the number of establishments is small, the proportion of total business done by corporations is relatively large, thus indicating that the corporation increases the size of the business unit even among businesses of dominantly small size. The 1939 Census of Manufactures showed that although only 16 per cent of the establishments in the baking industry were of the corporate form, this 16 per cent did 67 per cent of the business and employed 65 per cent of the wage earners in the industry. In tobacco manufactures, the figures were 39 per cent of the establishments, 90 per cent of the employees, and 98 per cent of the value of products. From the Census there has been prepared a table of eight industries in which about a third of all establishments are corporations and in which the proportion of wage earners and the value of products are also reported. The Census report is reproduced in part in Table 8.

TABLE 8. ACTIVITY OF CORPORATIONS IN 8 INDUSTRIES, 1939⁵

Industry	Per Cent of Establishments That Are Corporations	Per Cent of Wage Earners Employed by Corporations	Per Cent of Value of Products by Corporations
Bread, bakery products	16.2	65.4	67.4
Apparel and other products made from fabrics	44.9	68.1	73.7
Engraving and plate printing	48.6	80.6	80.5
Fur coats and other fur garments	37.7	55.4	52.7
Lumber and timber products	34.8	70.3	77.3
Millinery	47.0	73.6	73.8
Printing and allied industries	46.2	82.8	88.2
Tobacco manufactures	38.4	89.6	98.3

In contrast to those industries in which the corporation is a relatively infrequent form of business enterprise, there are some industries in which it is the outstanding form of organization. The industries which appear to be peculiarly adapted to the corporate form are, for the most part, those having the characteristics of large enterprise. In 1939, 52 per cent of manufacturing establishments were of the corporate form; they employed 89 per cent of the wage earners and created 93 per cent of the value of products for all the establishments.

⁵ Source: *Sixteenth Census of the United States, Manufactures*, United States Department of Commerce, 1940, pp. 230, 234, 251.

CORPORATION FINANCE

The dominance of the corporation in industry is increasing in American business. This is evidenced by the growing extent to which corporations are hiring a larger proportion of wage earners, producing a larger percentage of the product, and becoming more frequent as a form of business organization. If the total number of establishments is used as an index, the corporation increased from 24 per cent in 1904 to 47 per cent in 1929. Corporations employed 71 per cent of the wage earners in industry in 1904, but accounted for 89 per cent in 1929. If the value of products is used as a proper measure,

TABLE 9. THE CORPORATION IN THE UNITED STATES
ITS ECONOMIC IMPORTANCE⁶

Industry	Year	Per cent Number of Establishments	Per cent Total Employees	Per Cent Value of Product for Manufacturing Per Cent Total Sales for Other Industries
Manufacturing	1929	47	89	92
	1939	52	89	93
Wholesalers	1929	53	80	74
	1939	49	76	74
Retailers	1929	16	55	48
	1939	12	53	47
Service	1939	4	48	37

PROFITS ⁷	
Year	Per Cent Total Profits All Industries (excluding agriculture)
1929	55
1939	46
1946	45

the corporation turned out 74 per cent in 1904 and 92 per cent in 1929. The data collected by the Bureau of the Census indicating the growing dominance of the corporation are shown in Table 9. The reasons for the increasing importance of the corporation are many, and will be mentioned in another connection.

Since the corporation is gaining in prominence, one might expect to

⁶ Source: *Fifteenth Census of the United States*, United States Department of Commerce, *Wholesale Distribution*, 1930, Vol. II, p. 92, Table 8; *Retail Distribution*, 1930, Vol. I, Part 1, p. 89, Table 12A; and *Sixteenth Census of the United States*, United States Department of Commerce, *Manufactures*, 1940, Vol. I, p. 229, Table 1; *Wholesale Distribution*, 1940, Vol. II, p. 200, Table 9; *Retail Distribution*, 1940, Vol. I, Part 1, p. 71, Table 4A; *Service Establishments*, 1940, Vol. III, p. 96, Table 5A.

⁷ Source: *National Income, Supplement to Survey of Current Business*, United States Department of Commerce, July, 1947, p. 25.

find it more prevalent among recently developed industries than among older industries. And so it is. There were in 1939 about $2\frac{3}{4}$ times as many corporations in the airplane, automobile, radio, rubber goods, phonograph, aluminum manufacture, etc. industries as in all other forms of ownership combined. The limited liability aspect of the corporation, along with the unusual risk in new industries, accounts to a certain extent for such a condition.

General Economic Functions of the Corporation

The corporation, because of its peculiar characteristics and features, as already pointed out, is unusually well adapted to raise large sums of capital. This business form gives to the investor the advantage of always being able to discover a place to invest his funds to just the extent that he desires to invest, and in an enterprise whose risk is to his liking. It gives to the individual the opportunity of distributing his funds among a large number of companies of uniform risk, or of placing part of his capital in an enterprise of large risk and part in one of small risk. At the same time it permits him to place his capital in many ventures, each to his liking, and yet, by reason of the principle of limited liability, not only to restrict his losses in any particular one, but also to protect the remainder of his business interests from losses occurring in any individual business venture. Finally, the corporation places business upon an impersonal basis. Because it does so, it eliminates the frailties of emotionalism in business.

Classification of Corporations

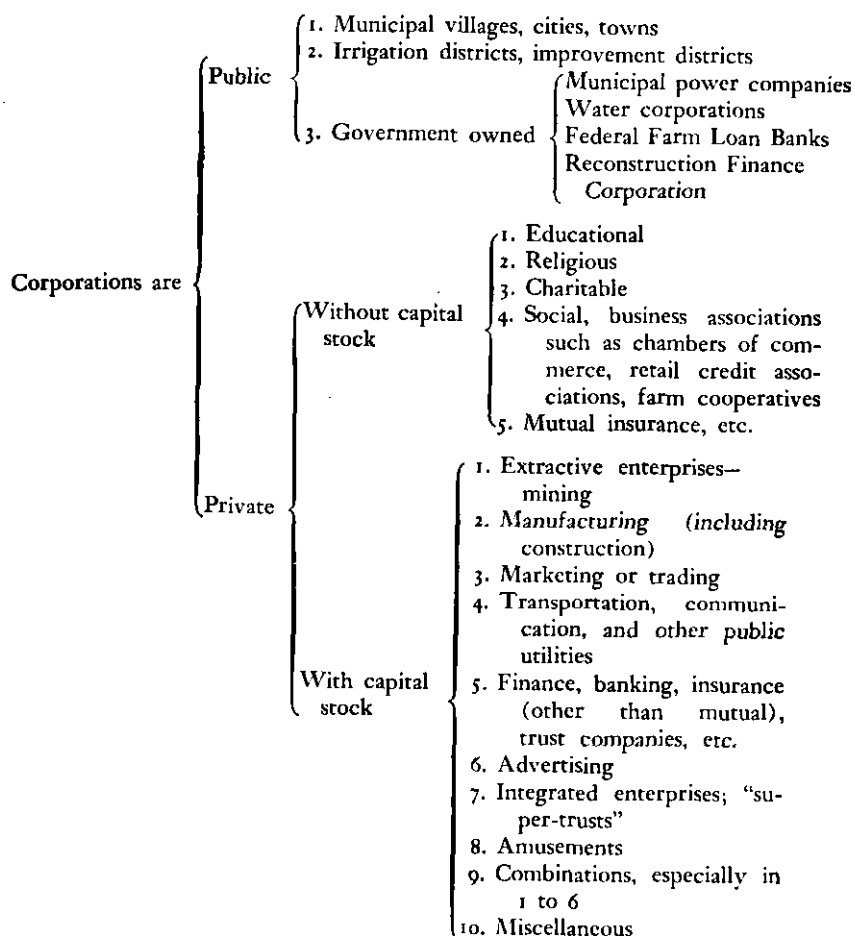
The tabulation on page 44, based upon the law of the State of New York, provide a general conception of the variety of corporations in modern society. The list is not to be considered as exhaustive, but illustrates the wide range of purposes served by this legal unit.

THE PROCESS OF INCORPORATION

The right to exist as a corporate enterprise can only be gained with the consent of the state. Therefore, those persons interested in a business must make application in a particular state for the charter of the enterprise. There is no requirement that this application must be filed in the state where the principal amount of business will be conducted. It is a matter of choice, in fact, whether to incorporate in the state where the business will be conducted or in some other state.

Those who create a corporation may find it advantageous to incorporate in one state while conducting business in a number of others. This advantage usually depends on the degree of regulation that a particular state adopts over corporations, the special taxes which it levies on corporate forms, and the limit upon the power of the organization which the statutes may provide. These factors, which may weigh heavily in favor of a particular state, explain, therefore, why many of our business corporations

in the United States show charters of incorporation in Delaware, New Jersey, and New York. A more concrete comparison of the relative positions with respect to governing corporate enterprises may be made by examining Table 10, which briefs the corporation requirements of several states.



A number of points may be made as to the comparison developed in Table 10. The New Jersey law provides that while the charter may be specified as perpetual yet there is the reserved power in the legislature to alter, suspend, or modify any charter, and this power does not appear expressly in any of the other cases. In both Nebraska and Delaware there are no specified requirements for qualifying the directors, while the other two states do have requirements.

In reference to the mortgaging of corporate property the New York law is much the most strict since it applies to *any* mortgage, while the terms in the other states apply only when *all* property is involved in the mortgage.

TABLE 10. CORPORATION REQUIREMENTS

	<i>New York</i>	<i>New Jersey</i>	<i>Delaware</i>	<i>Nebraska</i>
<i>Charter</i>				
Power	May provide any arrangement not otherwise assigned or prohibited by law (moneyed corporations excepted)	Any lawful purpose (moneyed corporations excepted); any legal provision creating, defining, limiting or regulating power	Any lawful business except banking or public utility operated in the state	Any legitimate purpose except public utilities with properties in the state
Lifetime	May make limited or perpetual	Perpetual unless limited; subject to alteration, suspension, or repeal in discretion of legislature	Perpetual unless charter states lesser term	May make limited or perpetual
<i>Stock</i>				
Kinds	Two or more classes, with preferences, privileges, and voting powers as may be provided	Two or more classes, as provided—no preference rate over 8 per cent	Any kind, terms and preferences may be left to directors	One or more classes in series and such designations, preferences, qualifications as in charter or directors' resolution when so empowered
Par, no par	Both allowed	Both allowed	Both allowed	
Voting	Full or limited	Full or limited	Any arrangement as a class	Full right to every stockholder, and cumulative
Pre-emptive	No provision	Provided unless otherwise stated	May be provided otherwise	No provision
Minimum to begin	\$1000 paid; \$2000 subscribed		\$1000	State in charter
<i>Directors</i>				
Qualification	Full age, at least one a U.S. citizen and resident of New York	Must be a stockholder	No specific requirement	Need not be a stockholder unless so provided

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TABLE 10. CORPORATION REQUIREMENTS (Continued)

	<i>New York</i>	<i>New Jersey</i>	<i>Delaware</i>	<i>Nebraska</i>
Office		May have outside state but principal one in New Jersey	May hold meetings outside state	Within or without the state
<i>By-laws</i>				
Enactment	Subject to contrary provisions directors may make necessary by-laws	In stockholders but charter may confer on directors	Charter may confer power on directors	In stockholders but charter may confer on directors
<i>Mortgage</i>				
Property	Any mortgage requires 2/3 of stockholders approve	If all property subject to mortgage, requires 2/3 of stockholders approve	Nothing limited	Mortgage, sale, or lease all property if majority of stockholders approve
<i>Taxation</i>				
Charter	Par—1/20 of 1 per cent No par—5¢ per share	20¢ per \$1000; 1¢ per share; minimum—\$25	10¢ per \$1000 to \$2,000,000; 5¢ per \$1000 to \$20,000,000; 2¢ thereafter	Statutory fees of filing— \$10 to \$25,000; \$20 to \$100,000; \$50 over \$100,000 and plus 50¢ per \$1000
Annual	1/10 of 1 per cent on value of capital stock to total proportion of business volume in state to total gross; minimum—\$10	1/10 of 1 per cent up to \$3 million par; graduated to 50¢ per million on all over \$5 million No par: begins 3¢ per share to 20,000 shares, graduates to ¼¢ per share over 50,000 shares	\$5—\$25,000; \$10—\$25,000— \$100,000; \$20—\$100,000— \$300,000; \$25—\$300,000— \$500,000; \$50—\$500,000— \$1,000,000; \$25 each additional \$1,000,000	\$5—\$1000—\$10,000; \$10—\$10,000— \$20,000 ranging up to \$400—\$1,000,000— \$10,000,000

A comparison of the charter rates for a company of one million dollars capital stock shows the advantage which Delaware allows. Again this advantage appears for Delaware as to the annual tax levying on all corporations, making the total fee for the first year in Delaware \$150 as opposed to the total of \$1000 in New York.

State	Charter	Annual (assumed 1/2 business done in chartering state)
New York	\$500	\$500
New Jersey	200	
Delaware	100	50
Nebraska	100	200

Generally speaking, the granting of the charter is only a formality of the proper state officer, who, having received the application in the necessary form, together with the fees attached, grants the certificate of incorporation. The charter is granted under the statutes of the particular state, and the proper state officer must ascertain whether the provisions of the application conform in general with the law. The charter will provide, generally, for the nature of the business, the principal place of business, the amount of capital stock and any issuance of different kinds of stock, the vesting of general business powers in the corporation, and possibly a limitation upon the total indebtedness. The following is a sample charter:

CHARTER OR CERTIFICATE OF INCORPORATION

WE, THE UNDERSIGNED, in order to form a corporation for the purposes hereinafter set forth, under and pursuant to the provisions of the Act of the Legislature of the State of entitled "An Act Providing a General Corporation Law" (approved April 19, 1915), and the acts amendatory thereof and supplemental thereto, do hereby certify as follows:

Article I

The name of this corporation is:

Article II

The principal and registered office of the Company is located in the Building, City of, State of, and the name of the agent therein and in charge thereof and upon whom process against this corporation may be served, is

Article III

The nature of the business and the objects and purposes proposed to be transacted, promoted and carried on, are to do any or all of the things herein mentioned, as fully and to the same extent as natural persons might or could do, viz:

Article IV

The Company shall be authorized to issue capital stock to the amount of dollars. The number of shares of which the capital

stock shall consist is shares of preferred stock of the par value of dollars each, and shares of common stock of the par value of dollars each.

The preferred stock may be issued as and when the Board of Directors shall determine and shall entitle the holder thereof to receive out of the net earnings, and the corporation shall be bound to pay a cumulative dividend at a rate to be determined by the Board of Directors but not in excess of one hundred per cent. After the payment of the above provided for dividend, the holders of the common stock shall be entitled.

The amount of capital stock with which this corporation will commence business is dollars, being shares of common stock.

Article V

The following provisions for the regulation of the business and the conduct of the affairs of the Company are hereby established:

In furtherance and not in limitation of the powers conferred by the laws of the State of, the board of directors is expressly authorized: to make and alter the by-laws; to fix the amount to be reserved as working capital and to authorize and cause to be executed mortgages and liens upon the property and franchises of this corporation; from time to time to determine whether and to what extent and at what times and places and under what conditions the books and accounts of this corporation, or any of them other than the stock ledger, shall be open to the inspection of the stockholders.

No stockholder shall have any right to inspect any account or book or document of the corporation, except as conferred by law or authorized by resolution of the directors or of the stockholders.

The board of directors shall have power to hold its meetings, to have one or more offices, and to keep the books of the corporation (except the stock and transfer books) outside of the State of at such places as may be from time to time designated by them.

The corporation in its by-laws may prescribe the number necessary to constitute a quorum of the board of directors, which number may be less than a majority of the whole number.

No person shall be eligible to hold office of director unless he is a stockholder of record according to the books of the company, and in case a director shall cease to be a stockholder as shown by the books, he shall ipso facto immediately cease to be a director and his office shall be vacant.

With the consent in writing, and pursuant to vote of the holders of fifty-one per cent of the capital stock issued and outstanding, the directors shall have authority to dispose, in any manner, of the whole property of this corporation.

This corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by law and all rights conferred on

officers, directors, and stockholders herein are granted subject to this reservation.

Article VI

The names and places of residence of each of the original subscribers to the capital stock and the number of shares subscribed for by each are as follows:

Name..... Residence..... Number of Shares.....

Article VII

The duration of the Company shall be perpetual.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this day of 194...

(L.S.)
(L.S.)
(L.S.)

All other matters will be generally referred to as subjects to be governed by the by-laws to be enacted by the stockholders in reference to the charter.

Foreign Corporations

The entry of a corporation from the state in which it is chartered into another state for the purpose of transacting business is usually regulated. Most states, however, enact sections in their laws to specifically cover these foreign corporations. Such regulations are burdensome to some degree, but they may be regarded as reasonably necessary to supervise the business operations of these corporate units by the state in which they are conducting business. The burdens of regulation consist usually in the nature of special taxes and general reports for purposes of taxation of both the firm and its stockholders.

Qualifying Steps. Most states have a common series of steps for the qualification of a corporation registered as a foreign corporation. The acts consist of filing statements and the payment of fees, which may be briefly outlined as follows:

- 1. Application for certificate to do business in the state, including in some states an acceptance of the provisions of the state constitution and general laws for the doing of business.
2. Copy of the complete articles of incorporation as amended, properly certified.
3. Copy of complete by-laws of the corporation, properly attested.
4. Designation of a place of business in the state and the naming of an agent for the service of legal process in the state.
5. Statement of financial condition of the corporation, its capitalization, and the amount of capital and assets to be employed in the state.

A corporation chartered in another country would be known as an alien corporation.

When these qualifications are complete, they may have to be renewed later after a limited period, for some states will not grant the privilege for an indefinite time. Also many states require certain annual reports, such as:

1. Annual tax or information reports with levy of annual tax.
2. Statement of change in place of business in the state or change in resident agent appointed for service of process on the corporation in the state with attached fees.
3. Copy of any amendment to the corporation's articles of incorporation with stipulated fees.

Various states impose one or more of the following penalties for failure of a foreign corporation doing business in a state to comply with its requirements:

1. Fines on the corporation, officers, agents, or employees of the corporation; or imprisonment of officers, agents, or employees of the corporation.
2. Liability of officers, directors, or stockholders for corporate debts or liabilities arising out of transactions within the state.
3. Making contracts, entered into by the corporation, unenforceable; prohibiting the filing, maintaining, or defending of suits in any state courts; and/or restricting the holding by the corporation of real property in the state.

STOCKHOLDERS

As a group the stockholders of a corporation represent in their stock ownership the general powers of the corporation. As individual stockholders they have little power over corporate matters, though in a few instances they may have standing in court on behalf of themselves and all other stockholders. The general rule requires the stockholder to seek correction of policies and procedures in the stockholders' meetings, and if he cannot win a majority decision the courts will not ordinarily seek to find relief for the holder. That is, where the stockholder cannot agree with the policies and procedures of the concern which do not constitute fraud or abuse of position by officers or directors, he should sell his interest. This freedom of disposition of his interest is, of course, one of the most important rights which the stockholder has under his contract. So long as he holds his stock, he has agreed to join a community and to allow his interest to go with the decision of that community or group action.

By-laws

One of the first objects of business for the initial stockholders' meeting is to adopt a set of by-laws which will become the internal rules of management. These rules ordinarily provide for the position of the stockholders in relation to the corporate activities, for the election and division of powers for the officers, and for the election and division of powers for the directors. (See the accompanying sample by-laws.) The next step is the selecting of the board of directors, whose members will subsequently act as the executive

committee for the stockholders. The general policies of the business will not hereafter be referred to the stockholders. They will be answered for by the directors. Unless the by-laws have specified that decisions must be referred back to the stockholders, the law usually implies that stockholders have the right to do little more than elect the directors.

BY-LAWS

OFFICES. 1. The principal office shall be in the City of, State of, and the name of the resident agent in charge thereof is

SEAL. 2. The corporate seal shall have inscribed thereon the name of the corporation, the year of its creation and the words "Corporate Seal, State of"

STOCKHOLDERS' MEETINGS. 3. All meetings of the stockholders shall be held at the office of the corporation in

4. An annual meeting of the stockholders shall be held on the first day of November when they shall elect by a plurality vote, by ballot, a board of directors, and transact such other business as may properly be brought before the meeting.

5. The holders of a majority of the stock issued and outstanding, and entitled to vote thereat, present in person or represented by proxy, shall be requisite and shall constitute a quorum.

6. Each stockholder shall have one vote for each share of stock having voting power, registered in his name on the books of the corporation.

7. Written notices of the annual meeting shall be mailed to each stockholder having a right to vote thereat.

8. Special meetings may be called by the president or by

9. Business transacted at special meetings shall be confined to the objects stated in the call.

DIRECTORS. 10. The property and business of this corporation shall be managed by its board of directors, three in number. Directors must be stockholders.

11. The compensation of directors shall be

12. An executive committee of two or more directors may be set up to

13. Meetings of the board shall be as follows:

OFFICERS. 14. The officers of the corporation shall be chosen by the directors and shall be a president, vice-president, secretary and treasurer.

15. Salaries of the officers shall be fixed by the board of directors.

THE PRESIDENT. 16. The president shall be the chief executive officer of the corporation. He shall preside at all meetings of the stockholders and directors. He shall have general and active management of the business and shall see that all orders and resolutions of the board are carried into effect.

17. He shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the corporation, shall keep in safe custody the

CORPORATION FINANCE

seal of the corporation, and when authorized by the board shall affix same to any instrument requiring it.

THE VICE-PRESIDENT. 18. The vice-president shall in the absence or disability of the president perform the duties and exercise the powers of the president, and shall perform such other duties as the board of directors may prescribe.

THE SECRETARY. 19. The secretary shall attend all sessions of the board and all meetings of the stockholders and record votes and minutes of proceedings. He shall give notice of meetings and

THE TREASURER. 20. The treasurer shall have the custody of the corporate funds and securities. . . .

21. He shall disburse the funds as may be ordered by the board.

VACANCIES. 22. In the event of vacancies in office, the successors shall be chosen thus:

CERTIFICATES OF STOCK. 23. The certificates of stock shall be numbered and shall be entered in the books of the corporation as they are issued. . . .

TRANSFERS OF STOCK. 24. Transfers of stock shall be made on the books only in the following manner:

25. The transfer books may be closed for a period of days preceding any meeting or

INSPECTION OF BOOKS. 26. The directors shall determine when and under what conditions the accounts and books may be opened for inspection by the stockholders.

ANNUAL STATEMENT. 27. The board of directors shall present an annual statement. . . .

AMENDMENTS.

VOTING AND CONTROL

Exercise of the Voting Right

The stockholder's right to vote as an expression of his opinion is confined to stockholders' meetings, either regular or special. At such a meeting he is entitled to express opinions, but unless these were reduced to a by-law or formal resolution they would not be effective or binding upon the actions of the directors and officers. The major questions upon which the stockholder's vote can be exercised will be the election of the directors, the amendment of the charter or by-laws, and in some cases the sale or mortgage of the entire assets of the corporation. It is worth noting that the stockholder is not in the position to directly affect the major decisions of corporate operation.

The lack of power in the position of the stockholder is of considerable importance in a unit which is large and has widely scattered stockholdings. Such is the case, of course, for many of the most successful and prominent corporations in the country. In these circumstances a stockholder usually feels that he is so inadequately informed and inexperienced with the questions of the business that he cannot express an opinion upon specific decisions. This is true apart from the fact that many stockholders do not have

an effective number of votes when compared to the votes presented in the meeting by principal stockholders and the corporate managers. In such an instance the group of directors and officers may be maintained in office for long periods of time without effective and challenging opposition to their decisions.

The quorum necessary for a meeting is usually controlled by the by-laws of a corporation though some incorporation statutes set the minimum. Whenever these regulations permit half of the total number of stockholders to constitute a quorum, and the majority rule is followed, it is apparent that about one-fourth of the stock may decide all questions. On specific points, such as mortgaging the property of the corporation, this limit of the voting requirement may be substantially increased. But these actions constitute only a few of the many policies under which the corporate operation must be carried out. The entire question creates a problem in the social aspects of the corporation which will be dealt with in Chapter XXXIX.

Methods of Voting

The general common law granted each stockholder one vote without regard to the quantity of capital invested. The corporate statutes have generally adopted the rule of one vote for each share. This is regarded as more equitable for those who have contributed the greatest sum of capital and have therefore assumed the greatest risk. A part of the problem pointed out in the preceding discussion arises from this rule. In the case of the cooperative corporation the common-law rule is used, and it is claimed that this makes for more effective responsibility on the part of officers and stockholders. Though this point might be conceded it is not likely that large contributors of capital would accept such a method and the incumbent risks of their heavy investment.

It is interesting to discover that the English Companies' Act includes a scheduled appendix which illustrates possible limitation of share voting. In this instance the stockholder might be given one vote for his first ten shares, thereafter one vote for each five shares up to a holding of one hundred shares, and thereafter one vote for each ten shares. This could be adopted by corporations in the United States under the existing incorporation laws of a few states and it might serve to encourage the interests of a minority. This provision is unlikely to attract great public interest. As an extreme in the matter it is worth noting that Eastman Kodak Company does not permit the voting of less than ten shares.

Cumulative Voting. A device created and recognized in the incorporation statutes of some states for the protection of minority groups is known as cumulative voting. The idea is drawn from the political concept of proportional representation. If a board of seven members was to be elected and you were the owner of ten shares, the cumulative method would allow you to have a total vote of seven (number of board members elected) times ten (number of shares owned) or seventy votes. You would be per-

mitted under this method to cast the seventy votes in any way you desired upon the seven vacancies. You might cast them all for one individual or you might give fifty votes to one and twenty votes to another. Obviously this cumulation enhances the voting power, but to be effective it must be combined with others to outvote upon some one office the even divisions of votes which the large stockholders will tend to cast for the majority of the board.

It is also clear that even where the minority stockholders have elected a representative to the board of directors such a member will not be in a position of control. There may be, however, a salutary effect upon the scrutiny of actions, the thoroughness of consideration, and the elimination of prejudicial actions. The majority of a board of directors will feel that this minority representative is a lookout who may achieve great effectiveness by stating his disagreements publicly or issuing information directly to stockholders. A board of directors ordinarily does not like to have its business and decisions discussed publicly, and will therefore give more than ordinary weight to the opinions of the minority representative.

Limited Voting. The stockholder and corporation may, by the stock contract, specify no voting rights of the stockholder, unless the incorporation statute prohibits. Thus many stock contracts have no voting rights at any time, by reason of the direct statement in the contract.⁹ There are many situations, however, which the stockholder may feel it should be his special privilege to pass upon. These can be provided for by restricted voting powers stated in the contract. The more common grants of special and limited voting power are classified as (1) veto voting and (2) contingent voting.

Veto Voting. In the event the corporation is proposing such unusual actions as the sale of all its real property, or the creation of a special class with complete priority over all outstanding contracts, such actions might be presented to all the stockholders. If the preferred stock is granted veto power in this case and refuses to approve, the action becomes impossible—thus the name “veto,” as in the case of governmental procedure. While the initial approval of regular voting stock has been given, the refusal to concur on the part of the special stock group granted the power to vote on the specific action prevents the company’s proceeding. These agreements are of particular importance to preferred stocks, which may have no regular voting power, and stockholders of such class deem the veto powers necessary to protect their interests.¹⁰

Contingent Voting. Under special conditions, such as the failure of the corporation to pay dividends on the preferred stock for more than one year or other stated period, the preferred stockholders may be given the

⁹ Of 40 preferred stocks issued in 1945-1947, there appears no general voting rights allowed in 30 issues, and full voting rights in 10 issues.

¹⁰ Veto voting was authorized in 38 out of 40 issues of preferred stock issued in 1945-1947.

general power to vote. This power remains so long as the contingent event is not removed, but once the dividends have been paid and are currently being paid the power to vote is lost, and the preferred stock reverts to its non-voting status. Various arrangements of this power to vote are possible, with the special grant of the right to elect the whole board of directors, or a majority of the board. In a few instances the vote on board membership may be limited to a minority representation on the board, a not very satisfactory provision if a real change of policy is required.¹¹

Proxy Voting. In order to facilitate voting by stockholders they have been given the privilege of voting by an agent when they cannot be present in meetings. The form as illustrated in Figure 4 is in substance an agency

GENERAL BAKING COMPANY


PROXY

Know all Men by these Presents that the undersigned hereby constitutes and appoints **GEORGE L. MORRISON, FRANK K. SHEPARD** and **OSWALD L. JOHNSTON**, and each of them, attorneys and agents, with power of substitution in each of them, in the name, place and stead of the undersigned to vote as proxy at the annual meeting of the stockholders of **GENERAL BAKING COMPANY** to be held on the eleventh day of March, 1948, at eleven o'clock in the forenoon, and at any adjournment or adjournments thereof, according to the number of votes that the undersigned would be entitled to vote if personally present. Copies of the Notice, dated February 13, 1948, of said meeting, and of the Proxy Statement, dated February 13, 1948, have been received by the undersigned.

The undersigned agrees that said attorneys and agents, and each of them, in person or by substitute, may vote in favor of the proposed directors named in said Proxy Statement, or, in the event that such persons are not available by reason of an unforeseen emergency, then in their discretion in favor of the election, as Class A directors, of any other persons, and may vote in accordance with their discretion on any other matters or proposals not known at the time of solicitation of this proxy that may legally come before the meeting, or any adjournment or adjournments thereof.

A majority of such of said attorneys and agents as may be present and act at said meeting, or any adjournment or adjournments thereof, in person or by substitute, or, if only one shall be so present and act, then that one shall have and may exercise all the powers of said attorneys and agents hereunder.

IN WITNESS WHEREOF the undersigned has hereunto set his hand and seal this.....day of1948.



Number of Shares Voted on this Proxy:

Preferred

Common

..... (I.S.)

When signing as attorney, executor, administrator, trustee or guardian, please give full title as such. For joint accounts, each joint owner should sign.

FIG. 4. Proxy Form (General Baking Company).

appointment, with either a general power or a specific power as stated in the proxy. In these days of large stockholder lists and relatively small holdings, it is obvious that only a few of the stockholders are likely to be at the meetings in person. The most interested parties, the officers and directors, will no doubt attend together with a few major stockholders. The general group of stockholders either will have failed to vote or will have presented their proxy to another.

Those who solicit the proxy of the stockholder are most likely to be the directors in office or a major stockholder. Thus the policies already in-

¹¹ Contingent voting was provided in 37 issues out of 40 preferred stocks issued in 1945-1947, but only 14 of these issues granted the right to elect a majority of the board of directors. The other 23 provided for election of one-third or less of the board in the event of dividend defaults.

augured by these persons will be undisturbed and any other acts which they contemplate will be confirmed. In general the most important act will be the election of the directors for, unless specific questions of policy are submitted, it is through this group that the decisions are made.

When asked to send his proxy to designated persons, usually stockholders or directors then interested in the concern, a stockholder may question both why he should send it and whether these persons should have the proxy. In order that the business of the corporation may be transacted, a quorum must be present in a meeting, by person or by proxy; thus it is important that stockholders vote. As to the person to whom the proxy is given, that is a decision which only the stockholder can make. Because he is likely to give it to an officer or director already holding office, there is good probability of no change in current policy. This continuity of policy is good in a general way, but it may also be poor, for failure to check and evaluate the acts of the official group may lead to inefficient and less alert management.

Under the current rules of the Securities and Exchange Commission, the management which requests proxies in the name of present officers must disclose their stockholder interests, their compensation received from the company, and their connection with subsidiaries. If a special contract is proposed for approval by the proxy vote, any personal interest of the management must be disclosed. Thus a step has been taken by which the stockholder may judge the interests which the management will represent. When a management proposal for a generous retirement plan for officers appears, for example, some light of special interest may be shed upon the question when it appears that such officers own little or no stock in the company. Or on the contrary, the proxies may be heavy stockholders thus virtually assuring themselves under the retirement provisions of a special claim upon the earnings of the company.

DIRECTORS AND OFFICERS

Directors

The directors of a corporation are charged with the general supervision of its operations and the making of policy decisions. Within the framework of the charter and by-laws the directors will be required to make the necessary judgments as to how and when the corporation should act within its powers. For example, after the corporation has reported profits, it will be the policy-making decision of the directors which determines how much shall be paid as dividends and how much shall be used by the corporation. The exact order in which the dividend payments will be due the several classes of stock will be prescribed by the statements of the charter or by-laws.

The number of directors required for a corporation varies according to the state which granted the charter, and usually such provision is for a minimum. Directors are commonly required to be stockholders though this is not an absolutely universal rule. Often this requirement is complied with

by a stockholder's loaning stock to the proposed director for use and for qualifying him under the provisions of the law. Upon leaving the office of director this person will return the stock to the original owner.

Powers of the Directors. When acting as a board the directors have the exclusive power to manage the business and to control its assets. Stockholders have no right to interfere with the judgments of the board except upon court action alleging fraud or abuse of power. In other words, the courts will not substitute their judgment for the decisions of a business which have been made by the directors, in what appear to be reasonable and fair circumstances. The board of directors may delegate the transaction of immediate and ordinary business to the officers, but such actions as leasing the property, mortgaging the property, or setting the price at which securities are to be sold cannot be delegated to others. Generally the term of office, compensation, and sufficiency of conduct on the part of the officers will rest within the discretion of the directors.

The general power to borrow money is granted to a corporation and would normally be exercised by the directors, but within limits prescribed by them this action may be delegated to officers. Incident to borrowing, the power to give the corporation's property as security is vested in the directors. Generally they have the right to purchase, sell, or lease the property of the corporation within their discretion as a board subject only to the specific terms of the statutes and charter.

Responsibilities of the Directors. The exercise of a director's power in good faith and with reasonable judgment will ordinarily leave the director free of any responsibility for loss sustained by the corporation. The directors individually would be liable for misapplication of assets, acts beyond the specified or implied corporate powers, secret profits (unless fully disclosed), and negligence or neglect of duty. Absence from meetings with reason may excuse a director from liability for actions taken in such meetings but he is expected to attend with reasonable regularity. A director may receive payment for attendance at the directors' meetings.

Officers

The charter of a corporation will usually specify the officers to be elected. The more typical ones are president, vice-president, secretary, and treasurer. Provision may be made for a greater number of officers and the subdivision of their duties by specifications in the by-laws. The typical field of operation for each officer may be detailed as follows:

1. *President.* The president will have principal charge of all employees and the task of correlating the work of each of the other officers. He will act as the corporate representative for the making of all instruments and contracts, and will be expected to see that all orders and resolutions of the board of directors are put into effect.
2. *Vice-president.* The vice-president is expected to aid and substitute for the president in performance of his many duties. When these duties are

too numerous or detailed for competent handling by one individual, the tasks may be divided. Common routines of executing checks, certificates of stock, purchase agreements, and other general contracts will be given to this officer.

3. **Secretary.** The principal duties of the secretary involve the record keeping, other than financial records, of the corporation. All records for the directors' and stockholders' meetings, proper registry of stockholders, and correct proxy authorizations must be prepared by the secretary. He commonly has charge of the corporate seal and will countersign all corporate documents with whatever other chief officer has been designated to act. Making all reports to government agencies, and keeping documents such as deeds, leases, insurance policies, and sending corporate reports to stockholders commonly become the duties of this officer.
4. **Treasurer.** The treasurer usually acts as the chief fiscal officer of the corporation, supervising the proper keeping of financial records and preparing tax reports and financial statements. In many of the larger corporations today the task of analyzing and supervising financial records including the proper tax reports has been assigned to a controller. This officer is often a technically trained accountant, and the treasurer serves as a policy-making official for the general financial problems of the business. All checks, notes, and other negotiable paper of the corporation normally require the treasurer's signature. This officer is expected to prepare the financial reports for both the board of directors and the stockholders. His duties include the supervision of the safekeeping of all funds and negotiable assets and the proper disbursement from the regular deposit account.

Sometimes an additional operating official for the corporation is designated as chairman of the board of directors. This is often the case with our larger corporate units. This officer will not only preside over board meetings but will be regarded as the senior officer of the corporation. While he would not ordinarily assume any routine duties it would be expected that he could countermand any actions of the other officers. When such an office is created it evidences the need on the part of the board of directors to have someone constantly studying policies affecting the business. Information would be prepared and analyzed, and conclusions would be formulated by this official for presentation to the full board of directors on any general policy which might be in need of change or reexamination.

Responsibility of Officers. An officer is in the position of a fiduciary, that is, an agent in a situation of confidence and special knowledge of the corporate business. Because of this position he will be liable for any failure to use his best care and judgment and to act in reference to corporate matters with the utmost good faith. He is not liable, however, for mistakes or errors in judgment, except where he may act beyond the powers of the corporation. The officers are subject to removal at the discretion of the board of directors, and their duties may be reassigned at the will of the

board. Ordinarily there are no special qualifications for the holding of the office and it is not uncommon for one individual to be both director and officer. This would mean, too, in many instances, that he was a stockholder. One of the advantages, however, of the corporate form is the general right to employ an officer with little or no capital invested in the business. Some might not view this as an advantage because they would doubt the interest of such an officer, but in these days of technology many experts still lack capital to invest.

SUMMARY

The corporation has come to occupy a position in the economy of the business structure of the United States beyond the importance of its numbers. In manufacturing, transportation, and the electric utilities, all industries requiring large capital investments, the corporation has become the usual form of enterprise. Since the number of wage earners and value of products supplied for the economy by the corporate form of enterprise in these fields is more than 90 per cent, the importance is self-evident. In the fields of distribution, service, and agriculture the corporate form has made substantial growth as a business unit but it is not dominant. It is noticeable that the increase has been large in the fields of service and wholesale distribution within the past two decades.

Corporate charters must be obtained from a state in order to create the legal entity for the enterprise. Where this charter is obtained is a matter for decision taking into account a wide range of possible factors including corporate powers, securities, and operations of the corporation. Likewise there is the question of the relationships of the directors, officers, and stockholders and the extent of the state control or specification of these rights. Taxes, of course, assume a large place in the decision.

Though a charter has been obtained in one state, this does not give the right to enter another state and do business. This act requires the permission of the second state, by a certificate of grant upon proper registration. While many restrictions upon this entry could be laid down, the tendency is for the states to require nominal tax payments and resident agent registration.

Stockholders occupy a position of general corporate control which is not too effective, since much discretion must be left to the directors and officers, who are both better trained and better informed upon particular business questions, encountered by the enterprise. Directors and officers are being required to take, and are coming to assume voluntarily, much greater responsibilities as agents and fiduciaries in the handling of corporate business. Because of the voting difficulties faced by stockholders, widely scattered and only nominally informed, this attitude by directors is a social necessity if the corporate enterprise is not to become the victim of restrictions sufficiently great to impair its economic usefulness for private enterprise.

QUESTIONS

1. Explain the significance of the growth of the corporate enterprise after the breakup of the guild system.
2. In reference to the growth pattern of the several industries, why do you think the meat-packing industry shows a decline per establishment as compared to the other fields?
3. What connection with financial policy do you think existed between the policies and the rate of growth in the meat-packing industry?
4. Although the corporation has grown in significance as far as volume of production is concerned, how do you explain the profit showing from 1929 to 1946?
5. Why is the charter of importance to a corporation? In what ways do the states of incorporation influence this charter?
6. Explain the relation of the by-laws to the corporation and especially to its charter.
7. For what general rights does the stockholder possess voting power? Indicate briefly the variations of this power which may be provided.
8. Explain in general the legal position of the directors in relation to the corporation and the stockholders. What is their responsibility for errors in business operation?
9. How do you account for the development of the controller in business? How do you distinguish his position from the treasurer's?
10. What is the position of the chairman of the board of directors in relation to the president of a corporation? Why has this division developed?

PROJECTS

1. Prepare a ten-item bibliography on responsibilities of corporate directors and officers. Summarize the comments.
2. Chart the burden of federal income tax on business profits, corporate and non-corporate units, as to both gross income and operating profit in the fields of manufacturing, trade, and service for 1925 to 1945.

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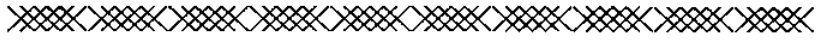
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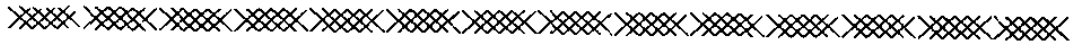
PART TWO



Instruments of Finance

CHAPTER IV

Capital Instruments



Introduction

A business manager is called upon to use a number of instruments and statements in the course of his testing, examining, and solving financial problems. We are probably keenly aware of how the special financial statements like the balance sheet, the income account, and the surplus statement play their roles in such a picture. Any acquaintance with the accounting statements incident to courses of study has, no doubt, pointed up the relationships of these statements to the manager's various problems when he has need for assistance in analysis and verification of policy.

When one is called upon to study other financial instruments, such as mortgages, bonds, stocks, and their like, the initial impression might easily be that these are matters of great detail to be left largely to a legal force trained in drawing such agreements. This impression, however, underrates the importance of these instruments as influences upon financial policies. It is desired to make the point at the outset that such instruments are to be used by a financial manager in somewhat the same fashion as accounting statements. That is, financial instruments are used as devices to reach ends which have been studied and verified as being in the best interests of the particular business.

In substance, we may regard these instruments issued as contracts for capital granted to a business as the net conclusion of a series of forces—on the one side forces representing the bargaining power of the business, and on the other side forces representing the bargaining power of investors. In other words, firms face at the outset the fact that a business must create capital contracts to be sold in the market. The desires of investors entering this market with funds for investment must be as carefully considered as the desires of the business itself; otherwise it is obvious that no contracts can be sold, and this, after all, is the ultimate test of the actual financial instruments as devices for procuring capital for the enterprise.

Market Demand

In this light it should be no surprise that while we can reasonably well classify the general nature of the contracts usually found in a series of

financial instruments, nevertheless, in the capital structure of each particular business these agreements may differ in many and varied details. As we have explained, the variation in details is the result of a bargain arrived at on behalf of the business and the investors who purchase the contracts. To make the matter more specific, if we recall the conditions surrounding the capital market of 1933, we may remember the many heavy withdrawals of deposits from banks, evidencing the great distrust of the owners and their tendency to hoard currency. This attitude led many creditors to demand that contracts entered into should terminate within a very short period, when creditors might again convert their position into one of currency in hand. With these moods present in the market, it is evident that any company which had to approach investors in this period would have first of all to grant many provisions which would safeguard the credit or capital extended. This was usually done by marketing securities secured upon property valued at several times the amount of the debt. Since persons were, in this circumstance, considering themselves as taking extensive risks to let the funds out of their hands rather than to retain them as currency or demand deposits, it is not at all surprising that the interest rates were substantially increased over the period a year or two previous to this crisis. Too, it was conforming very definitely with the attitudes of the period that any loan had to be paid within two years or so—certainly within five years. However, for an investment in anything more permanent, such as a stock contract, these conditions would make such a sale almost an impossibility. When we examine the record for this period, therefore, we find that new issues sold in the market for the year 1933 were less than 600 million dollars and that these instruments were divided into 540 million dollars of debt instruments and 60 million dollars of stock contracts, or 10 per cent of the issues. We find, further, that the rates changed on the average for such capital loans from an average of 5.6 per cent to 6.7 per cent. Thus any business seeking capital at that time had no choice but to offer such terms if it desired to complete an issue. Any enterprise would have had the problem also of keeping its demands for capital to a very low sum in order not to embarrass its future by such restrictive and expensive contracts as would have been required.

A distinct contrast to this period can be found in the latter part of 1937. After a period of considerable government spending, the general price level was beginning to rise and investment activities were at a high point. The capital market in the previous three years had begun to accept issues in increasing amounts and at a consistently lower rate. There was a considerable optimism over the future and the expectancy that rising prices would increase profits. In the light of such conditions, it would not be surprising to find that it was possible to sell stocks or permanent contracts, whereas four years before, this was next to an impossibility. We would expect, of course, to find a decreasing interest rate on the average, since the market was pervaded with an optimism over further profitableness and definite

increase in the volume for business. Since this future appeared quite definitely as one of improvements, we might reasonably expect that investors would now lend their funds for rather considerable periods of time, and possibly without being too insistent upon marketable securities.

If we examine the reports for the period we find some evidence to support this analysis. For the 1½ billion dollars of new capital issues in 1937, we find almost 400 million dollars of stock instruments in the total, or 26 per cent of total issues. The average interest rate for this year shows a decline from 5.5-6.7 per cent to the point of 4.55 per cent. The maturities which were granted upon loan contracts show on the average over twenty or twenty-five years. All of these conditions, therefore, demonstrate the changed attitude of investors and the ability of business to obtain its funds upon contracts far more advantageous to itself.

This picture of the about-face in market conditions between 1933 and 1937 may serve very well, therefore, to illustrate the point that financial instruments must be cut much after the manner of cloth by the tailor to fit the particular conditions and demands of the investment market. It is true that the business must measure these terms against the need for raising capital at this time. Whenever a decision is made to acquire capital, the contracts offered must necessarily meet the conditions of the market.

The examination of fixed capital instruments in the following chapters is pursued because we must understand the various contractual terms which may be devised to meet the market conditions when the firm is selling its securities. We must recognize the commitments which such contracts represent for the business when it creates securities. The terms of each new issue of securities will change in order to meet the current market demands. For these reasons a matter of policy must reflect not only the company's desire but also the market attitude. And it must be clearly understood that the manager may be limited or circumscribed in his actions by the security terms so as to prevent problems for the business in its future operations.

Company Position

To make this a bit more concrete we need only to cite the interest rate. Perhaps the market is insistent upon 6 per cent for borrowed funds. The manager certainly ought not to bind the firm to such a contract if, upon examination of the records, he finds that the business has a high variable earnings record—that in some years not as much as 6 per cent is earned on the funds committed in the business. It would be greater wisdom to raise capital in such circumstances from a source which would not commit the business to pay a fixed rate of return in each year regardless of earnings in that year. That is, a preferred stock with a fixed rate of 7 per cent dividends, but which might be easily postponed for one or more years, would be better adapted to the situation in which this business finds itself as compared to borrowing money. Thus it is clear that the financial policy of the firm in

favor of an issue of stock rather than an issue of bonds, other costs being no greater, is conservative and safe.

Again, we might take the illustration of a possible provision in the new stock instruments requiring that any future stock or debt contracts which the firm desires to issue must be accepted by a stipulated percentage of the owners of the previously created instruments. The market might be one in which such definite limitation upon total securities issuances would be almost a necessity for the sale of the new stock contract. Clearly a business could not well afford to permit the decision upon such matters to be taken from its directors and be dependent upon a decision of shareholders. If this agreement could be avoided by the granting of some offsetting promise, surely it would be the wise financial policy of the business to do so. It is conceivable that in this instance investors would accept a bond secured by a very adequate first mortgage without any stipulation of the right to control the total quantity of other instruments which might be created in the future. That is to say, we have been able to meet the market demand by pledging some of our assets while leaving our management with full discretion as to the time and amount of future issuances of contracts. Thus it appears in this illustration that where a choice is at all possible, the market conditions permitting, the financial manager must be fully aware of the danger involved in restrictive agreements upon the present and future policies of the business.

TYPES OF CAPITAL INSTRUMENTS

We can present the types of capital instruments as (1) participation contracts and (2) debt contracts. This classification permits us to make an analysis without regard to the particular business form which the managers have elected for the enterprise.

Participation Contracts

Elements of distinction in the contracts are as follows: A participation contract does not entitle the owner to a full return of his invested funds if the business is liquidated. After all prior claims against the business are discharged, however, it entitles the contributor to his proportion, whether or not this is considerably less than he actually invested. Secondly, the contributor upon such a contract is in no position to force a collection of a specific payment for the use of his investment. It is true that if any profits are disbursed he may have a contractual right to share in such disbursement, but this right is predicated upon the existence of profits as well as on a decision by the directors to make a disbursement of such profits. If neither of these conditions exists, his capital may be utilized by the business for an indefinite period without a direct return to the investor. Thirdly, an investor in a participation contract is, by that fact, understood to have the privilege of engaging jointly in the management of the enterprise. As we have already pointed out in the case of a partnership, this is the right to act equally with all other partners in making decisions and in acting as

agent for the others. In the case of the corporation a stockholder shall have the right to vote in accordance with his share interest in the business.

Debt Contracts

These distinctions may be examined in the light of the general privileges which a debt contract confers upon the investor. First, a return of the sum originally invested is implied in such agreements and may be enforced when due by a legal action against all of the assets in the business, including even the personal property of the enterprise. Secondly, such a contract carries a right to have a specific payment annually or periodically for the use of the capital contributed to the business. This payment does not depend upon the existence of profits or the discretion of the manager. It is a right which the investor may enforce against all the assets of the business by the institution of a legal judgment against them. Thirdly, the investor in a debt contract will not be understood to have any right to participate in the business decisions of the enterprise. Subject to the general terms of the contract under which his investment has been made, the manager of the enterprise in this case will be expected to make all decisions as to the use of the funds utilized by the business, whether they are raised from this particular contract or by other contracts issued on behalf of the business.

This general classification may be applied broadly to all firms legally organized for business. That is to say, the characteristic of a participation contract will be the same, in general, when created by a partnership, joint-stock company, or corporation. There will be a contract formulated or implied by law creating the right of the participants in any of the cases to the general claims previously outlined, these claims being, of course, in distinct contrast to those of investors acquiring a debt contract in the same business enterprise.

Such broad and definite variances in the capital instruments again reinforce the statement already made that a business in creating its capital structure has many legal relationships to consider. Thus, it becomes apparent that it is a necessity for a student of business finance to acquire an understanding of the many contractual variations possible in the various instruments and the effects which they may have upon the financial results of the business. In other words, we must recognize these instruments as devices to be pointed, shaped, and changed to meet the particular conditions of a business and an investment market. In this light the discussion of the future chapters as to the various contractual details is helpful.

Financial Terms

The ideas reflected in the financial form of the business are commonly presented in a variety of terms. *Capital* may be used to indicate the total commitment or investment of the enterprise. Thus we speak of the Borden Company as having 206 million dollars of capital, meaning assets with which

to carry on its operations. Other usages of the term will be found, but this concept will be used unless otherwise stated.¹

Capitalization represents the number of dollars in total outstanding security issues the enterprise has created.² The Borden Company statement, as of December 31, 1946, shows notes payable (non-current) of 25 million dollars and common stock of approximately 60 million dollars, or a total of 85 million dollars provided by security instruments placed in the hands of investors. The use of this term occurs frequently in stating that a concern is overcapitalized, that is, that it has fewer real assets than the quantity of its securities. This is simply to say that relatively the quantity of assets is *not* as great as the securities created; the opposite condition may exist in what is known as undercapitalization. In such a case, the firm would have asset values greatly in excess of the total securities issued, again a statement of comparisons. That is, neither condition is basically right or wrong; rather they express conditions of fact as to a relative matter.

Capital structure indicates every permanent source from which the enterprise has derived capital, whether securities were issued or not. That is, the most common source apart from securities will be retained earnings of the enterprise which have been "plowed back" into it. The Borden Company has a surplus, capital and earned, of 60 million dollars and general surplus reserves of 26 million dollars representing values in the business for which no security is outstanding. Add to this figure the capitalization of 85 million dollars and we have the total capital structure of the Borden Company—171 million dollars. It may be shown as:

Notes payable	\$ 25,000,000	15%
Capital stock	60,000,000	35
Reserves	26,000,000	15
Surplus	60,000,000	35
	<hr/>	<hr/>
	\$171,000,000	100%

In this structure, then, it is apparent that 50 per cent is supplied by the capitalization, of which 15 per cent is debt and 35 per cent is stock contracts. The balance of the capital structure is provided by the earnings produced

¹ Accountants often use the term "capital" to designate the excess of total assets over total liabilities, that is, net worth. In legal usage capital denotes the par value of the stock, or, in the case of no-par stock, the "stated" or "declared" value takes the place of the par value. Economists define capital as those units of wealth which will produce further goods. This definition would include only those assets, such as inventories, property, and equipment, which are used in the actual production process; not intangibles like bonds or good will purchased from a predecessor company.

² Other definitions for capitalization are used in accounting and the mathematics of finance. Accountants say an expenditure has been capitalized when the money spent results in the acquiring of an additional asset. In the mathematics of finance the potential earning power of the property is capitalized to determine the present value of the property. For instance, if a certain piece of land will rent for \$1000 a year and interest rates are 5 per cent, the land is now worth \$20,000, the capital sum which at 5 per cent would produce \$1000 earnings.

CAPITAL INSTRUMENTS

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THE BORDEN COMPANY AND CONSOLIDATED SUBSIDIARIES
Balance Sheet
December 31, 1946

ASSETS

<i>Current Assets:</i>		
Cash	\$	29,004,830
United States and Canadian Government Securities		5,984,098
Receivables (Less Reserves—\$2,894,600)		26,678,474
Inventories—At the Lower of Cost or Market:		
Finished Goods	\$26,420,373	
Materials and Supplies	31,221,420	57,641,793
Total Current Assets		\$119,309,195
<i>Investments and Non-Current Receivables:</i>		
Unconsolidated Subsidiaries (Foreign and Domestic)		3,223,373
United States and Canadian Government Securities on Deposit (Pursuant to Workmen's Compensation and Milk Control Laws)		1,887,311
Mortgages		1,273,422
Other		5,797,245
Total		12,181,351
Less Reserves		1,439,108
Net Investments and Non-Current Receivables		10,742,243
<i>Property and Equipment</i> (Principally at cost, but in part at lower valuations established by the company)		144,943,870
Less Reserves for Depreciation		69,621,314
Net Property and Equipment		75,322,556
<i>Deferred Charges</i>		813,445
Trade-Marks, Patents and Good-Will		1
TOTAL		\$206,187,440

LIABILITIES

<i>Current Liabilities:</i>		
Accounts Payable	\$	25,929,272
Accrued Accounts:		
Taxes (After deducting Treasury Savings Notes equal to accrued U. S. Income Taxes—\$12,800,000)		2,817,591
Other		6,003,845
Total Current Liabilities		\$ 34,750,708
<i>Non-Current Liabilities:</i>		
Notes Payable		25,000,000
Other		28,230
Total Non-Current Liabilities		25,028,230

CORPORATION FINANCE

LIABILITIES—*Continued*

<i>Reserves:</i>			
Contingency Reserve		2,000,000	
For Possible Inventory Price Declines		5,000,000	
For Losses on Unusual Property Disposals		5,000,000	
Insurance Reserves		7,118,045	
For Replacement of Depleted Normal Inventories		2,202,562	
Other Reserves		<u>5,087,808</u>	
Total Reserves			26,408,415
<i>Capital Stock and Surplus:</i>			
Capital Stock—THE BORDEN COMPANY			
Common \$15 par			
Authorized	8,000,000 shares		
Unissued	3,582,042 shares		
Issued	4,417,958 shares	\$66,269,370	
Capital Surplus		13,981,996	
Earned Surplus		<u>46,377,984</u>	126,629,350
<i>Less Treasury Stock—At Cost:</i>			
200,958 shares (Including stock reserved			
under Officers and Employees Stock			
Option Plan—48,500 shares)			
			<u>6,629,263</u>
Capital Stock Outstanding			
(4,217,000 shares) and Surplus			<u>120,000,087</u>
TOTAL			<u>\$206,187,440</u>

and held within the corporate enterprise, giving a showing of great strength in the structure.

For entry in the financial statements the total quantity of either a stock or a debt security validly created under the terms of the charter is the *authorized* sum. Any part of the security which has not been sold is *unissued* and that portion which has been sold of the authorized quantity is the *issued* amount of the security. After a security has been issued, it may be in the hands of the public, in which case it is *outstanding*; but if the instrument has come into the possession of the corporation, it is a *treasury* instrument. The treasury instrument may be held as assets or ordered canceled and in the latter case it would be impossible to issue such stock again.

In the case of the Borden Company, the authorized sum of stock is 8,000,000 shares, par value of \$15 per share; the unissued amount is 3,582,042 shares; and the issued stock is 4,417,958 shares for which the sum of \$60,000,107 has been received. Of the issued amount 4,217,000 shares are outstanding; the remaining 200,958 shares are treasury stock.

UNIT VALUES IN FINANCE

General Use

The securities which the corporation issues must be divided into units. This is true for both stock and debt contracts. The older method has been

the issuance of instruments with par values or denominations stated on the face of the certificates. For a stock certificate, therefore, we may have a \$100 or a \$50 par value, which figure in any case becomes a base for proportioning the claims of the stockholder. Compared to the total value of all issued stock, the dollar value in the individual stockholder's case indicates his pro-rata position. That is, if he has 10 shares of \$100 par stock out of an issue of \$100,000 he has a 1/100th interest in the concern.

A bond issue, too, must be arranged to divide the whole debt into portions to be held by individual investors and this is done by units of \$100, \$1000, or \$5000 bonds. These figures are pars, or denominations. The interest payments will be a percentage figure based on the par.

In recent years a practice has developed in the field of stock instruments of omitting a unit figure and calling the share a no-par unit. To express the stockholder's interest, his number of shares as a part of the whole number of shares issued gives the proportion; and dividend and preference agreements are stated in a dollar or cents figure. That is, on a no-par stock the dividends are declared, for example, as \$1 dividends. If a preference agreement is to be made, then the stock contract states that in liquidation the holder shall have, say, \$25, as a payment prior to payments on other stock.

Par Value Units

There is no entirely satisfactory definition of par value. Probably the most practical definition, despite its lack of scientific phraseology, is: *Par value is the value printed on the face of the certificate.* When par values are printed on stock certificates, it is common to express the dividend as a "rate per annum" on the par value; thus a \$100 par-value stock on which there is paid \$6 per year in dividends would be called a "6 per cent" stock or would be said to carry a "6 per cent dividend." If several issues of stocks of various par values, or if stocks with preferences in any of the features of the contract, are outstanding, the specific participations in assets etc. are usually defined in terms of par values. Thus a corporation with a \$25 par value Class A and a \$100 Class B common will, in the absence of preference privileges, give \$1 to each share of Class A and \$4 to each share of Class B in the event of dissolution.³

Still another characteristic which is ascribed to par value is its fixity. In contrast to the continually changing market and book values, the par value of stock cannot be changed; corporations, with the consent of the state, are sometimes said to change the par value of their stock. What they really do is to cancel the old stock and issue new stock with a different par value.

Some states provide that the stocks of a corporation may not be issued

³ A corporation with \$100 preferred and \$25 common could provide that assets are to be distributed equally between the shares of preferred and common after payment of the par values in both instances. This would operate to increase the participation of the common stockholders fourfold (proportionately).

for less than par⁴ in order to eliminate at the outset the problem of stockholders' liability and to insure that the corporation will have sufficient capital to carry out its aims with a reasonable degree of assurance of success.⁵ A control over the minimum capital of a business as a matter of public policy is the essence of this particular provision. The formation of a corporation and the issuance of a charter are a benefit conferred by the state upon a specific group of persons. Under the theory that taxes should be levied in proportion to the benefits received from the state, par values may, assuming a benefit proportional to the capitalization of the corporation, serve as a basis of computing the tax. Thus par values are said to provide a measure of the benefit represented by the corporation's right to do business. If a stock subscriber fails to complete the payment for a share of par value, the presence of the par value provides an accurate basis for forfeiture on unpaid subscriptions.

In considering this problem, care should be taken to distinguish between a deficiency in the payment of the subscription price and stockholders' liability because of unpaid par value. The former is enforceable by the corporation, the latter by the creditors of the corporation. Thus, A subscribes for a share of \$100 par value stock at \$92. He pays \$85 to the company. The corporation has a right to collect \$7, the difference between what he agreed to pay in his subscription and what he has paid. But the creditors could collect \$15, the difference between the amount actually received and the par value. In some instances the corporation may sue to collect the liability the same as a creditor. Strictly speaking, however, stockholders' liability is enforceable by the creditors of the corporation, not by the corporation itself.

It is often pointed out that "\$100" or "\$25" printed on the face of a stock certificate is an aid in selling it. The accuracy of this statement appears

⁴ At common law, shares with par value may be issued at any fair market value. All states at the present time have statutes on the subject, and therefore the common-law rule is no longer applicable.

The determination of the price at which stock is to be sold is an act of the existing stockholders through their elected representatives, the directors. If some stockholders dissent to fixing the price at less than par, they have a remedy against purchasers for less than par unless loss of their legal rights occurs by laches. See E. H. Warren, *Select Cases and Other Authorities on the Law of Private Corporations*, 2nd ed., p. 201, and W. M. Fletcher, *Cyclopedia of the Law of Private Corporations*, Vol. II, Sec. 5187-5188.

⁵ The rule of justifiable value is used when shares are issued in exchange for property. The prudent investment theory seems fairly well established. *Lloyd v. Preston*, 146 U.S. 630 (1892). There is an array of decisions on the subject of shareholders' liability to meet the statutes of the several states. Among the more interesting cases may be cited: *Johnson v. Louisville Trust Co.*, C.C.A. Ky. 293 F. 857 (1928); 264 U.S. 585 (1924); *American Refining Co. v. Staples (Texas)* (1924); *Handley v. Sturtz*, 139 U.S. 417 (1891). See the discussions of the following: 7 *Am. Bar Assoc. J.* 534; W. Z. Ripley, *Railroads: Finance and Organization*, pp. 90-91. In some states there are statutes with respect to par and no-par securities. *Lee v. Cameron*, 169 Pac. 17 (1917); 17 *Ill. L. Rev.* 173; 9 *Cal. L. Rev.* 61.

questionable if only experienced investors are involved. The par value of a security ought to describe the equity of proprietorship, if all shares were paid and all profits (accurately computed and completely disbursed) equaled the rate of investment income demanded by the public on shares of such nature. It does appear true that corporations regard par values as the basis upon which the dividends paid would represent a fair return upon the investment. Finally, the net worth of the corporation normally consists of two divisions, an amount representing proceeds from sale of stock and another sum representing earnings of the business not yet paid out in dividends. Par value serves as a direct and facile method of distinguishing these two funds in the net worth.

No-Par Units

No-par stock is stock without a par value, that is, any monetary figure on its face. A share of no-par stock is an aliquot part of the net worth of the corporation. Such stock was first authorized by the State of New York in 1912, although similar shares had been known for nearly a century and a half before that time. During the decade from 1920 to 1930, no-par shares increased greatly in popularity,⁶ and their popularity is still growing. As a consequence of their increasingly wide use, a careful examination of the characteristics of no-par and par value securities is incumbent upon all who would achieve a thorough knowledge of corporate financial policy.

There are really two classes of securities which are called no-par stock. In the first class no-par stock is issued with a "stated value" on it, that is, with a minimum issue price, the stock being more or less of a contradiction in terms.⁷ Such no-par stock may be sold for any price (equal to or above the "stated value"); the excess over the "stated"⁸ value is not necessarily a part of stated capital and may be used in payment of dividends. It is properly a premium and corresponds to "paid-in" surplus or premium on par value securities.

With the second class, which may be called true no-par stock, there is no designation of value in any form. Usually all proceeds derived from the sale of such true no-par shares become a part of stated capital. In those states in which the statutes are not specific, the presumption is that unless a specific provision was made at the time the stock was subscribed for, the whole of the subscription contract price would become stated capital and therefore

⁶ Not all types of corporations are at present permitted to issue no-par stock. Financial corporations, such as banks, trust companies, insurance companies, building and loan companies, etc., are usually prohibited from issuing no-par shares. Instances are known, however, in which a no-par stock corporation owns all the stock of such companies; hence in effect these companies are using no-par shares.

⁷ In the Illinois law, each share must have written or printed upon it the amount actually received by the corporation for the stock. General Corporation Act of 1919, Section 30, as amended by Laws of 1921, p. 369.

⁸ Cf. 25 *Col. L. Rev.* 43-63, "Problems of Non-Par Stock" by A. A. Berle, Jr. Some states require a stated capital; some do not; in others it is optional.

would not be available for dividends. If a state makes a provision for minimum stated capital before corporations begin business, whether a definite amount or only a requisite of the articles of incorporation, true no-par shares may usually be used.⁹ All states at present allowing no-par stocks permit stocks both of no-par value and of par value to be issued by the same corporation. This is known as "mixed" par values.

It was thought that the use of no-par stock would compel the investing public to direct its attention to the real status of the company, hence prove an aid in eliminating outright frauds and flagrantly speculative promotions. It seemed also, to those who have fostered the cause of no-par stock, that such shares would compel the shareholder to take cognizance of the fact that his shares represented only a proportionate equity in the assets of the company, which, in turn, tended to equal a reasonable capitalization of the earnings of the company, monopoly conditions being excepted. The seemingly increased simplification of the matter of shareholders' liability, as well as the distinctly lesser amount of liability, promised a step forward in the rational use of the corporation as a form of business enterprise. In the instance of a relatively few unscrupulous promoters and corporate managers, no-par stock may prove a welcome blind.

In the course of the development of the use of no-par value the statistics in 1938 from the registered issues of stock exchanges showed that 42 per cent of common stocks were no-par, and 33 per cent of preferred stocks had a no-par division.¹⁰ This represents a growth from 1922, when it was estimated that 2 per cent of all corporations were making use of no-par shares; and in 1925, this number was estimated as being 6 per cent of the corporations. Again, in 1928 all issues on the New York Stock Exchange, exclusive of railroad issues, showed that 43 per cent were of the no-par unit type. By 1930, one author estimated that in the utility and industrial field the use of no-par stocks had extended as high as 85 per cent of the issues in companies with assets of 10 million dollars or more.¹¹

The "Value" of a Share of Stock

Of course, the mere fact that "\$100" is attractively engraved in appropriately selected and colored inks on the face of a share of stock bears no relationship either to the book value of the share or to the market value of the share. Table 11 shows wide variations which may and do occur be-

⁹ There are three general attitudes toward the question of stated value: (1) Some states require a minimum or permit all in excess to become paid-in surplus available for dividends; (2) some require all moneys received for no-par shares to become fixed capital unavailable for dividends; (3) some permit the corporation to determine what proportion may be paid-in surplus available for dividends. New York typifies the first, Illinois the second, and Delaware the third.

¹⁰ *Statistics of American Listed Corporations*, Securities and Exchange Commission, 1941, Pt. I, pp. 140-145.

¹¹ National Industrial Conference Board, reported in *New York Times*, August 12, 1928, and A. S. Dewing, *Financial Policy of Corporations*, 4th ed., 1941, Vol. I, p. 70.

CAPITAL INSTRUMENTS

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TABLE 11. COMPARISON OF PAR VALUE, BOOK VALUE, AND MARKET PRICE OF SHARES OF VARIOUS PAR VALUES

Name of Company	Par Value	Book Value 12-31-46	Price 1946	
			High	Low
American Bank Note Company	\$10	\$24.76	\$ 45¼	\$ 25¾
American Chicle Company	no-par	42.38	164½	120
Anaconda Copper Mining Company	50	66.77	51¾	35
Continental Motors Corporation	1	6.42	24	10
General Cigar Company, Inc.	no-par	43.85	40¾	27¾
Lehigh Portland Cement Company	25	41.22	55¾	34¼
Mack Trucks, Incorporated	no-par	74.98	76¾	38½
Montgomery Ward & Company, Inc.	no-par	51.47	104¼	57¼
Phelps Dodge Corporation	25	34.17	48	29¾
Phoenix Hosiery Company	5	27.59	41	16¾
St. Louis-San Francisco Railway Company	no-par	14.78	12¾	11¾
Sears, Roebuck and Company	no-par	14.82	49¾	35¼
United Fruit Company	no-par	24.32	53¾	41½
United States Gypsum Company	20	62.46	132	93
Wagner Electric Corporation	15	38.94	49½	34½

tween the book value, the market value, and the par value of securities. This greater or less independence of par value from the other two values leads to many difficulties for ignorant or careless investors on the one hand, and to misrepresentations on the part of promoters, salesmen, and corporations on the other.

Since the proprietorship of the corporation is "owned" jointly by the stockholders and involves economic values, it would be expected that a share in that proprietorship would be valuable. At the present point we are interested only in describing, not in calculating, the value of the shares of stock.

Collectively, the shares of a corporation represent the total of the proprietorship interests. The individual shares of stock represent proportionate equities in the proprietorship. The indication in the certificate of corporate stock of its par value has the effect of declaring the actual money, labor, or property that has come into the corporation from its original subscriber, and in lieu thereof the owner's claim *on, or interest in, the properties of* the corporation, and that its original face value was the amount indicated. It is common knowledge that economic and physical conditions are causes of fluctuation of the actual and market values of properties generally, and that corporate stocks are subject to such changes. Hence, the par value indicated in the certificate of stock has not always represented its market or book value. There are two fundamentally different methods of describing the "value" of one of these proportionate equities: (1) *market value*, or selling value in the open market, and (2) *book value*, or value based upon the accounting records of the corporation.

1. *Market Value.* A business is valuable only if it represents a real or potential business income; that is, one would be able to dispose of a business only if it had valuable rights at present or was expected to obtain such valuable rights in the future. The sum for which a business might be sold, divided by the number of shares of stock outstanding, might be said to represent the market value of each share. However, since business corporations are not commonly sold as units, the market value of shares as computed by this method cannot be relied upon or ordinarily calculated with facility. Business corporations tend to be sold "piecemeal"—that is, a few shares at a time. Those corporations whose stocks are listed on the stock exchange find that their shares are sold every day and that the shares frequently change in value considerably during the day. At any particular time, if one multiplied the price at which a share is actually sold by the number of shares outstanding, the result would be the market value of the proprietorship estate of the corporation, as fixed by the sale price of the share or shares considered. Obviously, since the price at which shares are actually sold varies from time to time, the market value of the business changes accordingly. There are many factors which influence these changes in the market value of shares, such as assets, earnings, management, manipulation, investment psychology, etc., the discussion of which is not germane to our interests at the present time and which will be found carefully considered in treatises on investment.¹²

2. *Book Value.* The books of a business will show the total liabilities and the total assets of the enterprise. If the debts exceed the assets, the concern is insolvent; if the latter exceed the former, the concern is said to have a true net worth equal to the excess of the true assets over the true liabilities. It has been indicated that the net worth of the business is the proprietorship interest, and, since each share of stock represents a proportionate part of the proprietorship, dividing the proprietorship interest by the number of shares gives the proportion allottable to each share. This proportion is commonly called the *book value* of the share. *Book value is the amount of money which would accrue to the holder of each share of stock if the corporation should sell its assets for the amounts shown on the books, and discharge its debts in accordance with their amount, as shown by the books.*¹³ Since the amount

¹² Reference to the market price of any currently quoted security will provide ample evidence. To cite specific examples, during the year 1946 the following ranges of market values were noted:

Stock	High Price	Low Price	Per Cent of Change
Mack Trucks, Inc.	\$ 76¾	\$ 34½	124.2
Montgomery Ward & Co., Inc.	104¼	41½	150.0
Radio-Keith-Orpheum Corp.	28¾	7¾	256.1
United Aircraft Corp.	120	100¾	19.1

Not infrequently, in an active stock market the price of a share of stock will change five or even ten points within a single day.

¹³ For each individual issue of stock, consideration would have to be given to the provisions for preferences and for participations. See Chapter XXXVIII, "Failure: Termination and Dissolution," for a detailed discussion of this process.

of assets, as well as the amount of debt, varies from day to day and even from moment to moment in any business, it would be expected that the proprietorship interest as shown by the books would also vary from time to time. Both the book value per share and the market value vary; and it would, indeed, be rare that the book value and the market value would coincide with or remain substantially identical to each other for any length of time.

The Size of Stock Shares

An increase in the publicity which has been attached to the stock market has caused many corporations to become "market conscious" or "price conscious" with respect to their shares. As the price of an individual share fluctuates up or down, the fortunes of the company are borne along on the tides of the market. An unusually high price, such as would be brought about by having the fraction of the equity too large by reason of too small a number of shares, is often undesirable. It will prevent popularity of the shares, hence reduce the advertising value of stock ownership; it will prevent wide distribution of the shares, since many persons will be more willing to purchase ten shares at \$28.50 per share than to buy one share at \$285; it will probably mean a large dividend per share per annum, and this will lead to criticism on the theory that the corporation is profiteering. A corporation with 10,000 shares upon which \$50 was paid in dividends each year would be more likely to be criticized than one with 100,000 shares upon which \$5 per share per annum was paid in dividends.

On the other hand, it has been pointed out that an unusually small unit of participation (i.e., a very large number of shares) will mean a low market price. If the market price of the shares is too low, the corporation will feel the effects: (1) by unpopularity of the stock because of low collateral value at commercial banks; (2) by the shift of the security from a semi-investment position of the businessman's type to the group classified financially as "cats and dogs," whether merited or not; (3) by a serious reflection upon the credit standing of the corporation, since low prices on shares hint that the concern is overcapitalized according to popular financial ideas; and (4) because low prices of shares invite difficulties in maintaining control of the concern unless the management actually owns a sufficient number of shares to retain control.

There appears to be no criterion by which one may say that any particular "size" of share is the best. It has been more or less traditional in the United States that mining shares should be cheap, say, under \$10, and that bank shares should sell at more than \$100. Exceptions to both are increasingly common. Possibly somewhere between \$25 and \$100 would be the older conception of the proper "size" or unit represented by one share. The development of no-par stocks has probably reduced these figures somewhat. Certainly \$100 is no longer an accepted proper size for shares.

To adjust the shares of a corporation so that they will sell within a proper "size," as measured by market prices, there are many devices. Among the more common schemes for increasing the size of the share are the following: (1) One share may be issued for each two, or one for three, or any other number of shares outstanding. This will reduce the number of shares, hence increase the fraction of the net worth represented by one new share. (2) If the state law permits, the corporation may purchase its own shares in the open market. Shares so purchased should be retired. If held only as treasury stock, they sometimes fail to achieve the end desired, for treasury shares may be more or less of a threat hanging over outstanding shares. (3) A consolidated company may take over several smaller concerns and in the exchange of stock make such changes as will, in effect, result in a larger share. (4) A new corporation may be formed to take over the assets of the old concern. In the exchange of the shares, appropriate changes may be made so that one share of the new concern will represent a larger fraction of the net worth than was represented by one of the old shares. Following the stock market panic of 1929 and the prolonged depression, many corporations were more or less forced to readjust their capitalization structures through one or more of the processes mentioned.

Decreasing the size of the share may be accomplished by reversal of the procedures given in the preceding paragraph. In 1946-1947 many corporations reduced the fraction represented by one share. Recognition of the need for keeping market prices at a level which would bring widespread support appeared throughout 1946-1947 in the actions of many major companies, including Bethlehem Steel Corporation, Eastman Kodak Company,

TABLE 12. STOCK SPLITS BY NATIONAL CONCERNS

Company	Unit	Date	No. Issued for Each Old Share	Price Before Split	Price After Split
Bethlehem Steel Corporation	no-par	1948	3 for 1	103	33
Cannon Mills Company	no-par	1947	2 for 1	75	41
Cudahy Packing Company	\$10 par	1947	3 for 1	50	12
Eastman Kodak Company	\$10 par	1948	5 for 1	164	40
Norfolk & Western Railway Company	\$25 par	1947	4 for 1	242	57
United Biscuit Company of America	no-par	1947	2 for 1	42	20

and Norfolk and Western Railway. Often in speculative market, as in 1945, these split-ups made substantial profits for the owner by reason of the wider range of bidders. The major companies are less impressed with this motive and more with the desire to keep a constantly interested group of increased numbers as potential market buyers. In Table 12 a few of the splits created by major concerns are cited. In no case is there any unusual market gain apparent, but the desire to lower the par values is very obvious

in the fact that Norfolk and Western has dropped from \$100 to \$25 and Cudahy Packing from \$30 to \$10.

An Appraisal of No-Par Stocks

The usefulness, desirability, and disadvantages of no-par and par stock may be considered from many points of view, the various characteristics sometimes being an advantage from one standpoint but a disadvantage from another. Here, four points of view will be discussed: those of (1) the corporation, (2) the stockholder, (3) the creditors and of the corporation, and (4) the public.

1. *The Point of View of the Corporation.* The legal rule prohibiting the sale of par value stocks at less than par, unless shareholders' liability is assumed, often prevents a corporation from obtaining additional capital at a time when it is most needed. In fact, in the absence of the relatively simple solution of the no-par stock, embarrassed corporations not infrequently avoid placing liability for uncollected subscriptions upon stock purchasers by means of the exchange of stock, in excess quantities, for some property. The property owner then returns, by way of a gift, the extra stock to the company; the returned stock is *treasury stock* and may be sold for any price to provide working capital or additional fixed capital, or used as a bonus to effect the sale of preferred stock.¹⁴ Thus no-par stock is a solution for certain financial difficulties.

Again, in the reorganization of a corporation old stockholders may ordinarily be handled more easily if no-par rather than par value securities have been issued. The same is true in mergers and consolidations, where the existence of par values may prove a stumbling block to the final consummation of the proposed combination. Should it be desirable to reduce or increase the stated capital after the consent of the state has been obtained, no-par stock issues are more easily managed than par value securities. Where the common stockholders of a corporation have sole or controlling voting power, they may desire to trade on their equity as far as possible. If no-par stocks are used, it appears possible to sell more preferred by making the preferred a \$7 stock, say, as the equivalent of \$100 par value at 7 per cent, and then make the common equivalent to \$10 or \$25 and divide the profits equally between the common and preferred shares after paying a limited amount on the common. If a bonus of any sort is given by the corporation for any purpose, no-par appears to be better than par value stock, the reasons being that there will be less objection from other stockholders and that the no-par stock may be issued for a low price, i.e., for a small consideration.¹⁵

¹⁴ Haskins and Sells, *Capital Stock without Par Value from an Accounting Point of View*, 1922.

¹⁵ When the corporation begins business it is immaterial what price is received for the shares; but once it has begun operations, made profits, or suffered losses, it is obvious that the price at which additional shares are sold may materially affect the interests of existing shareholders.

Corporations have indicated, however, that they find many disadvantages in the use of no-par stock in their financing. A great many purchasers of stocks do not know how to determine the worth (book value or any other) of a share of stock, and consequently are likely to show credence in the par value printed on a certificate. Such purchasers may hesitate to accept no-par stock; hence the corporation finds the market area of no-par stock somewhat limited. Moreover, some states discriminate against corporations having no-par stock, either through tax laws or by actual prohibition of the power to do business. Again, the existence of a paid surplus may prove advantageous to a corporation, especially in its early life, or at any other time when earnings fall below the dividend requirements. Unless precaution has been taken to specify that a portion of the money received from subscriptions is paid-in surplus, the courts are likely to prohibit payment of dividends from that source; and it is true that stockholders may feel better if dividends are paid from the outset, despite the fact that such payments may actually mean a return of subscription payments.

Another difficulty in the use of no-par stock is that in the event of a merger or consolidation by exchange of no-par stock of the new company for the stocks, of whatever kind, of the old companies, all the stated capital as well as the surpluses of old companies will automatically become stated capital in the new company. Needless to add, such freezing of the surplus of the individual companies in the stated capital of the consolidated company is a problem of the first magnitude, since it may considerably alter the position of stockholders in the old and new companies.

2. *The Point of View of the Stockholder.* The essential distinction between the interests of the stockholder and those of the corporation is the difference between the interests of the individual and the interests of the group. The interests of the individual stockholder are furthered when no-par stock is used under the following conditions: (a) The stockholder's liability is limited to his subscription agreement as long as the amount exceeds the legal minimum, is a fair market value, and is set by the board of directors or by a vote of the stockholders, or expressed in the articles of incorporation or amendments thereto. (b) Since corporations probably find it easier to issue and sell additional stock to obtain new funds when no-par rather than par value securities are used, it follows that stockholders having limited finances will be less likely to suffer through the imposition of assessments at the hands of those having more financial backing and the voting power. The ultimate position of the individual stockholder is the same whether he sells a portion of his stock to pay the assessments on the remainder or whether the corporation sells additional stock to obtain funds. (c) It is thought that the absence of a par value on a share of stock will cause a prospective stockholder to make more diligent inquiry regarding the value of the stock, although there is much argument on the validity of this point. (d) There can be no doubt that the individual stockholder is more likely to understand the dividend rates on no-par stock than those on par value securities. No-par stock always

gives the number of dollars paid per share per annum, whereas the statement that a \$50 par value stock is a 10 per cent stock when it is selling for \$80 is likely to lead the unwary to believe that the 10 per cent refers to the market price rather than to the par value.

The stockholder may find that no-par stock will prove undesirable to him for the following reasons: (a) There may be overvaluation of purchased properties, patents, etc., or services of promoters, when "fully paid and non-assessable" no-par stock is exchanged for these assets or services, for when this is done the shareholder who buys for cash frequently pays much more than other shareholders. Par value stock might preclude such practices because of the liability of the promoter. (b) Because of the ease with which greater amounts of no-par stock may be sold as compared with par value stock, the position of the stockholder both as to the extent of trading on the equity and as to possible risk may be radically changed as compared to the circumstances under which the securities were purchased. (c) If several issues of no-par stock are sold with equal rights, or if portions of the same issue are sold at different prices, any individual stockholder may find that he has paid quite a different amount for shares of the same kind.¹⁶ Thus portions of a no-par issue are sold at \$33, \$51, and \$19. All are fully paid and non-assessable in the absence of a stated value. If a \$50 par value stock had been sold under the same conditions, those who bought at \$33 and \$19 would have liability and potentially might have to pay approximately the same amount as the man who bought originally at \$51. But methods by which such liability may be avoided were mentioned; thus the result would not be so marked as it seems on first sight. (d) Because no-par stocks tend to be used for somewhat more speculative types of business, and because their dividend record is thought to be less stable, the market price of such securities is less stable. Decreasing the stability of the market price lowers the degree of marketability at a fair price and decreases the collateral value of the share to the stockholder.

3. *The Point of View of the Creditors of the Corporation.* The creditors of a corporation are interested in the problem of no-par stock since it may have an influence upon the extent of equity proprietorship and upon the extent to which stockholders' liability may be relied upon as a reservoir from which the creditors may satisfy their claims. In so far as the corporation may dispose of no-par stock more easily and consequently obtain new additions to stated capital or a larger initial capital, or may reduce funded debts, no-par easily qualifies as a favorable type of stock. At the date of organization, because assets may be used at their fair value to offset the capital stock issued against the assets, there is less incentive for overvaluation of assets to balance the books of the company, or for the offsetting vice, inflation of organization

¹⁶ *Hodgeman v. Atlantic Refining Co.*, 13 Fed. (2nd) 781, U.S. Circuit Court of Appeals (1926), held that, despite state law permitting directors to sell no-par stock at any price, the price must be uniform for any certain period of time and must involve no substantial impairment of the rights of prior holders.

expense to balance the books rather than showing a deficit at once. Lastly, the absence of a par value should encourage greater and more intensive investigation in regard to the standing of a corporation having no-par stock before an extension of credit is made.

But the creditors of a no-par stock corporation frequently find themselves at a great disadvantage because of the tendency to reduce the stated capital of the concern to a minimum and because of the decreased liability of stockholders.¹⁷ The fact that stock subscription contracts are legally collectible is not of sufficient importance to eliminate the argument that a decreased amount of collection exists in the instance of no-par stock. Moreover, if, as is frequently done, the corporate balance sheet merges stated capital and surplus into a single item, the creditor is at a loss to discover the actual amount of stated capital and therefore would surely increase credit charges because of uncertainty.

4. *The Public's Point of View.* Public and social justice stands ever ready to eliminate some concepts which in the long run may not be advantageous to public interest. Speculative enterprise is essential to progress and, in so far as it represents technological advances, must be considered advantageous, provided the risks of making such economic speculations are confined to those who can afford to carry them. But when the element making speculation possible is extended to contriving activity, there is difficulty in presenting a justification. That there is a potential educative value in no-par stock seems self-evident. But this self-evident advantage may accrue only in the presence of sufficient and accurate data on the financial affairs of corporations and a propensity of the public to use such information.

There certainly are many elements of no-par stock which probably affect the interests of the public neither one way nor another. There is no influence upon the problem of non-voting by a large number of stockholders, or upon the problems growing out of minority stock groups as against majority interests. The "outsider" is quite as much at the mercy of the "insider" as ever, no-par stock perhaps having added a bit to the ability of the latter to exploit the former. Lastly, the mere fact that no-par stock is theoretically ideal tends to insert a great potential danger into the public's relations to the corporation because of ignorance and inertia in gathering information.

SUMMARY

Instruments for the raising of capital are contractual devices for drawing the full array of possible investors into the position of providing the corporation with capital. Investors have widely varying requirements, so the corporation must reach a bargain with them on many points which will be acceptable to both the user and the provider of business funds. In this effort to reach the

¹⁷ It has been said that under the Delaware law, at least, it is not a serious exaggeration to state that shareholders' liability has disappeared and that the major characteristic of no-par stock corporations has become, not limited liability, but no liability. 24 *Col. L. Rev.* 449-468.

body of investors the corporation must act under the conditions of general market psychology and the particular record of the corporation to prepare a satisfactory financial contract. Great flexibility in such contracts is both a necessity and a virtue of the bargaining in this market. Thus a study and understanding of the many possible variations in security contracts becomes advisable for a student as both a potential business manager and a possible investor.

Potentially and ideally, no-par stock contains much promise. It is an ideal statement of what the shares of a corporation actually are—aliquot parts in the proprietorship equity of the company. It conforms to the fundamental doctrine of *caveat emptor*, hence places the responsibilities for commercial and investment credit upon the lending and investing institutions; it eliminates the necessity for a considerable amount of accounting fiction in expressing the net worth of corporations; and it brings to the corporation a flexibility beyond the fondest dreams of corporate directorates in the days of only par value stock. Lastly, no-par stock seems to have the approval of the heads of the greatest corporations of the land and no small number of jurists and others skilled in the legal arts.

Actually, on the other side of the question, there is a complete abandonment of the trust fund doctrine. No-par stock operates in many instances to obscure the amount, if not the non-existence, of stated capital. It eliminates, for practical purposes, the possibility of regulating corporation capitalizations. Furthermore, it tends to obscure from many the value of the security. Those who actually manage a corporation carry a responsibility to those who buy the stocks of the company; similarly, the accounting profession should carry a responsibility for preparing financial statements in a form that will not mislead the relatively uninformed on the matter of earnings, etc. It is not enough to prepare financial statements which are *technically* correct; the statement should, when intended for use and interpretation by the uninformed man in the street, be prepared in a manner least likely to be misinterpreted by him. The elimination of shareholders' liability probably operates quite as much to the disadvantage of the average public as to the advantage of the few controlling insiders.

QUESTIONS

1. Indicate some of the factors which shift in the capital markets and which require that the instruments sold likewise shift their terms.
2. Examine the record of sales of securities by classes of instruments and point out the better periods for the sale of stocks in the past fifteen years.
3. Contrast on three definite bases the nature of a participation versus a debt contract.
4. Give your definition of the terms capital, capitalization, and capital structure.
5. Which unit of security division is the older, par or no-par? Why was the second class developed? State your view of the more desirable procedure.

6. Indicate what values other than par may be ascribed to a stock instrument. Outline the difference between such values.
7. Check the records for whatever facts you believe may bear on the values, and explain whether you think that the difference in book and market values for American Chicle, Montgomery, Ward & Co., and United States Gypsum Co. shown in Table 11 is justified.
8. How do you explain the difference in par sizes used by different concerns? Is there a tendency toward the lower par values? Explain.
9. Why are "stock-splits" undertaken by concerns? Do they ever reverse this process? Why would they?
10. Explain the concept of the "trust-fund" doctrine for stock liability. Support your view of the soundness or unsoundness of the doctrine.

PROJECTS

1. Report on the sales of securities for the past twelve months as to volume and type of security offered in the several fields.
2. Trace four "split-ups" from their original date to the present as to high and low points. Contrast the degree of movement on an index scale with that in a like period just prior to the "split-up" date.

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CHAPTER V

Capital Stock



THE participation agreements created for capital contributions to any business unit are contracts which may provide for wide variations in the general terms. For a corporation, this means a capital stock agreement, to which the stockholders have consented in the specification of rights in the creation of the corporation and its stock issues. The proprietorship interest of the corporation is owned by the shareholders collectively, and their respective equities in the fund are called stock or shares. The owner of a share of stock is, in a sense, an entrepreneur; but ownership of stock is not ownership of the assets of the corporation; rather, ownership of stock is ownership of a contract with the corporation which, in turn, owns the assets. Legally, a share of stock is a contract, embodying rights and duties, between a legal entity, the corporation, and an owner of the share, the stockholder.

STOCK CLASSES

At the outset it will be of general benefit to our future discussion to classify stock into two general classes: (1) ordinary stock and (2) stock with variations. This division will permit us to emphasize that, stock being essentially a contract, one should be reluctant to determine the liabilities of a particular issue by mere reference to title. Speaking more particularly of the first classification we shall regard ordinary stock as all those contracts which grant the rights generally implied in any corporate stock agreement by operation of the general corporate law. Secondly, stocks with variations will be regarded as all contracts which by some stated provision create some privileges or modify the otherwise regular rights in those contracts. It should be noted that the stock contract is drawn from a wide variety of sources, including the statutes of the state of incorporation, the charter, the by-laws, and, in some instances, the stock certificate. All of these, therefore, may contain clauses in some way providing for a modification of a privilege not accorded to ordinary stock. But few stock certificates contain more than a mere summary of the major provisions of the stock contract, and the owner of such stock not infrequently may be completely uninformed of the entire terms of his stock contract. Actually only a few shareholders appear either

to have or to care about full knowledge of their contractual rights as owners of stock, except in the event of litigation. Shares of stock or stock contracts are not negotiable instruments, but are executory contracts, legally transferable without the consent of the corporation in most instances. In any individual corporation every share of stock of the same class has identical contractual rights and duties with every other share. Stocks registered on fully licensed exchanges must express all contractual terms on the certificate under the existing regulation.

ORDINARY STOCK

The contract of ordinary stock is, as we have said, one existing between the holder of the security and the corporation which has issued it. The agreement will include those provisions which the general law implies in the absence of any other agreement. The stockholder will be held to have given his consent to these terms by his act of purchasing the stock. The fundamental rights of the holder of the stock include the following:

1. To sell and transfer the stock.
2. To have an evidence of ownership of the share of stock.
3. To inspect the books of the company.
4. To protect the corporation from wrongful acts of either majority or minority shareholder groups.
5. To restrain ultra vires acts of the corporation.
6. To participate in the management of the company, and to have a voice in determining the policy of the corporation on questions which affect the corporation as a whole.
7. To participate in the earnings of the company.
8. To subscribe to new stock issues.
9. To share in the proceeds in event of dissolution.

Transfer of Stock

One of the prime elements in the corporation as a form of business organization is the transferability of the ownership interests without directly affecting the enterprise. See the transfer form contained on the stock certificate in Figure 5. Under the common law, directors and officers of a corporation may not make and enforce any restrictions upon the transfer of the shares of stock of a corporation. In most states, the statutes give a reasonable power of discretion to the directors of the corporation to specify proper registration to the end that both the corporation and the shareholder may be better protected.¹ Sometimes provisions will be found in the certificates or by-laws of corporations restricting the transfer of the shares by requiring the making of a prior offer to some designated agency. This is a requirement often made especially desirable when stock has been

¹The rare situation of a bearer stock, transferable by delivery, and dividends paid to whoever presents a dividend coupon is illustrated by Imperial Oil, Ltd., of Canada.

sold to employees, who must surrender it upon leaving the company. In some states such provisions are definitely legal, in others definitely illegal.²

Evidence of Ownership

Every shareholder is entitled to recognition by the corporation of his ownership of the share of stock. This evidence of ownership is usually given in the form of a stock certificate, which may summarize the terms of the contract between the corporation and the share owner. A stock certificate is illustrated in Figure 5. The registration of this certificate may be made with the company, though many concerns will employ banks or trust companies to act as agents for this work. Certificates traded on the stock exchange must go to both a transfer agent and a registrar for proper recording. The registrar usually disburses the dividend checks to the many individual holders.

If there exists what is known as a voting trust, the shareholder may receive a voting trust certificate instead of the actual stock certificate. Upon withdrawal from the voting trust the shareholder would receive his stock certificate. At the date of the sale of the stock by an underwriting syndicate, share purchasers sometimes receive interim certificates and/or due bills until such time as the stock certificates are ready for distribution.³

Inspection of the Books

It is a well-settled common-law doctrine that a shareholder has the right to inspect the books of the company pertaining to the stock records and general financial status. It is essential to know who the other shareholders of a corporation are in an appeal for purposes of forcing satisfactory action and securing unity of action among stockholders to prevent ultra vires or other harmful acts by those in actual charge of the corporation. The law will uphold the shareholder in the enforcement of his right. Ordinarily the stockholders are given by statute the power of forcing the officers to submit an annual financial statement.⁴ It is a generally accepted legal rule that the shareholders cannot obtain access to the detailed books of account, since to give such access would be to open the private records of the business to anyone who might acquire a share of stock.⁵ The exact extent to which

² *Moses v. Soule*, 63 N.Y. Misc. 203; 136 N.Y. App. Div. 904 (1909); *Barrett v. King*, 181 Mass. 476 (1902); *Bloede Co. v. Bloede*, 84 Md. 129 (1896); *Steele v. Telephone Ass'n*, 95 Kan. 580 (1915); *Trust & Savings Co. v. Home Lumber Co.*, 118 Mo. 447 (1893); *Morris v. Hussong Dyeing Machine Co.*, 81 N.J. Equity 256 (1913).

See also W. J. Grange, *Corporation Law for Officers and Directors*, rev. ed., 1940 p. 177.

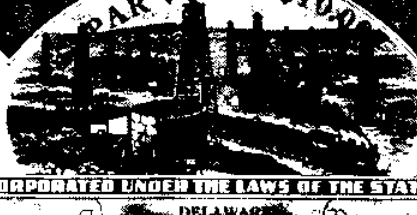
³ Lost certificates are reissued ordinarily only if the stockholder purchases an indemnity bond in favor of the company. The corporation will set the terms to be required whether for a specific sum or for an "open" liability bond.

⁴ The nature of what can be accepted as a satisfactory financial statement is discussed later.

⁵ *Ellsworth v. Dorwart*, 95 Iowa 108 (1895); *The People v. Walker*, 9 Mich. 328 (1861); *Stettaner v. N.Y. & Scranton Const. Co.*, 6 Atl. Rep. 303 (1886); *Dodge v.*

PAR VALUE \$10.00

No. 15



Shares

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

Universal Oil & Refining Company

Authorized Capital Stock \$20,000,000

This Certificate that _____

is the owner of _____ Shares of the Capital Stock of

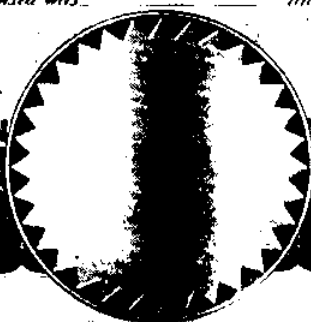
Universal Oil & Refining Co., fully paid and non-assessable.

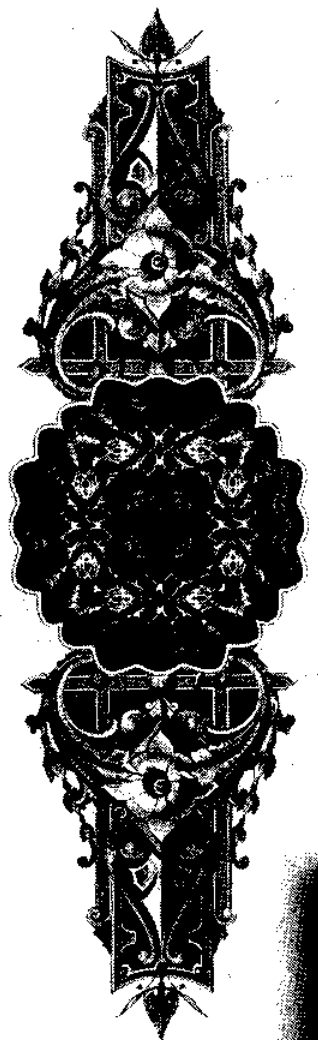
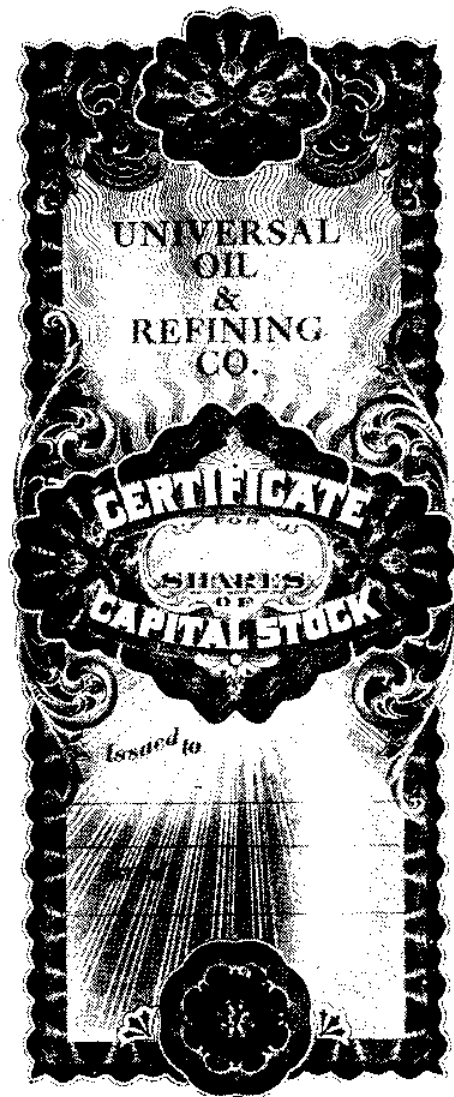
transferable only on the Books of the Corporation in person or by Attorney on surrender of this Certificate.

In Witness Whereof, the duly authorized officers of this Corporation have hereunto set their names and caused this certificate to be hereunto affixed this _____ day of _____ 19__

Secretary

President





The value received _____ hereby sold, assign and transfer
with _____
name of the Capitalist that represented by the within D.
Signature and delivery necessary to make and assign
to transfer the said stock on the books of the within named
Company, with full power of substitution, in the presence
of _____
Witness of _____

FIG. 5. Stock Certificate Form.

this right may be exercised can be determined only by study of state law. The general rule is that shareholders have access to books of record but not to books of account. The question of demanding an accounting involves similar reasoning.

Under the regulations of the Securities and Exchange Commission financial statements, in respect to registered issues, must be annually filed. Thus full information is available either by direct issue to the stockholders or through the publications of the financial reporting services, such as Moody's and Standard and Poor's.

With the many statements obtainable through commissions regulating various enterprises, such as railroads and public utilities commissions, we have a good deal of material upon the financial matters of such concerns. But for many firms not operating under the Securities and Exchange Commission and not engaged in fields of business with public commissions supervising them, the stockholders may very well be interested in the amount of information which they are entitled to receive. Upon this score, the statutes of most states are very lax. Many provide rather perfunctory requirements that the corporation shall issue annual financial statements. Some require that abbreviated statements of these matters shall be published in papers of public circulation. An examination of these provisions and their enforcement would indicate that they are quite ineffective. We might say that they are commonly ignored. Where publications give any of these statements, they are usually very brief. In other words, the stockholder in such a case may easily find himself with little or no accurate information. This is one of the most important fields for enlightened public policy open to business managers. The small corporation executive is usually more reticent to make these statements because he feels they disclose his competitive position to other business firms. There was a time, not so long back, when even our larger corporation units took this attitude. It is conspicuous today that frank and thorough reports to the general public are now viewed as wise public policy wherever the corporation seeks to sell its securities throughout the country.

One of the strongest forces for publicity of business and financial information prior to the recent federal laws was in the requirements of the New York Stock Exchange. The exchange was a leader years ago in demanding at least annual statements which might be made public. Later, these requirements were increased to semiannual statements, and finally to quarterly statements. No doubt a strong impetus was thus given to the voluntary issuances of reports and to written reports being mailed directly

Ford Motor Co., 204 Mich. 459 (1919). Many nice questions are involved in the case of subsidiary companies, mergers, and pure holding companies. The courts will usually insist upon sufficient evidence to show that the stockholder has a real cause for action. A stockholder who harasses a corporation may be open to an injunction restraining him, or to an actual damage suit.

to the stockholders. It is clear that any effort to obtain greater stockholder participation in corporate management must be predicated on full disclosure.

Protection of the Corporation

The acts of a corporation are those brought about by the officers of the concern; the acts of the officers reflect the policies outlined and laid down by the board of directors. In the absence of fraud, malfeasance, or negligence, the directors of a corporation usually may not have any liability imposed upon them. The shareholder's remedy is found ordinarily in his power to remove the directors⁶ or to elect new ones at the next meeting. However, a majority in control of a corporation may necessitate the court's protecting the opposing faction from any damages.⁷

Ultra Vires Acts

A corporation has only such powers as are (1) contained in its charter, (2) implied by reason of its business, (3) given to all corporations under the general corporation law of the state in which it is organized, and (4) extended to all corporations by common law. If a corporation does anything not within its powers, such an act is called ultra vires.⁸ Generally speaking, a shareholder may do nothing about an act of the corporation which is ultra vires if the act is completed; an ultra vires act partly completed may usually be completed; one wholly uncompleted will usually be set aside. Directors who ordered such improper acts will, however, be personally liable for any damages by reason of such actions, unless it is shown the directors did not know of the ultra vires character of the act.⁹

The Voting Power of Stock

Only outstanding stock may vote. A corporation may not vote its own stock, even if held as treasury stock; but it may vote the stock of other corporations. The voting powers of stock, unless specified to the contrary, rest in all shares of stock, and each share votes equally. Under specified common-law rule, stock could be voted only in person by its owner. Most states permit voting by proxy, although some of them limit it, as do some corporations.

Ordinarily, in order to vote, stock must be registered on the books of the company on the date the vote is cast. Corporations specify that only shares registered on some particular date shall have the privilege of voting. In the absence of provisions for registration for voting, all stock is voted by the

⁶Power to remove a director must be granted in the charter or action must await a regular meeting, or such time as the by-laws have been amended as to the term of office. See W. W. Cook, *Principles of Corporation Law*, p. 371.

⁷These acts involve principally fraudulence and negligence, either of the directors or of other stockholders who by majority control may prevent the corporation from instituting action. See *ibid.*, pp. 400-404; 422-434.

⁸See W. M. Fletcher, *Cyclopedia of the Law of Private Corporations*.

⁹See Cook, *op. cit.*, p. 458.

owner registered on the books of the company on the date of elections. Stock sold, but not transferred on the stock books of the company, is votable only by the registered owner, who may, however, give the new purchaser a proxy.

The matter of voting power is, of course, coincidental to, if not inherently bound up with, the management of the corporation.

Exactly what may the holder do with his voting privilege? Generally speaking, this privilege may be exercised at the annual meeting of the corporation upon two questions: (1) the membership of the board of directors and (2) the amendment of the by-laws. Review of these two matters indicates that there are a vast number of questions, especially in relation to policy, such as expansion, personnel, sale of debt instruments, and a host of others, which will come to the directors only for decisions. The general exception to this broad statement rests in the rule that directors cannot proceed to sell or mortgage the entire assets of the firm without the consent of the stockholders. It should be recognized, however, that this would be an unusual action in any case. So far as the usual relationship and questions affecting the business from year to year are concerned, these will not be submitted to the stockholders but will be matters for the decision of the directors.

Receipt of Earnings

In the absence of fraud, malfeasance, and negligence, the shareholder has no right to withdraw earnings from the corporation, excepting as the directors may see fit to declare dividends.¹⁰ Any profits must be set aside by action of the board of directors to be taken out of the business as dividends for stockholders. This situation may be explained in the light of the doctrine of the corporate entity which we discussed earlier. It was then pointed out that we must regard the property and, therefore, the earnings of the property as owned by the corporation. This being true, the profits are not those of the stockholders immediately, but belong to the corporation. The directors, therefore, have to determine whether the corporation ought to retain them or disburse them.

Subscription to New Stock

Under the common law, two important principles were laid down with respect to the old shareholders and new issues of stock: (1) Existing stockholders must be given an opportunity to retain their proportionate control in the affairs of the corporation; and (2) the equities of the existing shareholders in the surpluses of the corporation may not be impaired. Both rules are violated if new stock is issued to the public before the existing shareholders have been offered the right of subscription to it. To illustrate, if Mr. A held one-tenth of the shares of the corporation, which had 10,000

¹⁰ See *Newsweek*, April 26, 1948, for suit to be filed by stockholders of Curtiss-Wright Corp.

shares outstanding, and the corporation should sell to others an additional 10,000 shares, Mr. A's control would be reduced by one-half. Likewise, Mr. A's proportionate equity in any surplus which the corporation might have would be reduced. Moreover, those acquiring stock in a concern which is in actual operation will avoid any outlay for organization expense which naturally would be borne by the original shareholders. The right of the shareholder to prior purchase of additional stock issues is known as a preemptive subscription right.¹¹ Under this right, stock may not be sold to the public at a price less than that at which it was offered to the old shareholders. The right does not apply to treasury stock.

Many modern corporations, under the state statutes, have inserted clauses in their by-laws or certificates giving waiver of preemption subscription rights. A typical provision is that of the Johns-Manville Corporation, which provides that preferred and common stockholders are not entitled to a right to purchase or subscribe for any part of unissued stock or any stock to be issued by reason of an increase in authorized amount, or any bonds, certificates of indebtedness, debentures, or other securities convertible into stock, or any stock purchased by the corporation or its nominees.

On the other hand, some corporations specifically provide that all new securities of the same issue must first be offered to old shareholders of that issue. Montgomery Ward Class A stockholders have the exclusive right to subscribe for any issue of Class A stock, and, in the event of any increase in the common stock, the holders thereof have the exclusive right to purchase such stock. Even when the preemption subscription right is denied, the power is not infrequently given to the board of directors to give preemptory rights to one or all classes of stock for each specific new issue.

Share in Proceeds in Dissolution

Corporations leave the world as they enter it—possessed of nothing. They must distribute their assets to their share members after paying all debts. Each shareholder is entitled in ordinary stock to share, in proportion to the number of shares held by him, out of the residual assets after all debts and other stock priorities have been discharged.

Summary of Rights

Every true ordinary stock must therefore conform to five essential tests:

1. There should be no other class of stock with a superior power of management of the corporation during its normal existence and in the normal conduct of its affairs.
2. There should not be a class of stock with a subsequent claim on earn-

¹¹ The law is not clear as to the rights of the holders of securities which carry a conversion privilege or stock purchase warrants. In the absence of specific statutory provisions, it appears doubtful whether preemptory rights accrue to such shareholders. Most corporations, however, protect the holders of convertible or warrant-bearing securities by a "dilution clause."

ings. That is, the ordinary stock must legally have the right to receive all the earnings not contracted to be given specifically to other stocks when declared by the board of directors.

3. There should not be any other class of stock with a subsequent claim to the assets of the company in the event of dissolution, though there may be other shares with an equal claim to the assets of the company.

4. There should be no class of stock with a greater liability for the debts of the company, but there may be stocks with an equal liability.

5. Lastly, to be ordinary stock, the shares should comprise that class of stock the existence of which is necessary to the existence of the stock corporation as a going business concern and may be retired only at the dissolution of the corporation.

TRADING ON THE EQUITY

No discussion of common stock is complete unless some attention is given to what is known as trading on the equity. Stated briefly, this consists of increasing earnings for the stock, and likewise losses, through borrowing. If a corporation has solely capital stock of \$100,000 earning at the rate of 5 per cent, it would not be trading on its equity. That is, it has not made use of any borrowed money in addition to the proprietorship. Such a corporation if operated with \$200,000 total capital might increase its rate of earnings, and if it earned a 6 per cent rate on its capital while it paid 5 per cent upon its borrowed capital, it would make an additional 1 per cent on its owned capital by reason of the borrowed capital's being paid only 5 per cent out of the earnings. If the owners borrowed \$200,000 and invested \$100,000, they would be able to increase their own earnings more than double, for at 6 per cent the firm would now have \$18,000 operating earnings, and after \$10,000 interest would have \$8,000 left, or an 8 per cent return. The stockholders would have traded on their equity to the extent of 200 per cent.¹² So long as there are excess earnings over interest rates, this is a real advantage.

¹²In general, the extent to which the corporation trades on its equity is measured by the formula

$$\frac{C-NW}{NW} \times 100 = E$$

in which C is the total capital used by the corporation, NW the amount of the proprietorship equity, and E the percentage to which the shareholders have traded on the equity. Southern Railway Company, at the close of the calendar year 1946, showed a net worth amounting to \$369,000,000 and borrowed capital amounting to \$305,000,000. The stockholders (as a whole) had therefore traded on their equity to the extent of

$$\frac{674-369}{369} \times 100 = 83\%.$$

With the preferred stock classified as a prior claim the common stock would show the extent of trading on the equity by the calculation below. That is, as far as the common stock is concerned, any prior claim on earnings and assets may be classed as "borrowed capital." In the case of the Southern Railway Company, the preferred stock amounted to \$60,000,000. The calculation would be:

$$\frac{674-309}{309} \times 100 = 118\%.$$

But quite the opposite result could happen. In the last case, suppose the earnings rate fell to 3 per cent on capital; then operating earnings would be but \$9000. Interest charges would equal \$10,000 for the year. Thus a deficit would result, for while the earnings rate was only halved, the interest rate was immobile. So the ordinary stock finds the risk expensive. Had the concern borrowed but \$100,000, then earnings would equal \$6000, a slight balance over the \$5000 needed for interest.

This difference arises over the shifts in the structure, which may be emphasized by comparing them.

	Case I			Case II	
Debt	\$200,000	66⅔%	Debt	\$100,000	50%
Stock	100,000	33⅓%	Stock	100,000	50%

The larger the ratio between the borrowed capital and the net worth, the higher will be the percentage of trading on the equity, or "leverage," as it is named in stock-trading circles. And, other things being equal, the higher the percentage of trading on the equity, the greater the degree of risk assumed by the stockholders. There is also an increase in the risk assumed by the bondholders and preferred stockholders.

Different types of corporations trade on the equity in varying degrees. Industries with stable earnings or of a monopolistic nature may ordinarily trade on their equity to a much greater extent than highly competitive and unstable industries. Thus railroads and public utilities ordinarily can and do trade on their equities more than industrial, manufacturing, and merchandising companies. For the pattern refer to Table 19 in Chapter XVI.

It would appear that, in the matter of trading on the equity, the interests of the stockholders are opposed to those of the bondholders. The bondholders are desirous of protection; protection to their principal and to their income is afforded by having a large amount of capital supplied by the stockholders. They reason that a small rate of earnings on the large amount of capital supplied by both would be more certain to assure them of income, and that a large amount of capital supplied by the stockholders would serve to protect them against shrinkage in assets because of price changes, wear, obsolescence, depletion, etc. Moreover, if the shareholders have not traded on their equity to a large extent, they will have invested a large proportion of the total capital, and will accordingly be relatively more active in preventing large operative losses and less likely to take chances which would cause such a large shrinkage in the value of the assets of the corporation as to result in losses to the bondholders. This reasoning is ultimately correct, for while over a period of time the success or failure of the corporation is of paramount importance to everyone, it is the crisis period which heavy trading on the equity may not be able to meet.

QUESTIONS

1. Explain the significance of the statement that a "stock" is a contract.
2. Are the terms of "ordinary" stock capable of change by contract? If so,

- does this mean that the power to control the corporation can be destroyed?
3. Trace the exact procedure involved in the transfer of a stock certificate in order to complete the transaction and have the new owner properly registered.
 4. Explain the reasons why a "voting-trust" may be created.
 5. Discuss the concept that the stockholder is not a direct claimant of the earnings of a concern. How do you relate this to the reluctance of courts to interfere with the dividends ordered to be paid?
 6. Why should a stockholder value his right to preemptive subscription? From the standpoint of taxing the value gained, why could you regard this value as a different thing from the option to buy granted to officers?
 7. What is meant by the term "equity" as used in the financial field? Would you include preferred stock in this concept?
 8. Describe the relation that you feel exists between the degree of trading on the equity and the variability of earnings in the field. Indicate two contrasting types of business which you think illustrate the point.
 9. In view of the current low interest rates, would this be an advantageous time to study the trading-on-the-equity possibilities in a company? In measuring the gain from trading on the equity, do the company's retained earnings amount to borrowing?

PROJECTS

1. Determine the value per share which a preemptive right would have in the case of McCall Corporation if an issue had been offered in July, 1948, for a 25 per cent stock increase.
2. Examine the schedule of charges on the New York Stock Exchange and compute the fees due for a purchase of 50 shares of Chrysler Corporation and of \$2000 in bonds of the Great Northern Railway Company.

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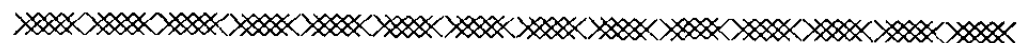
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CHAPTER VI

Stocks with Variations



TO APPEAL to the many possible buyers of stock instruments there are variations which can be inserted by contractual stipulation in the agreement. These become the subject of examination here. The rights of an ordinary stock continue, of course, and only at those points where expressed differences are provided will the stocks vary.¹ Since many different market conditions are to be met at the times when stocks are sold, it will be natural to find that a company may have more than one stock with the same general name and yet many variations in the detailed terms.² It should be emphasized that frequently the variation is a reduction of the normal stock rights, such as the loss of voting privileges or the lack of preemptive rights. For convenience of examination we will group the possible types of variations by the titles which the public commonly recognizes: (1) preferred, (2) guaranteed, (3) classified common, and (4) unusual types.

PREFERRED SHARES

Whereas ordinary stocks represent residual claims both as to assets and as to income, preferred shares normally represent prior claims both as to assets and as to income. Bonds, being creditor obligations, rank above the claims of any form of stock. Preferred stocks are intermediately situated between bonds and common stocks. In many ways they are compromise securities. They lack the safety usually characteristic of secured obligations, and have, as an offsetting advantage, a larger yield; they lack the power of management found in common stocks, and as an offset are given a claim on earnings superior to the common stock, and usually a contingent voting power; they ordinarily have no power to force the payment of dividends but usually have the power of cumulating their right to receive dividends if the dividends have been earned.

¹ Preferred stock represents a contractual arrangement between the corporation and the stockholders *inter se*, and provides a system for the distribution of profits and assets among the stockholders. Legally, one group or portion of the stockholders makes contracts with another group or groups; it is not contrary to public policy, and the courts will enforce the contract. Cf. W. W. Cook, *Principles of Corporation Law*, p. 48.

² See the Iowa Electric Light and Power series of preferreds with Preferred A, Preferred B, and Preferred C.

Reasons for the Use of Preferred Stock

The original motive for using preferred stock was to offer a type of stock to investors who were anxious to receive income in excess of the interest paid on bonds and who, while willing to assume a slight risk, were quite unwilling to assume the risks which accompany the ownership of ordinary or common stock. Use of preferred stock usually requires the corporation to pay a slightly higher rate upon the capital secured through the sale of preferred stock as compared to the rate paid upon capital secured through the sale of bonds, and in exchange the company avoids the possibility of foreclosure if the "fixed" charges on preferred stock are not met. The purchaser of preferred shares, among other things, has exchanged his right to enforce collection, ordinarily held under a bond, for a right to receive an additional income over and above that received on bonds. Corporations sometimes found it injudicious to mortgage their assets at the particular moment when added capital was needed. Such bonds might be sold only as a second mortgage or junior issue at an abnormally high coupon rate or at a discount (hence at a high effective rate) or under very onerous underwriting terms. Under these circumstances, preferred stock might provide a method of raising capital on a much more economical basis than bonds. Sale of preferred stock may avoid both jeopardizing the control of the common stock and bringing the burdens of a bond issue. Too, the common stock can by this choice of financing retain a lion's share of the profits.

Meaning of the Term "Preference"

The term "preferred" or "preference," as used in conjunction with stock or shares, means that the particular share or stock stands in a distinctive and favored position with respect to some of the usual rights of shareholders. In the previous chapter it was noted that there are nine of these more important rights, which are now subdivided into two sections: (1) those rights wherein the preferred shareholder ordinarily stands in the same position as the holder of common stock and (2) those rights in one or more of which the preferred shareholder occupies a distinctive position as compared to the holder of common stock.

A. Rights usually not differentiated in preferred shares

1. To transfer the stock
2. To have evidence of ownership
3. To inspect the books of the company
4. To protect the corporation from wrongful acts of either a majority or a minority
5. To restrain ultra vires acts of the corporation

B. Rights in which preferred shares stand in a different, usually a limited, relation to the company as compared to common shares

1. To share in the proceeds in the event of dissolution
2. To participate in the earnings

3. To participate in the management of the company
4. To subscribe to new stock issues
5. To control future security issues, injurious to original stock position

Dividend Preference

The most universal attribute of preferred stock is that it is entitled, by expressed statement, to receive dividends prior to the declaration of dividends on common stock. If the same corporation has several preferred stocks outstanding, there is normally a sequence described in the stock certificate which fixes the order in which the respective stocks may receive dividends.³ In the absence of specific provisions to the contrary, all preferred stocks share *pari passu*,⁴ but definitely before the common stock receives anything. Priority of issue, however, does not give priority of dividends.

Cumulative Dividends

A preferred stock is said to be cumulative if, when the dividends are not paid in any given year or dividend period, they accumulate so that the following year or dividend date gives the preferred stock the right to receive the usual amount of dividends for the two years. The cumulation privilege places the preferred stockholders in a more definite position to claim earnings, and puts certain points of misunderstanding as to the rights of preferred shareholders in a clear legal light.⁵ If no "contrary intention appears," the preferred stock is cumulative; it has rights with respect to the profits earned by the corporation in any year, even though dividends are not declared in that year. It is within the discretionary power of the board of directors to decide whether the preferred shall receive dividends when earned, but if the board desires to build up a surplus, it is free to do so. Limitations may be created, however, on dividends on subsequent issues.⁶

³ For examples of instances in which several preferred stocks have and have not interclass preferences, see West Penn Electric Co.; Pacific Gas and Electric Co.; Long Island Lighting Co.; Cluett, Peabody and Co., Inc.; and Maryland Casualty Co.

⁴ *Pari passu* means ratably, by equal progress, by the same gradations. That is, if several preferred stocks are without a preference as among themselves, they will share and share alike in the matter of dividends.

⁵ A tabulation from Moody's manuals on industrials showed that more than nine-tenths of the preferred stocks were cumulative by the terms of their contracts.

⁶ McKesson and Robbins, Inc., §4 Cumulative Preferred: "So long as any \$4 preferred is outstanding, no dividend or other distribution may be declared on any junior stock, except out of earned surplus accumulated since July 1, 1941, nor may any such dividend or distribution be declared, nor any junior stock acquired, unless thereafter consolidated earned surplus accumulated since July 1, 1941 is at least equal to five years' dividend requirements on all outstanding preferred and any stock ranking prior to or on parity with preferred."

Cook Paint and Varnish Co., §3 Prior Preferred: "Except by consent of $\frac{2}{3}$ of prior preference no dividends may be paid on junior shares unless thereafter net current assets are twice net current liabilities and consolidated net tangible assets equal 150%

The directors must also give or set up "credits" in favor of the preferred stock when earnings to which the preferred stock is entitled are so used. These "dividend credits" automatically rank ahead of any rights of the common shareholders with respect to assets and earnings. It is held generally that the corporation has made a promise to pay such dividends when earned prior to any declaration on subsequent stock claims, if the promise has not been fulfilled in the past. The corporation must make good for previous periods before other stocks are paid dividends.⁷

Value of Cumulation. As to the value of the cumulative characteristic of preferred stock, there is much disagreement. In reference to such clauses, it is pointed out (1) that if the company earns the dividends the preferred shareholder fares no better with or without the clause and (2) that the dividends on cumulative preferred stocks, when accumulated to some considerable amount per share, are more frequently paid up through a compromise exchange of additional special or other stocks than by cash disbursements.

The existence of such clauses, however, may have been the pitfall of temptation into which the hard-saved dollars of many unwary investors have been dropped.

On the other hand, it can be pointed out that this clause does permit (1) the greater ease of raising capital through preferred stock, (2) the elimination of all uncertainty of the status of the stockholder with respect to priority in dividends, and (3) the removal of some powers of discretion which might be abused by boards of directors. An examination of a random sample of 100 preferred stocks in 1930 in each of the railroad, utilities, and industrial fields showed more than 95 per cent to be cumulative by contract, and a similar sample in 1948 showed 93 per cent cumulative.

Settlements of preferred stock dividend accumulations may vary widely, though the company usually tries to conserve upon cash payments. Thus the compromise reached usually amounts to the receipt of more stock, either preferred or common, as the dividend "sweetened" by a small cash sum. Examples of these situations may be found in the American Woolen Company 8 per cent preferred, which had \$58.50 accumulations in 1946, when the company offered 1½ share of prior preferred stock and \$8.50 cash for each old share of preferred stock. The Penn-Dixie Cement Company had \$100.04 accumulated dividends in 1945 on its 7 per cent preferred

of issue price of outstanding prior preference, and any stock having priority or parity therewith, all sinking fund requirements have been met, and such dividends are limited to surplus earned subsequent to November 30, 1944, plus \$600,000 of surplus accumulated prior to that date."

⁷ It is customary to limit the preference participation of par value stocks on a percentage-of-par basis, and to limit no-par preferred to a fixed number of dollars per no-par share.

stock when it offered a plan to create only common stock and exchange four shares of new common for one share of the preferred stock.⁸

Non-Cumulative Dividends

If preferred stock is definitely stated as being non-cumulative and non-participating, the ordinary stockholders can accumulate earnings into surplus for a number of years without paying anything on the preferred stock. When a large earned surplus has been created, the common shareholders may, through their elective representatives, the directors, vote a limited dividend for the single year on the preferred and pay to themselves all remaining earnings which would go largely to preferred stock if regular preferred dividends had been paid or if the cumulation privilege had been included. This may easily occur, too, without any original intent to manipulate or deprive the preferred stock, for the earnings were probably used in expansion and improvement programs. This postponement will, however, substantially benefit the ordinary stock exclusively in the form of high dividends, from the larger earnings.

If the preferred stock contract between the preferred stockholders and the corporation guarantees or entitles them, in general terms, to a certain annual dividend, but makes the dividend payable in each year dependent upon the profits of that year, the dividends are not claims on other years; so if the profits in any one year are insufficient to pay the dividend it need not be paid, in addition to subsequent dividends, out of the profits of subsequent years before any dividends may be paid on the ordinary stock. This preferred instrument is, however, entitled to such earnings as do exist in any year, and even if a dividend is not declared, the right to receive it survives. Ordinarily it is for the directors to determine whether the condition of the corporation is such that a dividend on preferred stock may be declared and paid; and the courts will not interfere unless an abuse of that discretionary power is shown. If the directors abuse their discretion, however, and refuse to declare a dividend when it is clear that there exists a surplus profit available for that purpose or dividends on subsequent stock issues are to be paid, a suit brought in the proper court of equity by the preferred shareholders may compel the declaration and payment of a dividend.⁹

⁸ Other cases of like character are Cudahy Packing Co. 7 per cent preferred, which in 1945 offered one share of 4½ per cent preferred plus \$8.50 cash; North American Refractories 6½ per cent preferred with cumulations of \$88, which in 1947 offered ten shares of new common for one share of preferred; and Peabody Coal Co. 6 per cent preferred, \$100 par, with \$28.50 cumulations in 1947, which offered five shares, \$25 par, of common and \$3.50 cash in settlement.

⁹ Upon petition to the court in 1943 the American Car and Foundry Co. for its non-cumulative preferred stock was enjoined from declaring a common stock dividend, as the directors had voted and awarded the preferred stockholders a judgment for dividends earned but not paid in past years amounting to the sum of \$2,487,000. The dividend record of the company shows that in 1943 it paid \$14.25, which included \$7.00 for 1936 and 25¢ for 1938; and in 1942, \$5.25 for 1941, 29¢ for 1938, and \$3.50 for 1942.

Participating vs. Non-Participating Preferred Stock

A preferred stock is said to be participating or non-participating according to whether its rights to receive earnings and/or to participate in assets upon dissolution are limited or unlimited.¹⁰ Preferred shares may be participating either as to income or as to assets.¹¹ To state the matter another way: Preferred stock is participating when it has (1) the right to receive earned dividends in excess of the amount stated in the certificate and pro rata with ordinary stock, and/or (2) the right to receive payments from the assets of the company in the event of dissolution, beyond the par value in the case of par value stocks and beyond the stated value of subscription price in the case of no-par stocks.

If nothing is stated as to whether preferred stock will or will not be participating as to earnings,¹² some courts will decide it to be participating; others, to the contrary. The use of the name "preferred," "preference," etc., as attached to the stock is evidence of the intention of the issuers for priority, but, as we were reminded previously, in all other respects the rights of ordinary stock are continued.

The main object, of course, of the provisions giving participating advantages to the preferred stock is that they allow the sale of preferred stock either in greater quantity or on better terms. Participation which rests upon the general rule, there being no contractual statement, will be simple or pro-rata division. Thus with a 5 per cent preferred stock, this dividend would first be paid. Then the ordinary stock would receive a 5 per cent distribution, and any further distribution would be at the same percentage of payment to each class. The New York Dock 5 per cent non-cumulative stock illustrates the case.

By the contract, however, the participating rights may be completely denied or rearranged to meet the selling needs of the period when the stock is offered. Consequently fully participating stock is used as an additional feature to tempt investors, although over a period of time it is of doubtful advantage, especially in the absence of restrictive provisions as to the amount of common or the dividends thereon.¹³

¹⁰ With respect to earnings, some preferred stocks are non-participating, such as the 3½ Per Cent Cumulative Preferred of the McCrory Stores Corp., which has no dividend rights beyond the cumulative 3½ per cent rate.

¹¹ Preferred stock of the American Sugar Refining Co. is non-preferred as to assets, hence must be participating. In fact, all stocks which are not preferred as to assets and have no limits on the amount of assets they may receive automatically become fully participating as to assets. In the eyes of the law, under such circumstances, all shares are treated as common stock in the event of distribution of the assets.

¹² See C. W. Gerstenberg, *Financial Organization and Management*, 2nd rev. ed., p. 135.

¹³ If full participation is given preferred stock, protection should be given against dilution of the earnings ratio through the issuance of additional common stock. Supposing a corporation with \$100,000 preferred stock and \$100,000 common stock earned an average of \$30,000 each year. If the preferred was entitled to 7 per cent and participation after the common received 8 per cent, the total paid to the preferred would be

Preferred stocks may be fully participating or limitedly participating. If limitedly participating, the preferred stock receives only a limited amount in addition to its first stipulated receipt.

Typical of preferred stocks having partial or limited participation is the new Chicago and North Western Railway 5 per cent Cumulative Participating Preferred, which is cumulative at 5 per cent to the extent earned and may participate to the extent of \$1 per share in addition, making a possible total of 6 per cent dividend on this stock.

Some participating preferred stocks have what may be called series or stepped participation. Under this scheme the preferred might be entitled to 7 per cent, then common 7 per cent, then preferred 3 per cent, then common 3 per cent; and after 10 per cent on both classes, they would share alike in further distributions. This type of participation is less common among recently issued preferred stocks.¹⁴ It was particularly popular with railroad stocks at one time.

Asset Preferences

To give the preferred stock of a corporation preference to assets as well as to dividends gives added safety to the investor and at the same time makes it possible for the corporation to raise more capital without selling bonds or additional ordinary stock. Of course, all preferred stocks are not preferred as to assets, but by far the majority are. Such preference is presumed to remove, to a degree, the risks connected with the preferred stocks as compared to bonds. Were preferred stocks not preferred as to assets, there might be a temptation for the ordinary stockholders to extend their trading on the equity so far as to eliminate almost completely the protection given to the preferred stock through the investment of the common shareholders.

If a stock is not given a prior right to participate in the assets of the corporation, it shares pro rata with all ordinary stock. The limit to which shares have preference to assets is usually defined in terms of the par value or some other specific amount. Not infrequently, if limits are given, there will be a different limit for the preference to assets in the event of voluntary or

14½ per cent and to the common 15½ per cent. But the common shareholders could obtain a lion's share through the issue of \$100,000 additional common stock. The division would then be 10½ per cent to the preferred and an equivalent of 19½ per cent to the old common stock. It is only fair, when fully participating or even partially participating stocks are issued, to give to the preferred shareholders voting power with respect to issues of common stock, thus enabling them to protect the worth of the participation benefit.

¹⁴ The American Products Co. with two preferred stock issues provides: "Participating preferred stock has preference to cumulative dividends at \$1.50 per year. After common has received 50 cents per share in any year, it and participating preference participate equally per share with common. When participating preference (No. 2) has received \$3.50 per share and common \$2.50 per share in any one year, thereafter any further dividends shall be paid as follows: \$2 per share to participating preferred, \$1 per share to participating preference and \$2 per share to common."

involuntary dissolution of the corporation.¹⁵ The usual provision is to give greater preference to the shares in the event of voluntary than in the event of involuntary liquidation. Such protection, through added sacrifice of the common shareholders, is theoretically designed to eliminate the temptation to wind up the affairs of the corporation through sale of its assets by those in control of the company's affairs. Also, it prevents the subterfuge of a merger through the sale of common stock given to the old shareholders of another corporation to pay off the preferred at the consummation of the merger. In the case of no-par stock, the limits of the preferences are usually stated in a fixed number of dollars per share. These limits are normally at or above the original subscription price for which the stock was sold.

Management Participation

The matter of voting powers of preferred stocks, in most states, is left up to the corporation; hence there is a wide variation in the practices. Generally, preferred stocks may be classified as to their voting power under two heads: (1) those having full voting power with the common stocks, a right they will possess unless it is denied in the contract; and (2) those having restricted voting power, which form two subtypes: (a) preferred stocks which under certain contingencies acquire sole voting power on all matters, and (b) preferred stocks having voting power upon only a few matters in any event. The conditions under which voting power passes to the preferred shareholders in whole or in part may be non-payment of dividends, failure to meet the sinking or redemption fund, reduction of the working capital position of total assets below a specified minimum, etc., all being elements designed to give security and power to the holders of the preferred shares.

Full Voting Rights. In giving full voting power to preferred stockholders, the ratio, both present and prospective, between the amount of common and the amount of preferred stock must be considered. More precisely, the number of votes which may possibly be cast by the preferred and the ordinary shareholders as groups will influence decisions with respect to voting power. If the common and the preferred are sold in units, i.e., a fixed number of shares of each of the two stocks in a unit, during the period immediately following the distribution of the stock, every shareholder will be influenced proportionately by both classes of stock. But as some of the shares are placed

¹⁵ In the case of involuntary liquidation preferred stockholders of the York Corp. will receive \$50 per share plus accrued dividends; in the case of voluntary liquidation preferred stockholders are entitled to the redemption price then in effect, which runs from \$55.50 prior to 1949 down to \$53 after 1957. Robertshaw-Fulton Controls Co. preferred receives par (\$25) plus accumulated dividends in the event of involuntary liquidation, and \$26.25 plus accumulated dividends in the event of voluntary dissolution. General Mills, Inc., 5 Per Cent Cumulative Preferred has preference to par and dividends when the liquidation is involuntary and preference to \$115 and dividends when the liquidation is voluntary. International Minerals and Chemical Corp. preferred pays \$100 per share plus accrued interest in the case of involuntary liquidation and \$110 per share plus accrued interest in the case of voluntary liquidation.

in the open market, the two classes of stock gradually separate from each other, one going to one type of investor, the other to another type. That is, some unit purchasers will dispose of their preferred shares, keeping the common stock; others will do the opposite. Even within the same group of shareholders, the preferred and common shares tend to rearrange themselves so as to form preferred and common shareholder groups, and a certain stockholder class consciousness develops.

Although at the date of original issue the voting powers of the two stocks are equal, subsequent developments will often swing the balance of voting power one way or the other, as the quantity of either stock is increased.¹⁶

Contingent Voting. Illustrative cases of typical voting powers of preferred stocks will be found in the following: Cluett, Peabody and Company, Inc., 7 Per Cent Cumulative Preferred entitles its holders to one vote per share at all stockholders' meetings, but the entire voting power for the election of directors is vested in the common stockholders unless four quarterly dividends are in default, whereupon the preferred has exclusive voting power for the election of directors. The holders of the 5 Per Cent Cumulative Preferred Stock of the Securities Acceptance Corporation have no voting rights unless the cumulative dividends on the stock shall be in default and unpaid, in whole or in part, for six quarterly dividend periods, in which event they have one vote for each share of stock. In this event approximately 21 per cent of the total voting rights of the shares of the company would accrue to the holders of the preferred stock. On subsequent actions of the company the preferred stockholders have no specific power to vote. Anderson-Prichard Oil Corporation 4¼ Per Cent Cumulative Convertible Preferred has no voting power whatever unless six quarterly dividends are in arrears, whereupon the preferred stock acquires the right to elect a majority of the directors. The two series of preferred stock of the Indianapolis Power and Light Company have equal voting power of one vote per share with the common stocks of the same company. Eastman Kodak Company preferred stock has one vote per share, and each holder of ten shares of the no-par common is entitled to one vote, but no holder of less than ten shares of common has any vote.¹⁷

Classified Voting. Radio Corporation of America \$3.50 first preferred

¹⁶ The Baldwin Locomotive Works in 1928 had outstanding 200,000 shares of common and preferred stock. Both had equal voting power, and a balance was maintained between them. Stock split-ups of common stock, the issuance of additional shares of common stock, and the redemption of preferred stock have changed the ratio of voting power. In 1946, there were outstanding 77,633 shares of preferred stock and 1,875,299 shares of common stock; thus the ratio was changed from a 50-50 division between common and preferred to one of approximately 4-96 in favor of the common stock.

¹⁷ Since 1940 the New York Stock Exchange will no longer list any preferred stock unless it provides for (1) election of at least two directors upon the default of six quarterly dividends, (2) approval by two-thirds of the preferred stock class for any charter or by-law change affecting the preferred stock's position.

Only the 4 Per Cent Cumulative Second Preferred Stock of Cluett, Peabody and Co., Inc., would be subject to this rule because all other stocks of the companies mentioned above are traded over the counter or were issued prior to 1940.

and common stock have general voting power except when dividends for four quarters are in arrears on the \$5 cumulative preferred, which then receives one vote per share. E. I. du Pont de Nemours and Company preferred stock has voting power whenever the company fails to pay preferred dividends when they become due and the default continues for a period of six months. The preferred stock of the American Smelting and Refining and Mining Company votes on all matters except the issue of additional common stock or other stock deferred to the common stock. The case of the Vulcan Corporation is of some interest, in which the \$3 prior preferred has no vote at any time, while its \$4.50 preferred stock after default of four quarterly dividends is entitled to twenty votes per share.

No logically tenable system of thought has been formulated as to when and how voting control should pass from the common to the preferred stock. Certainly such control should pass only when further control by the common stock might jeopardize the position of the preferred stock, and the shift should remain only so long as is necessary to give protection to the preferred shareholders. It frequently happens that the shift of voting control to preferred shareholders means the abandonment of all hope by the common stockholders, the interest of the preferred stock not necessitating any consideration of the position of the common stock, as is necessary the other way around. But to be of any value, the preferred stock should acquire the balance of power under such conditions as warrant the acquisition of voting power.¹⁸

Denial Powers of Preferred Stocks. In an analysis of preferred stocks a careful distinction must be maintained between the consenting powers and the dissenting powers. Those familiar with democratic government inform us that the positive vote is easier to obtain than the dissenting vote. When full powers of approval are given to preferred stock, at least a majority approval is required; not infrequently it is 60, 66⅔, 75, 80, or even 100 per cent. However, to obtain the consent of large majorities is difficult and undesirable, first, because preferred shareholders are lackadaisical in voting, particularly if they are dyed-in-the-wool investors; second, because it is more or less expensive; and third, because it may slow up financing, refunding, combinations, etc. Moreover, assenting action is positive; it requires reasoning and persuasion on the part of the management to convince the shareholder sufficiently to stimulate him to action.

To place the initiative in the hands of the shareholder instead of the corporation, as is necessary when consenting power is required under the preferred stock contract, may prove useful on occasion. That is, denial power is given and, when not exercised, is presumed to be implied consent. It is

¹⁸ Quaker Oats Co. preferred stock acquires voting power, among other conditions, whenever the dividends are as much as three months in arrears. On December 31, 1946, there were outstanding 180,000 shares of preferred and 699,553 shares of common stock. The preferred stock, when it voted, had the right to cast four votes for each share, whereas the common cast but one vote per share. The result of a three-months' default in dividends on the preferred stock would be to pass voting control to the preferred stock.

usually provided that a dissenting vote on the part of 12½, 15, 20, or 25 per cent is sufficient to prevent an action. It appears that, per share, the strength of a denial privilege is from three to six times the strength of an approving or consenting ballot. While denial voting gives more power to the individual shareholder, it at the same time necessitates his rather continuous vigil to the end that his position is neither weakened nor jeopardized. If consenting power is given, the preferred shareholder will presumably be notified by the management if an act is contemplated which might jeopardize his position. There is much to be said, however, for the use of the denial power, since this will bring pressure to bear upon the shareholder to interest himself in the affairs of the company.

Subscription Rights. The general rule that the contract between a corporation and stockholders cannot be impaired in content or in effect without the consent of the shareholders is applicable to both preferred and common stock.¹⁹ Preferred shares are always exposed to the peril of the intrusion of new securities with claims equal or superior to those of the preferred stock, and the preferred shareholder should be always on the alert to prevent such intrusion. Subject to specific statutory provisions of the state in which the corporation is organized, the general rule on preferred stock is that it has only the right to protect its position as to income, assets, etc., against all impairment. The rules applying to common stock are otherwise applicable. If a series of preferred stocks have all been sold, it is not uncommon to find that some of the less well-protected issues are given the same subscription rights as the common stock. Clearly a corporation may deny, in the absence of statutory requirements to the contrary, all privileged and preemptory rights of preferred stock as well as common stocks.²⁰ In fact, the corporation may deny to one class of stock, such as the preferred, and by its silence give preemptory rights to another class.²¹

Protection of Preferred Shares Against Dilution

The creation of any prior or equal claim against the earnings or the assets of the corporation will operate to reduce the equity values of the preferred stock. The degree to which such dilution occurs is proportional to the amount of stock issued with at least an equal claim against earnings or against assets. In the event of the creation of prior claims, the dilution is proportionate to the ratio between (1) such prior claims and (2) the excess pro-

¹⁹ Public Service Corp. of New Jersey 8 per cent preferred has the same privileges to new stock subscriptions as the common. The 7 per cent, 6 per cent, and \$5 no-par preferred stocks have no such rights.

²⁰ Cluett, Peabody and Co., Inc., Second Preferred Stock denies preemptive rights. The common stock has no specific mention of preemptive rights except, "entitled to such preemptive rights as are provided by the laws of the State of New York."

²¹ The Cudahy Packing Co. requires an affirmative vote of two-thirds of the preferred stockholders to enable the corporation to create or authorize additional preferred, any stock having priority or parity therewith, or any securities convertible into such stock of preferred.

tection by way of earnings or assets previously available to the preferred stock and the amount of the prior claim. If the element of priority in preferred stock is of any value, then the holder of such shares could and should be expected to demand a voice in the matter. Some corporations provide protection against dilution by stipulating that the creation of any claim against earnings or assets equal to or superior to the preferred stock shall require the consent of the preferred stockholders in whole or in part. Thus the same protection is given to the preferred holders as is often extended to bondholders. If voting power is given to the preferred, then mere consent of the directors may suffice for the issue of additional preferred stock.

A typical example of the protection afforded preferred stocks will be found in the Standard Brands, Inc., \$4.50 preferred, which requires the consent of $66\frac{2}{3}$ per cent of both common and preferred before any mortgage or lien may be placed upon the property of the company or upon a subsidiary. Boston and Maine prior preference stock must have two-thirds consent to issue additional preferred stock other than in exchange for convertible bonds.²² Reliance Manufacturing Company is limited in the issue of any funded debt unless the earnings available for dividends on the stock and interest charges in two out of three previous years amount to at least three times the requirements. Crucible Steel Company of America preferred stock must consent by a two-thirds vote to all new prior claim securities, with the exception of purchase money mortgages. The issue of preferred to refund prior claim issues is not necessarily dependent upon the consent of the preferred stock. In some instances the preferred stock contract will prohibit not only the issue, but also the assumption and guarantee of prior claim securities without the consent of the preferred shares.²³

International Harvester Company may not increase or decrease either the common or the preferred without the consent of at least two-thirds of the outstanding stock in each class. International Nickel Company of Canada, Ltd., preferred is redeemable on sixty days' notice after February 1, 1931, at 120 per share and accumulated dividends. It has a par value of 100. No additional preferred can be issued unless earnings on the preferred are 300 per cent of the dividend requirements in 24 of the preceding 30 calendar months. Jessop Steel Company common stock may receive no dividends unless (1) preferred has been paid and does not exceed net income available since 1945 and (2) quick assets are twice debts due in one year.

To prevent permanent restrictions on the company in the matter of issuing preferred stocks, it is possible to provide that restrictions such as those just given shall cease to be binding upon certain conditions. Removal of all restrictions when the sinking fund or redemption fund shall have reached a point sufficiently large to protect the preferred stocks is but a matter of com-

²² The American Locomotive preferred stock is of some interest in its provisions about the creation of any debt. In this preferred stock no consent is required to issue purchase money mortgage obligations.

²³ Mullins Manufacturing Corp.

non sense. Thus if a sinking fund has been accumulated to the extent of 110 per cent of the par value of the preferred stock outstanding, all such clauses should be inoperative. It is inexcusable to force the accumulation of a large cash fund to redeem preferred stock at, say, 105 when none can be bought for less than 125. Accordingly, suspension of sinking fund requirements is permissible when the accumulations in cash amount to anywhere from 15 to 25 per cent of the preferred stock. Whether the ratio should be high or low will depend upon the ratio of the dividend requirement to earnings. The proportion should be sufficiently high so that the use of the accumulated fund would substantially reduce the charges ahead of the common stock and materially increase the protection afforded the remaining preferred shares.

Retirement of Preferred Stock

Restriction upon the issue of additional preferred stock in the interests of greater safety to the preferred shareholders and the common stocks is a *negative or preventive measure*. It seeks to prevent abuse of the preferred stock privileges by circumvention. It is only to be expected that there will arise occasions when it will be desirable to reduce the amount of preferred stock outstanding over a period of time instead of merely preventing additional issues. Reduction in the preferred stock may be compulsory under the terms of the *preferred stock contract*, or it may be made voluntary on the part of the voting stock. The general propositions governing reduction in the amount of borrowed capital by sinking funds, etc., are applicable. Required reduction in the preferred stock may be brought about through one of three processes: (1) direct redemption; (2) redemption through sinking fund operations; (3) conversion.

1. *Redemption* is accomplished by purchase of stock and cancellation of the shares so purchased. Cancellation actually retires and reduces the amount shown to be outstanding by the books of the company. Some corporations, to protect the shareholders against declining marketability of their preferred stock when the amount is reduced, provide that the preferred may be redeemed as a whole, but not part of the issue at a time.

2. *Sinking funds* for preferred stocks are misnomers; they should be called redemption funds, because a sinking fund is held against a debt and preferred stocks are not debts. The use of such funds is to guarantee a reduction in proportion to the amount of preferred which has been issued,²⁴ in proportion to earnings,²⁵ in proportion to the dividend payments on the deferred

²⁴ Beginning in 1948 on October 31 of each year the Brown Shoe Co. will retire 2½ per cent of the preferred stock theretofore issued.

²⁵ Until 1957, Northwest Airlines, Inc., is required to set aside in a sinking fund an amount equal to 10 per cent of net earnings available for common dividends but not more than 3 per cent of the par value of First Preference Preferred Stock. The funds are available to purchase stocks on the market at the public price.

stocks, or in proportion to the volume of business done.²⁶ The first method may be and is used when it is desirable to sell an unduly large amount of preferred stock and to guard against a possible unforeseen misfortune to the company which would seriously embarrass a corporation with a large preferred stock issue. Also, such a clause leaves little choice to the common shareholders who usually control the management, or to the management itself. The second type of sinking fund ought to be used where the earnings are more or less proportional to depletion or wastage of assets. If so used, it will automatically prevent the common shares from reducing the asset protection given to the preferred stock. The third method may be used where payment of unusual dividends during the early life of the company on the preferred issues may lead to decreased worth of assets. Some preferred stock redemption funds are cumulative, some are not.²⁷ If they are not made cumulative but must be met before dividends on common stock, they may act only as deterrents to the declaration of common stock dividends until such time as both the redemption fund and the common stock dividend may be met.

3. *Conversion of preferred stock gives a degree of option to the preferred shareholder.* If the common stock of the company becomes of unusual value, he may exchange his preferred stock for common in accordance with the previously determined basis of exchange. Occasionally conversion privileges are for the purpose of simplifying the financial structure.²⁸ Generally speaking, the conversion privilege in preferred stocks, like that in bonds, is used for the purpose of selling more prior claim securities than could be sold otherwise. It is customary, where preferred stocks are convertible, to

²⁶ The Pickering Lumber Corp. provides that after retirement of First Mortgage Bonds there shall be applied to the retirement of the preferred stock \$3.50 per 1000 feet of pine timber cut and 50¢ per 1000 feet of fir timber cut each month from tracts of timber owned by the company located in the standard unit.

²⁷ The Burlington Mills Corp. is required to pay annually into its preferred sinking fund a sum sufficient to redeem 2 per cent of the maximum shares theretofore issued. However, no payment shall be required and the sinking fund shall not be deemed in default if consolidated net earnings for any preceding fiscal year after preferred dividends are less than \$300,000. Payments are not cumulative. Willys-Overland requires that the greater of 10 per cent of consolidated net earnings for the preceding fiscal year or an amount sufficient to retire 3 per cent of the largest number of Series A preferred shares at any one time outstanding shall be paid into a sinking fund each year. The Brown Shoe Co., Inc., preferred issue provides that an annual amount sufficient to retire 2½ per cent of the preferred stock theretofore issued shall be paid into a sinking fund. This is a cumulative requirement and must be met before any dividends are paid on or acquisition is made of junior stock.

²⁸ The Vulcan Detinning Co. had four classes of stock under the plan of June 15, 1920. They were Preferred, Preferred A, Common, and Common A. After June 15, 1930 (ten years from the date of beginning the plan), the Preferred A was to be converted into preferred and the Common A was to be converted into common. This left only two stocks, preferred and common, outstanding in 1947. Cf. also, the Wheeling and Lake Erie Railroad Co. conversion provisions.

pay the accumulated dividends in cash.²⁹ Provisions are usually inserted to protect the conversion privilege against dilution through the issue of additional shares of the security into which the conversion can be made.³⁰

GUARANTEED STOCKS

Guaranteed stocks constitute an anomaly in one sense in the general group of stocks with variations. The obligation created under the guarantee is not that of the corporation whose stock is in the hands of the shareholders; rather stock of A corporation has been purchased, and to this stock has been attached the guarantee by B corporation for the benefit of the stockholder in A stock. Thus the common stock of New York and Harlem Railway is guaranteed by the New York Central Railroad for the dividend of \$5 per annum. The owner of this stock is technically possessed of two contracts, one the ordinary share of the original road—New York and Harlem Railway—and second the guarantee promise of the New York Central Railroad.

The obligation created by the guarantor is that of a general debt, enforceable as a creditor's claim prior to the stock obligations issued by the guarantor itself. Dividends on this stock may be paid, therefore, while nothing is paid on the stock of the guaranteeing concern. In the case cited, the dividends on the New York and Harlem Railway have been paid continuously since 1873 while the dividends paid by the New York Central have been irregular.

These stocks have arisen out of (1) the process of corporate combinations, and (2) practices in connection with asset-leasing arrangements. In the first type, which is far the more numerous, holders of small blocks of stocks have frequently refused to give up the shares which they hold in the older companies in exchange for the securities of the combined company, usually a *holding company*. The courts have been quite zealous in the protection of minority groups; and in instances where objectionable terms of exchange might involve litigation which would be expensive, uncertain of outcome, fruitful of a considerable amount of publicity, and always time-consuming, it has often happened that a guarantee on the stock of the objecting shareholders was a happy solution. During the two decades from 1910 to 1930, especially the latter, the consolidation movement in the public utility field, and finally in the industrial field, was characterized by the appearance of a considerable number of guaranteed stocks in these fields.

Because a guarantee, properly entered into, creates the equivalent of added debt of the guaranteeing corporation, the various classes of stock in that concern may find their actual positions to be very different from those which a cursory analysis of the balance sheet would indicate. It has been carefully pointed out by Professor Dewing that, while guaranteed stocks

²⁹ The Wheeling and Lake Erie Railroad Co.

³⁰ This is true of Class A common stocks also. Cf. provisions of the Class A stock of Curtiss-Wright Corp. as a typical example.

have many of the apparent advantages of bonds and occupy about the same position in the capital structure, there are two important differences. The legal rights of the guaranteed stock are enforceable as creditor rights only against the guaranteeing corporation, whereas the bondholder will be able to enforce his rights as a creditor both against the issuing and against the guaranteeing corporation. In other words, while guaranteed bonds have a dual claim against the guaranteeing company and against the issuing company which was the original borrower, the claim against both companies is that of a creditor. Guaranteed stocks have a creditor claim against the guaranteeing corporations, but their rights as far as the issuing corporation is concerned are on a par with those of any other shareholder of the same class. A second important difference between the two is found in the event that a reorganization becomes necessary. Almost invariably the holder of guaranteed stocks must accept a greater sacrifice than the holder of guaranteed bonds.

The second type of guaranteed stocks, those resulting from the leasing of corporation assets, does not differ from a legal viewpoint in any important respect from the guaranteed stocks which arise out of consolidations. But from a practical point of view there is a tremendous difference, for the leasing corporations have to pay for such property uses, hence remit to the issuing corporation whose property has been leased, before arriving at net earnings available for bond interest on their own bonds. To state it briefly, the guaranteeing corporation deducts, as an expense item, the costs of the guarantee before it arrives at its own net profits.³¹ In effect, then, securities guaranteed through a leasing arrangement may actually precede first-mortgage bonds issued by the lessee corporation; hence they occupy an excellent investment position.³²

In the final analysis, the value of a guarantee on a stock or bond depends upon: (1) whether or not the guaranteeing act is ultra vires; (2) the care used in constructing the guarantee contract; (3) whether the use of the assets of the guaranteed company is essential to the guaranteeing company; (4) the probability of satisfactory earnings of either company and both companies; (5) the life of the guarantee; (6) the status of the security after the expiration of the guarantee. In the earlier guaranteed securities, many of the contracts were extremely loosely drawn but in recent years guarantees have been drawn with greater care.

³¹This is in conformance with the uniform accounting practice approved for the railroads by the Interstate Commerce Commission.

³²It must not be forgotten that corporations have been known to issue enormous quantities of bonds under a guarantee. In holding companies, there are numerous examples of bond issues being sold by subsidiaries where the ratio of bonds to the total assets approached or even exceeded the value of the properties. When the assets of the guaranteeing corporation consist of nothing but the common stocks of the corporations whose bonds are guaranteed, one has a classic example of lifting oneself by one's own bootstraps. The soothsayers of some financial organizations are truly marvelous to hear!

CLASSIFIED COMMON STOCK

In the decade from 1920 to 1930 corporations extensively adopted what is known as classified common stock. A corporation having 100,000 shares of common stock outstanding would retire the old common with what would be known as Class A and Class B Common, giving 100,000 shares, share for share, for the old stock and then, perhaps, half a share or one share of Class B as a bonus. The distinction between the Class A and Class B might be based on any one of many factors. Usually there would be about the same differences as are ordinarily found in preferred and common stock,³³ except that both would be subordinated to any preferred.³⁴ The scheme had several effects worth noting. (1) It altered the nature of the capital structure to a considerable extent, increasing in effect the amount of preferred stock and decreasing the net common equity. (2) It reduced the proportion of the stock of the company necessary to control, for it is common not to allow Class A stock to vote except in the event of certain contingencies such as default in dividends or breach of contract. The effect of this reduction in control is threefold: (a) It eliminates substantial proxy voting; (b) it places the control of the corporation in the hands of those actually interested in, and perhaps directly responsible for, its profitable operation; (c) it makes possible an increased distribution of the stock of the company, but not with an accompanying dispersion of corporate control. Since Class A stock ordinarily has certain preferences with respect to dividends and is participating, this type of stock was hailed by the public as a safe common stock devoid of the limited dividends of preferred and possessed of the income possibilities of common stock.

The provisions of Class A stock are such as to remove it definitely from the category of common stock, but also such as to prevent its being classed as a preferred stock in the strict sense of the term. One writer has classified it as a kind of weakened preferred stock—another inviting temptation to the sacrifice of investment security in exchange for only a hope.³⁵ In practice, classified common stocks have not been particularly well protected by (1) dividend cumulation provisions; (2) redemption and retirement funds; (3) clauses designed to prevent weakening of their position through the issue of deferred shares; (4) clauses giving protection by granting voting power upon questions relative to prior claims, especially bonds and short-term indebtedness; and (5) dividend payments upon deferred shares which would preclude payment of dividends upon the Class A shares.

Some typical examples of the use of classified common stock will make clear the nature of these shares. In the case of Godchaux Sugar, Inc., Class A common has full voting power. Both shared equally in dividends and both

³³ See Isador Grossman in *Am. Bar Assoc. J.*, March, 1929, pp. 128 ff.

³⁴ This distinction is not always true; e.g., Liggett and Myers Tobacco Co. Common B is almost exactly like the common, with the exception of the lack of voting power.

³⁵ A. S. Dewing, *Corporation Finance*, rev. ed., p. 27.

shared equally in the event of dissolution with a priority on both to Class A.³⁶ The Hearst Consolidated Publications Class A receives cumulative preferred dividends to the extent of \$7 per year and 75¢ more after \$1.75 on common, is redeemable on thirty days' notice at \$30 per share, is preferred as to assets to the extent of \$30 for voluntary liquidation, and does not participate further in the assets. Class A stock of the Coca-Cola Company is cumulative to the extent of \$3 per year, is limited to this amount, is entitled only to preference to the extent of unpaid cumulated dividends, after which it shares equally with common, but not in any assets obtained by the sale of common stock in excess of 1,000,000 shares, nor to exceed \$52.50 per share in any event. Class A is non-voting except when two dividend payments are in arrears. Class A stocks, like preferred stocks, are often convertible into common stocks of the same company. The United States Leather Company Class A stock is preferred as to dividends and receives two-thirds of the assets in the event of dissolution or the winding up of the affairs of the company.

UNUSUAL FORMS OF STOCK ✓

In the years 1920-1929 there arose several forms of stock which require brief and passing comment. Occasionally other special varieties of stock will be created for special purposes, such as sale to employees.

The motives leading to the wide diversification of types of stocks may be found partly within the corporations, partly in the agencies concerned with promotion, and partly in the public which is seeking "something for nothing." Corporations and their managers have endeavored to invent new attractions for capital funds in order to avoid funded and other debts; they have in some instances wanted to secure to a few the extraordinary profits of the business without the assumption of risk in the event of failure. Investment bankers and promoters have been motivated by similar stimuli, and have at times been hard pressed to find something new to lighten the task of selling securities. The public is always seeking something for nothing, and any form of stock which appears to give promise of extraordinary income will always continue to be easily distributed.

Bankers' Shares

Bankers' shares is a term used to describe two utterly different forms of shares. In one type, a bankers' share represents a partial ownership of another share. This type is used frequently to make possible a wider distribution of ownership of high-priced stocks and to distribute more widely stocks of large par value without reducing the par value of the share. The second type of bankers' share refers to shares given to investment bankers for their services in promoting and selling securities and supporting the market for the securities of the company. Such shares are very similar to, if not identical with, promoters' stock.

³⁶ This corporation has since reclassified its stock into one class.

Promoters' Shares

Promoters' shares or *promoters' stock* represents a form of stock frequently given to the promoter of a business as part or entire payment for his services. This type of stock usually has no voting power and receives dividends only after dividends have been paid on the other stocks. If the enterprise is successful, the promoter may receive large profits. It is proper that such stock should be limited in some fashion, either in the amount of total earnings to be received by it or in the number of years in which it may have the privilege of receiving any dividends.

Founders' and Management Shares

Founders' shares are similar to promoters' shares; the same is true of *management shares*. Management shares are frequently used to give a residual share in the profits of the company, and in this form closely resemble promoters' shares. Both founders' and management shares are used, like promoters' shares, to give an extraordinary participation in the profits of the company in the event of its success, and in order to avoid criticism from other shareholders when the directors decide to pay huge bonuses to management. Promoters' shares, founders' shares, or management shares do not ordinarily carry any stock liability in the event of dissolution or failure, nor do they usually have any claim upon the assets of the company. Any class of stock which does not receive dividends until dividends have been paid on one or more other classes of shares is properly called a *deferred stock*.

Debenture stock is not common in the United States. It is often used to designate a form of bond, although a few true debenture stocks have been issued, but chiefly in England.

QUESTIONS

1. Why should an investor regard preferred stock, which ranks after all debts, as having less risk than common stock?
2. Is the dividend preference of a stock an absolute claim on earnings? If not, what is the protection against the loss of earnings by management?
3. What circumstances make it difficult for the cumulations of a stock to be paid in cash? Is this a clear sign of poor management?
4. The general rule for non-cumulative stock gives this stock a better or poorer claim to total earnings than the common stock. How does the minority view of the matter change this?
5. Upon what ground may the assumption be justified that the preferred stock, when nothing is said in the contract, is "participating"? Outline the difference between simple and limited participation rights.
6. Discuss whether or not a preferred stock, so called, would have preference as to assets if no provision appeared in the charter or by-laws. In what light do you regard this provision as a protection to the stockholder when it does appear? Explain.

7. If voting privileges were not in the contract, would preferred stockholders usually vote? If the amount of preferred stock is small compared to the other stocks, will the right to vote be effective as a protection?
8. What is meant by classified voting? Do you regard it as good public policy to have these distinctions? Explain.
9. Explain the distinction between a "contingent" voting right and a "denial" vote. Do you regard one as more effective than the other? Give reasons for your answer.
10. What risk may preferred stock have from the act of "dilution"? How can provisions be set up for protection?
11. At just what points do the preferred and guaranteed stocks differ in their position? Does this mean you would always value the one class as being better than the other one? Explain.
12. Why was classified common stock created originally? Do you expect it to be popular in all markets or are there conditions which favor its use by a company? Explain your position.

PROJECTS

1. From the manuals prepare a random list of five preferred stocks which show dividend arrears. Contrast the per share arrears to the cash holdings per share.
2. Prepare a list of ten stocks reported in the manuals as participating, and for the companies draw up a table of earnings and dividends paid over the last five years.

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Broadened Market for Securities. The use of bonds invites into the market the funds of persons not interested in acquiring ownership risks or responsibilities. Likewise a concern can approach buyers of an area in which it is not well known with an offering of its bonds *more readily than* with its stock agreements. Thus funds have been drawn into the large-scale enterprises of the eastern and central United States from the investments of all areas of the country. This factor has become of increasing importance as capital has become available for investment in the central and western sections of the country. In large security issues of today, one of the immediate questions for the syndicate manager is a good national distribution.

Development of the great institutions of investment such as the life insurance companies has been generally confined since the Armstrong investigation in 1905 to a conservative investment program. The central requirement of this investment policy has been the purchase of bonds rather than stocks. Thus in 1947 the life insurance investments showed 5.5 billion dollars of mortgage loans, 19.2 billion dollars of United States and municipal bond issues, 4.7 billion dollars of bonds of public utilities, 2.5 billion dollars of railroad bonds, and 4 billion dollars of industrial bond holdings.

Length of Credit in Bonds. By generally accepted definition, any issue for a period less than five years is considered a note issue, while any for a period beyond five years is known as a bond. The exact length of a bond issue is a matter of custom and of the customers' resistance to long periods. A few bond issues have been issued for a period of 100 years,² and there are very few issues which are known as perpetuals.³

Business characteristics of the several fields have set a general pattern for credit periods. The railroads were originally granted the longest time periods in bonds, because of the theory of perpetual debt policy held in the early decades of their history. Issues of 50 to 60 years are not uncommon as a result of this policy, and in the best market periods the public is still willing to purchase such instruments.⁴ Many of the public utilities have issued bonds for 35 to 50 years but it has been generally more difficult to get the public to accept these longer periods as regularly as for the railroads.⁵ In difficult markets neither of these fields can sell such long-term credits. Often, too, the rates are much higher in such market periods so the shorter period of 10 to 15 years seems advisable.

² American and Foreign Power, 5 per cent—2030; Baltimore & Ohio Railroad, 4½ per cent—2010; Delaware, Lackawanna & Western Railroad, 4 per cent—2042; New York Central Railroad, ref. 5 per cent—2013.

³ Canadian Pacific, 4 per cent perpetuals; British Consolidated, 3 per cent.

⁴ A survey of issues, 1945-1947, shows the railroad issues widely distributed in maturity from 15 years to 55 years. The distribution ran 20 per cent under 25 years, 45 per cent in the 25-50 year group and 35 per cent over 50 years in maturity.

⁵ Distribution of maturities of public utility issues, 1945-1947, shows 15 per cent in the 10-25 year group; 72 per cent in the 30 year group; and 13 per cent in the group over 30 years.

The industrials have been viewed as a business type too exposed to variations in competition and management to allow for more than moderate periods of 10 to 20 years.⁶ There may be a few exceptions but the unusual risks of even the best companies keep the issues very much within such time periods.

Decreased Costs of Funds. Because of the creditor's position possessed under the bond instrument, the investor will accept lesser annual payment. This is illustrated by Table 13, which shows the rates on stocks and bonds

TABLE 13. STOCK AND BOND YIELDS—PER CENT: 1936 TO 1945⁷

Year	Bonds	Stocks	
		Preferred	Common
1936	3.87	4.33	3.5
1937	3.94	4.45	4.8
1938	4.19	4.34	4.4
1939	3.77	4.17	4.2
1940	3.55	4.14	5.3
1941	3.34	4.08	6.2
1942	3.34	4.31	6.6
1943	3.16	4.06	4.8
1944	3.05	3.99	4.7
1945	2.87	3.70	4.1

between 1936 and 1945. Thus, if the company keeps its financial policies within the bounds of good practice, it can ordinarily obtain a substantial part of its permanent capital from bonds at a differential cost of about $\frac{1}{10}$ of 1 per cent compared to preferred stock and in most years at an advantage of nearly 1.4 per cent compared to common stocks.

Evidence of Bond Use. Some evidence of the shift in the buyers' willingness to purchase stocks or bonds is shown in Table 14. Here we can see, apart from the costs of the respective types of issue, a clear indication of the inability in the period 1931-1935 to sell stocks in any volume. Bonds thus offered the only medium by which concerns could meet their financial needs in the market. Again the very strong preference for such issues throughout the period after 1929 is truly significant as to the important position which this credit avenue played in business finance. In the recent good years a distinct increase in sales of stocks is evident, but even though a substantial market offering in this field was possible the very large use of bonds is still a marked factor in the market offerings.

Retention of Control. The owners of the corporation avoid losing control of the corporation and avoid the investment of additional funds by using the issuance of bonds. At the same time the bondholders while contributing

⁶ In the industrial issues, 1945-1947, the maturity distribution appears with 72 per cent in the group of 5 to 20 years and 28 per cent in the 25-30 year group.

⁷ Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1946, p. 447.

CORPORATION FINANCE

TABLE 14. AMOUNT AND DISTRIBUTION OF CORPORATE FINANCING IN THE UNITED STATES—1929 TO 1947⁸
(000,000 omitted)

Year	Total	Type of Security		Per Cent of Total	
		Stocks	Bonds	Stocks	Bonds
1929	10,026.4	6,921.4	3,105.0	69	31
1930	5,473.3	1,568.3	3,905.0	29	71
1931	2,589.0	343.1	2,245.9	13	87
1932	643.9	24.0	619.9	4	96
1933	381.6	152.7	228.9	40	60
1934	491.1	34.6	456.5	7	93
1935	2,267.4	150.8	2,116.6	7	93
1936	4,631.9	567.9	4,064.0	12	88
1937	2,433.7	760.4	1,673.3	31	69
1938	2,140.5	97.7	2,042.8	5	95
1939	2,196.2	233.9	1,962.3	11	89
1940	2,762.6	327.9	2,434.7	12	88
1941	2,618.8	299.1	2,319.7	11	89
1942	1,042.5	129.4	913.1	12	88
1943	1,080.9	173.8	907.1	16	84
1944	3,176.6	511.9	2,664.7	16	84
1945	6,223.9	1,316.4	4,907.5	21	79
1946	6,420.0	2,069.0	4,351.0	32	68
1947	8,739.0	2,075.0	6,664.0	24	76

Note: 1947 is an approximation based on the months Dec., 1946-Nov., 1947.

to the capital obtain a degree of safety not possible through stock ownership. Thus the expansion of the concern is made possible beyond the resources of its stockholders and yet their power to control is not impaired.

It is true, however, that often the bankers attach conditions to the bond issues which, although not operating as direct voting powers, amount to management decisions. Such instances are the clauses governing dividend declarations, the extent of borrowing allowed, and various debt retirement requirements. In fact, the requirement may be made that one or more of the banking firm's representatives be elected to the board of directors.

In the case of a company with a widely distributed list of stockholders, this risk of losing control by added stock issues is not as great as with a small concern where stockholdings may be concentrated. Likewise, the use of preferred stock issues without voting power and small issues of common stock frequently makes the control of the corporation possible with only a small total investment possessed of voting rights.

Trading on the Equity. It was pointed out in Chapter V that the stockholder could enhance his total returns by trading on the equity. This use of the credit of the corporation is an important reason for borrowing, though as was previously suggested only those concerns with great stability in

⁸ Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1946, p. 451; *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, January, 1948, p. 76.

earnings should attempt it as a permanent policy. The demonstration of the advantage of borrowing a portion of the total capital of the business is to be found in Table 15, where the case of a structure of \$100,000 in stock and \$100,000 in 5 per cent bonds is illustrated.

TABLE 15. PROFITS FOR THE EQUITY BY USING BONDS

Year	Rate on Assets	Earnings	Interest	Earnings for Stock	Return on Stock
1	4%	\$ 8,000	\$5,000	\$ 3,000	3%
2	6%	12,000	5,000	7,000	7%
3	7%	14,000	5,000	9,000	9%
4	8%	16,000	5,000	11,000	11%
5	2%	4,000	5,000	d 1,000	d 1%

d=deficit

The contrast between the columns headed Rate on Assets and Return on Stock points the advantage in each year, or the disadvantage. The degree of fluctuation in earning power shown here is not apt to occur except in the industrials. Table 4 in Chapter I indicated this contrast between a steel company's record and a public utility. Thus in Table 15 we find that the concern has gained for its stock 1 per cent in the second year, 2 per cent in the third year, and 3 per cent in the fourth year by its use of borrowed funds. The first year showed a decrease of return by 1 per cent, and in the fifth year a deficit for the stock was created, a result of the risk involved.

The policy of borrowing is thus made a question not only of the marketability of the instruments at the moment added capital is needed but also of the possible gain or loss in returns on the stock. The experience for the railroad field, to the degree such trading was practiced, has proved to be one of great risk, as evidenced by the large percentage of roads forced into

TABLE 16. EQUITY TRADING RESULTS IN SHELL UNION OIL CORPORATION

	1940	1941	1942	1943	1944	1945
Earnings	\$21.8	\$34.3	\$48.2	\$72.5	\$29.8	\$11.1
Per cent on capital structure	6.4%	10.0%	14.0%	21.3%	8.8%	3.3%
Per cent on stock equity	9.6%	15.5%	21.0%	34.4%	13.6%	4.4%
	(Millions)					
Funded debt	\$ 94.1					
Capital stock	202.0					
Surplus	42.3					
	<u>\$338.4</u>					

receivership in the 1930-1936 period. Many of these cases were aggravated situations of trading on the equity which could not survive in the radical shift of earnings occasioned by the difficult economic period after 1930.

A test case is illustrated by the Shell Union Oil Corporation's records for 1940-1945, set up in Table 16, and the results here show very substantial

gains. The interest rates are less than 3 per cent on the debt, yet the earnings on the assets have never been less than 6 per cent. Thus gains for the stock equity have ranged from 3 per cent to over 12 per cent per year in the use of the borrowed funds by this concern.

DOCUMENTS OF BOND ISSUES

An examination of the fundamental differences between debt contracts and stock contracts was made in an earlier chapter. As was pointed out, the long-term debt agreements or bonds would probably have need to provide contractually for many possible conditions with the borrowing corporation since the bondholders would have no other control. It is this need which has led to the development of the bond issue as a device for fund raising, while yet providing a method of protection for the bondholder.

Indenture

To evidence the complete agreement when funds are borrowed for a long-term debt a general contract is created, known as an indenture. This contract is complete and controlling over all portions of the debt agreement. Full terms of all required performances are set out in the indenture, as is the exact form of the bonds issued to the bondholders. If a security agreement is to be made its full terms will be set out in the indenture. A description of the duties of the parties to the indenture is stated, and a full statement of all contractual promises and undertakings.

The parties to the indenture are the borrowing corporation and the trustee. When the borrowing is undertaken the bondholders are unknown persons, so a legal trustee is chosen who will represent the future bondholders. He executes the indenture with the borrower and holds the contract as the legal representative of the bondholders.

Bonds

The bonds of an issue are negotiable instruments executed by the borrower, usually in the name of "bearer." These instruments pass then without registration, though by election a purchaser may choose to have a registered bond in his own name. The terms of these bonds are set out in the indenture and the trustee must see that the bonds conform. The details of handling these bonds will be discussed later, but suffice it to make clear that each one is a unit part of the whole loan, the full terms of which are in the indenture.

It should be stressed at this point that a bond issue without security would be complete with the creation of these two instruments. Should the issue have an agreement for mortgage security, the indenture would describe the full terms of the mortgage also.

Mortgage

When it is desired to give security upon real or personal property as a grant of priority in payment to a creditor, a document in special form

and known as a mortgage is made. In the case of corporate issues, this mortgage will be signed by the corporation and made to the trustee of the bond issue as a part of the indenture. The trustee becomes here, as before, the legal holder of the mortgage but on behalf of the equitable interests of the bondholders. This instrument must be placed upon the public records in accordance with the filing requirements of each jurisdiction where any of the property is located.

Thus, with these various contractual instruments, the framework for the corporate debt operations is created. A more detailed examination of each of the instruments is warranted.

The General Form of Bonds

Definition of a bond is an extremely difficult thing. Between the two general classes of corporate securities, stocks and bonds, there is a comparatively wide gap. One is a credit instrument, the other an evidence of ownership. No formal definition of a bond will be given, for exceptions would be certain to appear.⁹ Instead, the discussion will center about the more general characteristics usually found in bonds: (1) Bonds are integral parts of a large debt; (2) they contain the promise of the corporation to pay interest and to repay the principal; (3) there is a date of maturity; (4) there is a date for payment of interest, and the rate of interest.

Bonds as Integral Parts of a Large Debt. As was mentioned, there are many bonds issued under a single mortgage, but usually only one mortgage. Each bond is an evidence of indebtedness to the holder in due course thereof and is signed by the corporation officials and authenticated by the trustee.¹⁰ As such, each bond represents an integral part of a large debt. The corporation indenture represents the whole of the debt. The individual bond gives a brief summary on some points in the indenture under which it is issued,

⁹L. Chamberlain and G. W. Edwards, *Principles of Bond Investment*, p. 79, gives the following: "To the word Bond, custom has given the prerogative of representing all subdivided interest-bearing contracts for the future payment of money that are drawn with formality, whether secured or unsecured. . . ."

C. W. Gerstenberg, *Financial Organization and Management*, p. 161, defines a bond: "A corporate bond may be defined as a written promise, under seal, to pay a specified sum of money, usually \$1,000, at a fixed time in the future, usually more than ten years after the promise is made, and is usually one of a series of similar bonds all carrying interest at a fixed rate, and all covered by a so-called deed of trust, or mortgage, in which the corporation's property is mortgaged to the trustee for the benefit of all the bondholders." This particular definition is not a good one for several reasons; e.g., it has been held that bonds are secured whether a mortgage exists or not. Another definition which is fairly usable, but which is not intended to be precise, is found in F. L. Stetson *et al.*, *Some Legal Phases of Corporate Financing*, p. 16: "Primarily, a corporate bond contains a promise to pay a fixed sum at a time and place specified, and to pay interest thereon at a rate, time, and place, also specified."

¹⁰It is not absolutely necessary that a mortgage exist or be legally drawn, provided that the bonds recite that they are secured and indicate in general terms how they are secured. *U.S. v. Stanford*, 161 U.S. 412, 427 (1896); *Dundas v. Desjardins*, 17 Grants Ch. (U.C.) 27 (1870); *White Water, etc., Co. v. Vallette*, 21 How. 414.

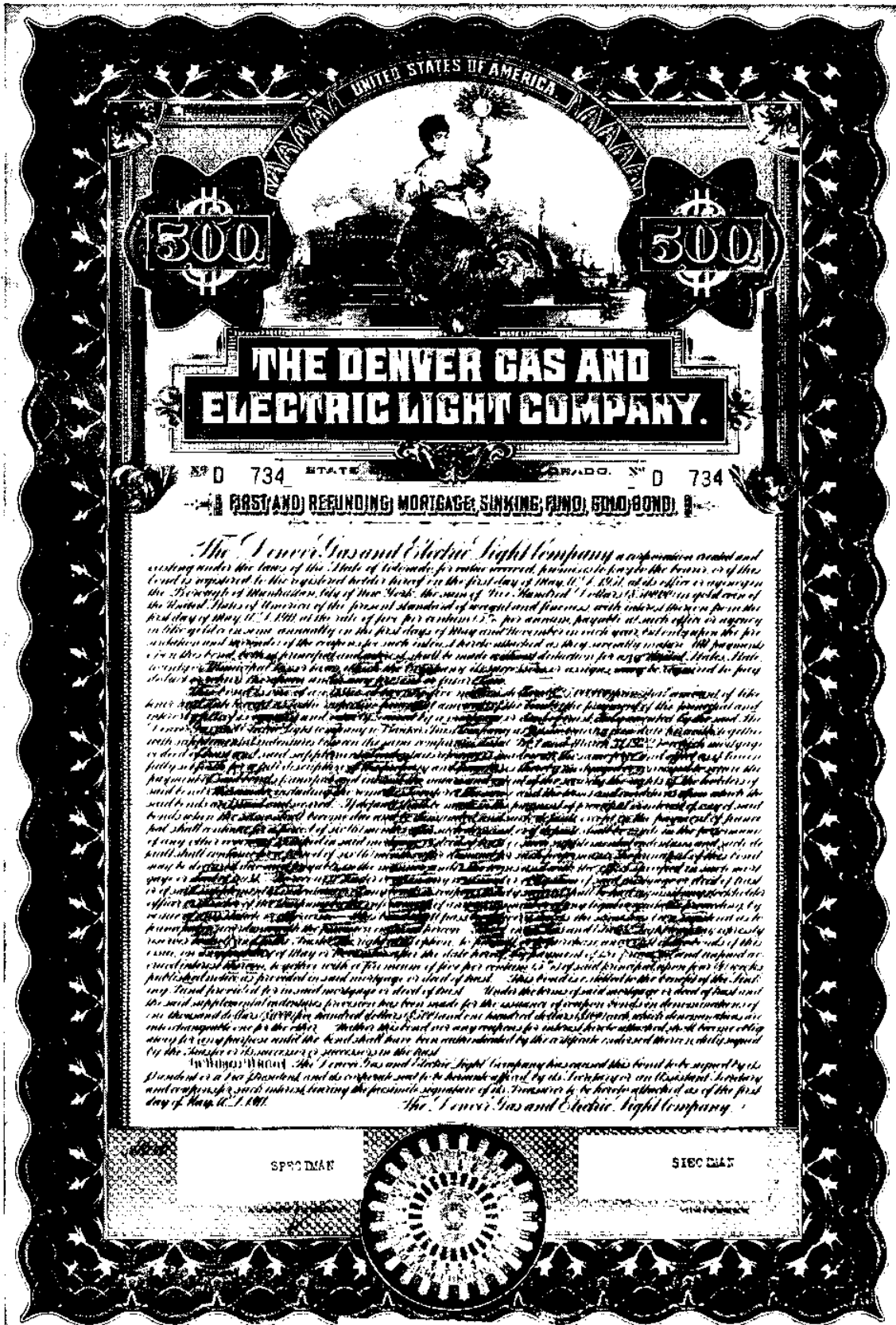
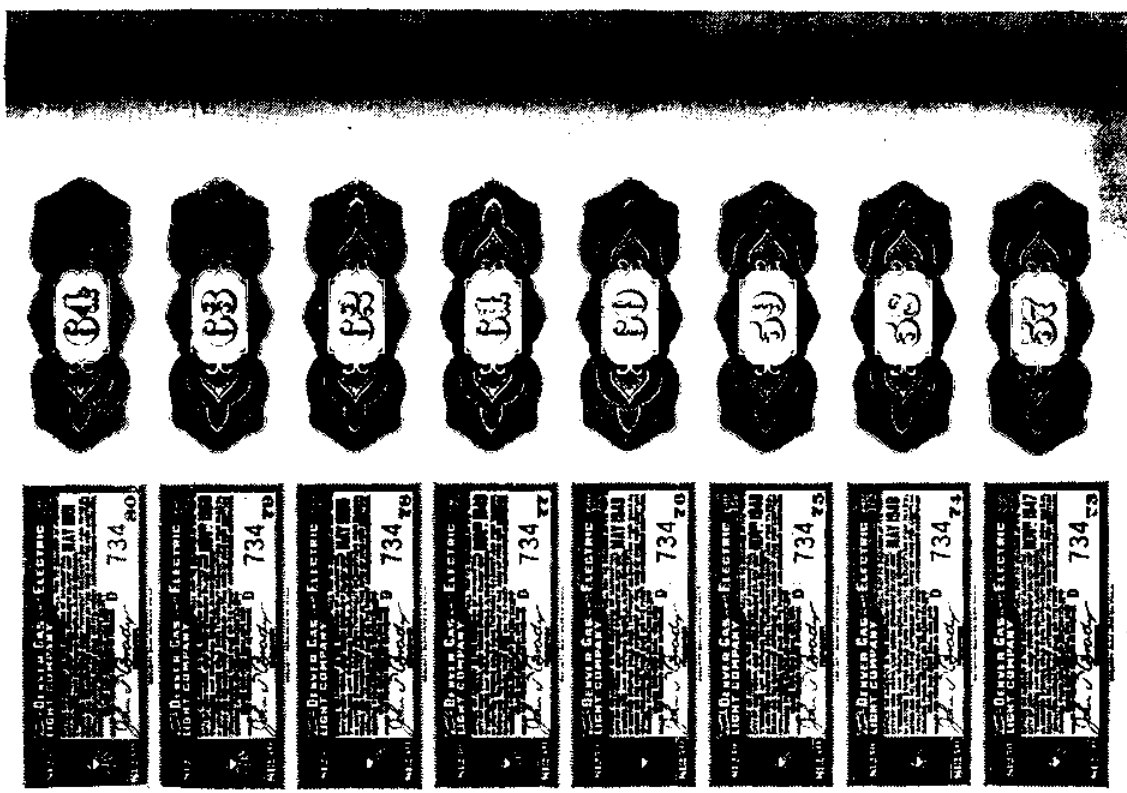


FIG. 6. Sample Bond Form (Denver Gas and Electric Light Company).



This hereby certifies that this bond is one of the issue of bonds authorized in the act of June 11, 1907, and supplemental amendments within referred to.
 Witness: Trust Company, master
 By *J. C. [Signature]* SECRETARY

THE DENVER GAS AND ELECTRIC LIGHT COMPANY
Guaranty
500.
FIRST AND
REBUILDING BONDS
SINKING FUND BONDS
INTEREST PAYABLE
MAY 15, 1911
INTEREST PAYABLE
MAY 15, 1911
AT THE OFFICE OR AGENCY OF THE COMPANY IN THE BOROUGH OF MANHATTAN CITY 99
MERCANTILE

especially the rights of the bondholders and the duties of the corporation. See the bond form in Figure 6. Frequently, it has been held that in cases of clear discrepancies or conflicts between the terms of the bond and the terms of the mortgage, the terms of the bonds will prevail and the courts should place an interpretation upon the points under question which will be most favorable to the bondholders.¹¹

Each bond of the same series is identical to every other bond except as to serial number and denomination and whether or not the bond is registered. Indeed, almost all corporation mortgages and bonds provide that any bond, whether registered or coupon, is interchangeable with every other bond of the same denomination. If several series of bonds are issued under an open-end mortgage, there may or may not be a difference in the provisions of the various issues. The variations most commonly found are in the date of maturity,¹² rate of interest,¹³ place and date of payment, transfer and registration privileges, tax provisions, sinking funds, conversion and stock purchase privileges, redemption terms, and denomination.¹⁴

Promise to Pay Interest and to Repay Principal. Usually the first important clause of the bond is the promise, unconditional on the part of the corporation, to pay a sum of money representing the principal, and a promise to pay upon the surrender of coupons the interest on the principal at stated intervals. These coupons are deposited with your local bank like checks to be forwarded to the place of payment as a collection item on behalf of the depositor. Most bonds issued at the present time state that both interest and principal are payable in legal tender.¹⁵

Ordinarily, the rate of interest paid upon a bond is fixed at 3, 4, 5¼ per

¹¹ See A. W. Machen, *A Treatise on the Modern Law of Corporations*, Vol. II, pp. 1729, 1730, 1806. For supporting decisions of this point of view, see *Railway Co. v. Sprague*, 103 U.S. 756 (1880); *Guilford v. Mpls., Sault Ste. Marie, & Atlantic Ry. Co.*, 31 Am. St. Rep. 694 (1892); *Chicago & Q.R. Co. v. Pyne*, 30 Fed. 86, 90 (semble) (1887); *American Natl. Bank v. American Wood Paper Co.*, 29 L.R.A. 103 (1895); *Cincinnati Gas and Electric Co. v. N.Y. Trust Co.*, 213 N.Y. Supp. 314 (1926); *American S.S. Co. v. Wickwire Spencer Steel Co.*, 42 F. (2nd) 886, 893 (1930)

¹² *Southern California Edison 6's of 1923, Series A*, provided that no additional bonds be issued with a maturity date more than 25 years from the date of issue.

¹³ *Sapulpa Refining Co., First Sinking Fund Convertible 6½'s* issued in 1921.

¹⁴ *Kansas-Nebraska Natural Gas Company, Inc., Trust Agreement of 1941* contains the provision that the various series of bonds issued thereunder may differ in the following features: (1) title; (2) date, maturity, interest rates, and interest payment dates in place of those therein provided; (3) taxes without deduction for which principal and/or interest shall be payable; (4) provisions for the reimbursement of the holders for taxes; (5) right of redemption, redemption premium, and notice of redemption; (6) provisions in respect to sinking fund; (7) provisions in respect to conversion; and (8) such other terms and provisions as are not in conflict with the general terms hereinafter set forth.

¹⁵ *Siemens & Halske A. G. Participating Debentures of 1930* contain provisions to protect the interest rate should the rate of exchange be depreciated by more than 5 per cent from par. In 1933 (Public Resolution No. 10, 73rd Congress) the gold clause was repealed in the United States, by giving full legal tender power to all money irrespective of contractual provisions, and such a clause was very common up to that date.

cent, etc., per annum. A few bonds have been issued as "participating." That is, they have a minimum stated interest rate, say, 5 per cent, and also have the right to receive additional interest contingent upon earnings and payments upon other securities of the company. Participating bonds are restricted almost entirely to corporations which are financially weak or which find it necessary to float their bonds in strained money markets.¹⁶

General Form of Coupon Bond. The following is a typical coupon bond:

MADISON GAS AND ELECTRIC COMPANY
First Mortgage Bond

\$..... \$.....
MADISON GAS AND ELECTRIC COMPANY (hereinafter called the "Company"), a corporation of the State of Wisconsin, for value received, hereby promises to pay to bearer, or, if this bond be registered as to principal, to the registered owner hereof, on, at in the sum of Dollars (\$.....) in lawful money¹⁷ of the United States of America, and to pay interest thereon from at the rate of per cent (.....%) per annum, in like lawful money, payable..... at in on the day of and on the day of in each year until the Company's obligation with respect to the payment of such principal sum shall be discharged as provided in the indentures hereinafter mentioned, but only, in the case of interest due on or before the maturity date, upon presentation and surrender of the interest coupons therefor hereto attached as they severally mature.

This bond is one, of the series hereinafter specified, of the bonds of the Company (herein called the "bonds") known as its "First Mortgage Bonds," issued and to be issued in one or more series under, and all equally and ratably secured by, an Indenture of Mortgage and Deed of Trust dated as of January 1, 1946, duly executed by the Company to First Wisconsin Trust Company, Trustee (herein called the "Trustee"), to which Indenture and all indentures supplemental thereto reference is hereby made for a description of the property mortgaged and pledged, the nature and extent of the security, the terms and conditions upon which the bonds are, and are to be, issued and secured, and the rights of the bearers or registered owners of the bonds and of the Trustee in respect of such security. As provided in said Indenture, the bonds may be for various principal sums and are issuable in series, which may mature at different times, may bear interest at different rates and may otherwise vary as therein provided; and this bond is one of a series entitled created by a Supplemental Indenture dated, as provided for in said Indenture.

¹⁶ For an example, see Siemens & Halske A. G. Participating Debentures, Series A, due 1930.

¹⁷ The gold clause appeared in the bonds at this point in those instruments created prior to 1934. After that date the instruments appear as here stated. The gold clause would be enforceable for legal tender only after 1934, since legislation of that date abolished the right of citizens to have gold in their possession.

To the extent permitted by said Indenture, modifications or alterations of said Indenture or of any indenture supplemental thereto and of the rights and obligations of the Company and of the bearers or registered owners of the bonds and coupons may be made, and compliance with said Indenture or any such supplemental indenture may be waived, with the consent of the Company, by an affirmative vote of the bearers or registered owners of not less than sixty-six and two-thirds per cent ($66\frac{2}{3}\%$) in principal amount of the bonds entitled to vote at a meeting of bondholders called and held as provided in said Indenture and by an affirmative vote of not less than sixty-six and two-thirds per cent ($66\frac{2}{3}\%$) in principal amount of the bonds entitled to vote of each series affected by such modification or alteration or waiver in case one or more, but less than all, of the series of bonds then outstanding under said Indenture are so affected; provided, however, that no such modification or alteration or waiver shall be made which will (a) affect the terms of payment of the principal of, or interest or premium on, this bond, or the right of the bearer or registered owner hereof to institute suit for the enforcement of any such payment on or after the respective due dates expressed in this bond or in the coupons appertaining hereto, or (b) otherwise than as permitted by said Indenture, permit the creation by the Company of any mortgage lien ranking prior to or on a parity with the lien of said Indenture or of any indenture supplemental thereto, with respect to any property covered thereby, or give to any bond or bonds secured by said Indenture any preference over any other bond or bonds so secured, or deprive any bondholder of the security afforded by the lien of said Indenture, or (c) reduce the percentage in principal amount of the bonds required to authorize any such modification or alteration or waiver; all as more fully provided in said Indenture.

In the event that any bond shall not be presented for payment when the principal thereof becomes due, either at maturity or otherwise or at the date fixed for the redemption thereof, or in the event that any coupon shall not be presented for payment at the due date thereof, and the Company shall have on deposit with the Trustee in trust for the purpose, on the date when such bond or coupon is so due, funds sufficient to pay the principal of such bond (and premium, if any), together with all interest due thereon to the date of maturity of such bond or to the date fixed for the redemption thereof, or to pay such coupon, as the case may be, for the use and benefit of the bearer or registered owner thereof, then all liability of the Company to the bearer or registered owner of said bond for the payment of the principal thereof and interest thereon (and premium, if any), or to the holder of such coupon for the payment thereof, as the case may be, shall forthwith cease, determine and be completely discharged and such bearer or registered owner or holder shall no longer be entitled to any lien or benefit of said Indenture.

In case an event of default as defined in said Indenture shall occur, the principal of this bond may become or be declared due and payable in the manner, with the effect, and subject to the conditions provided in said Indenture.

This bond is transferable by delivery unless registered as to principal on the books of the Company to be kept for that purpose at the office

or agency of the Company in, such registration to be noted hereon. After such registration, no transfer shall be valid unless made upon said books by the registered owner in person, or by attorney duly authorized in writing, and similarly noted hereon; but this bond may be discharged from registration by being in like manner transferred to bearer, and thereupon transferability by delivery shall be restored, after which this bond may again from time to time be registered or made transferable to bearer as before. Such registration, however, shall not affect the negotiability of the coupons for interest hereto attached, which shall always be payable to bearer and transferable by delivery.

The Company and the Trustee and any paying agent may deem and treat the bearer of this bond, if it be not registered as to principal, or, if this bond is registered as herein authorized, the person in whose name the same is registered, and the bearer of any coupon hereunto appertaining, as the absolute owner for the purpose of receiving payment of or on account of the principal hereof and interest hereon and for all other purposes, and neither the Company nor the Trustee nor any paying agent shall be affected by any notice to the contrary.

No recourse shall be had for the payment of the principal of, or the interest on, this bond, or for any claim based hereon or otherwise in respect hereof or of said Indenture or any indenture supplemental thereto, against any incorporator, or against any stockholder, director or officer, past, present or future, of the Company, as such, or of any predecessor or successor corporation, either directly or through the Company or any such predecessor or successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise, all such liability, whether at common law, in equity, by any constitution, statute or otherwise, of incorporators, stockholders, directors or officers being waived and released by every bearer or registered owner hereof by the acceptance of this bond and as part of the consideration for the issue hereof, and being likewise waived and released by the terms of said Indenture.

Neither this bond nor any of the annexed interest coupons shall be valid or become obligatory for any purpose unless and until the certificate hereon shall have been executed by the Trustee or its successor in trust under said Indenture.

IN WITNESS WHEREOF, MADISON GAS AND ELECTRIC COMPANY has caused this bond to be signed in its name by its President or one of its Vice-Presidents, and its corporate seal to be impressed or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries, and coupons for said interest bearing the facsimile signature of its Treasurer to be hereunto attached, as of the day of

MADISON GAS AND ELECTRIC COMPANY,

By
President.

Attest:
.
Secretary.

A typical authentication certificate reads:

TRUSTEE'S CERTIFICATE

This hereby certifies that this bond is one of the issue of bonds mentioned in the mortgage or deed of trust and supplemental indentures within referred to.

BANKERS TRUST COMPANY. Trustee

By.....
Secretary.

The following is the general form of an interest coupon:

No..... \$.....

On the day of, unless the bond hereinafter mentioned shall have been duly called for previous redemption and payment duly provided therefor, upon surrender of this coupon, MADISON GAS AND ELECTRIC COMPANY will pay to bearer, at, Dollars (\$.....) in lawful money of the United States of America, being months' interest then due on its First Mortgage Bond,, No.....

.....
Treasurer.

Maturity Dates in Bonds. The maturity date is the date of repayment. In any issue in which bonds were callable, redeemable, or subject to repayment before a certain date,¹⁸ a specified maturity would be provided and such bonds as were not paid by the date specified would have to be paid at that time.

If the maturity date is more than, say, twenty-five years from the date of issue, the bonds would usually be called long-term bonds. Occasionally bonds will be issued with maturity dates of a century or more.¹⁹ They are mainly restricted to railroads, public utilities, and other enterprises in which there is a great certainty of long-continued operation of the business and are offered in a favorable market. In a poor market one of the conditions bond buyers are likely to avoid is a long maturity. When the maturity date extends beyond the span of a generation so that, as far as the individual bondholder is concerned, the bonds will not be redeemed during his lifetime, the bond begins to assume many of the inherent financial and investment characteristics of a cumulative preferred stock with default provisions. From an institutional viewpoint extra long-term bonds are less objectionable.

¹⁸ Elk Horn Coal Corp., 1925, provided "on the first day of December, 1931 (unless before that time this bond shall be called . . .)"

¹⁹ West Shore Railroad First 4's are due in 2361; Northern Pacific Railway First 3's in 2047.

Denominations of Bonds. By denomination of a bond is meant the face or par value of the bond, that is, the amount which is to be paid to the holder of the bond as principal when the bond is redeemed. Common denominations for bonds are \$100, \$500, \$1000, \$5000 and \$10,000. By far the most common size is \$1000. Indeed, until after the Liberty Loans had demonstrated the tremendous capital resources available from the small investor that could be secured by use of small denominations, but few bonds were issued with denominations less than \$1000.²⁰ The objections to bonds of low denominations is the additional expense to the corporation at the time of issue and in the remittance of interest.

Transferability. Both coupon bonds and registered²¹ bonds are usually transferable by the owner without restriction from the trustee or the corporation. Coupon bonds are transferable by delivery unless registered as to the principal. If the coupon bond is registered as to principal, transfer can be made only by the registered owner in person, or by an attorney duly authorized in writing. Registration of a coupon bond, however, does not ordinarily affect the negotiability of the interest coupons. Such coupons are made payable to bearer and are transferred by delivery only. The bond usually states that payment of the coupon to anyone discharges the company from liability for the interest whether or not the bond is registered as to principal. Because of the impossibility of dealing directly with hundreds of bondholders, corporation mortgages are usually made out to a trustee who acts as the representative of all the bondholders.²²

The General Contents of a Corporation Mortgage

Corporation mortgages, while possessing great variation in their terms, are all more or less alike in their structure. An important division of the mortgage is the recitals, which include a description and statement of such

²⁰ In general, registered bonds tend to have a larger average denomination than do coupon bonds. Thus the Madison Gas and Electric Co., Series of 1946, provides for coupon bonds from \$100 to \$1000, but for registered bonds of \$1000 and/or multiples thereof (Indenture, p. 49).

²¹ Most bond issues provide for registration of bonds by a registrar, which may be the corporation, the trustee, or other person or corporation appointed for the purpose. Registration of a bond is noting in the proper book that X is the owner of bond No. _____. Bonds may be registered as to both principal and interest, or only as to principal. A bond registered as to both principal and interest may be discharged only by making payment to the registered owner or to his written order.

²² Corporation pledge agreements are known under a variety of names. Some of the more common are: corporation mortgage; trust indenture; trust agreement; collateral trust deed; deed of trust; first mortgage and trust deed; indenture of mortgage; agreement of assignment and pledge; indenture of trust; mortgage and deed of trust. There are some legal differences between these forms. However, they are used more or less interchangeably in a semi-descriptive manner. In the discussion here the term "corporation mortgage" or "corporate mortgage" will be used to designate these pledges generally. Corporation leases and equipment trust agreements should probably not be included under these general terms, since such instruments contain many peculiarities.

things as the purpose of the mortgage, the authorization and execution of the mortgage, the delivery of the bonds, copies of the forms for bonds, coupons, etc., resolutions of the stockholders authorizing the bonds, the trustee's certificate, and such other legal documents as may be involved in the issuance of the security. If the pledge contract is of the nature of a deed of trust, there would next follow the *habendum* or ownership clauses.²³

Probably the most important division of the mortgage from a financial viewpoint is the *articles*. A brief description of the different articles will follow:

1. *Designation, Form, Denomination, Execution, Registration, Etc., of Bonds.* This section of a corporate mortgage and indenture pertains to such things as the date, place, and method of payment of the bonds and the interest. Usually there are provisions regulating the signing and sealing of the bonds; and if the bonds are issued in registered form for principal or for both principal and interest, these details are mentioned at this point.

2. *Issuance of the Bonds.* The corporate indenture states that the issuance of bonds is to be limited to the authorized bonded indebtedness, and that the bonds may be issued only for certain definite purposes and then only in accordance with specified circumstances such as net earnings of a fixed minimum amount²⁴ or for exchange for new properties or properties of subsidiary companies above a fixed percentage of the value of the properties of the acquired companies.²⁵ Other factors which might at some future date

²³ *Habendum*: that part of a deed which describes the estate which the grantee is to have in the property granted. It often follows the premises. *Premises*: "That part of a deed which precedes the *habendum*, in which are set forth the names of the parties, etc. . . . and in which are recited such deeds, agreements, or matters of fact as are necessary to explain the reasons upon which the present transaction is founded."—H. C. Black, *Law Dictionary*, 3rd ed.

²⁴ South Carolina Power Co. First and Refunding Mortgage Bonds stipulate that no additional bonds may be issued if the net earnings are not twice the interest requirement. The Cudahy Packing Co. First Mortgage Sinking Fund Bonds, Series C, 2½ per cent, provide that additional bonds may be issued if the earnings applicable to bond interest during a period of not less than two nor more than five fiscal years shall have averaged 2½ times the annual interest charge upon all bonds then outstanding under the indenture, including those proposed to be issued.

²⁵ National Dairy Products Corp. 2¼ Per Cent Debentures, due 1970, permit the company to acquire additional funded indebtedness in order to retire an outstanding debt of the company; but if additional funded indebtedness is to be used for other purposes, the sum of the consolidated preferred stocks and consolidated indebtedness does not exceed \$50,000,000 or the consolidated net tangible assets are equal to at least \$50,000,000 plus three times the amount by which the sum of consolidated preferred stocks of restricted subsidiaries and consolidated funded indebtedness of the corporation exceeds \$50,000,000. Portland Gas and Coke Co. First Mortgage Bonds, 3¼ per cent series, due 1976, besides requiring net earnings to be twice the annual interest requirements at the time of the issue of additional bonds, require that the additional bonds so issued shall not exceed 60 per cent of the cost or fair value, whichever is less, of property additions of the company.

affect the holders of the initial series of bonds may be included in the terms of the mortgage.²⁶

3. *Particular Covenants of the Company.* The corporation agrees to do certain things, which usually include such items as maintaining offices in certain places, paying interest and principal punctually, keeping records and lists of properties, paying taxes and assessments, maintaining franchises, and keeping proper accounting records, as well as attending to many other of the myriad agreements of particular instances. The company also agrees that it will not do certain things, such as create prior liens on mortgaged properties, purchase or extend coupons, go into dissolution or liquidation, permit claim of paramount title on the mortgaged property, sell the assets or enter into consolidations or mergers that would impair the lien represented by the mortgage, pay cash dividends except out of surplus, etc. The corporation usually agrees to keep proper register books, record legal documents, keep the property insured, carry on business efficiently and maintain the property, turn over money to the trustee if received from insured properties or spend the money in replacing destroyed assets, etc. If there are any defects discovered in the titles to the mortgaged properties after the mortgage has been recorded and the bonds have been issued, the company is usually required to make good such defects.

4. *Redemption of the Bonds.* Although under that division of the corporation mortgage pertaining to the denominations, etc., of bonds there is usually made mention of the redemption or repayment of the bonds, in many corporate indentures a separate section is devoted exclusively to these problems. The provisions regarding sinking funds are given at length, together with such definitions of current ratio, net earnings, gross earnings, consolidated earnings, subsidiary companies, dividends, etc., as may be necessary to meet the requirements of the particular issue. If the bonds are callable, the method of call, price of call, date, notice, and other details will be given. If the bonds are convertible at the option of the company, which amounts to redemption by refunding, the circumstances attendant to such exchange of securities are included at this point.

5. *Default and Remedies in Default.* It is usually provided that default on the part of the corporation in any of its covenants makes the entire issue immediately due and payable. This stepping up of the maturity date is more technically called "acceleration of maturity." The trustees are given power to enter and take possession of the property in the event of default, although sometimes, if the property is sequestered at the suit of parties other than the trustees, the trustees may take action without waiting for default. The company usually agrees to a waiver of its rights under the stay and re-

²⁶ Some of these factors might be such items as current ratio, dividends paid by companies, operating expenses, etc. Kentucky Utilities Co. First Mortgage Bonds, Series A, 3 per cent, agree in the indenture that, so long as any bonds of Series A are outstanding, no dividends will be paid on common stock unless certain provisions regarding maintenance, repairs, and depreciation are met.

demption laws governing the corporation. The section of the mortgage governing remedies in the event of default will usually contain provisions in regard to the disposition of the proceeds of the judicial sale of the property. If there should be a delay on the part of the trustees in beginning legal proceedings to protect the bondholders, neither the trustees nor the bondholders are restrained from beginning action at a later date.²⁷

6. *Release of the Mortgaged Property.* Trustees are usually given power to make partial release of mortgaged property pledged as security for bonds, for either special or general purposes. Should the release of the property result in its being exchanged for securities or any intangibles or other property of any kind, the properties secured by the exchange become subject to the lien just as the previous property was.

7. *Defeasance and Reconveyance.* Upon satisfaction of the debt under a given mortgage, the property should rightfully return to the corporation free of lien. As a matter of fact, most corporate mortgages provide that upon the deposit either of cash, in amount to satisfy the claims of bonds outstanding, or of the bonds (which have been purchased or obtained in some other manner) the property automatically reverts to the corporation free of lien.²⁸ Should it happen that not all of the cash deposited with the trustee for the redemption of the bonds is claimed by presentation of bonds, the funds are held by the trustee for a period of time, say, five or ten years, and then returned to the corporation, absolved of liability.

8. *Immunity of Stockholders, Officers, Directors.* The stockholders, officers, and directors of a corporation are specifically exempted by a corporate indenture from any liability under it. The liability of the debt is *corporate*, not *personal*. However, bad faith on the part of stockholders, directors, or officers may create personal liability enforceable at law.²⁹

9. *Duties of the Trustee.* Since the trustee's duties are discussed at some length later in the chapter, no discussion is given at this point.

10. *Miscellaneous Provisions.* Among the miscellaneous provisions found in the articles of a corporation indenture are such things as: mergers, consolidations, etc., on the part of the corporation; conversion into other bonds or stocks; details regarding pledged securities; creation and extent of supplemental indentures; binding of successors to the corporation; and the effects of illegality in the bonds or the indenture.

²⁷ Moreover, the fact that the trustees did not begin action at the default of one condition in the mortgage does not operate to prevent action at the default of another condition at a subsequent date. See *Watson v. Chicago, Rock Is. & Pac. R.R. Co.*, 169 App. Div. (N.Y.) 663 (1915); *Vanderbilt v. Schreyer*, 91 N.Y. 392 (1883); *Morgan's Louisiana & Texas R.R. & S.S. Co. v. Texas Central Ry. Co., et al.*, 137 U.S. 171 (1890); *Union Trust Co. v. Belvedere Co.*, 105 Md. 507 (1907); *Union Trust Co. of Md. v. Thomas*, 66 Atl. 450 (1907).

²⁸ The length of time is dependent upon state law.

²⁹ *Richardson v. Union Mortgage Co.*, 228 N.W. 103 (1929); *Walker v. Howell*, 209 Iowa 823 (1930); *Browning v. Fidelity Trust Co.*, 250 Fed. 321 (1918); *Green v. Title Guarantee & Trust Co.*, 227 N.Y. Supp. 252 (1928).

THE TRUSTEE

Position of the Trustee in a Corporate Mortgage

A corporation mortgage is a triangular agreement between the trustee, the bondholders, and the corporation. The trustee is an agent of both the corporation and the bondholders.³⁰ Ordinarily he should have ample power to carry out the protective duties with which he is charged, yet should not be burdened with too much detailed work and responsibility. There is usually no reason why either an individual or a corporation cannot be a trustee. The early practice in this country was to have individuals act as trustees.³¹ Later, to avoid difficulties because of the limited life of a natural person, it became much more common to appoint a trust company or other corporation with trust powers.

Kinds of Trustees

The term "trustee" is commonly used to refer to an "individual trustee," for a natural person, or a "corporate trustee," such as trust companies, banks with trust powers, or other corporations having trust powers. Should the corporate trustee merge with another corporation, be dissolved, or enter into bankruptcy, or should the individual trustee die or become incompetent, or should either the corporate trustee or the individual trustee resign, provision is usually made for the appointment of a "successor trustee." Thus permanent and continuing representation is provided.

Duties of the Trustee

The duties of the trustee under a corporate indenture include a wide range of subjects, and any individual indenture is likely to include some that would not often be found in other indenture agreements. Some of the more common duties and powers might include the following:

No responsibility for the nature or amount of the pledged property; reasonable compensation and expenses, usually payable prior to the bonds; release of property to the corporation or other persons under certain conditions; no liability for acts if the corporation fails in giving clear title to property; responsibility for payment of taxes, insurance, etc.; full power to act on all business documents believed genuine and correct; right of notification in event of suit by bondholders; no action

³⁰ For a typical set of trustee liability exemptions, see *Kansas-Nebraska Natural Gas Co. to City National Bank and Trust Co. of Illinois Indenture of 1941*. The trustees may not escape all liability, for the immunity clauses of mortgages do not extend to gross negligence or bad faith. See *Harvey v. Guaranty Trust Co.*, 236 N.Y. Supp. 37, 51 (1929); *Browning v. Fidelity Trust Co.*, 250 Fed. 321 (1918). The latter is one of the leading cases and is frequently cited.

³¹ The individual should be a citizen of the United States. The appointment of two trustees, one corporate and one natural, with different powers under the law should be distinguished from "co-trustees" where the trustees have equal power.

in case of default unless guaranteed expense of action and requested, usually in writing, by a certain percentage of the outstanding securities; bid at a forced sale of the property; allowed to merge with other trust companies; buy and sell bonds of the same issue; declare the bonds due in case of default; power of entry and right of possession, foreclosure and sale, and distribution of the proceeds to bondholders.

The trustee is required to assume certain specified responsibilities, such as keeping informed as to the condition of the properties and the financial conditions of the company, or administering the sinking fund. In other cases, the trustee is specifically prohibited from doing certain things such as taking action in the event of default without the request of a certain percentage of the bondholders or bidding at the sale of the mortgaged property. An individual trustee may not, in some cases, do certain things without the consent of the corporate trustee.

Trust Indenture Act

Because many trustees did not have either power or resources to supervise effectively the bond contracts, and others were affiliated with bankers or borrowers so closely that they could not act fearlessly or impartially, legislation was undertaken in 1939. The basic provisions of the Trust Indenture Act under the administration of the Securities Commission provide for accurate disclosure of the indenture terms, empower investors to obtain current information and to combine to act in their protection, and require a disinterested representative for the trust who would administer the provisions granted.

The chief requirements to reach these objectives in all trust indentures are as follows:

1. At least one trustee shall be in corporate form, subject to examination.
2. Capital and surplus of trustee shall be at least \$150,000.
3. Trustee shall be required to perform all duties and obligations.
4. Trustee with conflicting interest shall resign or dispose of the interest (definition of the conflicting interests).
5. Required percentage of securities to create conflict of interest shall be designated.
6. Trustee if becoming creditor of corporation within four months of default, must hold collection in special account.
7. Corporation must file at least each six months with the trustee names and addresses of bondholders.
8. Upon demand of three or more bondholders list of holders shall be made available within five days; proxies shall be mailed to such upon payment of costs.
9. Trustee must be required to send brief annual report to holders and to receive regular reports from the corporation upon operations, property, values, and authenticity.

10. Trustee must give holders notice of defaults within ninety days of occurrence.
11. No relief of trustee for negligence or willful conduct may be included.
12. Provision shall be made for holders to sue, except 75 per cent of all holders may consent to postponement of interest due for three years.

The trustee is usually paid an annual fee by the borrowing corporation, since this is an expense incident to the arrangement of the loan. Sometimes a deposit is required to be held by the trustee which will permit the hiring of counsel for the prosecution of any legal actions necessary to execute properly the trust.

Authentication of Bonds

The authentication of bonds by the trustee is one of the most important duties. After the company has had the bonds engraved,³² and the bonds, together with such other legal instruments as are necessary to show valid claim to the mortgaged property and its value, have been delivered to the trustee, the latter will "authenticate" the bonds. This the trustee does by placing his official signature to the proper certificate on the bond. A typical authentication certificate appears on p. 134.

SUMMARY

Bond issues require the creation of extensive contractual agreements since the rights of the parties are determined by the contract for the loan. The holders of the bonds have no voting power so their protection is in obtaining agreement requiring management to perform in stated ways. The bond issues are set up in the basic agreement known as an indenture. Bonds which contain the promise to pay in small denominations, and which are owned by the individual investor, are subsidiary portions of the basic agreement. The role of the trustee as the representative of the bondholders is of extreme importance.

QUESTIONS

1. Why do bonds attract the conservative investor? When we consider that in the case of a large corporation it is almost impossible to liquidate by foreclosure after default, is this investor attitude wise?
2. Do all bonds have an equal maturity period? If not, may they obtain them by adjusting the interest paid?
3. What evidence is there that investors will sacrifice returns for the

³² Ordinarily at the expense of the issuing corporation. Occasionally corporate mortgages will contain a provision that the bonds are to be engraved according to the standard set by some stock exchange. This is especially true if it is expected to list the securities on the New York Stock Exchange, where the restrictions are many and the requirements strict. The certificates of the bonds, or the notes, etc., are usually engraved with considerable care, especially if the securities are expected to be listed on an exchange.

- preference of a bond holding? Is this a constant factor? Why would it vary?
4. Is trading on the equity always a profitable move? Do you find any evidence of a time when this condition might have been true? In calculating such gains, may low interest rates be offset by high prices for property?
 5. Why is an "indenture" created? Would you regard this instrument as more important than bonds? Explain the relation of these two instruments.
 6. In what way does the issuance of bonds make the creation of a debt by the corporation easier and more attractive? Explain any disadvantages which might occur from this situation.
 7. How do the coupon and registered bonds differ? Would there be any advantage to the corporation, trustee, or others if all were registered?
 8. Explain the purpose of a mortgage given with a corporate issue. Is this instrument filed like an ordinary mortgage on farm land, wherever the property or any part is located?
 9. Why is a "trustee" employed in the creation of a bond issue? Why is this not done for a stock issue?
 10. Indicate the elements of the Trust Indenture Act which you regard as important in maintaining the bondholders' position.
 11. Explain the nature of "authentication" of bonds by the trustee. What is the legal liability for payments due on the bonds? Is the trustee the investment banker who sells them?

PROJECTS

1. Examine *Moody's Industrial Manual*. Can you find six companies with debt which do not use a trustee? Explain the circumstances which might exist.
2. Determine and demonstrate the degree to which "trading on the equity" has been profitable for the American Telephone & Telegraph Company in the past five years.

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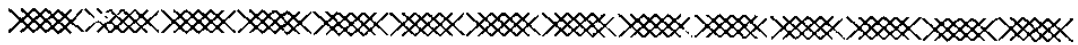
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CHAPTER VIII

Secured Bonds



BOND issues are often secured by the mortgaging of property by the borrower. These issues, rightly or not, attract the conservative investor more certainly than any other instrument. The security of a prior claim, even over other general creditors, gives such a bondholder not only a feeling of certainty but a significant legal position.

MORTGAGE BONDS

Types of Corporation Mortgages

Corporation mortgages may be classified in several ways into broad, general groups. The basis of classification may be (1) the order of claim against the assets of the corporation, in whole or in part; (2) whether the total amount of bonds that can be issued under the mortgage is fixed or not; (3) the general purposes to which the proceeds of the issue are put. Under the first classification there are three general classes: senior, junior, and underlying mortgages.¹ Under the second classification, mortgages are closed-end or open-end, and the end of the latter type of mortgage may be limited or unlimited.

Priority of Lien. The offering of security for a bond issue frequently results in the same property being offered under several different mortgages. This leads to the necessity of determining the rights as between the several mortgages or liens, and the customary rule provides that the first lien in point of time on the same described property shall be treated with first priority in liquidation. All others will rank in order of the successive dates of their creation. The mortgage whose claim is superior to all subsequent mortgages on the same property is the *senior* lien. The others are spoken of as *junior* liens, that is the group which may follow the first lien. The term "underlying mortgage" is used to designate a mortgage with the prior claim

¹ There is no necessary relationship between the sizes of the senior and junior mortgages, but the importance of the distinction between junior and senior mortgages lies in part in the amount of borrowing done under each. A junior mortgage of \$100,000,000 coming after a senior mortgage of \$10,000,000 would be regarded quite differently from a junior mortgage of \$10,000,000 coming after a senior mortgage of \$100,000,000. In the latter case the shrinkage in satisfying the senior mortgage might be so great that the senior mortgage would completely absorb the assets.

on the specific property about which we are concerned, and which property is subject to a series or group of subsequent liens.

In general, debts are to be classified into the two groups of (1) general and (2) secured debts. All debts have a general claim, but some by a special contract or mortgage may be granted priority on some or all of the real and/or personal property. Whenever liquidation becomes necessary or action must be taken on behalf of the liens because of a default, this matter of priority will become particularly important. So long as the concern is a going concern and interest payments and other obligations of the loans are maintained, the questions of priority do not appear important.

In the case of the concern whose capital structure is shown in Table 17,

TABLE 17. CAPITAL STRUCTURE WITH SERIES OF LIENS

Assets	\$250,000	First mortgage	\$75,000	1st lien
		General mortgage	40,000	2nd lien
		Notes	50,000	3rd lien
		Capital stock	75,000	} Stock equity
		Surplus	10,000	

we find that if there was a default on the unsecured notes they could seek a judgment on the properties but when up for sale would be forced to bid a price high enough to pay the first and second liens. If we suppose that the default covers interest on all obligations, then the first lien would press for its payment to which its priority would entitle it.

On the sale of the assets in a liquidation it is more than likely that only a partial sum will be realized as compared to the values stated on the records. If the assets in this case sell for just half, or \$125,000, and each mortgage was a lien upon the entire property, we would find the sale values applied as follows:

1. First mortgage	\$75,000	Payment in full
2. General mortgage	40,000	Payment in full
3. Notes	10,000	Payment of 20 per cent of face
		This issue loses the remainder, \$40,000.
		Capital stock is a complete loss.

The process of enforcing these mortgage rights in event of default is known as foreclosure. For an individual holding the entire mortgage this is a time-taking process but a reasonably satisfactory one. In the case of corporate mortgages great difficulty has been encountered in enforcing the lien rights for a number of reasons. Among these reasons are (1) delay encountered in getting agreement among widely scattered owners as to the procedure to be taken, (2) laxity of the trustee in acting, and (3) complexity encountered in selling large properties such as a railroad right-of-way. Strict foreclosure often does not result, but a compromise agreement is worked out in settlement. The importance of action by the trustee is now

emphasized by the provisions of the Trust Indenture Act set out on pages 140-141.

Closed-End Mortgages. Strictly speaking, a mortgage is classed as a closed-end mortgage when all the bonds that can be issued and sold under the indenture and mortgage are issued and sold at the time the indenture is made.² Closed-end mortgages possess the obvious advantages of protecting the holders of the bonds issued thereunder as far as possible. However, in giving the fullest protection to the holders of the bonds, closed-end mortgages often operate to the disadvantage of the corporation in that there is no allowance for future financing. As a result, the corporation may engage in financial and legal subterfuge to obtain capital without resorting to junior financing.³

Here, as in many other phases of financial practice, the procedures of the day when mortgages were held by individuals on small independent properties have been used as the pattern. Today, when applied to large corporate enterprise, these procedures are not as satisfactory as they were for the individual mortgage owners. The chief result of using closed-end mortgages has been to leave a corporation which has grown from small beginnings, possibly by the addition of a number of small independent firms which had created their own mortgages, with a long series of relatively small closed-end mortgages. These instruments have strong security, but they also represent small issues which have limited marketability and are very expensive for the corporation to administer. The chief problem created for the corporation, however, is forcing the subsequent liens to be of junior lien. This increases the interest rates substantially and possibly causes other contractual burdens, such as heavy sinking funds, to be added to the issue. The best illustration of this process is found in the railroad field for most roads are a result of a series of combinations, lease arrangements, and subsidiary company stockholdings as the small early roads have been combined into railroad systems. Simplification and reduction of total costs for capital structures have been the cause, therefore, of creating the open-end mortgage.

Open-End Mortgages. Open-end mortgages provide an avenue for future financing but do not give as much protection to the holders of the bonds. Open-end mortgages may be used to advantage in public utilities, railroads, etc., where there is close supervision of the amount of funded

² The bonds of the Denver Union Stock Yard Co. are designated as First (Closed) 3½'s due 1951.

³ As these problems are commonly solved by means of the formation of subsidiary companies, collateral trust agreements, etc., they will be treated in a later section of the text. Any kind of financing is dangerous which, at a future date, is likely so to hamper the activities of the corporation as to interfere with its most efficient operation and with the most complete good will from the public. Likewise, any type of financing which will probably force the corporation into devious paths to obtain needed funds in the future is dangerous.

debt and fixed charges,⁴ and where the principle of perpetual debt may be followed with more certainty.

A mortgage is classed as an open-end mortgage when only a part of the bonds permitted under the terms of the issue are sold at the time the loan indenture is created. Thus an important legal principle of mortgage procedure, wherein priority in the time of creation will give priority of lien on the asset pledged, is changed. For when several series of bonds are issued under a single indenture and mortgage security, the time of issue for any bond series of the same indenture creates no priority of lien. All bonds issued under the same indenture, in other words, share the security of that contract ratably.

The possibility, therefore, of expanding the amount of bonds under a mortgage issue beyond the amount now issued is the most important reason for investors avoiding their purchase. Acceptance of the procedure is growing, so that today such issues constitute the average practice. In times of extreme market difficulties the closed-end mortgage reappears as it did in the 1933-1935 period. Under the many conditions used to safeguard over-issuance in present practice it is possible to create a relatively strong open-end issue without forcing a complex lien structure upon the corporation.

Limited and Unlimited Mortgages. If there is no limit placed upon the amount of bonds issuable under a given corporate mortgage, such a mortgage would be called "unlimited." If there is a limit, the mortgage would be limited, and referred to as such. Sometimes the limit is given as a fixed amount;⁵ sometimes it is given as a relative amount, in which case the mortgage should be referred to as a "variable-limit" mortgage.⁶

The conditions under which additional bonds may be issued under an open-end mortgage with either a fixed or a variable limit are described in many ways.

Restrictions of Further Issues

The provisions under which additional bonds may be issued under an open-end issue are many and varied. Generally they are contingent upon one or more of these conditions: (1) ratio of total bonds outstanding to the value of the assets; (2) ratio of the interest requirements to the amount of earnings available for payment of interest on the bonds; (3) creation of a

⁴Some states attempt to exercise some degree of control over the amount of funded debt which corporations in general may create, although such supervision is, on the whole, rather ineffectual.

⁵City Ice Co. of Kansas City, First 6's, due and retired in 1945, was an open-end of fixed amount.

⁶The Pittsburgh, Bessemer and Lake Erie Railroad Co., First Mortgage 2% Per Cent Bonds, Series A, stipulate that additional bonds may be issued but the aggregate amount outstanding should not exceed 50 per cent of the investment of the company. Under the terms of the Consumer Power Co. First Mortgage Bonds, 2% Per Cent Series due 1975, additional bonds may be issued under the mortgage to the extent of 60 per cent of the amount of unfunded net property additions.

surplus account as a protection to the interest payments; (4) creation of a sinking fund in a definite ratio to the amount of the new issues; (5) ratio of the value of bonds issued to the value of new property acquired; (6) amount of preferred and/or common stocks outstanding; and (7) maintenance of a satisfactory current ratio.

Asset Ratio. A limit setting a maximum ratio between the total bonds outstanding and the amount of assets to secure the bonds is useful, especially if provisions are included whereby revaluations of the originally mortgaged property may not increase the amount of bonds with an equal or superior claim. The original cost or market value, whichever is lower, should condition the issuance of additional bonds on a rising price level. At the same time it introduces an element of risk to the corporation, as well as to the bondholder, in the event of falling prices. Should prices rise, the fixed ratio between the funded debt and the assets may lead to the sale of large quantities of bonds in abnormal periods such as war, etc. The stockholders may extend their trading on the equity to a point where their original investment shrinks to nearly nothing. Neither original cost nor current market prices are entirely satisfactory if a permanent change in price levels should occur.

Earnings-Interest Ratio. If the ratio between the earnings and the bond interest requirement is made the basis of the sale of additional bonds, it may prove particularly troublesome to a business which needs funds for expansion during the depression period of the business cycle, and at all times to those businesses which must expand in fixed units of large size, such as automobile companies or hydroelectric companies.⁷ If the additional issue is conditional to earning interest requirements, say, two and one-half times in the preceding twelve months, it may easily happen in a prolonged period of depression that expansion by sale of bonds will be impossible. At the same time, the stock market may be in such a bad way that stocks cannot be sold even if it is desirable to do so. To avoid these possible difficulties, averaging the ratio of earnings to fixed charges over a longer period of time may be the solution. But if a long period of time, five years, for example, is used, then the sale of bonds may be continued long after it should be, in the case of declining profitableness of the use of capital; likewise, in periods of increasing profitableness, when expansion is actually very desirable, the corporation may find itself unable to issue new bonds as rapidly as is desirable. It would seem that a proper basis might be to use a sliding scale. The problem of restrictions on further issues is extremely complicated and needs much thought before satisfactory solutions are available. The cor-

⁷ The length of time necessary for the corporation to derive revenues from the assets acquired by the sale of additional bonds is sometimes a most troublesome factor. If two or more years must elapse, as is likely to be the case in a hydroelectric plant, the earnings may shrink enormously before the new plant is ready for operation. Moreover, there is no possibility of the corporation's being able to prepare in periods of poor earnings, for the low profits would prohibit the sale of additional bonds at that time.

poration should at all times have maximum freedom in the issuance of bonds if, as, and when capital is needed and its use is profitable, but it should be prevented from such issuance when the reverse is true.

Types of Interest Ratios. Some care should be exercised by the student to examine the differences in interest ratios as to the manner of application, though the ratio is two to one in all cases. An example will illustrate the varying result, if we have an earnings record and structure as follows:

Earnings for required period—	First mortgage 4%	\$50,000
\$15,000	General mortgage 5% ^a	30,000
Ratio required—earnings twice	Notes 6%	30,000
interest	Capital stock	75,000

^a General mortgage is open-end.

Under the provision, "shall be twice on all bonds issued and proposed to be issued under the mortgage," the \$15,000 allows \$7,500 to be used for interest. The clause requires this to be used for the mortgage only, and since \$1,500 is now paid, the remainder of \$6,000 would be free. At a current rate of 6 per cent this would allow \$100,000 more general mortgage bonds to be issued. If all interest being paid is considered, it totals \$5,300 now, but with \$6,000 more the combined total of \$11,300 compares to \$15,000 in the ratio of 1 to $\frac{3}{10}$. This is known as the single-issue ratio and clearly allows more bonds than is wise from the bondholder's point of view.

Had the provision read, "shall be twice on all bonds issued, proposed to be issued, of this issue and all other indebtedness," the result would be quite different. Since \$7,500 would be the maximum for all debts and \$5,300 is now being paid, the difference of \$2,200 would be the amount which could be added to the interest allowance. At a 6 per cent rate for the new bonds this sum would support an increase of \$36,666 bonds under the general mortgage. This sum appears within reason compared to the whole structure and earnings.

Another point should be stressed in reference to the interest ratio which is not coupled with an asset ratio. The division of available earnings will support varying amounts of new bonds depending upon the current interest rates. Since 1940 the trend has brought the interest rates to very low levels, and this adds a factor which should be closely watched by the investor. If the calculation just made had been upon the assumption of the current rate for the issue of 4 per cent, the amount of new bonds would be \$2,200 capitalized at 4 per cent or \$55,000. This sum is large compared to the structure and, while current earnings will pay the cost, the very low interest rate may invite a much too large capital sum in added bonds. Coupled with a 75 per cent ratio on existing assets, the maximum would be \$138,000 in total debt. With a \$110,000 sum now issued in total debt, this control would still allow an added \$28,750, a figure more nearly in line with the original calculation.

After-Acquired Property Clause

Many corporation mortgages contain what is known as an after-acquired property clause as added protection of the lien. That is, the mortgage not only covers the property specifically described in the mortgage but also includes all other property acquired afterward by the corporation, whether by expansion, consolidation, or otherwise. Public utilities and other corporations possessing valuable franchises often include their franchises as a part of the mortgaged property.⁸

The chief purpose of the after-acquired property clause is to give the securities a higher rating than they would otherwise have, and therefore to allow the corporation to borrow money on better terms. While such mortgages allow the corporation to acquire money on better terms than it otherwise could at the time the mortgage is made, such terms may prove onerous at a future date when it becomes desirable to obtain money for further corporate purposes. Such mortgages should be used by strong corporations when they are reasonably certain that the debts will be retired before additional financing is necessary, by corporations of the poorest financial standing when it is a last resort, and by corporations in medium financial condition which expect to be in a position to refund. In almost every instance, bonds issued with an after-acquired property clause in the mortgage should include a call provision in the issue.

Avoidance of After-Acquired Property Clauses

The presumption is that after-acquired property clauses protect bondholders from the company's over-borrowing. They are, however, open to a number of objections from the point of view of the corporation, such as the unexpected need for additional funds to operate the same property, and the sudden growth in value of the properties, making the older lien of almost insignificant size in relation to the current value of the mortgaged properties, yet requiring that the term "second mortgage" be used with any further mortgages. An oil company might prove an excellent example: A small company has a few wells and some property leased, against which it has issued some bonds under a mortgage with an after-acquired property clause. A deep oil zone is discovered, and immediately the property is enhanced in value to a point almost beyond the fondest dreams of the little corporation. To obtain funds to exploit this deeper zone, the company is confronted with the problem of issuing bonds or stocks, but, having a mortgage against its

⁸During the earlier development of business corporations, especially the first half of the nineteenth century, the courts held that a corporation could not mortgage its franchise unless specifically empowered in its charter to do so. The result was that state laws had to be passed giving this right to corporations generally. Even after the right was granted, the conditions under which a corporation might mortgage its franchise varied greatly from state to state. Cf. *Carpenter v. Black Hawk Gold Mining Co.*, 65 N.Y. 43-50 (1875); *Snell v. Chicago*, 152 U.S. 191, 199 (1894); *Rob't Gue, Appellant, v. The Tide Water Canal Co.*, 24 How. U.S. 257, 263 (1860), for court decisions bearing on this point.

properties, it cannot do the former. The owners must issue stocks, and perhaps lose control of the company, or evade the after-acquired property clause.

Actually, corporations avoid these provisions in their mortgages by several methods, three of which are common. They may use (1) purchase money mortgages; (2) subsidiary corporations through (a) *guarantee of stocks or bonds*, (b) exchange of stock for bonds, and (c) collateral trust agreements; and (3) lease agreements.

Purchase Money Mortgages. A purchase money mortgage is one issued in payment of property acquired through down payment of only a portion of the cost of the property.

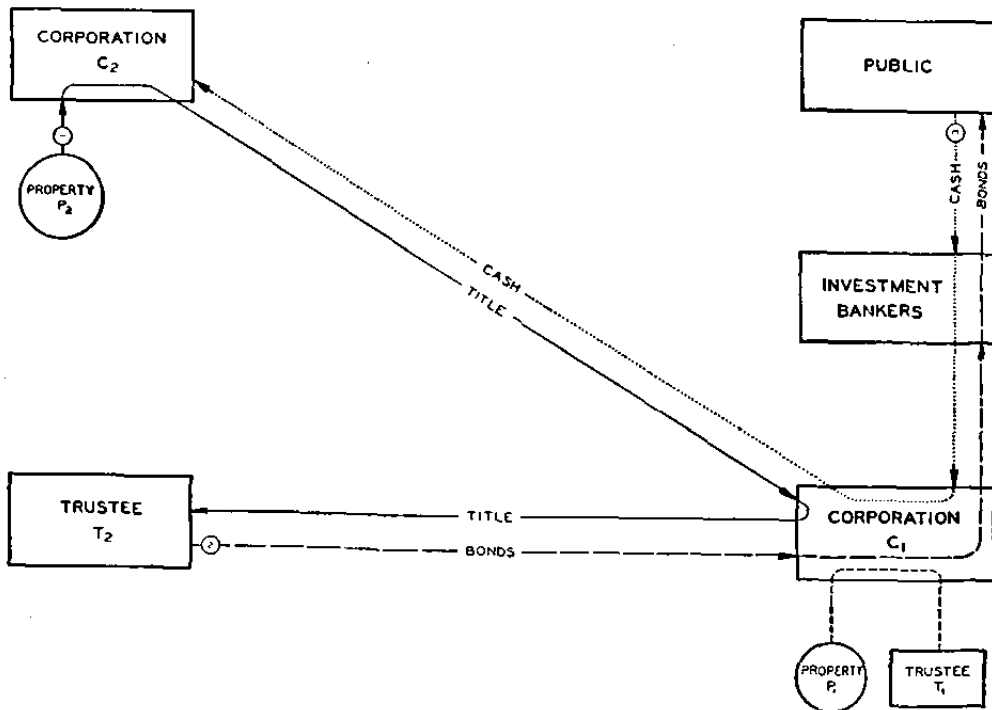


FIG. 7. Use of Purchase Money Mortgage in Avoiding an After-Acquired Property Clause.

In the diagram we suppose that corporation C₁ is the owner of property P₁ against which there have been issued bonds containing an after-acquired clause, and that it is desirous of acquiring property P₂ from corporation C₂ through the use of mortgage bonds. The procedure is to have C₂ pass the title in escrow through C₁ to the trustee T₂, a recoverable contingent title going to C₁. The trustee then authenticates bonds which are delivered to the public in exchange for cash. The money is turned over to C₂ who then clears the escrow on the title to property P₂. As the matter now rests, corporation C₁ has made a down payment on the new property and has sold a first mortgage on that property to the public. The old bondholders of P₁ have only such an addition to their security as may be in the equity value of the

purchase contract. It is quite common to find exemptions made for purchase money mortgages with a provision that the percentage ratio of the mortgage to the value of the property acquired by it shall be within certain limits.⁹

Use of Subsidiary Corporations. The subsidiary corporation is a common device used for many purposes in corporate operations.

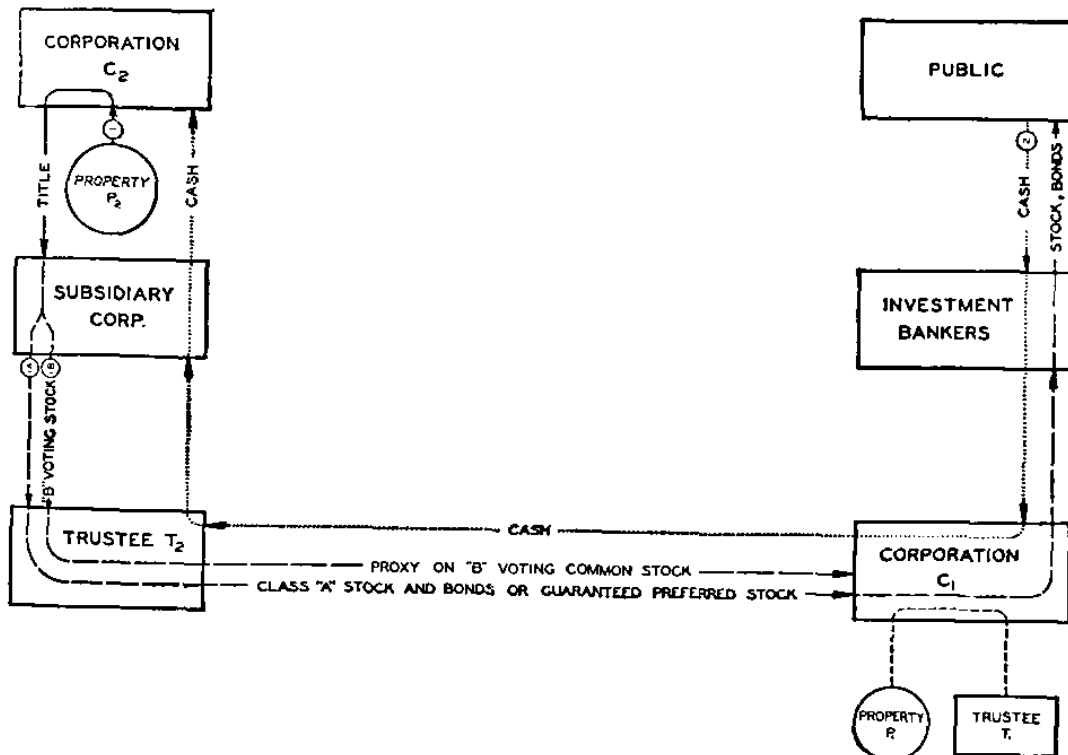


FIG. 8. Use of Guaranteed Securities of Subsidiary Corporation in Avoiding an After-Acquired Property Clause.

Case 1: *Guarantee of stocks or bonds.* Let it be supposed that corporation C₁ (see Figure 8) owns property P₁, and that it is desirous of obtaining property P₂ but has an after-acquired property clause in a bond issue which has previously been sold against property P₁. A subsidiary corporation C₂ may be formed to acquire property P₂. C₂ has no credit standing; it could sell its stocks or its bonds to the public, but the outcome of this would be uncertain and it could probably be accomplished only upon a high cost basis. But a small bond issue and non-voting stock of C₂, both or either guaranteed by C₁, may sell favorably on the market. The guaranteed securi-

⁹ Assuming that the ratio of purchase money mortgage bonds is the same as that of the original mortgage bond, the bondholders are merely providing a method of maintaining the bond ratio at a constant level. If it is higher, then the over-all ratio will rise. If the bond ratio on the newly acquired property is less than that for the bonds of the old issue, the average property coverage will have been increased to the old bondholders. But, since it not infrequently happens that the corporation will use cash, which has been borrowed on short term, to make the down payment, the old bondholders will probably be in a worse position than before the purchase money mortgage was arranged.

ties of C_2 are now sold to the public and the proceeds used to pay for property P_2 . Of course the voting stock of corporation C_2 is now held by C_1 .

Technically, C_1 has not evaded the after-acquired property clause for it has not acquired property P_2 . But for practical purposes it has acquired P_2 , since it owns the voting stock of C_2 , and thereby acquires the full benefits of P_2 except such expense as interest on bonds and dividends on stocks held by the public.

Case 2: *Exchange of stock for bonds.* It may and usually does happen that the stocks and bonds of the subsidiary company are of little market value or, if of value, are difficult to distribute. The parent corporation will in such instances acquire the bonds of the subsidiary, giving its own stock in exchange. The stock of the parent company is then sold to the public by the subsidiary corporation, and the proceeds are used to acquire such properties as are desired by the subsidiary corporation. Generally speaking, the scheme is a useless one, except where it is desirable to have the property kept entirely separate from the parent company. Thus suits against either company will not influence the property except to the limit of the shareholders' equities.

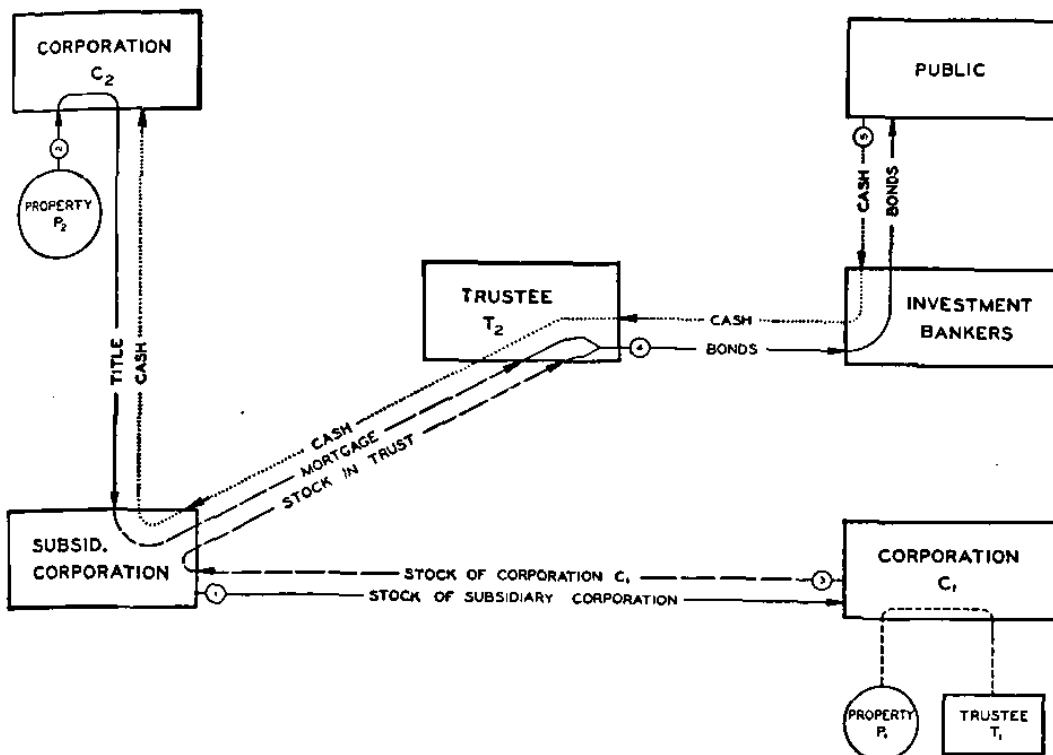


FIG. 9. Use of a Subsidiary Corporation and a Collateral Trust Agreement in Avoiding an After-Acquired Property Clause.

Case 3: *Use of collateral trust agreements.* One of the simplest of the methods for acquiring properties and evading after-acquired property clauses, when a subsidiary corporation is used, is the collateral trust security. Let us suppose C_1 has outstanding an after-acquired property clause bond

issue and is desirous of acquiring P_2 . A subsidiary corporation is formed. Its stock is exchanged for the stock of C_1 . A mortgage on P_2 , plus the collateral deposit of the stock of C_1 , is made to the trustee T_2 , who authenticates bonds. These are in turn sold to the public, and the cash derived therefrom is used to pay for P_2 . The advantage of this method lies in the fact that it frequently permits the corporation to sell an amount of bonds equal to the entire cost of P_2 . At the same time it prevents the jeopardizing of the control of C_1 since the voting of the subsidiary is retained by C_1 . As a matter of fact, the control of C_1 may actually be accomplished by a smaller proportion of the total stock than was possible before. See Figure 9 for diagrammatic representation of Case 3.

The Leasing Arrangements. One of the most advantageous devices from the standpoint of the corporation when after-acquired property clauses have been so drawn as to preclude even the use of the subsidiary corporation or the purchase money mortgage is the lease of the property needed. In this device the title to the property is not acquired, only the right to use the property. However, it happens that leases are made for 99 years or longer,¹⁰ which amounts to practical acquisition. Under these long-term leases, it is not uncommon to issue what are known as *leasehold bonds*. Such bonds are secured merely by the right to use, while the corporation acquires, for practical purposes, the actual ownership of the property. If the new resources of the leased properties exceed the costs of the bond issue, all well and good. But if they are less, the holders of the bonds with an after-acquired property clause frequently find themselves facing a serious situation.

Consolidation and Merger. If a given corporation has placed an after-acquired property clause in its bond issue, it may evade all problems arising therefrom through the use of what is known as the merger route. That is, corporation C_1 will form a consolidation or merger with corporation C_x . The existence of C_1 is terminated, and the old bondholders are confronted with an entirely new situation in which they have a lien upon only a portion of the property of corporation C_x instead of upon all of the property of the corporation with which they started out. There are many legal problems involved in this particular scheme, and the student is referred to the legal treatises on this subject for further detail. The general legal rule is that after-acquired property clauses will not bring the property of successor corporations into the mortgage, unless a special state statute so provides.¹¹ Mere reorganization of the old corporation under a new name does not affect the after-acquired property clause,¹² but an outright sale of the assets

¹⁰ Leases are often made for what amounts to perpetuity. Thus the Atlantic Coast Line Railroad and Louisville and Nashville Railroad jointly executed on May 11, 1923, a lease for the Carolina Clinchfield and Ohio Railway which is to run for 999 years.

¹¹ For collateral reading, see 13 *Minn. L. Rev.* 88; 44 *Harv. L. Rev.* 260. The leading court decisions on the subject include: *Guaranty Trust Co. of N.Y. v. N.Y. & Q.C. Ry. Co.*, 253 N.Y. 190, 170 N.E. 887 (1930); *Trust Co. v. Traction Co.*, 106 Ohio St. 577 (1922); *Commercial Trust Co. v. Chattanooga Ry. & Light Co.*, 281 Fed. 856 (1921).

¹² *Meyer v. Johnston*, 53 Ala. 237 (1875).

of the old company to a new one will apparently be valid to break an after-acquired property clause unless the bondholders can demonstrate that the sale is intended specifically to reduce their security.

Consolidation and Refunding of Mortgage Bonds

The consolidation of mortgage bond issues is usually prompted by the desire of a corporation which has several bond issues outstanding, some or all of them probably small in size, to simplify the structure. These small issues have no well-defined market, being acceptable for trading on but a few exchanges. Because of the limited size, there results a limited and discontinuous market, often subject to violent abuse by the "unlisted" bond dealers. Moreover, the issues are not likely to be identical even though they represent several series issued under a common mortgage. The variations in the several issues may be purely technical, or they may be of considerable practical moment in the matter of priority of claims to assets, interest, callability, convertibility, sinking fund requirements, etc. Small as well as large differences lead to confusion among some holders of bonds. The consolidation of issues eliminates such variations in the position of bondholders and avoids confusion among the holders.

The greater the number of stock and bond issues which a corporation has outstanding, the more complex will become the capital structure of the concern. While there may be some arguments in favor of a somewhat complex capital structure, there rapidly approaches a degree of complexity which is a perplexing problem to everybody concerned. The refunding of a dozen or more bond issues by consolidating them into a single issue is a desirable step in the direction of simplification, which both the corporation and the holders of its securities should consider.¹³ Not only is the consolidation of bond issues a desirable step toward simplification, but it also eliminates the problem of frequent refinancing.

Scattered Control. A point may be made that consolidation of issues when a decline in revenues may bring about a default in the whole of the bonded debt is worse than if several issues were outstanding where default could occur in part of them but need not occur in all.¹⁴ The effect of varied issues is to break up the bondholders of the company into groups; it is much easier to deal with the smaller groups than with the probably better organized, and certainly more powerful, central committees which appear when large and consolidated issues are defaulted. Finally, it is pointed out that if a single large issue exists, the problem of refunding and refinancing constitutes a major consideration in the affairs of the company. If several

¹³ The authors have frequently been amazed at the ignorance displayed by bond- and stockholders in their knowledge of the position they occupied in the corporation's structure. On the whole, it may be concluded that they neither know nor care, but trust to some stroke of Providence to protect them from their errors.

¹⁴ The implication is not that maturities of small issues will not cause trouble. Several railroads in 1932 found themselves in most embarrassing positions because of small maturities. Only the aid of the Reconstruction Finance Corporation enabled them to avoid receivership.

small issues are used, each of them is a problem, but a relatively small one. Moreover, should a conversion clause be used, the possibility of conversion to stock in large amounts constitutes a more or less continuous threat to the control by existing stockholders unless some limiting device is used.¹⁵ But if many small issues possess conversion privileges, there is more likely to be an orderly conversion to stock.

Modification. On occasion, considerable difficulty may be encountered by corporations when an attempt is made to consolidate bond issues. As a possible protection against such difficulty, most bond issues include clauses under which the provisions of the issue may be changed, hence made uniform with other issues for consolidation purposes. There are two types of such clauses: (1) those which require consent on the part of a fixed percentage in principal amount of the bonds before the provisions of the issue may be changed, and (2) those which provide for a change on the part of the issuing corporation unless protested by the holders of the bonds upon proper notification of the proposed change. The former may be called an affirmative type, the latter, a denial type. It is customary to have the percentage affirmation amount to from 50 to 80 per cent of the principal amount of the bonds; denial powers are enforceable by from 20 to 40 per cent of the principal amount of the issues. The relative power of the individual bondholder, just as in the case of the voting powers of stock, is much greater if denial power rather than affirmative power is given.

Use of Calls. As a possible means of overcoming the difficulties encountered when a well-organized group of bondholders attempts to prevent consolidation of issues, the call privilege is exceedingly useful. In effect, it permits the sale of the bonds of the consolidated issue to the public in lieu of the old bonds held by the resisting holders. The penalty to the corporation for making the transfer is equal to the cost of calling over and above the price of sale of the new issue, plus the cost of underwriting. Thus to replace a bond callable at 103 through the sale of a new bond at 100 with an underwriting charge of 2 points will actually cost a total of 5 points, assuming the two bonds to be alike in maturity, interest rates, and other costs. This cost may of course be amortized over a period of years from economies resulting from the consolidation of several individual issues.

COLLATERAL TRUST BONDS

Besides mortgaging its physical properties, a corporation may mortgage or pledge¹⁶ its intangible assets, usually securities of other corporations.¹⁷ A

¹⁵ See Chapter XI for these devices. They are not to be sanctioned under ordinary circumstances, for they develop competition among the bondholders to convert their bonds.

¹⁶ There is a definite legal distinction between pledges and mortgages. The two terms are rather indiscriminately used because mortgages are rare in modern corporate finance.

¹⁷ Corporations sometimes pledge their own bonds. The usual reason for so doing is the existence of some undesirable clause in the pledged issue. A corporation may have a 6 per cent issue with an open-end mortgage. It desires to finance through the sale of

bond which is thus secured is known as a collateral trust bond.¹⁸ Instead of being secured by physical property, it is secured by stocks and bonds.¹⁹ Such a bond is an indirect lien on the property of the corporation whose securities are or have been pledged or mortgaged, as well as a general obligation of the issuing company.

The collateral trust bond, originating in railroad finance, was used especially during the period in which the consolidation of hundreds of short and unimportant lines into the large systems of the country occurred.²⁰ In the two decades 1910 to 1930 public utilities entered into extensive holding company and consolidation operations more than other types of corporations, and they have also made more extended use of the collateral trust type of bond than have other types of corporations.²¹

Use of the Collateral Trust Bond

In its development, a large corporation will often acquire considerable quantities of stocks and bonds from a large number of issues put out by small corporations. Retention of the issues may be necessary to maintain the control of the companies so essential to the larger corporation. But to have funds continuously tied up in these securities is not desirable, especially if the parent company can sell bonds at an interest rate less than the rate of income upon the securities. By lumping together the many small issues and depositing them with a trustee, the corporation can use them as the basis of a bond issue, thereby recovering for other uses a large percentage of the funds invested in the subsidiary corporations. The collateral trust bond thus becomes a method of economizing on capital by a holding company in the acquisition of companies already in existence.

Frequently companies find it convenient to establish new subsidiaries, but their security issues will have a distinctly limited market or no market at all.²² The establishing company may, by utilizing its own prestige as a sort

bonds, and can do so on a 4.8 per cent basis. It pledges its own 6 per cent bonds with the trustee and issues 5 per cent bonds against the collateral, which it can dispose of slightly above par.

¹⁸ If borrowing is for a short term only, the instrument is called a collateral trust note. Cf. Chapter XIII.

¹⁹ The term "collateral" as used in the field of finance means any stock, bond, mortgage, or other transferable instrument used to reinforce a promise to pay. Franchises are frequently included, as are trademarks, trade names, trade brands, patents in the name of the issuing corporation, patents acquired or to be acquired, copyrights, etc. If a company deals in mortgages, these are used; if it has much short-term finance paper, it may be used.

²⁰ Harold Reed, *Corporation Finance*, pp. 29-30.

²¹ W. E. Lagerquist, *Public Utility Finance*, p. 79.

²² Ordinarily, investment bankers will have nothing to do with a security issue of less than \$100,000; as a matter of fact, an issue of less than \$500,000 is seldom profitable for the investment bankers. There are numerous bond issues of smaller amounts, particularly in the financing of small public corporations such as school districts. Also, many small corporations have bond issues, but their distribution and sale is largely a matter of personal activity and only rarely a matter for consideration by the investment banker.

of guarantee or warranty, use the stocks and bonds of these multitudinous subsidiary companies as a basis for a collateral trust issue,²³ thus in effect financing them by public offering. Such public financing by the individual companies would be quite out of the question.

Contrast of Collateral and Ordinary Mortgage Bond Agreements

It is generally conceded that the collateral trust agreement is the most complicated legal instrument commonly used in corporate financing. It is peculiarly complicated because the pledging corporation retains rights with respect to the pledged securities and at the same time must perform certain duties with regard to the corporations and the securities involved. Perhaps the difference may be illustrated by the two accompanying diagrams: Figure 10 of an ordinary mortgage bond issue, and Figure 11 of the mechanism of collateral trust agreements.

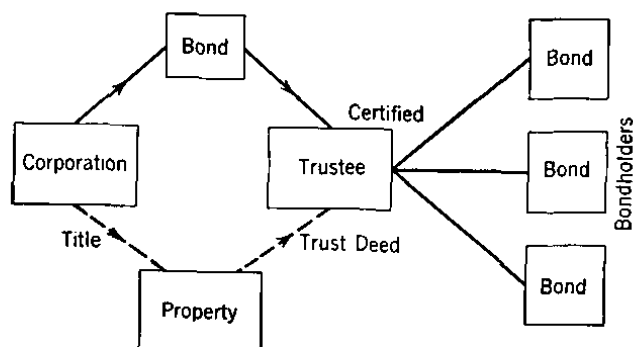


FIG. 10. Relations in Mortgage Bond Issue; Agreements and the Parties.

The difference in the two arrangements lies largely in the fact that the collateral trust agreement must not only include all the primary elements of the ordinary corporate mortgage between the corporation, the trustee, and

²³ Pyramiding in trading on the equity, especially in the case of a holding company, has made use of the collateral trust arrangement. Suppose that a holding company is formed for purposes of acquiring a number of subsidiary water companies. At the outset a capitalization of \$5,000,000 is determined upon, of which \$2,000,000 are bonds and \$3,000,000 are stocks. The securities acquired may amount to \$3,000,000, the properties of one sort or another to \$2,000,000. The holding company may now pledge the \$3,000,000 of securities as the basis of a collateral bond issue, providing that the funds so acquired will be used only for purposes of acquiring more stocks and bonds of additional subsidiary companies. In the end, if \$2,000,000 collateral trust bonds are sold, there will be a capitalization of \$7,000,000 for the holding company, of which \$4,000,000 are bonds and \$3,000,000 are stocks. Originally the stockholders of the corporation traded on their equity to the extent of 66⅔ per cent; they now trade on their equity to the extent of 133⅓ per cent. This process pyramids the investment of the stockholder, and may create a dangerous condition if the earnings on the additional securities purchased by the proceeds of the sale of the collateral trust bonds are but slightly in excess of the interest requirements on the collateral trust bonds.

the bondholders, but must also extend to the agreements between the pledging corporation, as a stockholder or bondholder, and the respective subordinate corporations.

The Amount of Collateral

If the collateral trust issue is a closed-end, closed-issue type where all bonds are sold at once, the amount of the collateral is fixed once and for all. But if it is open-end and/or open-issue, the problem arises as to the terms upon which additional bonds may be issued. How much collateral must be deposited? What is the basis of evaluating the security?

The theory is that there should be maintained between the par value of the new bonds and the value of the additional collateral a ratio which will give equal protection to the bondholders, irrespective of the amount which might be issued. Ordinarily, it is described as the percentage which the par value

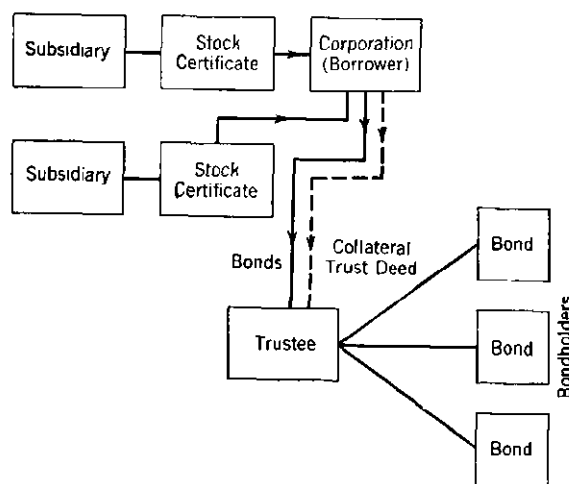


FIG. 11. Relations in Collateral Trust Bond; Agreements and the Parties.

of the collateral should bear to the bonds, or as the percentage which the par value of the new bonds will bear to the added security. The former might be 125 per cent,²⁴ the latter, 60 per cent.²⁵ A shrinkage of 20 per cent in the value of the former will reduce the value of the collateral to the par value of the bonds; it requires a shrinkage of 25 per cent to do the same thing to the latter.

Substitution of Securities

The older practice was to allow no substitution. But this necessitated the retirement of bonds when the pledged securities for any reason were removed

²⁴ *Railway and Light Securities Co.*

²⁵ *New England Gas and Electric Assoc. 2 3/4's, due 1967.*

from the pledged portfolio. Such practice put the pledging corporation in the very undesirable position of always having to stand ready to redeem such proportion of its bonds as would correspond to the proportion of the pledged securities which were to be released. To avoid this particular difficulty, the corporation could have a sinking fund or a conversion fund through which the holder of bonds could, at his pleasure, convert his bonds into a pro rata amount of the collateral.²⁶ Occasionally, serial retirement of the collateral trust bonds was used to meet the situation, although the retirement on a scheduled arrangement would not be likely to meet the unexpected developments against which the protection was most desired.

Naturally, these difficulties brought about a change in policy and in practice. It is now common to allow the substitution of securities of "equal-value and worth."

Withdrawal of Pledged Securities

Withdrawal of pledged securities differs from substitution in that the latter merely maintains the value behind the collateral trust bonds, while the former actually reduces the total of the collateral. The withdrawal of hypothecated securities is permissible only when there is a corresponding reduction in the amount of the collateral trust issues outstanding. The basis of withdrawal may be par value, market value,²⁷ or original acceptance value by the trustee.²⁸ In any event, the privilege of withdrawing securities upon surrender of the bonds adds to the flexibility of the collateral trust issue.

Peculiar Clauses Where Controlling Stocks Are Pledged²⁹

Because the value of the pledged stock will depend upon the existence of prior claims in the form of bonds, preferred stocks, mortgages, etc., it is customary to protect the pledged securities against the creation of debts by elaborate provisions which will normally make exceptions to cover the following: (1) conduct of current business, (2) pro rata pledge of newly issued bonds, (3) refunding or extending current issues, (4) bonds already authorized, and (5) purchase money mortgages, provided a pro rata protection is maintained.³⁰ Further, the assets representing the proprietorship

²⁶ Any bonds so converted operate to increase (usually) the equity protection behind the unconverted bonds.

²⁷ If the Sioux City Gas and Electric Co. makes any withdrawal of pledged securities, the trustee requires payment into the fund of the cash equivalent of the fair value of the property released.

²⁸ Under the terms of the Philadelphia Co. Collateral Trust Sinking Fund 4¼'s, due 1961, bonds delivered to the trustee must be accepted at the current sinking fund redemption price, unless the company specifies that they are not to be so accepted.

²⁹ There are many and varying legal constructions relating to pledged stocks. For detailed consideration of the subject, see W. W. Cook, *Principles of Corporation Law*, Vol. II, or W. M. Fletcher, *Cyclopedia of the Law of Private Corporations*.

³⁰ Hugo Stinnes Industries, Inc., is an excellent example. As a matter of fact, pledged bonds can scarcely be said to be protected to the desired extent by provisions for the pro rata deposit of additional bonds issued after the creation of the collateral trust. The

equities must be protected against sale. Exceptions usually are provided when the sale is for cash, to the pledging company, to another corporation whose securities are pledged, or the partial release of the indenture through retirement of the bonds.³¹

Possession and Sale of Pledged Securities

It is customary to give physical possession of pledged securities to the trustee, but whether they are transferred to the name of the trustee or left recorded in the name of the pledging corporation and an assignment or endorsement executed to the trustee depends entirely upon the individual issue. If transfer is made on the books of the transfer agent to the name of the trustee, a proxy is made out to the pledging corporation by which it retains voting powers. But no such proxy is necessary if the securities remain registered in the name of the pledgor corporation. On the whole, actual transfer to the name of the trustee and delivery of a limited voting proxy to the pledgor corporation is possibly the best policy. The unrestricted sale by the pledgor of pledged securities is usually permitted upon the same conditions as those on which securities are allowed to be withdrawn.

Dividends and Interest on Pledged Securities

If bonds of other corporations are pledged, the pledging corporation is not permitted to receive and hold repayments of principal, since to do so would reduce the amount of security of the collateral trust bonds. Furthermore, income derived from the sale of assets is not to be paid to the pledging corporation; even the assignment of coupon and dividend rights is forbidden as this might jeopardize the future position of the bonds. If judgments are obtained through the legal enforcement of rights contained in the pledged securities, the proceeds are paid to the trustee. As a matter of fact, the consent of the trustee must frequently be obtained before the pledgor corporation can have the power to obtain and enforce any such judgments.

The disposition of dividends paid in the form of stock is a study in itself. In some cases all stock dividends must be paid directly to the trustee;³² in others, only pro rata amounts;³³ and in still others no portion need be de-

deposit of 25 per cent of the bonds of a company which has a 40 per cent bond ratio in its capitalization is a very different thing from the deposit of 25 per cent of the bonds of the same company when it has an 80 per cent bond ratio. The increased bond ratio weakens the position of even a pro rata share, owing to dangers of default, reorganization, etc. This would hold true of pledged stocks as well as bonds.

³¹ It is almost universal to allow consolidation of subsidiary companies with each other or with the parent company, the theory being that no decrease in total security will occur if (1) the subsidiary corporation's securities into which the company is merged are pledged, (2) the assets are acquired by the pledging corporation, (3) the assets are acquired by a corporation guaranteeing the bonds, or (4) the assets are acquired by a corporation which assumes the bond issue in whole or in part.

³² *The Pitton Co. Collateral Trust 4's*, due 1961.

³³ *Alleghany Corp. Collateral Convertible Gold 5's* were an example of the trustee's receiving all income from collateral securities.

posited if the market value of the pledged securities exceeds a certain percentage of the par value of the collateral trust bonds outstanding.³⁴

The Worth of Collateral Trust Bonds

As a general rule, collateral trust bonds will sell on a better basis than the securities pledged. The reason lies in part in the fact that the collateral issue frequently is larger and consequently has more publicity, wider market organization, etc. But the fact must not be overlooked that the public takes little trouble to examine carefully the worth of the pledged securities.³⁵

In the end, the collateral trust is a method of pyramiding.³⁶ As such it is dangerous; it is almost certain to cause trouble when the rate of earnings on the pledged securities is less than the interest rate on the collateral trust bonds.³⁷

SUMMARY

Bonds which are granted security for the performance of their obligation may be created as a mortgage issue or as collateral trust pledge. The mortgage issue operates as a lien conveyance by a document which is filed upon the public record, so as to become a part of the title record. The liens of such claimants are recognized in the order of time or the date of the mortgage creation and its filing. The collateral trust issue is created by a pledge, that is, a deposit of personal property, stocks and bonds usually, with the trustee. Through the arrangements for such priority and security many purchasers are induced to buy corporate bonds.

³⁴ Railway and Light Securities Co. requires a protection of 125 per cent and 120 per cent by stocks and bonds, respectively.

³⁵ W. H. Lough, *Business Finance*, p. 148.

³⁶ The Alleghany Corp. 15-year Collateral Trust Convertible 5's, due in 1944, and 20-year Collateral Trust Convertible 5's, due in 1949, were typical examples of such pyramiding. Of the sixteen stocks pledged, but two are preferred; of the non-withdrawable securities pledged, 67,000 shares were preferred stocks and 2,524,400 shares were common stocks. Moreover, the Alleghany Corp. controlled the Chesapeake Corp., which had a convertible collateral trust 5 per cent bond outstanding secured solely by a pledge of 2,449,300 shares of the common stock of the Chesapeake and Ohio Railway Co. The common stock equity in the Alleghany Corp. was approximately one-third at the end of 1930; the common equity of the Chesapeake Corp. amounted to approximately one-half on the same date. Multiplication of the two equity ratios shows that the actual stock equity of the Alleghany Corp. represented but one-twelfth of the common stock equity of the C. and O. The latter stock held a one-third equity in the railroad. It is not an exaggeration, then, to state that three cents invested in the common stock of the Alleghany Corp. controlled one dollar in operating assets in the railroad. Subsequently the holdings of the Chesapeake Corp. were all acquired by the Alleghany Corp. so that in 1947 more than 25 per cent of the common stock of the Chesapeake and Ohio Railroad was in the possession of the Alleghany Corp. This constituted its principal asset against which there was 130 million dollars of debt and preferred stock issued.

³⁷ The Toledo, St. Louis and Western Railroad was forced into a receivership in 1914 largely because of this state of affairs.

QUESTIONS

1. State the general principle of the line gradation of mortgage claims. Does this situation reflect itself in the interest rates paid on the different issues? Explain.
2. Does a "closed-end" mortgage indicate that no further borrowing may be made by that concern? Explain just what it does limit.
3. Although you might regard the "closed-end" feature of a mortgage as advantageous, are there ways in which it might not be so to either the bondholder or the borrower?
4. How does the "open-end" provision of a mortgage operate? Does it provide for unlimited borrowing? Why would a company be interested in it?
5. Outline the methods which might be employed to limit an "open-end" provision. Which do you regard as the best for the bondholder? Why?
6. State your position on the idea that mortgage provisions should usually be restrictive for the sake of the bondholder and that this will prove to be best for the borrower too.
7. When we speak of an interest ratio as being "over-all," "after prior charges," or "single-issue," what are we referring to as a result? Does it really matter which term is employed?
8. Is an after-acquired clause an assurance of added first liens to a mortgage whenever property is acquired? Explain. Why is a company interested in avoiding the clause?
9. Explain what happens to the position of a mortgage with an after-acquired clause when the company uses the subsidiary or lease device to control more property. If the company issues a guaranty on the stock of the subsidiary, does this change the general relation?
10. Why is simplicity of corporate bond structure desirable? Do you find any disadvantages to this procedure for either the company or the bondholder?
11. Is a collateral trust bond useful only in the case of holding-company operations? How could it be useful otherwise?
12. What is the relation of the borrower to the collateral pledged on an issue? What happens to the voting and income rights inherent in the collateral instruments?

PROJECTS

1. Examine and report the mortgage lien structure of the Illinois Central Railroad Company. Which mortgages are open-end?
2. Report upon five collateral trust bond issues which you find in the financial manuals. Classify the types of security pledged and the use or restrictions of the income therefrom.

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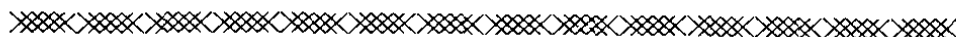
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CHAPTER IX

General Credit Bonds



BESIDES pledging its specific assets, tangible and intangible, a corporation may make use of its general credit as a basis for borrowing. This practice is becoming more and more common. A corporation's general credit, the same as an individual's, is fundamentally dependent upon (1) probable future income and (2) willingness to use that income, if realized, to discharge obligations. The source of such income is of consequence only in judging the stability, certainty, and adequacy of the income to meet the obligations issued against it.

Types of Securities Classed as Credit Bonds

Corporation securities ordinarily classed as general credit obligations are (1) direct obligations of the borrower and (2) obligations reinforced by a pledge, lien, or guarantee of another party. Certificates of indebtedness, debentures, corporation notes, and income bonds are the more common securities which are issued without a general lien or security. Debenture bonds represent an increasingly common security issued under a general lien by corporations in the United States.¹ Guaranteed bonds and stocks, assumed bonds, stamped bonds, and endorsed bonds are common examples of obligations which have been reinforced by a pledge or guarantee of a corporation other than that which issued the securities.

Reasons for the Use of Credit Bonds by Corporations

Ordinarily the use of credit bonds may be traced to one or more of four circumstances. The company may (1) be in an exceedingly strong financial

¹In England and in continental Europe the expression "debenture stock" is used to indicate a general lien on a company's assets. In the United States the term "debenture" is used to refer both to a form of bond and to a form of stock, each with its peculiar characteristics. For a complaint about the confusion which has arisen, see A. L. Bishop, *Financing of Business Enterprises*, pp. 248-249. The American debenture bond is nearly the counterpart of the English debenture stock. In fact, *Commercial Cable Co.* prepared an indenture in 1897 which covered both. It is possible to prepare an indenture in such a manner that the American debenture bond and the English debenture stock are interchangeable, and accordingly permit the security to be sold in the English or American market, whichever is the better. Cf. W. W. Cook, *Principles of Corporation Law*, pp. 550-551.

position, (2) be in a very weak financial condition, (3) desire to keep its assets clear of pledge, or (4) have to keep them clear because of public psychology, after-acquired property clauses, or other provisions in outstanding issues. At the same time, the corporation may not be in a position to issue additional stocks. The credit bond has been famous for its use by companies in the extremes of financial condition: those so strong that they can borrow money on satisfactory terms without giving a pledge of property or by issuing stocks without voting powers; and those so weak that they can get no more money any other way.

Some corporations ever fall short of that state of financial perfection in which they may finance in any way they see fit. They must take their money where they find it and according to such terms as must be given. There may have been as many mortgage bonds sold as possible; all collateral may have been pledged; stocks may have been sold as far as possible; and still more money is needed. Such a condition may easily arise in a rapidly growing corporation which was a small concern at the time the bonds were issued and whose activity is speculative in nature. The only solution is to use credit bonds and give them a priority on income over stock, but no voting power and no foreclosure rights in the event of non-payment of interest. Both the investment value of such bonds and the justification of their issuance by the corporation depend upon the increase in income made possible by reason of the added quantity of capital procured from the sale of the general credit bonds.

The use of credit bonds to avoid pledges on the assets may arise because of necessity or because of peculiar circumstances. The nature of the business may be such that the assets may not be easily mortgaged. Finance companies and acceptance corporations fall into this category, as do some types of investment trusts. Some companies possess assets which are of value only if used by other corporations, such as patents, copyrights, etc. Even franchise-owing corporations exist.

When preferred stocks are issued, restrictions are often placed specifically upon mortgage bonds and upon further issues of preferred stocks. These restrictions are sometimes so drawn, either intentionally or unintentionally, as to leave a loophole for the use of credit bonds. The object is, perhaps, justified, for the company would otherwise be unnecessarily fettered in its financing.

General Disadvantages of the Credit Bond

While it may be true that credit bonds solve certain financial problems in corporation finance, it is also true that their use is accompanied by cost and places the corporation in an undesirable position. If they are used by weak financial structures, the cost of selling them may be high.

The number of investors who will purchase credit bonds once appeared limited. Stock buyers do not want them because there is no chance for appreciation, no opportunity to share in the unusual profits of the company by

stock or extraordinary dividends, and no participation in the management. Bond buyers may not want them because little or no protection is given to the principal, and the interest payments on many of them are uncertain, if not variable. Many carefully drawn provisions have been developed to aid in overcoming these apparent disadvantages. By means of such frills as conversion privileges or stock purchase warrants the appeal has been much widened for even the stock purchaser.

The temporary nature of credit bonds in capital structures, even though issued for long terms, still further increases their unpopularity as an investment in normal times.

Some Controversial Aspects of General Credit Bonds

In practically every issue of general credit bonds, more or less elaborate provision will be included to define the status of the bonds and the corporation. The usual indenture will cover four points in considerable detail, for these items will be the focal points of any controversy which may arise. They are: (1) the meaning of gross and net earnings; (2) reserves against depreciation, bad debts, etc.; (3) general financial problems of the issuing corporation, especially with reference to creation of debts and prior liens, sale of other similar credit bonds, current borrowing, current status, payment of dividends on stocks, etc.; and (4) the legal status of the endorsing or guaranteeing corporation in the case of reinforced bonds. These questions assume importance when the contract as a protection states limitations upon certain financial acts of the debtor. As a general rule, the courts will be more favorable toward bondholders than they will toward stockholders, even though given the same apparent contractual position.²

Credit Bonds vs. Preferred Stocks

To protect preferred stock issues, it is common to include numerous provisions limiting or restricting additional issues with an equal or a prior claim. In the issue of credit bonds, such restrictions are usually less stringent; hence the credit bond may be used as a substitute for preferred shares. If stockholders' liability is considered, the credit bond has an advantage in that it may be sold for almost any price and no liability will be placed upon the purchaser.³ Not so with preferred stock; sale for less than par, or less than a fair value in the light of the existing affairs of the corporation, will definitely place liability upon the stockholder. The purchaser of the credit bond has about the same degree of protection of principal and interest as that usually given to the preferred stockholder. If the matter of stockholders' liability is a deterrent to the sale of preferred stock, credit bonds may be used. They have the advantage of the psychology which accompanies the word "bonds," although one can scarcely credit them with

² *Barry v. Missouri, etc., Ry. Co.*, 27 Fed. 1 (1886); *Lehigh Coal, etc., Co. v. Central R.R. Co.*, 34 N.J. Eq. 88 (1881).

³ See Chapter XI for liability where a conversion clause is included in the bond.

many of the remaining characteristics usually accorded bonds. The existence of a clause in the preferred stock or the common stock which limits the amount of preferred absolutely may sometimes be circumvented by the use of the credit bond. The history of many credit bonds would seem to bear out the statement that, when used in their pure form, they are probably little better than a preferred stock issue and may often be used to advantage instead of the preferred stocks in financing.

Income Bonds

Income bonds are claims against the net income of the corporation *if any income is earned*;⁴ that is, the payment of interest is secured through a charge upon the corporation's income, but not by the corpus of the corporation's property. These instruments are issued usually in the process of reorganization, as an exchange for former claims of the security holder. Only in a few instances have such securities been sold originally to investors. The income bond thus is closely allied to preferred stock, and the conditions under which earnings will be deemed to have been earned are not greatly different from those under which earnings will be declared to have been earned on preferred shares, hence entitling them to dividends.⁵ The clear advantage of such bonds is that if there are no earnings the corporation is not harassed to pay interest and cannot be forced to borrow money under any sort of terms. From the point of view of the income bond, net income is determined before the payment of dividends on the common stocks, but after depreciation has been deducted.⁶ The interest on some income bonds is payable before preferred dividends, and on others, after; it may or may not be cumulative.⁷ The more common practice is to make interest

⁴ Rochester Transit Corp. 4½ Per Cent Secured Income notes, Series A and B, due 1958, are typical. The interest is payable out of net income up to 4½ per cent per annum, cumulative. Interest is first payable on Series A notes and when fully paid is then payable on Series B notes. The Hudson and Manhattan R.R. Co. Income 5's, due in 1957, have an unusual interest record. The interest was cumulative after 1920, a period of seven years after the date of issue. Two per cent was paid each year from 1913 to 1916 inclusive; no interest was paid until 1921; in 1921, 4½ per cent was paid; in 1922, 7 per cent, 2 per cent being on account of unpaid back interest; in 1923, 6 per cent, 1 per cent being back interest; 5 per cent was paid through October, 1934. Thereafter varying amounts of interest were paid till in 1946 the unpaid accumulated interest amounted to 24½ per cent.

⁵ A. W. Machen, *Modern Law of Corporations*, Sections 546, 547, 2106.

⁶ A. M. Sakolski, *Investments*, p. 89, mentions a case in which the interest on the income bond was payable after common stock dividends.

⁷ Westchester Service Corp. Convertible Income Debenture 4's, due 1953, state that the interest is non-cumulative until the First Cumulative Income 4's of the company are reduced to \$1,000,000 and then is cumulative only to the extent of 2 per cent until First Income 4's are reduced to \$750,000, then 3 per cent until First Income 4's are reduced to \$500,000, and 4 per cent thereafter. Hudson & Manhattan R.R. Co. Adjustment Mortgage Income 5's were non-cumulative during the first seven years but cumulative thereafter.

cumulative, especially after a few years.⁸ In corporations which are especially weak but which have hopes of better times, the interest may be deferred from one to three years, rarely longer, or may be made contingent on some event.⁹ Although ordinarily the interest paid on income bonds is at a fixed rate, many income bonds are issued with only a maximum rate specified.¹⁰ If it is difficult to market the income bonds, the corporation may insert a participation clause.¹¹ Such a clause has many uses and few abuses. It removes one of the major causes of litigations, namely, the chance of the common and preferred stockholders' manipulation of the affairs of the company so as to show no profits for a series of years and then obtaining a major portion of the cumulated profits which are "realized" in one year.

The corporation's discretion by decision of the directors as to when interest on income bonds has been earned is not absolute; despite the fact that the indenture provides the directors of the concern with absolute power, the courts will look behind the veil of mere formality and seek to apply the principles of justice.¹² It will be the contention of most bondholders—and apparently they are upheld in this contention—that net revenues are a differential between the gross revenues and the expenses of the company. But not all expenses may be deducted. "The expenses defrayed or incurred in producing the earnings for a given period are the only charges which can enter into the income account for that period, except the payment of interest on prior encumbrances, as stipulated by the terms of the mortgage."¹³ Such construction of the nature of net revenues would not permit the deduction of sinking funds on prior-lien issues, or funds to meet serial maturities, etc.; and most income bonds specify that such charges may be specifically deducted. The "costs of repairs, renewals, and reasonable betterments" are deductible as expenses;¹⁴ also such depreciation, wear and

⁸If the bond contract does not specifically state that the interest is to be cumulative or non-cumulative, but makes the interest contingent upon earnings, unless damage action in equity is sought the courts will interpret the contract as non-cumulative (282 Fed. 61).

⁹Northwestern Terminal Railroad Co. First Income Gold Bonds, due 1977, pay interest only out of net income not later than one year after date at which rental begins to accrue to company under lease of operating companies.

¹⁰Chicago and Eastern Illinois R.R. Co. General Income 5's, due 1997, stipulate that interest is non-cumulative. Their record indicates that interest has usually been paid at 5 per cent, but interest for the year 1940 was paid at the rate of $\frac{3}{4}$ of 1 per cent.

¹¹One of the classic examples of the use of a participating bond, though called a "debenture," but which was based upon the payment of dividends individually on the preferred and the common stocks, was the Associated Gas and Electric Co. Guaranteed Participating 8's.

¹²Morse v. Bay State Gas Co., 91 Fed. 938 (1897); Stewart v. Chesapeake, etc., Canal Co., 5 Fed. 149 (1881); Buel v. Baltimore, etc., Ry. Co., 24 N.Y. Misc. 646 (1898); Thomas v. New York, etc., Ry. Co., 139 N.Y. 163, 181-182 (1893); Spies v. Chicago, etc., R. Co., 40 Fed. 34 (1889).

¹³Barry v. Missouri, etc., Ry. Co., 27 Fed. 1 (1886).

¹⁴Central of Georgia Ry. Co. v. Central Trust Co. of N.Y., 135 Ga. 472 (1910); Union Pacific R.R. Co. v. U.S., 99 U.S. 402 (1878); Spies v. Chicago & E.I.R. Co., 40 Fed. 34 (1889).

tear as are reasonable and sufficient to make good losses in the value of the assets during the year, even to losses sustained from price changes, appear to be allowable deductions. If it is possible to determine the net earnings of the original corporation, a bondholder whose interest is dependent upon earnings may not prevent a consolidation.¹⁵ The area of discretion of boards of directors as to what constitutes "expenses," "necessary repairs," "alterations," "improvements," etc., is broad, and the bondholders may obtain redress only when evidence of bad faith can be presented.¹⁶ A mere difference of opinion as to the wisdom or the necessity of such expenditures will not suffice.

To protect the position of income bonds and to increase their marketability, some companies make quite extensive protective provisions relative to the creation of prior liens against the company's assets.¹⁷ Some income bonds are secured as to principal, but depend solely upon current earnings for their interest. Although sinking funds are not the rule with income bonds, they are not unknown, especially where the income is violently variable from year to year and where the acquisition of an unusually large net income in one year may be practically certain to mean a reduced income in the future.¹⁸ Although it is but proper to permit the holder of income bonds to receive income which has been earned by subsidiary corporations and to which the parent company is entitled, various fictions have been invented to prevent such income from going to the income bonds.¹⁹

Certificates of indebtedness cover a series of slightly variable instruments. These instruments are used for both long- and short-term financing. When used for long-term financing, certificates of indebtedness signify only what

¹⁵ *Hart v. Ogdensburgh & L.C.R. Co.*, 69 Hun. 378, 23 N.Y. Supp. 639 (1893).

¹⁶ *Thomas v. New York & G.L.R. Co.*, 139 N.Y. 163, 183 (1893); *Missouri Pac. R. Co. v. Texas & P. Ry. Co.*, 282 Fed. 61 (1922).

¹⁷ The Irredeemable Certificates of the Atlantic Coast Line Co. are collateral trust bonds from the point of view of security of principal, but income bonds from the standpoint of the payment of interest. The indenture provides that no mortgage may be placed on the company's properties without the consent of two-thirds of the certificate holders; and, if such a mortgage is authorized by the certificate holders, they automatically acquire the privilege of exchanging their certificates for such bonds, par for par, as may be authorized. To insert such a powerful provision into income bonds may be a temptation in an adverse money market, but unless some provisions are made for future financing, the company may be embarrassed at some future time.

¹⁸ Northwestern Terminal Railroad Co. First Income Gold Bonds, due 1977, are callable. These bonds are secured as to principal and a reserve fund is provided.

¹⁹ Probably the most widely known case on this point is that of the Central of Georgia Railway Co., which issued income bonds in the reorganization in 1895. No interest was paid for several years, the company claiming that no earnings were made. The bondholders brought suit, and it was some years later that an auditor appointed by the court discovered that a wholly owned subsidiary, the Ocean Steamship Co., was making large profits. These profits were being "loaned" to the Central of Georgia Railway without intention of repayment. The court decided that income of a subsidiary is income of the parent company, hence the holders of the income bonds were entitled to their interest. For a summary of the case, see 69 S.E. 708-720 (1910).

they state: that the corporation owes money to the holder of the instrument and has agreed to pay interest thereon, subject to certain conditions. They do not often have sinking funds and seldom are secured either as to income or as to principal.²⁰

Debenture Bonds

Debenture bonds are based upon the general assets of a corporation.²¹ They are not a specific lien upon any particular asset, such as a mortgage bond, which is a lien upon the particular assets mentioned in the mortgage. For debentures it is common to give some form of general indenture to define the bondholder's rights, the trustee's obligations and powers, and the covenants of the corporation, and to state other matters which are better taken care of in a general instrument than in the individual bond.

An examination of seventy-two debentures issued in 1930 failed to exhibit any markedly higher yield basis than that on mortgage bonds with an equally good position in the financial structures of the issuing companies. Analyses of debenture issues in 1946-1947 indicate that debenture bonds still show yields comparatively close to those of the mortgage bonds, though some ran slightly higher. Moreover, the fact that debenture bonds are normally issued for a shorter term than mortgage issues of the same companies enhances their position, for they are not so dependent upon values many decades in the future.

Debenture bonds are used chiefly by public utilities and industrials. Formerly they were much in fashion in railroad financing. They are common enough in quasi-public corporations such as irrigation districts, water districts, improvement districts, etc., but their use by these quasi-public corporations is sufficiently different from private corporation use to omit their consideration in the present discussion. Railroad, public utility, and industrial debentures are diverse enough to warrant some individual consideration before discussing the details of debentures.

Railroad debentures were the earliest type of "debenture," many securities having been issued prior to the financial reverses of the railroads in 1893. At the present time many railroads have debentures outstanding, and some do all their financing by this method. Among the more important railroads making extensive use of the debenture may be mentioned: New York, New Haven, and Hartford; Illinois Central; Pennsylvania; and Union Pacific.

²⁰ See Atlantic Coast Line Irredeemable 5's, issued in 1897 for \$2,900,000.

²¹ An examination of 34 debentures issued by industrial companies in 1930 showed but 2 issues with a maturity of less than 10 years and 3 issues with a maturity of more than 15 years. Public utilities (38 issues examined) in the same year showed 3 issues with maturities of 10 years or less; 10 with maturities of from 10 to 20 years; 16 with maturities of from 20 to 30 years; 4 issues from 30 to 100 years; and 5 with maturities of more than 100 years. It appears that the range of use of the debenture is somewhat wider for public utilities than for industrials, a fact that arises from the fundamental differences in the assets and operations of the two types of economic activity. In 1946-1947 an examination of the issues showed 70 per cent at 25 years or less in maturity, with 40 per cent of the total at 15-year maturities.

The debenture bond has not been used by the weak railroads solely, or by the strongest lines; all types appear to be represented.

Public utilities have only recently adopted the debenture as a financing device. It is essentially the result of the development of the gigantic holding companies and the interlacing of financial structures in the last fifteen years. *Some public utility holding companies do all their borrowing by means of debentures.*²² In some public utilities less protection has been given debenture holders than is commonly given preferred stocks. In the public utility, refunding operations, simplification of financial structure, and acquisition of new capital have been the major causes given for the use of the debenture. Wide use of the debenture in connection with holding company operations has necessitated an extension of the restrictive clauses to subsidiary companies as well as the issuing corporations. About one-half of the debenture issues of public utilities in the twenties were convertible, a feature which emerged from (1) a desire on the part of the parent companies to extend their trading on the equity, (2) the rapid expansion of public utilities in the period 1910-30, hence an appeal to the speculative sense of investors who might profit through the increasing value of the common stocks into which the debentures might be converted, and (3) the elimination of small bonds issues of local utilities which had been taken into a larger system.

Industrial debentures, somewhat like public utility debentures, represent financing growing out of the merger movement. But in the industrial field, the debenture is more often used on its own merits. Among industrial corporations the debenture appears to be increasingly common as a means of refunding issues secured by mortgages, funding current borrowing, and securing additional capital.

Provisions of debenture bonds vary much, but a few of the more important aspects of these instruments are covered in almost every indenture. Those which have a direct bearing upon the market status of the bonds and, accordingly, their usefulness in financing operations will include: (1) payment of interest; (2) repayment of the principal; (3) protection against additional debts; (4) participation directly, or indirectly through privileges, in the profits of the company; (5) use to which proceeds derived from the sale of debentures may be put; and (6) relations between holding companies and subsidiaries.

The rate of interest on debenture bonds is usually fixed,²³ although variable and contingent interest payments are not unknown.²⁴ If there is

²² See American Gas and Power Co. and American Telephone and Telegraph Co.

²³ A tabulation of 100 debenture issues selected at random in 1948 showed 88 per cent have a fixed rate of interest.

²⁴ London Street Ry. 5's were originally due in 1925 but were extended to 1930 with the interest raised from 5 to 6 per cent; extended in 1930 to 1935; extended in 1935 to 1940 with the interest reduced to 5 per cent; extended in 1940 to 1950.

See also: Charles Street Garage Co. First Gold 1's-3's, due 1947; National Sugar Mfg. Co. Second Mortgage 6's, due 1959; and Rochester Ice and Cold Storage Utilities, Inc., First 5's, due 1956.

a wide variation in the profits from year to year, restrictions may be placed upon dividend payments,²⁵ or special debenture interest reserves may be set up to assure the debentures their rightful income.²⁶

Numerous provisions are included for the repayment of the principal. Sinking funds are the most common scheme, whether dependent upon earnings, dividend payments, fixed amounts, or some other basis.²⁷ The extent to which sinking funds retire debenture issues appears to average slightly more than one-half of the total issue by the date of maturity.²⁸ The cases of sinking funds to retire the whole of the issue seem as uncommon as

²⁵ Gotham Hosiery Co. (then Gotham Silk Hosiery Co.) 5's, due in 1946 and retired, forbade the payment of common stock dividends if such payment would reduce the net quick assets to less than 75 per cent of the amount of debentures outstanding; the Emporium Capwell Corp. 4's, due 1952, prohibit the payment of dividends out of surplus created through the sale of real property; L. C. Smith & Corona Typewriter Co. 2's and 3's, due 1950, provide that no cash dividend will be paid on any class of capital stock if thereafter the net quick assets are less than 150 per cent of outstanding debentures, and all other funded debt; Philip Morris and Co., Ltd. 2½'s, due 1966, require 66 per cent consent of debentures to pay any dividends unless dividends are payable not more than sixty days after declaration and thereafter the sum of \$4,500,000 plus net income since March 31, 1946, at least equals the disbursements of such; Florida Power and Light Co. 4½'s, due 1979, restrict dividends so long as any junior funded debt is outstanding. Other examples are: United Airlines, Inc., 3½'s, due 1967; Caterpillar Tractor Co. 2's, due 1956; Addressograph-Multigraph Co. 2¼'s, due 1966; and Anderson-Clayton and Co. 2¼'s, due 1971.

One of the most common provisions regarding dividends is based upon the reduction of current assets below a fixed minimum, which would lead to the inference that debenture bonds depend for their security largely upon the working capital position of the corporation. It is customary to exempt stock dividends, since they do not reduce the net assets of the company.

²⁶ Green Bay and Western R.R. Co. has a Series A and a Series B income debentures, upon which interesting provisions have been made for the division of profits. Each year the net earnings of the company are to be applied: (1) 2 per cent on Class A debentures; (2) 2½ per cent on the common stock; (3) Class A debentures and the common stock to share pro rata in any additional surplus up to 2½ per cent per annum, making 5 per cent in all; (4) further earnings to be distributed to the holders of Class B debentures. A somewhat similar arrangement is set up for the distribution of the assets in the event of liquidation. Both issues are due only if, or when, the road is sold or reorganized.

²⁷ American Machine and Metals, Inc., Sinking Fund Debenture 4½'s, due 1959, provide that the company will pay, either in cash or in debentures, into the sinking fund amounts sufficient to redeem the following amounts of debentures: 1945-1946, \$80,000; 1947-1948, \$85,000; 1949-1950, \$90,000; 1951-1952, \$95,000; 1953-1954, \$100,000; and 1955-1958, \$110,000. Antilla Sugar Estates Debenture 6's provided that after 1932 there should be set aside 75 per cent of consolidated net earnings, as defined, to be applied to the redemption of the debentures providing that consolidated net current assets would not be reduced to less than \$750,000. Debentures may be delivered in lieu of cash.

²⁸ The approximate percentage of the issue which will be retired by the sinking fund provisions is shown for several issues:

North American Light and Power Co. 5½'s	40%
York Corp. First Sinking Fund 3¼'s	61%
Kentucky Fuel Gas Corp. 6's	80%

debentures without any sinking fund at all. Only rarely does it appear that an accelerating sinking fund is used with debenture issues. The interval for setting aside the sinking fund may be a month, a quarter, a half-year, or a year, the regularity of net income and degree of stability being the major controlling elements.²⁹

Most debenture indentures contain elaborate provisions designed to protect the debentures from any impairment from (1) the issue of additional debentures; (2) the issue of securities with prior claims either against assets or against earnings; and (3) acts which would impair the assets, earnings, or operating conditions of the issuing corporation. Additional debentures ranking equally against the assets of the company with those under consideration may usually be issued only when the quick assets, the total assets, and/or the earnings of the company provide a minimum protection ratio to the debentures to be outstanding after the new issue has occurred.³⁰ Public utility holding companies formerly permitted the issue of additional debentures up to a fixed ratio of the cost or the fair value³¹ of additional stocks of subsidiary companies which are acquired by the holding company. The balance of the value of subsidiary securities so acquired must usually be obtained from profits, or from the sale of stocks subordinate to the debentures and at minimum prescribed prices.³² Since holding companies derive their chief revenues from the subsidiaries which they control, the provision is relatively common that the parent company will *not divest* itself of a sufficient amount of the stocks of *important* subsidiary concerns so that it will no longer control them.³³ There may even be a guarantee by

²⁹ McCord Corp. 4½'s, due 1956, have a sinking fund contribution due each February and August. General Mills Sinking Fund 2½'s, due 1954, are an annual contribution.

³⁰ Cudahy Packing Co. First 3's, due 1964, allow additional debt if net earnings are 2½ times the annual charge on all debentures, including those to be issued. See also: National Container Corp. 5's, due 1959; Poor and Co. serial debentures of 1945; and National Service Conversion Sinking Fund 6's, due 1952.

³¹ In the United States under the Public Utility Holding Company Act of 1935, the operation of a public utility holding company structure is reduced to a very limited degree, but concerns operating in foreign countries or in other fields would not be subject to the restrictions.

³² Italian Superpower Corp. 6's, Series A, permit the issue of additional debentures to two-thirds the cost or fair value (whichever is lower) of additional securities bought by the company if the remaining one-third is paid by the sale of stock and if the net earnings are not less than 1½ times the interest requirements in twelve of the preceding fifteen calendar months.

³³ Warren Petroleum Corp. Ten-Year 3¼ Per Cent Sinking Fund Debentures, due March 1, 1955, provide that the company will not permit any subsidiary (a) to issue, sell, or otherwise dispose of any preferred stock except to the company or to one or more wholly owned subsidiaries and the company will cause every wholly owned subsidiary which acquires any such preferred stock to continue to be a wholly owned subsidiary so long as it shall be the holder of any such preferred stock, or (b) to issue, sell, or otherwise dispose of any additional shares of its capital stock entitled to vote for directors, unless the company or one or more subsidiaries shall forthwith acquire free from any lien or charge such part of such additional stock as may be necessary in

the parent company that certain conditions will be lived up to by a debenture-issuing subsidiary company.³⁴

The issue of securities with claims ranking equally with or prior to the debentures is almost invariably prohibited or limited in such a manner as to maintain the position of the debentures unimpaired.³⁵ The usual provision is that if any such securities are issued, the debentures must be equally and ratably secured with them, although this is really a weak provision, since it actually does not prevent the corporation from issuing any quantity of mortgage bonds it may desire to, as long as it at the same time, in effect, refunds the debentures.³⁶ Amendments to the indenture by a large proportion of the debenture holders may usually make possible the sale of mortgage bonds or other debt-creating instruments.³⁷

Impairment of the assets, earnings, or operating conditions of the debenture-issuing corporation includes almost everything pertaining to the finances of the corporation. An examination of some 200 debenture bonds brought provisions to light which covered, among other things, the following items:

order that the proportionate ownership of the company and its subsidiaries in such stock shall be maintained, provided, however, any subsidiary may issue or sell shares of its capital stock for the purpose of qualifying any person to serve as a director of such subsidiary, as a stock dividend or pursuant to any preemptive right of stockholders to subscribe for the same.

³⁴ The indenture of the Warren Petroleum Corp. Ten-Year $3\frac{1}{4}$ Per Cent Sinking Fund Debentures provides that the company will not permit any subsidiary to create, incur, assume, or guarantee any indebtedness of any character except to the company or to a wholly owned subsidiary. This does not, however, prohibit the subsidiary from (a) creating debts in the ordinary course of business which mature within one year, (b) creating leases made in the ordinary course of business, or (c) creating any mortgages, pledges, or encumbrances of the character excepted from the provisions of Section 6 of Article V of the indenture (a typical illustration of exceptions commonly made).

³⁵ Northern Natural Gas Co. $1\frac{1}{8}$'s, due serially 1950-1955, and $2\frac{3}{8}$'s, due serially 1956-1965, are typical. They provide that no additional debt may be incurred by either the issuing company or a subsidiary "without equally and ratably securing this issue thereby." It is customary to exempt current operating liabilities from the debt-limiting clause. Purchase money mortgages of 50 to 60 per cent are usually eliminated from this same provision. See the Weatherhead Co. $2\frac{1}{2}$ - $3\frac{3}{8}$'s, due serially 1952, 1966.

³⁶ Ashland Oil and Refining Co. Twenty-Year $\frac{2}{3}$ Per Cent Sinking Fund Debentures provide that the company will not at any time create or assume any mortgage, pledge, or other lien upon any of its properties or assets, whether owned at the date of the bond issue or afterwards acquired, or upon any income or profits therefrom, without making effective provision whereby the debentures then outstanding shall be secured by such mortgage, pledge, or lien equally and ratably with any and all other obligations and indebtedness thereby secured, unless net tangible assets are twice funded debt and earnings averaged over last three years are three times all interest on funded debt.

³⁷ Sixty-six to 80 per cent of the outstanding bonds is the common requirement. See Shell Union Oil Corp. $2\frac{1}{2}$'s, due 1971; Dayton Power and Light Co. First $2\frac{3}{4}$'s, due 1975; Pennsylvania Water and Power Co. $3\frac{1}{4}$'s, due 1964; Louisville Lighting Co. First 5's, due 1953; and Philadelphia Electric Power Co. First $2\frac{3}{8}$'s, due 1975.

Dividend payments on the preferred stocks are not to be made unless the earnings remaining are one and one-half times the interest and the sinking fund requirements, and if the payment of such dividends would reduce the net quick assets to less than 70 per cent of the debentures outstanding; no cash dividend will be payable unless the current assets are 125 per cent of the total liabilities; company will not "impair its efficiency as a going concern"; company will maintain a minimum of net quick assets equal to \$11,500,000; no capital expenditures may be made if the current ratio is less than one and one-half to one; no guarantees of the securities of other corporations may be made; rights to subscribe to common stocks are to be given the debentures if any such rights are given to the common stockholders; total assets equal twice the total debt, including the debentures; use of proceeds of the sale of stock under stock purchase warrants is only to retire debentures; sale of subsidiary stock is prohibited unless the proceeds are used to retire debentures.

This list of provisions will be added to by the examination of any extended list of debenture bonds. It is merely intended to indicate the variety of provisions which are used for purposes of giving this type of bond a degree of attractiveness which will make possible financing on reasonable terms. The fundamental aims of such provisions are (1) to insure a high degree of liquidity in the concern and (2) to guard against unusually large short-term loans, although the common exception of loans of less than twelve months' maturity would appear to leave the door wide open for bank borrowing and the continued renewal of such loans.

In view of the fact that the debenture appears much more frequently in the holding company arrangement than in other corporation structures, special notice is to be given to the particular provisions found in debentures referring to the relations between the subsidiary corporations and the holding company or the parent company. The clauses relative to the creation of debts normally extend to both the parent and subsidiary concerns, though there are exceptions.³⁸

Participation privileges appear to be used on no more than one-tenth of all debentures issued at the present time.³⁹ These privileges are for conversion or for the purchase of common stocks. The conversion element in debenture stocks is no different from that in any other type of securities, and the reader is referred to the more general discussion of privilege-bearing securities in Chapter XI.

³⁸ Columbia Gas and Electric Twenty-Five-Year 5 Per Cent Gold Debentures retired in 1945 made no restrictions upon the financing of subsidiary companies. On the other hand, see *supra*, p. 000, footnotes 32, 33.

³⁹ Examination of all debentures listed in *Moody's Manuals—Utilities (1947)*, *Industrials (1947)*, and *Railroads (1944)*—showed approximately 9 per cent to be convertible.

Guaranteed Bonds

Guaranteed bonds fall into two distinct classes: (1) those which were originally issued without a lien or pledge and which have been reinforced by a guarantee of another corporation; and (2) bonds which were issued with a general, or a specific, pledge or lien, and which have been reinforced by a guarantee of another company. The ones in the first group are more than likely to have been issued by stronger corporations than the second; there appears no distinct difference as to the strength of the guaranteeing corporation. In both instances such bonds have two companies to look to for their payment.

Guaranteed bonds arise from many financial circumstances, some common and some rare. The most common condition leading to the use of a guarantee is that in which two corporations, a strong one and a weak one, have some community of interest and it is desirable for the weak company to issue bonds while the strong one guarantees them. Mergers, consolidations, recapitalizations, reorganizations, etc., are also fairly common as the reason for the existence of the guaranteed issues. If concern A takes over the assets of B, there may exist a mortgage bond against the assets of B which is not callable or which A does not care to pay off for the time being; to keep the bondholders of B satisfied, A guarantees the payment of the interest and the principal of B. The holding company not infrequently brings about the guarantee of bonds issued by subsidiaries; sometimes such guarantees are worth exactly nothing, for the sole assets of the guaranteeing corporation may be only the common stocks of the concern whose bonds are guaranteed.

The theory of the guarantee is: (1) to increase the market value of securities being offered for sale, (2) to keep security holders quieted in merger or consolidation operations, and (3) to secure exchange of securities in the development of holding companies or in consolidations and mergers.

There are numerous methods of effecting a guarantee on corporate securities. Directly, one corporation may guarantee the securities of another through endorsement, through stamping the bonds, or through a general guarantee contract with the holders of the bonds and the trustee. Indirectly, one corporation may, in effect, guarantee the bonds of another through lease agreement, purchase agreements, royalty contracts, price agreements, etc. If a bond is guaranteed by more than one corporation, it is said to be *jointly guaranteed*.⁴⁰

The *extent of the guarantee* varies from issue to issue, the most common form being the guarantee of the interest and the principal of the bonds. If the guarantee is for preferred stocks, the dividends only are covered in

⁴⁰ Chicago Union Station Co. First "F," First "G," and Guaranteed Refunding Bonds are all guaranteed unconditionally as to principal and interest and requirements under Retirement Fund, jointly and severally, by endorsement by Chicago, Burlington and Quincy R.R. Co., trustees of Chicago, Milwaukee, St. Paul and Pacific R.R. Co., Pittsburgh, Cincinnati, Chicago and St. Louis Ry. Co., and Pennsylvania R.R. Co.

most instances. The same is true for common stocks. A few guarantee contracts cover only the interest on the bonds, or only the principal of the bonds.

The *nature of the guarantee* varies, but it is normally one of two types: (1) the promise, qualified or not, of the corporation or individual; or (2) the deposit of a forfeiture of money, bonds, stocks, or titles to other properties with a trustee to assure performance with a minimum of trouble on the part of the bondholders. The promise of the company may be but an open invitation to legal action, drawn out and expensive; but the deposit of valuable goods is both a guarantee of good faith and a guarantee of a minimum of expense to the bondholders. Where holding companies use the guarantee, the use of the trust deposit device should be more attractive than it now is, for it would enhance the value of the bonds and at the same time would leave the company in possession of the voting power of the stocks so deposited.

The Strength of Guarantees and Endorsements. The strength of a guarantee or endorsement on an issue of securities is essentially a function of three factors: (1) the legal strength of the contract, (2) the economic strength of the endorsing or guaranteeing corporation (or individual), and (3) the quality of the intentions of the companies. In the long run, the last is the most important.

The legal strength of credit bonds is an extremely complicated and uncertain thing; the reinforcement of bonds through guarantee contracts is still less well settled in legal affairs, for ordinarily one corporation does not have the power to guarantee the obligations of another.⁴¹ There appear to be all sorts of gradations of liability on the endorsing and guaranteeing corporation, as well as many variations in the views of courts in interpreting contracts of endorsement or guarantee of bonds and stocks. A guarantee or endorsement by one corporation of the securities of another is legal under one set of conditions, but quite illegal under another.⁴² For practical purposes, agreements for the reinforcement of corporate obligations may be divided into four grades: (1) those which are definitely valueless because

⁴¹ Power to make such guarantee arises either from statute provisions or charter powers, or by implication from the nature of the business. Even though the corporation guarantee is ultra vires, securities having such guarantee may be enforced against the guaranteeing corporation. *Higgins v. Hocking Valley Ry. Co.*, 188 N.Y. App. Div. 684 (1919), 177 N.Y. Supp. 444; *Hamer et al. v. New York Rys. Co. et al.*, 244 U.S. 266 (1917).

⁴² The following cases will be of interest to the student of this subject: *West St. Louis Savings Bank v. Shawnee County Bank*, 95 U.S. 557 (1877); *Gotshal v. Mill Factors Corp.*, 289 Fed. 1005 (1923); *Louisville, etc., Ry. v. Louisville Trust Co.*, 174 U.S. 552 (1899); *Penn. R.R. Co. v. St. Louis, etc., R.R. Co.*, 118 U.S. 290 (1886); *Green Bay, etc., R.R. v. Union Steamboat Co.*, 107 U.S. 98 (1882); *Central Trust, etc. v. Ind. & L.M.R. Co.*, 98 Fed. 666; *Railroad Co. v. Howard*, 7 Wall. 392 (1868); *Schlozer v. Heckerth*, 174 Minn. 525 (1928); *Madison & Indianapolis R. Co. v. Norwich Savings Society*, 24 Ind. 457 (1865). See also *W. M. Fletcher, Cyclopaedia of the Law of Private Corporations*, Sections 2719-2723.

of loose wording, poor legal construction, faulty provisions, etc.; (2) those weak guarantees and endorsements under which the endorsing or guaranteeing corporation carries no liability unless the issuing corporation cannot or will not pay, and until legal action has been taken by the security holders; (3) strong guarantees in which the corporation definitely agrees to meet the payments of interest and principal whether the issuing corporation can or does not; and (4) assumed bonds, wherein the primary liability is assumed by the corporation. The only way by which a corporation's actual or expected liability can be determined is by examination of the wording of the documents involved and of court decisions in the state.⁴³

The economic strength of the guarantee must be measured by investigating the issue exactly as if it were put out by the guaranteeing corporation instead of the issuing company. Corporations have been known to guarantee bonds in a wholesale fashion and assume unbelievable liabilities under such contracts. If a corporation has a net revenue of \$1,000,000, and preferred stock and bond issues of its own which consume \$500,000 of its revenue, its guarantee of a \$25,000,000 bond issue may not be worth much. On the other hand, if it had a net revenue of \$1,000,000, and no preferred stocks or bonds of its own, and it should guarantee the interest and principal of a \$5,000,000 bond issue, there would be reason to suppose the guarantee was of some economic worth. If buyers of credit bonds examined this aspect of guarantees and endorsements, there would be less tendency for corporations to guarantee or endorse bonds to such an extent that they could not possibly live up to the guarantees so given.

Court decisions are confusion, *par excellence*, on the subject of guarantees and endorsements. It is commonly held that liability on endorsement extends only to the equity of the common stockholders. Specific consent of bondholders or preferred stockholders may give the guaranteed bonds access to the assets of the company ahead of both the bonds and the preferred stocks.

Despite the fact that most modern bond and preferred stock issues of the better type contain provisions which limit or prohibit guarantees, corporations have devised ways and means of evading these provisions. One of the most common is the contract for purchase. Company A has a prohibitive clause against guarantees and endorsements. It is desirous of guaranteeing the bonds of company B. The guarantee is accomplished, in effect, by A's agreeing to purchase from B a product in such quantities and at such prices as will practically guarantee sufficient income to B to pay the interest and principal of its bonds. Such contracts are valid and may cause much damage. Should it be an ultra vires act of A to deal directly in the products of B, a subsidiary company of A, company C, may be formed to achieve the same end.

Dilution of the guarantee may occur if the status of the guaranteeing

⁴³ Furthermore, study of the management of the guaranteeing company and its actions in preparing for the possible contingency may be valuable.

company is permitted to change without limit. It is a moot question whether the holders of the guaranteed bonds can set up legal action to prevent such dilution if no provisions were included in the guarantee contract to this end.

The Elements of a Strong Guarantee. A strong guarantee will contain provisions under which the guaranteeing corporation agrees:

- A. To assume liability and to guarantee unconditionally the payment of
 - 1. Interest, if bonds; dividends, if stock
 - 2. Sinking fund or redemption fund installments
 - 3. Retirement of bonds; redemption of stock
- B. To assume the responsibility that the issuing corporation and/or the guaranteeing corporations will
 - 1. Maintain a definite surplus unless depleted through
 - a. Bond interest or bond charges
 - b. Preferred stock dividends
 - c. Operating losses
 - 2. Protect against dilution of surplus by stock dividends
 - 3. Protect against dilution of the issue
 - a. By the issue of additional stocks or bonds with equal or superior claims against earnings or against assets
 - b. By the issue of additional securities if the total assets fall below a stated ratio to total debt, unless the guaranteed bonds are given preference over new securities sold
- C. To pay any expense of litigation to the holders of the guaranteed bonds in the event that legal action is necessary to enforce the guarantee
- D. To limit the amount of guarantees or endorsements which may be entered into to
 - 1. A fixed maximum ratio to total assets
 - 2. A fixed maximum ratio to total earnings

To use the consolidated assets and earnings of the two companies for this limit also seems permissible.

Assumed Bonds

Assumed bonds are bonds issued by another company on which one corporation has agreed to pay the interest and principal. The process is the simple agreement of corporation A with corporation X to make all payments; in effect, a new obligor is added, identical to the original in every respect, except that the name of A appears at every point where X appeared in the original indentures.⁴⁴ Such bonds have an unusual position in that they have (1) a specific claim against the assets covered by the indenture, and (2)

⁴⁴Some difference of opinion exists as to the exact meaning of such "assumed bonds." For a broad and a narrow interpretation, see A. M. Sakolski, *Principles of Investment*, p. 75; and W. A. Wood, *Modern Business Corporations*. A broad interpretation is used in the discussion here.

a general claim against the assets of the assuming corporation and (3) of the original corporation, if still undissolved. Assumed bonds have arisen most commonly in (1) the reorganization of corporations, (2) merger and consolidation operations, and (3) the dissolution of minor subsidiaries of large companies at a time when cash was much needed by the parent concern or when the sale of assets to pay the bonds or to secure cash could not be accomplished on a satisfactory basis.⁴⁵

Assumed bonds are often secured by claims upon the key assets of a corporation such as a section of the main line of a railroad, or fundamental and basic patents of an industrial concern, or a valuable franchise of a public utility. If these bonds were not so secured, hence in a position to demand a "pound of flesh" in reorganizations, mergers, consolidations, etc., they would long since have been largely eliminated. Whether assumed bonds are regarded as strong or weak from an investment angle depends upon the ratio of the assumed bonds to the assets securing them, the income therefrom, and the importance of the assets to the assuming corporation. Corporations have been known to assume more bonds in proportion to their assets than they could sell to the public.

Probably the most common source of assumed bonds, at the present time, is the purchase money mortgage bond existing in companies which have after-acquired property clauses in their bond issues and which have used the purchase money mortgage in expansion. In many instances the story is unwise expansion or too rapid expansion and a later consolidation with other companies who assumed the purchase money mortgages.⁴⁶

Receivership Certificates

Statistics on the causes of financial embarrassment and failure of corporations show the most common immediate cause to be lack of working capital or current funds. If there should be an opportunity to make the corporation a going concern, financially able to pursue its own destiny, it follows that additional funds must be obtained on good terms and with dispatch. The receivership certificate is an elixir which, when taken in proper doses under the direction of those economic doctors, court receivers, may result

⁴⁵ The beginning student in corporation finance is often confused by assumed bonds and guaranteed bonds. In a guarantee, A agrees to pay the interest and principal of the bonds of B if B cannot or will not. In assumed bonds, B, which originally issued the bonds, remains liable for both the principal and the interest on the bonds, though the primary and direct liability to pay the interest and the principal of the bonds is taken over (i.e., assumed) by A. Usually B, whose bonds are assumed by A, passes out of existence, so the question is not seriously important.

⁴⁶ A classic example of assumed bonds growing out of unwise expansion is the Purchase Money Mortgage Bonds of the American Cement Plaster Co. This company expanded and was taken over by the Beaver Products Corp., another rapidly expanding concern, which assumed the obligations under the purchase money mortgages. Later, essentially as a result of the violent overexpansion, Beaver Products Corp. was taken over by Certain-teed Products, which, in turn, assumed the purchase money mortgages of the American Cement Plaster Co. These mortgages have now been retired.

in a complete cure of the financial diseases that have sapped the strength of the corporation or may bring about a prolongation of corporate life during which much may be accomplished toward soothing the pains of the stockholders and the bondholders, not to mention the general creditors.

Receivership certificates have a priority over all obligations of the corporation existing before the receivership. They may not be used for the acquisition of capital for expansion, but only for the operation and preservation of the corpus of properties in receivership. But if a project is partially completed, a court may permit the issue of receivership certificates to complete the construction if reasonable evidence exists that the completed project will not impair the value of other assets and may increase the value of the total assets by more than the cost.⁴⁷ They sell on a low-yield basis (whether rightly so or not) and permit the corporation to secure capital at a minimum of cost. It is not, therefore, an unheard-of thing to have a corporate management which finds the cost of added capital excessive arrange a *friendly* receivership, among other reasons, to secure working capital on the best possible terms and to postpone embarrassing debt maturities. Such certificates of indebtedness, though issued under the jurisdiction of the court, are in no way obligations of the organized state. Their ultimate payment must be made from the assets of the company. Unless refunded by the issue of other securities, they must be paid prior to the termination of the receivership. Theoretically, such certificates occupy an impregnable position in the financial structure of the company. Investigation of the history of many such issues shows that (1) if the concern is rehabilitated, they are likely to be refunded or postponed in payment in order to remove the corporation from the receivership more quickly, but (2) if the concern is liquidated, they are in an exceedingly strong position unless issued in excessive quantities.⁴⁸

Miscellaneous Bonds

The variety of corporation bonds is a thing of awe. While the discussion has been somewhat stereotyped and categorized, there are many issues which may not be fitted into the classes studied thus far. Only a small number of the more common of these will be mentioned.

1. *Joint bonds* are used when two or more corporations enter into a sort of partnership for the issue of bonds. They arise frequently from proper-

⁴⁷ That corporations should be permitted to borrow money against uncompleted construction seems equitable only when a distinct enhancement of the value of the receivership properties occurs in excess of the added liens of the receivership certificates. See *Rochester Trust & S.S. Co. v. Rochester R. Co.*, 29 N.Y., Misc. 222 (1899), 60 N.Y.S. 409 (1899).

⁴⁸ A. S. Dewing, *Financial Policy of Corporations*, pp. 142-144, appears unusually critical of receivership certificates. While it is true that they have been abused, it is equally true that they serve a necessary function in rehabilitating and managing financially embarrassed concerns. The criticism should be directed not against the instrument but against those who use it. For a favorable statement of their position, see W. Z. Ripley, *Railroads: Finance and Organization*, p. 389 ff.

ties which are used by several companies, such as railroad terminals, docks, tank cars, etc.⁴⁹

2. *Extended bonds* are bonds which have matured and, by agreement between the bondholders and the corporation, have been extended in maturity for a number of years.⁵⁰ Ordinarily, unless specifically agreed to, any participation privileges, convertible clauses, stock purchase warrants, etc., are not extended beyond the date of the maturity of the original bonds.⁵¹ These bonds arise when maturities occur at inopportune times for refinancing and for foreclosure and sale of the assets.⁵² To obtain such an extension, corporations may increase the interest rate, or give other emoluments to the bonds.⁵³

3. *Adjustment bonds* and *adjustment stocks* arise from the problems of mergers, reorganizations, and consolidations, as well as from the adjustment of issues at the time of their maturity when the company is not in a position to meet the principal payments and the bondholders are not in a position to enforce their claims.⁵⁴

SUMMARY

Credit bonds are used by corporations in the extremes of financial condition—both exceptionally sound concerns and those which have exhausted their secured credit. The problem for credit bonds is primarily the adequate protection of their original position, which may be seriously depleted by subsequent debts, either secured or unsecured. Debentures are the

⁴⁹ For examples of joint bonds see: Illinois Central Railroad Co. and Chicago, St. Louis and New Orleans Railroad Co. Joint First Refunding Gold 5's, due 1963, and Joint First Refunding 4's, due 1963.

⁵⁰ *Baltimore and Ohio R.R. Co., Pittsburgh, Lake Erie and West Virginia Refunding Gold 4's*, due 1951, were extended from 1941, and then to 1980. It is unusual for the maturity date to be extended for a period of more than ten years.

⁵¹ This is on the theory that the purchase warrants or privileges were separate contracts from the original issues. No instance of extension of bonds with *non-detachable* warrants has come to the attention of the writer, but it could provide considerable legal uncertainty were the bondholders to urge their rights. Of course, since any extension of an issue is a matter of consent on the part of the bondholders, the corporation would scarcely be in a position to press its point for not extending the privileges.

⁵² Many bond issues were extended during the depression from 1929 to 1933, since the decline in price levels had been so great that the bondholders stood to gain more through extending the maturity and hoping for a rise in prices than by forcing foreclosure proceedings and absorbing the losses of such litigation from the sale of the assets. In a good many instances there is reason to believe that anticipatory action by stockholders in securing agreement for extension has been the means of preventing unnecessary losses.

⁵³ *London Street Railway Co. (Canada) First Gold 5's*, due 1950, were originally due in 1925. They were extended to 1930 and the interest was raised from 5 per cent to 6 per cent; later they were extended to 1935. In 1935, they were extended to 1940 and the interest was reduced to 5 per cent. Since that time they have been extended to 1950.

⁵⁴ A typical example is the *Atchison, Topeka and Santa Fe Ry. Co. Adjustment Gold 4's*, due 1965. The interest was non-cumulative for the first five years, December 12, 1895, to July 1, 1900.

more common type of credit instruments, though a large number of income bonds and a few assumed bonds are to be found. The income bond has been extensively used since 1934 incident to the railroad reorganizations which have been numerous since that date.

QUESTIONS

1. Explain why a corporation would be interested in using general credit bonds. Would it always be unable to obtain the credit cheaper with secured debts?
2. Contrast the possible use of preferred stock and general credit bonds by a concern. Do you recommend one as a general practice? Explain.
3. How do income bonds differ from "debenture" bonds? Is it to be expected that income bonds will become more popular? Is a revenue bond the same thing as an income bond?
4. How is the position of a debenture bond affected in a company which is rated good today, if the company borrows regularly through the same channel for its future needs? How may this be controlled?
5. Are there any reasons why debentures might be used more often in one field of business than another? Do you regard the use of these instruments as dangerous for a company?
6. Indicate some common requirements included in debenture agreements to secure the position of the bondholder. Do you regard the better terms as good as a mortgage right? Explain.
7. For what reason does the limitation on dividend policies of concerns commonly appear in recent indentures, both mortgage and general credit? What does this do to possibilities for trading on the equity?
8. Explain whether a bond guaranteed by a company has a better position than the debentures of the same concern. What possibilities are there that a guaranty may lose its strength of claim?
9. Would you classify a guaranteed and assumed bond as the same thing? Explain your answer. Do these bonds arise from similar needs of the company?
10. Explain the way in which a receiver's certificate is a general credit bond and the position usually given such a certificate in relation to all other debts of the concern.
11. Indicate the circumstances under which a joint bond might be created. What terms of the bond would be most important for rating its security value?

PROJECTS

1. List six debenture issues found in the New York bond list or in the financial manuals. Through the use of percentage comparisons of prior liens and subsequent equities, classify the structures in which each debenture appears.
2. Make a list of four guaranteed bonds or stocks in different concerns and rank them as to value. Describe your tests and include the information for each case.

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CHAPTER X

Amortization: Sinking Fund and Serial Obligations



IT HAS been remarked that corporations are much like human beings since they are run by men and, if left to their own devices, are more than likely to fail to make adequate provision for future requirements.¹ The tendency is to allow the future to take care of itself and to let those who are in power at the maturity date worry about the repayment. There is nothing particularly wrong with such a philosophy if the management has sufficient skill and steadfastness of purpose to plan its finances so that funds will be available to meet the debt. However, this is often not done; the temptation to use available funds for other purposes, especially to avoid the unpleasantness of forced collections and to relieve the pressure for expansion, is often too great to be resisted. The result is insolvency, loan extension, litigation, failure, refunding in periods of financial stress, and other corporate financial embarrassments.

Opposing this very human attitude of directors and managers of corporations are the interests of consumers, employees, creditors, stockholders, and bondholders. Special provisions are written into the contracts of some securities whereby the total of the debt is diminished, in effect if not in fact, with the passage of time, by periodic payments on the debt or deposits against the debt. The term "sinking fund" is popularly applied almost indiscriminately to any procedure for the repayment of long-term obligations through the periodic setting aside of amounts for that purpose.²

Definitions

A serial bond is one in which a portion of the issue of which it is a part falls due periodically in accordance with a schedule of the numbers imprinted upon the bonds.³ It is not essential that exactly the same amount of bonds

¹ W. H. Lough, *Business Finance*, pp. 161 ff.

² Technically, the repayment of a debt on the "installment" plan is known as "amortization."

³ Northern Natural Gas Co. serial debentures consist of \$9,000,000 1½ per cent debentures due \$1,500,000 on each May 1 in the years 1950 to 1955, inclusive; \$16,000,000 2½ per cent debentures due \$1,600,000 on each May 1 in the years 1956 to 1965, inclusive, and \$10,000,000 2½ per cent debentures due \$1,000,000 on each May 1 in the years 1956 to 1967.

in principal amount fall due each year; in fact, it is quite common to have varying amounts of a serial issue mature at successive maturity dates.⁴ A sinking fund bond, strictly speaking, is one of the bonds of an issue in which it is provided that a series of sums shall be set aside each year, usually in the hands of a trustee, so that the total so set aside plus the interest earned upon it will be sufficient to retire the debt or a portion of it at maturity.⁵ The idea of sinking funds seems to have first originated in connection with public rather than private loans.⁶

Motives and Purposes of Sinking Fund and Serial Issues

Sinking funds and serial retirement provisions, when used in bond financing, have important and far-reaching influences both upon the financial policies of the corporation and upon the ease and technique of long-time financing. In accord with the principle of the ultimate payment of all debts, both types of financing force the gradual acquisition of the entire capital of the business by the stockholders. The serial method necessitates gradual payment; the sinking fund procedure builds up a fund, through segregation of assets, which equals the whole or part of the debt. In fact, the chief usefulness of the sinking fund consists in its ability to conserve what might otherwise be called earnings and therefore be paid out in dividends, hence to avoid undue expansion and to prevent a too lenient dividend policy. If the sinking fund be invested in bonds of the same issue, there are many likenesses to the serial retirement, though the student is warned that most important accounting and legal differences are to be considered.

⁴ American Cyanamid Co. Sinking Fund 2¼'s, due 1965, provide for semiannual payments of \$375,000 from 1950 to 1955; \$500,000 from 1955 to 1960; \$625,000 from 1960 to 1965; and \$10,000,000 in April, 1965. Hammermill Paper Co. Sinking Fund Debentures, 1945-1965, provide for retirement of \$150,000 per year from 1949 to 1952, \$175,000 per year from 1953 to 1956, \$200,000 per year from 1957 to 1960, and \$225,000 per year from 1961 to 1964.

⁵ The authors are fully aware that this definition is a narrow one. In fact, the greater amount of the discussion will here be based upon a much broader concept of a sinking fund than that indicated in this formal definition. For the most part, the discussion here will include those securities (debt contracts, as opposed to proprietorship contracts) in which any amounts are set aside from time to time in order to decrease the debt outstanding of the particular issue or some other specific issue on or before maturity. There appears to be no set policy as to how much or what proportion of a bond issue must be eradicated by these periodic payments in order that the issue may be called a sinking fund obligation. In fact, there exist bond issues with the appellation "sinking fund," in which no part of the issue bearing the name is retired; rather the sinking fund is used to retire bonds of some other issue, usually a prior lien. It would appear logical to designate as a "sinking fund" issue the one being retired, rather than the issue merely having a contractual requirement for the creation of the sinking fund.

⁶ The idea of a sinking fund as a means of extinguishing debts is easily traceable as far back as 1716, at which time England's Sinking Fund Plan was started. During the early era, say, up to 1800, sinking funds were used almost exclusively by public corporations. The literature is large on sinking funds, particularly in connection with their use by public corporations. Railroads were the first business corporations to use them to any great extent. Of late years, railroads and public utilities have been using them less frequently, while industrial borrowers are using them much more extensively.

In certain types of business, such as oil companies, mining corporations, lumber mills, etc.—producers of goods for which the market may be short-lived or in which there is a danger of exhaustion of assets—sinking funds and serial maturities operate to produce a larger equity behind the bonds than would otherwise be the case. This is particularly true during the later years of the bond issue. Increasing costs of doing business may make for increasingly strong competition, and partial retirement of the funded debt during the early years will give considerable advantage to both the bondholder and the corporation. Refinancing in periods of financial stress may be accomplished only at such high rates as may be onerous, hence it is desirable to refinance as soon as possible. The use of sinking funds not only provides for the possibility of refunding more easily but eliminates much risk that would otherwise be found. On occasion, sinking fund provisions may be used as an inducement for the exchange of bonds at refunding periods at times of adjustment in reorganizations.⁷

Advantages of Sinking Funds

When properly used, sinking funds have certain quite practical advantages in corporate financing. From the point of view of the corporation, the sinking fund inspires confidence in the business, protects the market for the securities in many instances through reinvestment, makes for a better morale on the part of the corporate management, facilitates new borrowing as well as refunding, and in general improves the financial tone of the corporation. The mere existence of a plan for debt payment is not without its influence upon other plans involving the finances of the company. The sinking fund, like the serial bond, forces the gradual acquisition of complete capital ownership by the stockholders, such acquisition being made from current earnings. Since it usually happens that bonds with sinking funds sell better than bonds without sinking funds, the corporation not only can market its securities on a better interest basis but can do so more cheaply since underwriting expenses will be higher for issues which sell less readily.

The investor feels that there is a greater assurance of the bond's being paid at maturity, that he has some protection against mismanagement of income and assets during the period of the issue, and that, since the failure to meet the sinking fund requirement ordinarily gives the same legal rights to the holder of the bond as default in either principal or interest, he is in a stronger position to enforce his claim and to obtain satisfaction thereon. Furthermore, there are some lines of economic endeavor in which the assets of the corporation consist largely of transitory values or of things of such a nature that the assets themselves gradually disappear—that is, they are depleted. Under such conditions, if there were no accumulations for the specific purpose of meeting the debt, the stockholders might be

⁷ Cf. C. W. Gerstenberg, *Financial Organization and Management*, 2nd rev. ed., pp. 279-280.

receiving dividends from capital, or at least receiving larger dividends than they should.⁸

Accounting Aspects of Sinking Funds

A "fund" is an asset; a "reserve" for a fund is a liability. If a "fund" is created on the asset side of the balance sheet without setting up a "reserve" on the liability side of the statement, there is created a special form of asset which presumably operates to take the place of another asset upon which the obligations were originally secured. It is a process of transformation; no new asset is created by addition to the old assets. If a "reserve" is set up without a proper "fund" on the asset side, a transformation of the liabilities of the corporation occurs. There is deducted from the otherwise surplus account an amount which presumably is directly available to satisfy the claim of the bonds. The theory is that if a "reserve," instead of a "reserve" and a "fund," is used, the corporation will refund the debt instead of paying it.⁹

Policies for Sinking Fund Use

It has been argued that, in the case of street railways, telephone companies, and other public utilities, the sinking fund is an injustice to the public because a rate is charged sufficiently high to retire the debt created in the acquisition of assets and thus the entire property is given to the stockholders, who, in the meantime, have been permitted a "reasonable" return on their investment.¹⁰ Instead of a sinking fund, it is argued that a "renewal and improvement" fund be used.¹¹ The argument appears to be increasingly logical as the life of the issue increases. The risk of having to refund short-term issues during periods of high interest rates would operate to negate the argument against sinking funds for short-term issues. A "renewal" fund or partial sinking fund would, through increase of the equity, increase the likelihood of financing at a desirable interest rate, even in periods of

⁸It would be interesting to know what the attitude of the courts would be in instances where dividends were paid which were earned only because insufficient depletion was charged.

⁹C. W. Gerstenberg, *op. cit.*, p. 275, note 1.

¹⁰F. K. Shrader, in *Bulletin of Investment Bankers Association of America*, April 27, 1921, pp. 228-234. The entire argument which distinguishes public utilities from other lines of business activity, as far as sinking funds are concerned, is predicated upon two propositions: (1) that the public utility is a monopoly, regulated to keep its prices to a reasonable basis, and would, if not regulated, charge much more; and (2) that the "reasonable" return to the common stock equity is arrived at after allowing sinking funds to be set aside in whole or in part. If the "reasonable return" on a "fair value" basis is determined before these debt retirement provisions are met, the entire argument falls to the ground, for the stockholders have merely elected to use, in effect, a portion of their dividends (reasonable in amount) to retire debts and to purchase an addition to their equity in the company.

¹¹National Electrical Light Assoc., *Annual Proceedings*, 1923. Quoted by W. E. Lagerquist, *Public Utility Finance*, pp. 107-113.

money stringency. It may be noted that similar reasoning is applicable to scores of economic organizations other than public utilities.

Use of sinking funds, by all corporations, creates a form of security in which the safety factor is higher than it would be without it; consequently it enables the corporation to borrow a portion of its capital at a very low rate from persons who would accumulate capital and purchase bonds only under such conditions.¹² In so far as this is true, sinking funds probably operate to cause saving and capital creation on the part of persons who would not otherwise allow their funds to be used in industry. There is an enlargement of the supply of funds for capital uses. But if the corporation borrows a portion of its capital at a very low rate, it trades on the equity of the stockholders and they obtain a higher rate of return on their proprietorship interests than they could possibly hope for otherwise. Moreover, from the point of view of a secured bondholder, some type of protection against the changes wrought by time is necessary. At the time he purchased the bond he did so with the thought of a specific security, usually as described in the mortgage or trust indenture. As time goes on, the assets acting as security against his claim may greatly change in value or, because of a variety of elements, may actually disappear, to be replaced by assets not subject to the claim of the bondholder, or which are already pledged as security against other borrowing. The result is that the bondholder feels some protection is needed against the "ravages of time."¹³

Financial Differences Between Sinking Fund and Serial Issues

There are many important differences between serial and sinking fund obligations. In the former there is actual retirement of the debt, a decrease in the amount owed; in the latter there is created a special asset, usually held by a trustee or by the corporation under limited conditions, for the express purpose of meeting a debt. If the rate of decrease in the debt through retirement by serial redemption is equal to the rate of decline in the value of the assets, the ratio of security to debt will remain constant; if the rate of retirement is less than or in excess of the rate of decline in the value of the assets, the ratio of security to debt will fall or rise accordingly. An excess of the rate of retirement over the rate of decline in the assets will give an increasing asset to debt ratio, and vice versa.

In sinking fund issues, however, in order to maintain a constant ratio between the security pledged and the debt secured, the increase in the sinking fund must be as much greater (in percentage of the bond issue)

¹² During the period 1934-1936 it was not at all uncommon to hear well-informed people say they didn't see much advantage in saving money if they only lost it when they invested. This is a psychology characteristic of severe depression.

¹³ Excellent examples of the effects of time upon assets are found in the wagon and carriage industry after the spread of the automobile, and in the gramophone industry immediately after the general appearance of the radio. Presumably these are "risks" of the trade, but they represent risks which no person can foresee, and for which provision cannot be made. In the electrical and chemical industries, it is not unlikely that similar events will mar the future of many bonds at present outstanding.

as the total of the bond issue.¹⁴ A rate of comparison would indicate that, given a fixed sum each year for the amortization of the debt, greater protection is afforded against fluctuating value of assets through application to retire a serial issue than to create a sinking fund against a bond of that type. However, the greater liquidity and smaller shrinkage factor in sinking funds as compared to assets generally will partially offset the apparently greater protection given through serial application.

Market conditions often decide between serial and sinking fund issues for the reason that sinking fund bonds sell better when the public wants long-term obligations, and serial obligations sell more easily when the public is looking for short-term securities. The marketing of serial issues is much more complicated, owing primarily to varying maturity dates,¹⁵ hence varying prices for the different dates if the bonds are sold a few points away from par so as to yield a different rate of return from the rate of interest paid on the par value.¹⁶ Many investors object to having portions of their

¹⁴ If a corporation had \$1,000,000 in assets to secure a bond issue of \$500,000, the asset ratio would be said to be 2 to 1. If the bonds were serial, a repayment of 10 per cent of the issue would be sufficient to maintain a 2-to-1 ratio with a decline of 10 per cent in the value of the assets. If the bonds were of the sinking fund type, a decline of 10 per cent in the value of the assets would necessitate the creation of a sinking fund equal to 20 per cent of the issue if a 2-to-1 ratio is maintained. That is, if the decline in value of the assets is to be offset by the sinking fund, the ratio of the sinking fund to the total of the issue must be as much greater, proportionately, as the ratio of the assets to the amount of the issue. Obviously, if the sinking fund were invested in bonds of the same issue and the bonds canceled, the sinking fund would need to retire but the same percentage of the issue as the shrinkage in the value of the assets.

¹⁵ On some occasions, serial bonds are sold at constant or equal prices for all maturity dates, but when so offered are sold only in "units" with specified proportions of the various maturity dates in each "unit." Cf. A. M. Sakolski, *Principles of Investment*, p. 86.

¹⁶ The "yield" of a bond is that interest rate which, when applied to the market or paid price of the security, will provide a sum sufficient to pay the nominal interest and offset the difference between the price and the par value. It is sometimes described as the present value of an annuity equal to the coupon values plus the present value of the principal when computed at the yield rate. It is the actual return in per cent, as distinguished from the nominal interest rate stated on the security. When securities sell above par, the "yield" is smaller than the nominal rate; when they sell below par, the "yield" is greater than the nominal rate given in the contract. The term "yield" is used with two different meanings in discussing security prices and security incomes. "Current yield" or "market yield" is the annual interest divided by present market price. Thus a \$1000 bond which carries an interest rate of 6 per cent gives an annual income of \$60. Supposing that it is selling for 105, we may compute the "market yield" as $60 \div 1050$, or 5.71 per cent. However, if the bond had a maturity date five years away, the holder of the bond would lose \$50 in five years, or an average of \$10 each year from his purchase price, for at the maturity of the bond it would be worth only 100 or \$1000. The "yield to maturity" would be found by taking this loss into consideration. In the above calculation the "yield to maturity" would be approximately equal to $(\$60 - \$10) \div \$1050$ or 4.76 per cent. The calculation of various "yields" for bonds is a relatively complicated procedure when all factors are considered. The reader is referred to the more specialized books on investments and mathematics of finance for a discussion of this subject. Most bonds are bought and sold with proper consideration for "yield to maturity."

holdings maturing at inopportune moments, so that, to market securities effectively, it is necessary to place them in the hands of persons wanting just the term of investment offered by particular bonds.¹⁷

If serial bonds are used, the corporation is bound to pay off a part of the debt or suffer default.¹⁸ On the other hand, a sinking fund may be omitted sometimes without the issue's going into default. As a matter of fact, if the trustee were to be lenient and not notify the bondholders of a default in the sinking fund provisions, it could conceivably happen that the sinking fund could be avoided by the corporation for many years without the bondholders being aware of what was going on.¹⁹ In general, serial issues are used where there is definitely no intention to refund the issue. On the whole, as a choice between pure sinking fund issues and serial issues, the argument favors the serial method since it avoids some of the uncertainties of the sinking fund, especially mishandling of the fund.

The Total Amount of Retirement

Bond issues may be retired either "in whole" or "in part"; that is, the reduction in the debt through the operation of serial redemption or through creation of a sinking fund may be complete or only partial. A sinking fund which at the maturity date retires all of the debt is said to be "complete" or "full"; a sinking fund which provides for retirement of but a portion of the issue by the maturity date is said to be "partial." The choice between "partial" sinking funds and "full" sinking funds is often contingent upon the extent to which the principle of perpetual debt may be safely employed in the particular type of economic endeavor involved. If the industry is one in which refunding operations could be profitably carried out in any but the most unfavorable capital markets, it appears wise to use only a partial sinking fund, or a serial issue in which but part of the issue matures during the life of the issue. This, obviously, is with the expectation that the public interest may be sufficiently strong to warrant a perpetual debt at the time of maturity, hence refunding the issue; or it is with the expectation that the partial retirement will operate to increase the attractiveness of the

¹⁷ There is some trouble when it is desirable to list the bonds or securities on the New York Exchange, since that body requires a separate application for each maturity date.

¹⁸ Sometimes serial bond issues are protected by *sinking funds in the same manner* that non-serial issues are. The occasion for such unusual protection to the holders of the serial bonds is usually rapid depreciation or depletion of the assets if an unusual volume of business is done. A cement company may have sufficient resources to last a period of twenty years at the expected rate of operation, and may issue a ten-year bond issue. If the rate of operations is unusually high, the resources of the company may be depleted more rapidly than otherwise. The effect would be to reduce seriously the protection of the property-secured bonds. In such cases, in addition to serial retirement, a sinking fund in proportion to the volume of business will provide protection to the bondholders in the event of an unexpected depletion of the assets, and at the same time will provide an incentive to the management through the serial maturity.

¹⁹ The Trust Indenture Act would require greater diligence of the trustee today, and the liability under the law is greater for any failure to act.

issue to such an extent that the refunding may be carried out during somewhat less opportune capital markets.

For the calculation of the exact amount to be set aside periodically, two methods are used. The first, which we may call the *actuarial* method, supposes that the amounts set aside in the sinking fund are invested at a known rate of interest, and that the total of the deposits plus the interest accumulated on them will, at the maturity of the issue, be sufficient to pay off the entire issue or a predetermined proportion of it. The second method, which we may call the *redemption* method, supposes that the amounts placed in the sinking fund shall be sufficient to redeem the bonds at their call prices. The *call or redemption method is better for the corporation if a higher rate of interest is paid on the bonds for which the sinking fund is created than can be earned through investment of the sinking fund, and the actuarial method is better in the contrary case.*

Rate of Growth of the Sinking Fund

Sinking funds are set up for (1) fixed or definite predetermined installments, (2) variable installments, (3) contingent installments, and (4) various combinations of these three.²⁰

- I. Fixed installments (regular or irregular periods)
 - a. Definite amount of money
 - b. Fixed quantity of bonds
- II. Variable installments
 - a. Conditioned by indebtedness
 1. Total amount of bonds outstanding of this issue
 2. Total amount of debt outstanding, all issues
 3. Amount of debt, other than this issue
 4. Total capitalization
 - b. Conditioned by results of business operations
 1. Volume of business in physical quantity
 2. Gross earnings
 3. Net earnings
 4. Surplus account
 5. Dividend disbursements

²⁰ For examples of many of these sinking funds, see California Oregon Power Co., due 1974; Elk Horn Coal Corp., due 1956; Walworth Co., due 1976, fixed minimum of increasing amounts, but 2½ per cent of net earnings if larger than fixed minimum and no other bonds than Series A are outstanding; Home Telephone and Telegraph Co., due 1967; Armour and Co. of Delaware, issued 1923 (provided for sinking funds at the discretion of the directors of the corporation for all series other than Series A, but has since been refunded in the consolidation of the Illinois and Delaware companies); Colorado Milling and Elevator Co., due 1960; Tobin Packing Co., Inc., First Mortgage 3½'s, due serially to 1960; Pittsburgh Coal Co., due 1949. For an exceedingly complex sinking fund arrangement see Lehigh Valley Coal Co. First and Refunding Mortgage Gold 5's, Series of 1924, due 1945-1974. A slightly different classification of sinking fund rates of growth is given in A. S. Dewing, *Financial Policy of Corporations*, 4th ed., p. 162.

- c. Conditioned by finance or assets
 - 1. Current ratio
 - 2. Sale of assets
- d. Conditioned by passage of time
 - 1. Increasing installments
- III. Contingent installments
 - a. Fixed minimum
 - b. Fixed maximum
 - c. Fixed *minimum and maximum*
 - d. Optional installments
- IV. Various combinations of first three groups

The Financial Burden of Retirements

From the point of view of the corporation, perhaps the most important problem connected with the utilization of the retirement procedures is the financial strain resulting from the segregation of revenue. Theoretically, the bond issue, if it is retired at all, should be retired out of earnings from the use of the funds over and above the interest on the bonds, or else from the disposition of the assets acquired through the proceeds of the issue. Otherwise, the stockholders will be forced to forego their legitimate dividends and, with the increasing tendency on the part of investors to insist that some sort of investment return be maintained on common and preferred stocks, the problem of sinking fund and serial issues has been increasingly important of late years. If it is conceded that the stockholders should not be forced to take a serious reduction in dividends and that it is desirable ultimately to retire the debt of the company, then the rate at which the sinking fund should grow and the rate at which serial redemption should occur would depend upon the surplus of net revenue derived from the utilization of capital obtained through the bond issue over and above the interest requirements upon the issue. The strain of a sinking fund or a serial issue upon the finances of a corporation can be illustrated in part.

Let it be assumed (1) that the interest on the outstanding bonds plus the sinking fund requirement approximates or equals a constant amount each year; (2) that the revenues from the use of the capital obtained from the bond issue increase, at first rapidly, later slowly. The total burden of the issue would then decrease during the life of the bonds. Figure 12 shows graphically the conditions described.

XX' is the total amount of the interest plus the sinking fund or serial payments while RR' indicates the net revenues derived from the use of the capital obtained from the sale of the bonds. The total financial burden upon the stockholders in the successive years would tend to decline. I is the issue date; M is the maturity date. RR' is made to turn down some time after the maturity of the issue to indicate that eventually the productivity of the assets acquired by the bond issue will diminish. Under such circumstances the stockholders would be forced to carry the bond issue, in whole or in part,

from the date of issue to some intermediate point such as T , say, five years, at which time the net revenues would become sufficiently large to carry the issue. Obviously, they should and do have a right to expect remuneration after that time for the cost carried during the early years of the bond issue. It is apparent that such a return is given in the large expansion of earnings. Should the sinking fund provision be deferred until a date such as T , the stockholders would have to carry the burden of the interest only from I to T . Under normal conditions, bonds used in financing a hydroelectric development might correspond fairly closely to these conditions. It might be pointed out that similar burdens would be found to a lesser extent if the

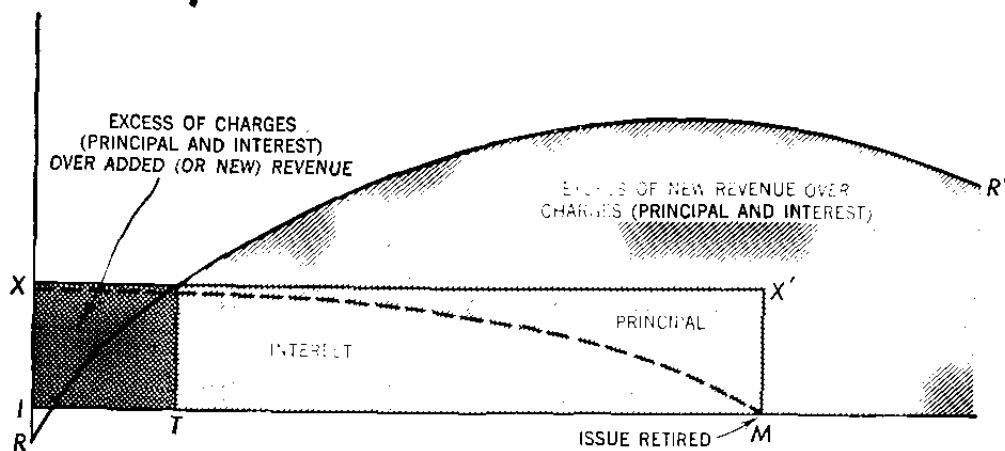


FIG. 12. The Burden of a Sinking Fund.

principle of perpetual debt had been followed and only interest paid on the bonded debt. The intermediate point, T , at which the revenues would be equal to the interest requirements, would, however, be reached much earlier.

SINKING FUND OPERATIONS

The Investment of Sinking Funds

There are many different methods of investing sinking funds.

1. *Cash Deposit.* If the company deposits cash with the trustee, it usually runs the risk of earning less on the sinking fund than it is paying on the bonds. Thus a corporation borrows at 5 per cent by means of a bond issue and provides cash to the trustee, who invests it at 4 per cent, losing 1 per cent on the amount of money tied up in the sinking fund. Ordinarily, cash sinking funds are kept purely as a temporary measure, not as a permanent proposition.

2. *Government Securities.* Deposit of the sinking fund to be invested in government securities is subject to the same objections as the preceding practice since the rate of return is not much greater upon government securities than upon time deposits with the banks in the name of the corporation or the trustee. It is probably less, in the United States, than the average rate which

could be earned by a trustee if the funds were left with the trustee to be invested in "legals for trust and savings."

3. *Securities of Others.* If the trustee or the corporation is empowered to invest the sinking fund only in the securities of other companies, the use of funds is diverted from the bonded corporation to other and, perhaps, competitive concerns. This method of investing the sinking fund has the disadvantage of risk due to a fall in the price of the securities held by the fund, so that the fund may be seriously impaired if liquidation occurs at an inopportune time.²¹

4. *Same Issue Purchases.* The most common use to which the sinking fund may be put is investment in securities of the same issue. Use of the sinking fund in this manner is advantageous for many reasons, among which we may mention the following: (a) The sinking fund is used to accomplish its chief aim, that of reducing or extinguishing the debt of the company. (b) The market for the bonds or stocks being purchased by the sinking fund receives a constant support. (c) There is less temptation for manipulation by the trustee or by the corporation. (d) The steady reduction of the existing debt improves the position of the corporation. (e) The remaining bonds outstanding receive enhanced protection unless the decline in the value of the assets is greater than the decrease (relatively) in the debt of the corporation. (f) There is created greater confidence in the management.²² Normally, if the sinking fund is of substantial size the price of the bonds is maintained by the investment of the sinking fund. A decided disadvantage of such use of the sinking fund is that the gradually declining amount of outstanding bonds operates to narrow the market and reduces the marketability of the remaining bonds.

5. *Other Company Issues.* To avoid narrowing the market, some bond issues will allow the investment of a sinking fund in other issues of the same

²¹ In 1931 and 1932 the dangers to these bonds were well demonstrated. The public was frightened; withdrawal of funds from a few banks caused them to fail. Failure of a few banks brought pressure upon many others. To maintain or to secure a highly liquid position, banks were forced to dispose of a portion of their security holdings. But this only created an added supply of the securities and forced prices of bonds still lower. The lowered prices of bonds endangered other banks, and so on. The cumulative process "broke" many securities far below their reasonable value; and a corporation having a sinking fund so invested would have found itself seriously handicapped if maturity of its own issues had to be met therefrom. Such a condition is abnormal, but must be considered as a possibility when providing that sinking funds are to be so invested.

²² It may be remarked further that sinking fund issues have a decided advantage over serial issues in the matter of default. If a corporation fails to meet its sinking fund, the matter is treated much less seriously by bondholders than if it defaults upon the payment of a serial maturity. In fact, sinking fund issues with provisions that default in the sinking fund will merely prevent dividends from being paid will sell quite as well to the average public as issues in which default of sinking funds means default in the issue and foreclosure. Truly, the psychology of many investors is a thing to be marveled at!

company.²³ If the sinking fund is invested in senior and prior claim securities, the effects upon the junior issues are approximately the same as if the sinking fund were invested in the same issue. However, if the sinking fund is invested in securities junior to the issue whose sinking fund is being invested, there is added protection only in reducing the general debt total, not directly to the bonds against which the sinking fund is created.

6. *Special Funds.* Occasionally, a special use will be made of the sinking fund, such as maintenance and repair of mortgaged properties, purchase of underlying bonds of subsidiary companies, retirement of outstanding stock of subsidiary companies, repayment to the company for properties which may act as security for further bond issues, etc. Unless properly guarded, many such uses of sinking funds offer temptations too great to be resisted by some managements.²⁴ It is considered proper to allow sinking funds to be used only for improvement purposes by corporations when the concern is one that can operate under perpetual debt, such as a public utility or a railroad company.

Anticipation of Sinking Funds

Some corporations anticipate sinking fund requirements by the deposit of extra large amounts in good years, or by actual discount of sinking fund requirements with the trustee.²⁵ Such anticipation may be practiced with wisdom, especially where the sinking fund is deferred. Unusually good business makes possible the setting aside of the sinking fund without

²³ There are two ways of treating bonds which are purchased by the sinking fund. The purchased bonds may be kept alive and interest thereon paid to the holder of the sinking fund. This is done by Chicago and Eastern Illinois First Mortgage 3 3/4 Per Cent—1985. Under such circumstances the sinking fund earns the same rate of interest as is paid on the bond issue. However, there is no actual decrease in the total cost of borrowed capital to the corporation. A second method is to cancel the bonds purchased by the sinking fund as in Cudahy Packing Co. 2 3/8 per cent—1967. This practice reduces the quantity of interest paid by the corporation. The first system could give a profit to the corporation under two sets of conditions: (1) purchase below par and (2) selling the repurchased bonds in the event of a rise in the price of the bonds. The second system, although it will usually retire the debt less rapidly, is to be preferred because reduction in the fixed charges may mean the difference between default and non-default during the lean years.

²⁴ A typical example is the California Oregon Power Co., 1922. It is generally conceded, however, that public utilities may properly use sinking funds in a much freer manner than any other lines of economic endeavor. This free use of sinking funds is based upon the principle of perpetual debt and the assumption of the continued value of the assets.

²⁵ Carthage Marble Corp., 1927; the company may pay more than the *minimum*, but such additional payment may not relieve it from making the prescribed minimum payments at future dates. Hence, in this instance, the corporation cannot anticipate the sinking fund requirement for any particular year. On the other hand, Penick and Ford, Ltd., 1924, allowed the anticipation of any year's sinking fund requirement in any other year. The Otis Steel Co. could, in any year, anticipate the sinking fund requirement for subsequent years on its 6 per cent bonds, due in 1941. Massey-Harris Co., Ltd., may anticipate not more than three years' sinking fund requirements.

embarrassing the business. In fact, on occasions it may prove to be excellent policy to defer the requirement of the sinking fund for a few years, and then meet the requirement by anticipation. A cumulative sinking fund is one in which, if the conditions do not allow the deposit of the fund in any particular year, then the corporation is bound to make up the deficit during the following year or years.

Methods of Purchasing Bonds by Sinking Funds

If the sinking fund is to be used to buy bonds of the same issue, there will be a problem of choosing the bonds to be redeemed or purchased. The following methods are common: (1) redemption by lot, (2) advertisement for bids,²⁶ (3) purchase in the open market. In order that the purchase by lot may be effective, it is ordinarily provided that the bonds may be redeemed at a fixed price, usually slightly above par. This price is known as the "call price" or the "redemption price." However, in order to allow the trustee or the corporation to take advantage of lower market prices, there is normally a provision that the corporation may, in lieu of the cash, buy the bonds in the open market and deliver them to the trustee in satisfaction of the sinking fund requirement. Investment of sinking funds in bonds of the same issue through advertisement for bids places the bondholders at a decided disadvantage, but from the corporation's point of view the practice is advantageous. On the other hand, when buyers know that a corporation is going to enter the open market, prices may move upward, and placing a limit upon the price to be paid becomes a practical necessity.²⁷

Effects upon the Equities of Junior and Senior Issues

Since it often happens that a corporation will have more than one bond issue outstanding, the effects of sinking funds upon the equities of the several

²⁶ The following item is copied from the *Wall Street Journal*, February 3, 1948: "Illinois Central Railroad invites tenders on or before February 16, 1948, of the above [Illinois Central Railroad issues named] in amount sufficient to exhaust \$20,000,000, notice to be given February 23, 1948, at a price not exceeding par." The trustee for Aluminum Co. of America 5 per cent bonds due in 1952, but retired in 1937, was required to advertise for bids on or before January 25 each year for bonds to be bought by the sinking fund.

²⁷ If the corporation has funds at any period preceding the date at which the purchase of bonds for sinking fund purposes must be made, it may take advantage of low prices and purchase bonds to meet the sinking fund requirement. The price which the corporation can afford to pay for bonds when thus purchased in anticipation of sinking fund requisites is the call price at the prospective purchase date, plus the interest on the bond during the interim, discounted at such a rate as the corporation could expect to earn upon the money in the meantime. Thus the call price of a certain 6 per cent bond callable six months from date is 104, and the corporation could expect to earn 10 per cent on money in the interim. The maximum price which the corporation could afford to pay would be \$104 plus \$3 (the interest on \$100 for 6 months at 6 per cent) discounted at a rate of 10 per cent for 6 months. At bank discount, the maximum price would be \$101.65; at true discount the maximum price would be \$101.90. As the date of call approached, the maximum price would approach \$107, or the call price of the bond plus interest due on the bond at that date.

issues necessitate some comment. The variations of the problems resulting from sinking funds being kept against several issues are many, but they are conditioned primarily through combinations of circumstances arising from (1) succession of claim and (2) investment of the fund. To take a simple illustration, let us suppose only two issues, one senior to the other. There are twelve possible combinations of these conditions in this relatively simple case. The greater the number of issues, the more complex become the problems.

Despite the seeming complexity of the problems arising from the variations suggested, most of them may be solved by the proper application of a few comparatively simple principles. Where a sinking fund is kept against, and invested in, the senior issue, the effect upon the equity of the senior issue, assuming the cancellation of the repurchased bonds, corresponds to that created through a reduction of the debt and is equal to an increase in the assets by the amount of the repurchased bonds multiplied by the ratio of the assets existing at the time to the amount of bonds outstanding. If a sinking fund is kept against a senior issue but invested in a junior security of the same company, there is no increase in the equity of the senior issue. The effect upon the junior issue may be a permanent or temporary betterment of equity position, depending upon whether the bonds of the junior issue purchased by the senior sinking fund are canceled or held as a temporary investment. Such use of senior issues by the sinking fund appears justifiable only (1) where the reduction in fixed charges through cancellation of the junior issue is greater than the reduction through retirement of senior bonds, or (2) where the rate of earnings upon the sinking fund will be greater if it is invested in junior than in senior bonds. A low redemption price on both issues would be advantageous, although open market purchase may be used to reduce the issue with a high call price.²⁸

If the sinking fund is kept against, and invested in, a junior issue, the effect upon the senior issue is nil, assuming cancellation of the repurchased bonds, but upon the junior obligations the effect is an increase in the ratio of the remaining junior bonds to the residual assets available for that issue after satisfaction of the senior claims. However, if the junior sinking fund is invested in senior obligations and these are canceled, the effect upon the equity of the junior issue is greater than in the first proposition where investment was made in junior bonds. In either case, if the bonds are kept alive, the increase in the equity is but a temporary condition, and has no effect upon the fixed charges of the business.

SUMMARY

Preparation for the retirement of obligations may be made by either sinking funds or serial maturities. The latter are viewed by the holders as

²⁸ Since bonds purchased by the sinking fund, if kept alive, are shown on the balance sheet as outstanding, non-cancellation may be a wise procedure if the bonds have a call price too far above the current price. This argument may become of considerable importance on occasion. See footnote 23, p. 197.

the more serious commitments, for a default in sinking fund does not usually lead to a default upon the loan unless long continued. The sinking fund may be operated so as to be much less a burden upon the corporation while yet accomplishing the task of debt retirement, for it is more flexible and may require less cash expenditure. Policies on debt retirement should vary, of course, as between kinds of business and the nature of the assets employed.

QUESTIONS

1. Do you think that the serial and sinking fund methods basically accomplish the same end? Outline the chief differences in their general nature.
2. Do you regard debt retirement as a prime policy for all business concerns? Would differences in the kinds of business justify variations in policy? Explain.
3. What problems are involved in operating a sinking fund requirement in a loan? Explain why the terms covering the assets which may be used in the fund are important to the concern.
4. In what ways does the serial retirement method lack the flexibility of the sinking fund method?
5. Discuss the bases upon which sinking fund retirements may be calculated. Indicate the fields in which they are particularly applicable.
6. What is meant by "anticipation" of the sinking fund? What advantage may there be in holding the sinking funds in certain kinds of assets rather than others?
7. By what methods may bonds be acquired for the sinking fund?
8. Explain how the use of sinking funds may be related to the kind of assets with which the business operates.
9. Should the sinking fund requirements be regarded as part of the cost of the capital which was acquired? In figuring an interest ratio, do you approve the definition of interest charges as the total of interest payments and sinking fund payments? Explain.

PROJECTS

1. Select four issues with sinking funds and report upon size of funds, types of funds, and other requirements. Which case is best? Justify your choice.
2. Check two serial retirement issues and show what would have been the effect of their terms on the earnings of the concerns if the retirement had been in operation from 1935 to 1945.

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CHAPTER XI

Profit-Sharing Securities

THE purchasers of bonds are interested primarily in security of principal plus a moderate but continuous income. Those who buy stocks do so principally on the basis of the potential appreciation; they are willing to accept a larger risk and a more or less intermittent but larger income than that paid to the bondholders. The former are dyed-in-the-wool, conservative investors; the latter are, not improbably, speculators. Between these two extremes of security buyers are many individuals who would be willing and able to assume some risk but who do not find themselves in a position to forego a continuous income, even though small in amount. To appeal to this great middle class of investors, corporations offer not only preferred stocks but also other securities of various types having rights to share in the prospective profits and at the same time carrying the fixed income characteristics of bonds and preferred stocks.

Again, at the time a corporation offers its securities for sale, it may be unable to do so at attractive prices. Money markets may be adverse, or public psychology may be such that certain types of securities sell on very poor terms. In anticipation of improvements in the money market and public psychology, the corporation may offer one kind of security to the public together with an opportunity to exchange such security for another of greater attractiveness at a later date. Or else a security is offered that is undesirable, but that, in conjunction with the opportunity of purchasing a more attractive security at a later date, will sell on desirable terms.

Historical Use and Development of Profit-Sharing Securities

Profit-sharing securities are not entirely new as instruments of corporation finance.¹ There have been periods when such securities were very much in fashion, and there have been intervals in which they were quite uncommon. Undoubtedly the classic example of the use of profit-sharing securities in railroad finance is the story of the Union Pacific under the guiding genius

¹ Convertible bonds have been traced as far back as 1581. Algemeinan Eisenhandels-Compagnie zu Steyer issued a security dated September 14, 1581, which could be converted into bonds. Any citizen of Steyer (Austria) could be a shareholder of the iron company, but as soon as he left the town he had to convert his shares into bonds. The Dutch West India Company in 1671 made use of convertible securities in reorganization. (*Financial Diary*, Vol. I, No. 12, p. 16.)

of E. H. Harriman. The process was simple. Bonds were sold at prices higher than the common stock; the funds were used to build up the road and to acquire subsidiaries which in turn augmented the income and made the common stock worth more than the bonds. With a rise in the price of the common stock, the bonds would be converted into common stock, which decreased the fixed charges to the company. As A. S. Dewing put it, "Reduced to its simplest terms, the device consisted in selling stock for more than it was worth, and then using the proceeds to establish its worth."² The corporation, financially speaking, lifted itself by its own bootstraps.

The following indicate the typical 1948 position of several convertible stocks and bonds placed on the market during periods of prosperity:

Name of Convertible Stock	No. of Shares	Price per Share P.S. 3-10-48	Price Paid for Stock When Secured by Conversion	Market Price of Stock on 3-10-48
Reliance Manufacturing Company, P.S., 3½%	3	\$62	\$33.33⅓	\$10½
Anderson-Prichard Oil Corporation, P.S., 4¼%	2.27	49	22.00	21¼
General Cable Corporation, P.S., 4%	3	35	16.66⅔	10¼
Twin Coach Company, P.S., \$1.50	1.33	26	26.25	10¼
Consolidated Retail Stores, P.S., 4¼%	1.43	40	35.00	11¼
McCrary Stores Corporation, P.S., 3½%	2.50	92	40.00	29

Name of Convertible Bond	No. of Shares per \$1000 Bond	Price of \$1000 Bond 3-10-48	Price Paid for Stock When Secured by Conversion	Market Price of Stock on 3-10-48
Chicago & North Western Railway Co., 4½, 1999	15	\$ 605	\$ 66.66⅔	\$15
Chicago, Rock Island & Pacific Railway Co., 4½, 2019	10 Pf.B.	771	100.00	51½
Consolidated Gas, Electric Light & Power Co., 2½, 1962	25	1060	60.00	66½
Hygrade Food Products Corporation, A6, 1949	20	1030	50.00	16
Public Service of Indiana, 2¼, 1962	25	997.50	40.00	40¼

² For a longer story, see T. W. Mitchell, in 21 *Quart. J. Ec.* 569.

Classes of Profit-Sharing Securities

When securities are surrenderable to the corporation in exchange for certain other securities, usually of the same corporation, this exchange process is known as "conversion."³ A second general group of profit-sharing securities are not surrenderable, but have what are known as "warrants," detachable or non-detachable, which give the owner of the warrant the right to purchase additional securities upon specified terms.⁴ The primary difference between the two groups is that in the one instance (warrants) the privilege is to *purchase* securities, while in the other (convertibles) the privilege is to *exchange* securities. Any type of security may be sold to the public with these privileges attached, although by far the most common are fixed-charge securities such as bonds,⁵ notes, and preferred stocks. Com-

³ A typical example is the Consolidated Gas, Electric Light and Power Co. Debenture 2½'s due in 1962, which are convertible into twenty-five shares of common stock for each \$1000 bond.

⁴ Bowser, Inc., \$1.20 Cumulative Preferred Stock (par value \$25) is an example. Each share of stock has attached a non-detachable stock purchase warrant evidencing the right to purchase one share of common stock, par value \$1 per share, at the price of \$18 per share on or after May 15, 1946, and on or before May 14, 1948; \$20.75 per share on or after May 15, 1948, and on or before May 14, 1950; and \$24 per share on or after May 15, 1950, and on or before May 14, 1952.

⁵ Practically every frill imaginable is used on occasion in financing by bonds in an adverse money market. Classic examples were the debentures of the Associated Gas and Electric Co., now merged with the General Public Utilities Corp. From 1927 to 1929 this company was able to sell bonds (debentures) on a 5½ per cent yield basis, including conversion privileges which at one time caused the bonds to go above 140. Yet in 1932, when refinancing and refunding operations were attempted, great difficulties were encountered. It was currently known that the concern was in a weak position for several reasons: (1) pyramiding was very extensive and the common stocks of some subsidiaries were earning less than the rate being paid on the bonds of the parent holding company; (2) there was a growing criticism of public utility holding company operations, which finally emerged as an investigation by the Federal Trade Commission; (3) the common stocks and the bonds of the company were much depressed in price; and (4) the public was afraid to buy anything, irrespective of its goodness or badness. The company, after due consultation with investment banking interests, decided to bring out a 40-million-dollar issue to meet some 6 millions of bank loans, 3 millions of purchase money obligations, and 26 millions of obligations of subsidiary companies. The balance of about 5 millions was to be used for general corporation purposes. The inducements added to these bonds included the following: (a) The bonds were participating to the extent of 1 per cent if dividends were paid upon the preferred stock, an additional ½ per cent if dividends were paid on the Class A stock, and an additional 1 per cent if any cash dividends were paid upon the common stock. (b) The principal and interest were guaranteed by the Associated Gas and Electric Corp., a subsidiary corporation of the issuing company, but which at least owned or controlled the operating subsidiaries. This factor in itself was self-admitted evidence of the weakness of the parent company. (c) Each bond carried a stock purchase warrant exercisable any time between 1933 and 1948, under which one share of common stock could be bought for each \$100 bond. The purchase privilege was protected against dilution through split-ups, merger, etc. (d) The bonds were issued in denominations as low as \$10—"baby bonds" as they were designated. The theory behind these very small denominations was both to reach the small

mon stocks are seldom issued with conversion privileges and, as far as the authors know, never with purchase privileges.

On occasion there is created a privilege-bearing security which includes the ownership of certain other securities not purchasable separately and not ownable separately from the original security.⁶ This amounts to outright sale of two kinds of securities in a unit, neither being salable separately. The advantages of such peculiar provisions are difficult to find. Not much different from such instances are those in which the purchase of the privilege-bearing security carries with it the ownership of a fixed amount of the common stock of a company, or the voting trust certificates representing the common stock of the company.⁷

The discussion will be confined to the first two general classes of securities, namely, convertibles and warrant-bearing securities.

SECURITIES WITH EXCHANGE PRIVILEGES

The Conditions of Conversion

The conditions of conversion, while multitudinous in variety, can be classified under a small number of major headings and studied accordingly. Conversion contracts normally contain clauses governing the following circumstances: (1) the kind of security into which conversion may be made, (2) the ratio of conversion, (3) the period of time within which the conversion may be exercised, and (4) protection against dilution of the conversion privilege.⁸

Kind of Security into Which Conversion Is Permitted. The customary direction of conversion is that of exchanging a senior security for a junior security. Thus bonds, debentures, and notes are converted into preferred

buyer and to prevent individual baby bonds from coming back into the market because of the prohibitive commissions to brokerage houses (minimum of \$1.25 per bond usually). (e) The company and the guarantor agreed not to create any additional debt, not to pledge assets, not to pledge stocks of important subsidiaries, not to sell assets of subsidiaries except to apply to the bonds, etc. The offering was first made to holders of the company's stock, the offer being at par and calling for a minimum of \$3 per \$10 to accompany the subscription contract. The balance was to be paid in installments within about six months—two dates being set in June and October. The bonds were offered in March at par (to yield 8 per cent), and by the first of June, 1932, were not all sold. In this particular case, it is not unlikely that the addition of so many frills deterred rather than aided the distribution.

⁶ Aldred Investment Trust 4½ Per Cent Debentures, due in 1967. Each \$500 and \$1000 debenture is accompanied by a certificate for five and ten shares, respectively, of common stock. Neither shares nor debentures are transferable separately until after the maturity of the debentures.

⁷ Waldorf-Astoria First Sinking Fund 7's, due in 1954 but exchanged in a bankruptcy reorganization in 1936, were accompanied by a non-detachable warrant entitling the holder to receive without further cost, on January 1, 1931, or earlier at the option of the corporation, common stock without par value in the ratio of two shares for each \$1000 principal amount of bonds.

⁸ The conversion clause will usually limit the extent to which conversion may be exercised.

or, most usually, common stocks; preferred stocks are converted into common stocks.⁹ Long-term bonds are usually converted into stocks; short-term notes are converted into longer-term bonds, redeemable preferred stock, or common stock. At any event, the usual direction of conversion is that of a shorter- for a longer-term security, a process of staying or indefinitely postponing the maturity of debt created through the sale of convertible securities. Indeed, from the point of view of the corporation, *the whole conversion process represents a method of selling stocks on a deferred delivery plan, instruments being given to guarantee good faith in the meantime, or until such time as the purchaser of the convertible security is willing to assume the risks of the junior security.* From the point of view of the purchaser, the conversion arrangement is merely a device for giving the purchaser a choice of holding either stocks or bonds, but holding the bond first, and, if a change is made, requiring him to continue holding the stock. The conversion works in only one direction.

Ordinarily the securities into which the privilege-bearing securities may be converted are those of the same corporation. Two important exceptions are noted, however. Holding companies not infrequently provide for the conversion of the preferred stocks or bonds into the stocks of subsidiary companies, and vice versa.¹⁰ In the case of collateral trust issues, the conversion into any or some of the pledged securities.¹¹

The Conversion Ratio. The ratio of conversion defines the amount of the convertible security to be given in exchange for a fixed amount of the security into which it is to be converted, or else it defines the amount of security to be given by the corporation in exchange for a fixed amount of the convertible security. Thus a \$1000 bond is to be exchanged for ten shares of stock, or ten shares of stock will be given in exchange for a \$1000 bond. (If the shares have a par value, the conversion ratio is commonly stated in terms of par value.) Ordinarily, the scale of conversion is fixed at the time the convertible security is issued.¹² In those instances where it

⁹ In rare instances, and usually because of extraordinary circumstances, stocks are made convertible into bonds and common stocks into preferred stocks. Class A stocks, which are really preferred stocks in most instances, are sometimes convertible into Class B shares. The A stock of the North American Creameries, Inc., was convertible into Class B if the Class A stock was called for redemption under the redemption provisions in the stock. The company was reorganized in 1936.

¹⁰ Cf. *infra*, special types of conversion. The motives leading to such conversion are not at all clear. The argument of simplification of capital structure through intercorporate conversion appears valid only when the conversion occurs from a security of a subsidiary company to a parent company.

¹¹ Chesapeake Corp. Collateral 5's, due in 1947, were convertible after May 15, 1932, and, until subsequent redemption (retired) or maturity, into the pledged stock. As usual in such conversion contracts, protection is given against dilution of the equities represented by the pledged securities.

¹² A third type of variable conversion ratio, represented by the cases in which the ratio is subject to change by the corporation, the trustee, or other agencies, is known as the *contingent conversion ratio*.

is not fixed, provision is always made for its *determination upon a definite basis* by the corporation or other parties.

If the exact ratio of conversion is not one of fixed amount, it is commonly a sliding scale. Such sliding scales are used to approximate the expected increase in the real value of the stocks (which is, perhaps, only another way of referring to the credit status of the company) and to speed up conversion in order to bring about a reduction in fixed charges more rapidly than would otherwise happen.¹³

A type of sliding scale conversion is illustrated by the 5 Per Cent Cumulative Convertible Preferred Shares of Jessop Steel Company, which are convertible into common stock of the company on the following scale:

To Dec. 31, 1947	\$17.50 per share
Dec. 31, 1947, to Dec. 31, 1948	18.50 per share
Dec. 31, 1948, to Dec. 31, 1949	19.50 per share
Dec. 31, 1949, to Dec. 31, 1950	20.50 per share
Dec. 31, 1950, to Dec. 31, 1951	21.50 per share
Dec. 31, 1951, to Dec. 31, 1952	22.50 per share
Dec. 31, 1952, to Dec. 31, 1953	23.50 per share
After Dec. 31, 1953	25.00 per share

Some care should be taken in determining both the price at which the convertible bonds are offered to the public and the exchange ratio of the bonds for stock. If the effective price at which the stock is sold by the corporation to the public is less than par for par value stocks or less than a fair value for no-par stocks, liability will be assumed by the conversion.¹⁴ Moreover, the management of the corporation is bound, whether in the contract or not, to maintain the contract for conversion in the status of the date of the sale of bonds in substance.¹⁵

The Period of Conversion. An interval during which conversion may

¹³ A rapidly increasing price for the stock into which the bond may be converted speeds up conversion. It would correspond to a declining number of shares per \$1000 bond, hence make it tempting for the bondholder to convert soon in order to secure a larger number of shares for each bond.

¹⁴ *Sturges v. Stetson*, Fed. Cas. No. 13,568 (1858); *Carver v. Southern Iron & Steel Co.*, 78 N.J. Eq. 81 (1910).

¹⁵ *Gay v. Burgess Mills*, 30 R.I. 231 (1909), is a classic example of an attempt to alter substantially the nature of the shares into which bonds were converted. In this instance a local manufacturing corporation with an authorized capital of \$1,000,000 divided into 10,000 shares of \$100 par value sold 6000 shares of stock and \$400,000 bonds. The bonds were convertible, for three years, into 10 shares of the capital stock of the par value of \$100 each. Because of financial difficulties, the company reduced its capital stock to \$10,000 by reducing the par value of stock from \$100 to \$1. It then raised it to \$1,000,000 consisting of one million shares of a par value of \$1. The new stock was offered to the old stockholders in proportion to their holdings, the corporation receiving \$594,000 cash for stock issued at par. (Some of the old shares were surrendered.) The directors then declared a dividend from the surplus, payable 5 per cent semiannually for five years. Action was brought by the bondholders to protect their position. The court held that they were entitled to protection and that the bondholders were entitled, upon conversion, to "an identical aliquot part of the authorized capital stock."

occur may or may not extend throughout the life of the issue. In general, it is convenient to classify conversion periods according to the following:

- A. Conversion privilege *beginning at the date of issue, or very soon thereafter*, and extending for a short time only, usually two to five years. Such a term may be called *immediate limited conversion interval*.
- B. Conversion privilege *beginning a short time after the original issue*, usually two to three years, and extending for a limited period only, usually five to ten years. Such a term may be referred to as a *deferred limited conversion interval*.
- C. Conversion privilege *beginning several years after the issue* and extending throughout the issue's existence. Such issues are often made very attractive in the conversion ratios but will usually include a call feature allowing the corporation the right to prevent the conversion.

Protection Against Dilution of Conversion Privileges. If a corporation has outstanding, at the time of the issue of a convertible bond, stock into which the bond is convertible, the value of the conversion privilege is in part conditioned by the amount of such stock outstanding or likely to be outstanding at the time of conversion. Should the corporation, prior to conversion, issue additional stock in the same or a superior class, each share of stock obtainable under the conversion contract would represent a smaller equity of the protective earnings and, accordingly, have a smaller market value. It would be bad faith, if not dishonest, for the corporation to issue such additional stock without compensating the purchasers of its securities having conversion privileges with respect to the stock.¹⁶ Conversion privileges of the better type contain protective features against the dilution of equity through issue of additional stock, sale of other securities having stock purchase warrants, consolidation or recapitalization changes in stock structure, payment of stock dividends, and other events which might impair the value of the conversion privilege.¹⁷ If a corporation is regularly paying a stock dividend instead of a cash dividend, exemption is usually made of

¹⁶ It is believed that courts would protect the holder of convertible securities unless the conversion contract specifically provided to the contrary. Cf. A. A. Berle, *Law of Corporation Finance*, pp. 138-139. See also *John Hancock Mutual Life Ins. Co. v. Worcester R.R.*, 149 Mass. 214 (1889); *Gay v. Burgess Mills*, 30 R.I. 231 (1909). The rule appears less certain in par value than in no-par shares. *Hodgman v. Atlantic Refining Co.*, 300 Fed. 590 (1924); *Pratt v. American Bell Telephone Co.*, 141 Mass. 225 (1886); *Sutliff v. Cleveland & Mahoning Valley R.R.*, 24 Ohio 147 (1873). The rule of fair value for new shares will hold in any event.

¹⁷ *Twin Coach Company \$1.50 Cumulative Convertible Preferred Stock* protects the convertible privilege as follows: (1) If the basic conversion price of the common stock is adjusted, the adjusted conversion price will in no case exceed the basic conversion price. (2) In the event of capital reorganization, reclassification of shares, statutory consolidation or merger with another corporation, or sale or other disposition by the company of its property, provisions are made whereby the holders of the preferred stock are entitled to receive the same kind and amount of securities and other assets issuable or distributable with respect to the number of shares of common stock into which such preferred stock is then convertible.

any dilution of the common stock through this process.¹⁸ In rare instances corporations go so far in protecting the conversion from dilution as to give the convertible security controlling vote or nearly controlling vote over future issues.

Special Conversion Contracts

The discussion thus far has concerned itself chiefly with the ordinary conversion contract. There are some special conversion contracts which may be mentioned briefly. These may be called: (1) *double conversion*, in which two or more issues are convertible into the same security;¹⁹ (2) *optional conversion*, in which the conversion may be made into two or more securities;²⁰ (3) *discretionary conversion*, in which the act but not the terms of conversion is dependent upon the discretion of the corporation or other individuals; (4) *contingent conversion*, in which the act of conversion is contingent upon unknown or uncertain events, usually not the decision of individuals;²¹ (5) *mixed conversion*, in which a single security must be converted into two or more securities according to a fixed ratio; and (6) *inter-corporate conversion*, in which the securities of one corporation are convertible into the securities of other corporations.²²

Reasons for the Use of Convertibles

There can be no doubt but that convertibles are used chiefly for the purpose of marketing issues at prices that would be impossible without the conversion privilege. In a sense, the effect of using the conversion privilege is analogous to substitution of a lien upon future earnings for a lien upon other properties in the present. In any event, convertible securities enable the corporation to borrow more money at the same cost, or the same amount of money at a lower rate, than would be possible without the privilege. It does not follow, however, that convertible securities are used only

¹⁸ Standard Investing Corp. 5½ Per Cent Convertible Debentures exempted the 1¼ per cent quarterly stock dividend. Public Service Co. of Colorado 3 Per Cent Convertible Debentures did not exempt stock dividends.

¹⁹ Duquesne Natural Gas Co. \$5 Preferred Stock, no par, and Duquesne Natural Gas Co. \$4 Preference Stock, no par, are both convertible into common stock.

²⁰ Anglo-American Telegraph Co., Ltd., ¾ per cent ordinary stock may be exchanged for equal portions of preferred ordinary and deferred ordinary at any time between January 1 and March 31 in each year.

²¹ The conversion clause of Eastern Utilities Associates convertible stock is an example of contingent conversion. When earnings for two consecutive calendar years available for distribution as dividends on the common and convertible shares shall have been not less than \$2.40 per share per annum on the outstanding common shares, plus \$1.20 per share per annum on the outstanding convertible shares, the convertible shares shall be convertible at the option of the holder at any time or from time to time thereafter into common shares at the ratio of two convertible shares for one common share.

²² Western Power Corp. Collateral Trust 5½'s were convertible into the common stock of the North American Co. Alleghany Corp. Collateral Trust 5's, due in 1950, were convertible into six shares of the corporation's cumulative 5½ per cent preferred stock, Series A, without warrants, and ten shares of its common stock.

by weak concerns. Some of the strongest corporations in the country issue convertible securities. The certainty of receiving interest upon the investment is not increased by the addition of the conversion privilege, but the potential appreciation is increased.²³

The popularity of the convertible security is partly attributable to the combination of the strength of a prior claim with the speculative characteristics of junior securities. If a corporation has already issued junior securities to the limit of appeal to the speculative buyer and has issued bonds as far as is justified by its properties and yet is in need of still more capital, it may appeal to the great middle class of investors who insist on some security of income, but who are willing to pay something for the potential appreciation of junior securities. Moreover, the market characteristics of convertible securities offer an attraction. As a general rule, when bonds are in a bad way because of speculation in common stocks, the convertible security will hold its price because of its speculative value; and, when stocks are depressed, the convertible will hold its price because of its investment characteristics. Any increase in the dividend rate operates to raise the price of the convertible, as would be the case with the stocks of the company; any decrease in the dividend rate, while it operates to reduce the price of the stocks generally to an appropriate yield basis, will merely reduce the convertible to its investment level.

Drawbacks to Convertible Securities

If bonds are offered with privileges of conversion into preferred or common stock, there is at once a potential increase in the outstanding stock of the corporation. As a result, as far as the present stock prices are composed of discounted future earnings, equities in those future earnings will be decreased and the market values of present stock diminished. The present stockholders find the market values of their holdings decreased, not only because of the new bonds outstanding, but also because of potential stock outstanding. However, it is presumed that they have voluntarily assumed this potential reduction of earnings equities and consequent surplus distribution.

Another feature of the convertible security which sometimes proves disturbing is the liability of stockholders when stocks are acquired from the corporation for less than their par value. The growing popularity of no-par stocks appears to be gradually eliminating this undesirable characteristic of convertible securities.²⁴

²³ This potential increased in the value of the security, Dewing has pointed out, is the result of three factors: (1) the excess of income over fixed charges, (2) the present and potential market price of the security into which the bond or preferred stock may be converted, and (3) the interval during which the conversion may or must be made.

²⁴ No-par stocks may not be sold for any price. The courts have repeatedly held that additional shares may be sold only at a reasonable or fair value. It would be but a simple extension of this logic to the proposition that bonds convertible into no-par shares must be sold at a price that would make a reasonable and fair valuation upon

A third difficulty is that the unconverted portion of an issue may be injured by the conversion of a part of it. As an increasing proportion of any issue is removed from the market, the market for the remainder of the issue becomes more and more restricted. Another drawback of the convertible security is the apparently inequitable treatment of the holder of risk-bearing securities. During hard times the holders of non-convertible securities, especially stockholders, hold the bag on the basis of prospects. But, because of the conversion privilege, they are partially prevented from securing anything more than prospects during the good years, for as soon as there are large profits to be divided, the holders of convertible bonds will convert and demand their share of the unusual profits. It would appear that this argument is sound and certainly of considerable importance if the ratio of convertible securities to non-convertible securities is high.

Tax laws both at the time of issue and at the time of conversion offer certain difficulties to the use of convertible securities. There are federal taxes and state taxes affecting both stocks and bonds. Thus when bonds are converted into stock, the income of the corporation will be increased by the amount previously used to pay bond interest. This added income (for tax purposes) will be reduced by the percentage of the tax on corporate incomes in effect at the time.²⁵

Finally, convertible securities represent a continuous threat against the existing control of the company, for it is practically always possible for those desiring control of the corporation to purchase bonds and convert them into stock. While such jeopardy of management control may operate as a whip to force the existing control to be more careful and more efficient, it may not lead to the greatest effort since the prospective conversion would detract from the fruits of such extension and application.

SECURITIES WITH PURCHASE PRIVILEGES

The second general class of securities with profit-sharing characteristics includes those sold with a contract under which the holder of the contract has the privilege of purchasing additional securities at a future date. Generally, such contracts are known as "warrants." Sometimes they are referred to as "stock purchase warrants," "allotments," or "allotment warrants," or merely as "privileges." As far as the corporation is concerned, the exercise of a purchase privilege amounts to the sale of new stock at the privileged price. The proceeds may and should be used for the same purposes as

the no-par shares at the time. See *Hodgman v. Atlantic Refining Co.*, 300 Fed. 590 (1924). However, the rule apparently does not extend to the surplus of the company. *Pratt v. Amer. Bell Telephone*, 141 Mass. 225 (1886); *Sutliff v. Cleveland & Mahoning Valley R.R. Co.*, 24 Ohio 147 (1873). For a good legal discussion, see A. A. Berle, *Law of Corporation Finance*, pp. 140 ff.

²⁵ The taxes would be (1948 Revenue Act): (1) 38 per cent on the added net income; (2) the possibility of a tax on any surplus in excess of the reasonable requirements of the business.

funds derived from new stock sales. If the proceeds are used to retire fixed debt, the effect upon the corporation is that of transforming debt into proprietorship.²⁶ The remainder of this chapter will be devoted to a discussion of the characteristics of these contracts.²⁷

Leading Characteristics of Purchase Warrants or Privileges

The value and usefulness of purchase warrants are the resultants of five characteristics. These are (1) period or life of the privilege, (2) detachability of the warrant, (3) nature of the purchasable security, (4) amount of the security purchasable, and (5) the price to be paid for the additional securities. Each of these characteristics must be considered both in relation to the policy of purchase and sale of privileges and in relation to their use by the corporation. There are other characteristics, sometimes less, sometimes more, important.

Life of the Privilege. Ordinarily the life of the purchase privilege is less than the life of the security to which it is attached.²⁸ A tabulation of all privileges attached to bonds appearing in Moody's Manuals in 1947 showed that the average ratio of the life of the privilege to the life of the bond was 92 per cent and that the average number of years during which the privilege could be exercised was 14. The listing of such privileges has steadily decreased since 1935. In no instance was the life of a bond privilege greater than 25 years or less than 1 year. A similar tabulation of privileges attached to preferred stocks gave an average life of 6.2 years. The range was from one year to the life of the security, some preferred stocks appearing to have perpetual privileges since there was no limit on the life of the privilege and no redemption clause in the stock. In the case of warrant right of American and Foreign Power Company, Inc., it has been issued without limitation as to time, and unattached, to purchase common stock at \$25 per share. Occasionally, the purchase privilege is made exercisable only after a lapse of time such as two or three years after the issue of

²⁶ Struthers Wells-Titusville Corp. First 5½'s with warrants provided that any moneys received from the exercise of warrants would be used to purchase bonds for retirement.

²⁷ These privileges should not be confused with stock rights, which are privileges given to existing holders exclusive of any contract. It is almost impossible to exclude all anticipation of rights and their prospective value when the stock of an old, long-successful corporation, which has followed a practice of giving rights from time to time, is offered for sale. The purchaser of the securities of such a corporation will include the expected value of the rights quite as he would the value of a purchase warrant. However, there is no binding contract upon the corporation to give such rights; the purchaser of the stock includes a value for the expected rights at his own risk. Stock rights and privileged subscriptions are discussed in Chapter XXIII.

²⁸ Havana Electric Ry. Co. Gold Debenture 5½'s, due 1970 (extended), were issued with warrants entitling the holders to subscribe for stock at any time prior to September 1, 1951. The Cady Lumber Corp., however, had 6½ Per Cent Sinking Fund Bonds with attached warrants which were exercisable during the entire life of the issue whether the bond to which the warrant was attached originally was called for redemption or not.

the privilege.²⁹ The life of a privilege contract may or may not extend beyond the date at which the security to which it is attached matures or is redeemed.

Detachability. Some warrants are detachable at any time; some are not.³⁰ Some are detachable after a certain date; others are detachable only upon redemption.³¹ Whenever privileges are detachable, if detached they may be bought and sold in the market separately from the security to which the privilege was originally attached. Detachability of the privilege gives to the holder an option to hold either (a) the privilege-bearing security and the warrant, or (b) the privilege-bearing security and the purchasable security; whereas a non-detachable privilege denies such freedom of choice and action. Non-detachable warrants are usually detachable in the event of redemption. If the warrant becomes void at the time of redemption, it is customary to allow a definite number of days within which the warrants may be exercised. Not infrequently the date of expiration of warrants is after the date of redemption.

Nature of Purchasable Security. Almost without exception, privileges to purchase securities are privileges to purchase a form of security junior to that to which the purchase warrant is attached. Debenture and mortgage bonds carry privileges to buy preferred and common stocks; preferred stocks have purchase contracts giving rights to buy common stocks; a non-voting common stock with a superior dividend claim may carry a privilege to buy voting common with a subsequent dividend claim. Privileges given to purchase the securities of other corporations are usually restricted to subsidiary companies and presumably represent simplification of the inter- and intra-corporate financial structure.³²

Amount of Security Purchasable. If the purchase privilege is detachable from the security with which it is sold, the effect is exactly the same as if the corporation offered two classes of security for sale, one to which the privilege was originally attached, usually a superior obligation of the cor-

²⁹ In 1928 Merritt-Chapman and Scott Corp. offered 6½ per cent cumulative preferred stock, Series A, par \$100, with a warrant detachable after December 1, 1929. This warrant entitles the holder to purchase at any time one share of common stock at rates which vary with the passage of time.

³⁰ The 160,000 shares of \$3.50 cumulative preference stock offered in 1928 by Thompson-Starrett Co., Inc., carried non-detachable warrants entitling holders to receive without cost after January 1, 1930, or earlier at option of bankers, one share of common stock in respect of each share of preference stock. For an example of a detachable warrant, see Merritt-Chapman and Scott Corp. 6½ per cent cumulative preferred stock.

³¹ Each share of the first preferred stock of Crosse and Blackwell Co. (1944) had a non-detachable warrant entitling holders to receive one-half share of common stock of the consolidated company to be issued and delivered when the share of first preferred stock to which the warrant was attached was redeemed by the consolidated company.

It will be noted that some warrants are detachable by the owner, others by the corporation, and a few only by the trustee.

³² Under a recapitalization plan, the Illinois Traction Co., as holder of all the old common stock of the Illinois Power Co., received transferable warrants to purchase one share of new common at \$30 per share after May 1, 1938, and on or before May 1, 1948.

poration, and another which is purchasable by the privilege, usually an inferior security of the corporation. The ratio of the offering would be the ratio between the privilege-bearing securities actually sold and the number of shares purchasable under the warrants divided by the fractional share represented by each warrant.³³ The size of the fractional share of each warrant is proportional to the difference between the current price and the privilege purchase price, divided by the current price of the purchasable security. Thus if a bond carries a privilege to purchase one share of stock at the price of \$50 when the current market price is \$55, the fractional part would be one-eleventh of a share. A corporation offering 10,000 such bonds for sale to the public at a price of \$1005 each would be accomplishing the same effect as if it offered for sale 10,000 bonds and 9090 shares of stock at par and current market, respectively. As the present market price of the stock moves upward from the privilege purchase price, the fractional equivalents increase; as the current price falls, the fractional equivalents diminish.

The Price to Be Paid for the Additional Securities. If it is the intent of the corporation, at the time the privileged securities are offered for sale, to give a real value to the privilege, then the price at which the privileged purchases may be consummated must be reasonably certain of falling below the future market price of the security purchasable under the warrant. Since there is no possibility of forecasting the price of a security years in advance, the value of the privilege is likely to be only potential. Past records of the corporation are the most potent arguments in ascribing a real value to privileges. In a sense, *the investor purchases a bond and makes a down payment on a stock which he hopes will justify his purchasing it in the future.* Because of this "down payment," the corporation finds he will more certainly buy the stock.³⁴

It is the more common practice to have the price of purchase increase, the further away the date of exercise is from the date of issuance of the warrants.³⁵ A typical example would be the warrants of Dixie Gas and

³³ That is, a corporation offering \$10,000,000 in bonds, with a warrant to buy 5 shares of stock at \$25 attached to each bond, really makes two offerings: (1) \$10,000,000 in bonds; and (2) 50,000 shares of stock. Assuming a par of \$25 for the stock, the offering was 1/9 stock and 8/9 bonds, the payment for the stock being optional.

³⁴ Of a very different character are the warrants which were originally attached to the Class A preferred shares of Consolidated Hotels, Inc., a subsidiary of Consolidated Public Service Corp. (Los Angeles). In this instance, the preferred stock carried warrants which entitled the owner to obtain, after May 1, 1931, an equal amount of common stock upon presentation at the corporation's transfer office. The holder of the preferred share was entitled to receive cash dividends, stock dividends, and stock rights issued to common stock during the three-year period of waiting. The only possible object of such provision is the control of the corporation with a minimum of capital during this period.

³⁵ Some warrants or stock purchase privileges are redeemable. Those of Bowser, Inc., could be redeemed upon thirty days' published notice. If the stock purchase privileges were called for redemption, the subscription warrants of these bonds could be exercised up to the date of redemption.

Utilities 6½ per cent bonds, entitling the holder to purchase common stock at a rate of 10 shares for each \$1000 bond at \$11 per share to February 1, 1929; at \$12.50 thereafter to February 1, 1931; at \$14 thereafter to February 1, 1933; and at \$15 thereafter to February 1, 1938, when the bonds matured. The theory of such prices is that of the continued progress and success of the company—not an unreasonable basis, if not overdone. The financial stratagem is that of causing the owner of the purchase privilege to exercise his privilege to buy junior issues while the price is yet low.

Protection of the Privilege Against Dilution

The value of a purchase privilege, like that of a conversion privilege, may be diluted through changes in the capital structure of a corporation between the time the warrant-bearing security is sold and the date when such warrant is exercised. Bonds may be issued or retired; new preferred stock may be issued; stock dividends may be given through capitalization of surplus.³⁰

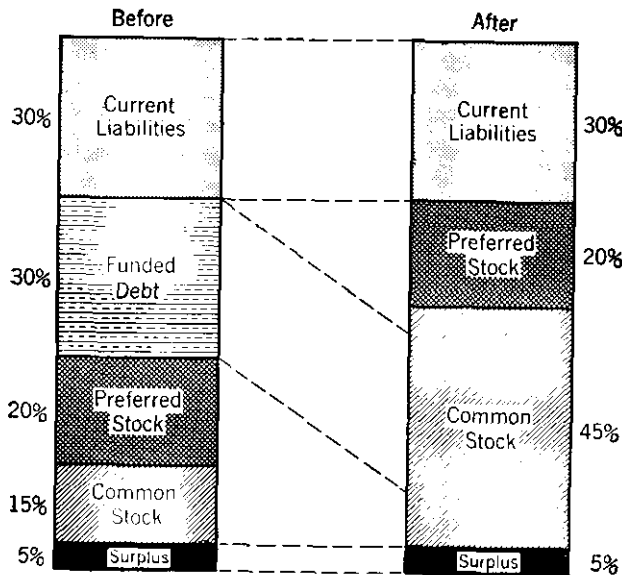


FIG. 13. The Structural Effects of Conversion: Case 1.

Structural Effects

The structural effects of financing by convertible and privilege-bearing securities may be illustrated by the following cases. In the first case, no privileges are used. A convertible bond issue is sold and later converted into common stock. Figure 13 shows the effects upon the financial structure. It is assumed that all the bonds are converted. If only a portion of the issue is converted, then the funded debt would not entirely disappear and the

³⁰ The same general legal rules hold for purchase warrants as for convertible securities. See A. A. Berle, *op. cit.*, pp. 146-147.

increase in the common stock would be lessened accordingly. The important point is the increased extent of proprietorship from 40 per cent originally to 70 per cent after conversion, indicating a lessened extent of trading on the equity. It is assumed that other things remain the same over the period. The changes that are a direct result of the financing are as follows: (1) The bonded debt disappears by reason of its conversion; (2) the common stock into which the bonds were converted is increased by the amount of common stock, not necessarily equal to the amount of the bonds converted, given in exchange for the bonds.

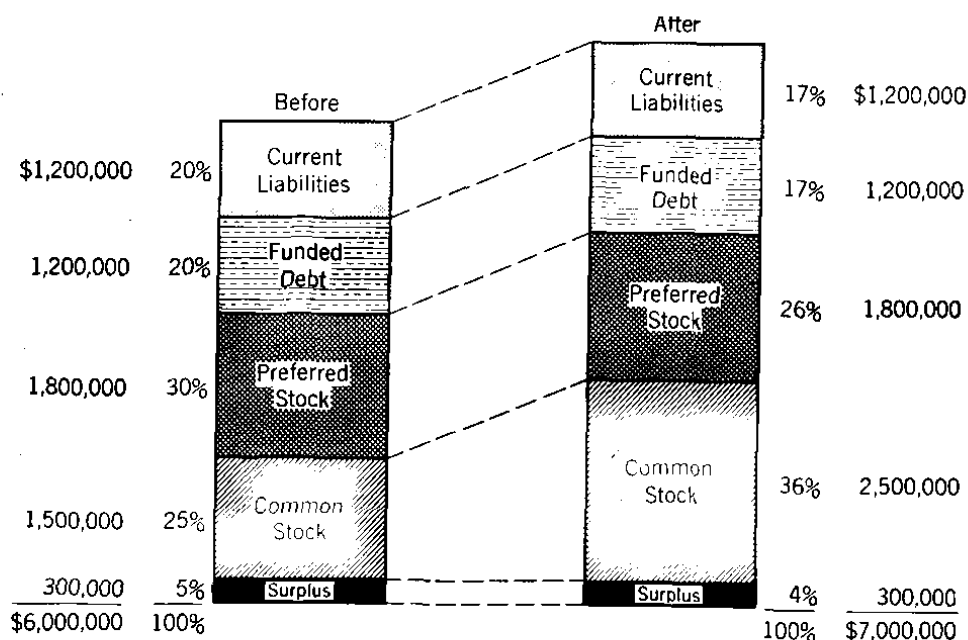


FIG. 14. The Structural Effects of the Exercise of Stock Purchase Warrants: Case 2.

In the second instance it is assumed that the bonds bear warrants to purchase common stock, and that the proceeds of the exercise of warrants are used for other corporate purposes than that of retiring the bonds. Figure 14 shows the effects.

The effects of greatest importance are (1) increased protection given to the preferred stock by reason of the larger amount of common stock outstanding; (2) increased protection given to the bondholders by reason of the increase in the total proprietorship interest, namely, the preferred and the common stock, to a total sum of \$4,300,000. In most instances there would be a decrease in the amount of the funded debt through redemption or the use of a sinking fund. However, this was not considered in the illustration. Thus, in dollars the amount has not changed, but as a percentage of the total capital it has decreased. Since the bonds were not retired, there would be an increase in the assets equal to the proceeds derived from the sale of stock under the purchase privileges.

SUMMARY

Profit-sharing securities become, therefore, devices for interesting the security buyer in immediate purchase of one class of securities possessed of priorities in rank, but with the option of changing the buyer's position at known prices into a junior security. The attraction of this junior security is the potential earning capacity in which it may share. Thus the security buyer is induced to buy out of the combined motives of a present certain security and an option on a potential profit-making security. The exercise of the option for the profit-making security may be accomplished by exchange (conversion) or by the purchase of the security at the special prices granted (warrants).

Hence the company may find that a conversion reduced its prior securities outstanding but increased its equity group. If the warrant device is employed, the company will possess cash derived from the issuance of further equity securities. The company will now be enabled either to retire prior securities by redemption or to add to its total investment.

QUESTIONS

1. Why would a security holder be interested in exchanging his bond for stock in the company? How would the ratio of conversion affect his attitude?
2. Explain why conversions usually hold for limited periods of time and why the ratios of exchange shift in these periods. Which way do the ratios shift? Why?
3. How does the issue of other securities by a concern become a matter of interest to the holder of a security with the conversion right?
4. What is the basic motive for offering convertible securities? What sacrifice may the company be making by such an offer?
5. Explain the relation between the prices of a firm's securities which are linked by conversion rights. Will the differential in prices remain fixed? Explain.
6. How do a conversion right and a warrant right differ? Is there a separate instrument covering the right in both instances?
7. What is meant by a "detachable" and a "non-detachable" warrant? Is one type more likely to induce the use of the right?
8. Explain how a company's purposes may differ in using conversion rights in one situation and warrant rights in another. What price does it pay for granting these postponed contract rights?

PROJECTS

1. Select two convertible issues from a current market list and report their current position. Examine the past five-year record of their conversion, and indicate whether or not the exchange has ever been profitable.
2. Report the results on the structure of the American Telephone and Telegraph Company if it exercises conversion in 2 $\frac{3}{4}$ s, 1957. Indicate the dif-

ference in book value of the stock which would result. At current prices, what does the transaction cost the company, if anything?

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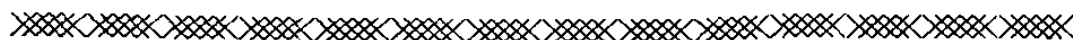
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CHAPTER XII

Lease and Purchase-Equity Obligations



MORTGAGE and collateral trust obligations are fundamentally based upon the assets to which a corporation possesses clear title; general credit obligations are essentially founded upon the ability of the management to produce an income and its integrity in the application of that income to discharge the corporation's debts. In the *discussion of both types of securities*, it was noted that not uncommonly assets to be acquired in the future through *purchase money obligations* were specifically exempted.¹ This chapter will be devoted to a review of *equipment*² obligations.

Lease and purchase-equity obligations are secured by one of two things: (1) a legal right or contract involving the use of assets or (2) equities in assets being or to be acquired. They may be issued by one of the four different parties, hence be the direct obligation of (1) the producer of the assets, (2) a trustee who temporarily holds the assets, (3) an independent corporation which either temporarily or permanently owns the assets, or (4) the corporation using the assets. In every case the *use* of capital assets is immediately acquired by the corporation later to acquire clear ownership, and payment is made directly or indirectly to the producer of the assets at once or in accordance with a schedule of payments contained in the contracts. Securities growing out of the *use or rental contract* are illustrated by leasehold bonds and some types of equipment trust securities issued by railroads, steamship companies, traction companies, patent holding corporations, etc. Securities based upon conditional sales contracts and purchase money mortgages such as these plans of issuing equipment obligations find their essence in the *acquisition* of assets, as opposed to *ownership* of assets.

Conditions Precedent to the Use of Lease and Purchase-Equity Obligations

There are many conditions which must be met before a corporation may safely rely upon the use of lease and purchase-equity obligations as a means of acquiring the use of capital. The use of the assets which are directly or indirectly pledged must be paramount to the corporation, and the assets

¹ That is, the *prior liens* acquired only rights against the residual value after complete satisfaction of the purchase money obligations.

² So called because they were first used in connection with railway and transportation equipment.

should be the direct revenue-producing elements in the capital assets of the concern. For security they should be of such a nature that they are quickly, easily, and cheaply movable, and they must be capable of direct use by any other concern engaged in a like line of industrial endeavor with a minimum of adaptation expense. Many divisible units, each more or less identical to the other, in which the life of the assets is definitely longer than the life of the securities issued against them, are further desirable elements.³

Railroad companies find rolling stock fits into these requirements perfectly; steamship companies find that steamships come close to fitting all of them, at least sufficiently so that the arrangement is rather frequently used by such corporations; tank car lines, traction companies, street railways, interurbans, truck transportation companies, bus companies, airlines, etc., all directly concerned with transportation, find that this device is admirably adapted to their needs. But the same element may also be extended to other types of enterprises such as vending-machine organizations, machinery leasing companies, patent holding companies, and others.

Origin and Development of the Equipment Obligation

The origin of the equipment security is found in the early history of the railroads, when it was patterned after certain barge-line securities. These were not greatly different from the provisions of the modern equipment obligations.⁴

The Financing Plans for Equipment Acquisition

There are many different methods of financing the acquisition of equipment. Only the more frequently used can be outlined in a general way: (1) the lease plan, (2) the conditional sale plan, and (3) the equipment mortgage plan.⁵ Each of these plans has variations, although the lease (Philadel-

³ There is some question as to whether this holds true in actual practice outside the railroad field. Cf. A. S. Dewing, *Financial Policy of Corporations*, 4th ed., Vol. I, pp. 210-211.

⁴ The earliest agreement examined by the writers is that between the Rhode Island Locomotive Works and the Chicago and Illinois Southern Railway Co., dated August 21, 1871, quoted in *Hervey et al. v. R.I. Locomotive Works*, 93 U.S. 664 (1876). This agreement was for the purchase of "one locomotive-engine and tender complete named Alfred N. Smyser No. 3" by the railroad company. The company paid \$1150 in cash and was to pay \$3580.16 in six months, \$3647.90 in nine months, and \$3715.90 in twelve months, a total of \$12,093.96. The railroad company agreed to keep and maintain the said locomotive-engine and tender in repair, but provided that "injury by collision, by running off the track," or by fire was not to be considered "reasonable and ordinary wear and tear." The company gave the seller a right to seize the locomotive-engine and tender in the event of default and to sell it for the unsatisfied liens against it, including selling and legal expenses. The locomotive works agreed that upon receipt of the last payment it would pass clear title to the railroad.

⁵ Variations, such as the mortgage collateral plan and the preferred stock plan, may be used but are not numerous.

phia) plan is probably sufficiently standardized in most states so that the deviations are inconsequential.

1. *The Lease Plan.* The lease plan is a simple lease arrangement. It is commonly known as the "Philadelphia plan" by reason of its origin in that city and the fact that in Pennsylvania conditional sales contracts may not be security for borrowing from third parties. The procedure is as follows:

The railroad company delivers to the car manufacturer an order for the equipment which is to be delivered to a "car trust," to which the railroad company makes a down payment and gives an agreement for lease at an

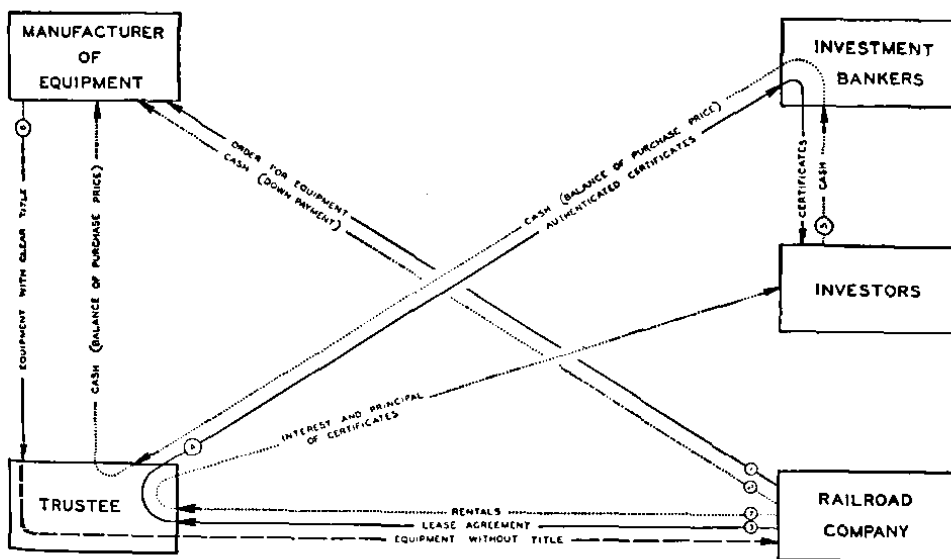


FIG. 15. The Philadelphia Plan of Issuing Equipment Obligations: Case 1.

annual rental. The car trust redelivers the lease of the railroad company and the title to the equipment to a holding trustee who then authenticates the car trust certificates and gives them to the car trust. The authenticated equipment trust certificates are sold to investment bankers, who resell them to the public. The annual rental agreed to under the lease is sufficient to pay the interest on the outstanding certificates and to retire them at maturity. In Figure 15 the relations are diagrammed.

Under the plan, the primary liability for payment of the certificates rests upon the car trust. After the car trust, the liability rests upon the equipment and the lease, and, through the lease, upon the general credit of the railroad. The railroad has not the slightest vestige of title until all rental payments have been completed. Upon completion of all payments, the holding trustee delivers title to the equipment to the railroad company.⁶ Most equipment obligations are issued upon this basis at the present time.

⁶For a typical provision of the I.C.C. regarding the title to the equipment under such leases, see 82 *I.C.C. Rep.* 55, authorization of the Elgin, Joliet and Eastern Railway Company. It reads, in part: "Until all obligations under the lease have been paid, title to the

2. *The Conditional Sale Plan.* The conditional sale plan is commonly known as the "New York plan." The mechanics are as follows:

The manufacturer of the equipment makes an agreement with the trustee under which the trustee is to sell equipment for it (to a predetermined buyer). The title to the equipment is transferred to the trustee. The trustee makes an arrangement to sell the equipment to a railroad company for a down payment and a series of notes, but under it the title remains with the trustee until all notes are paid. The trustee gives the notes and down payment to the car manufacturer in full payment of the equipment. The manufacturer wants his money at once, and since the notes are in negotiable form, he simply sells them to an investment banking group, which in turn resells them to the public. The railroad company pays the interest on the notes and retires them at maturity. When all the notes have been retired, the trustee delivers clear title to the equipment to the railroad company.⁷ Under this plan the fundamental liability rests upon the railroad company and then upon the equipment, the title to which has been retained by the trustee.⁸

3. *The Equipment Mortgage Plan.* The mechanics of the equipment mortgage plan may be explained briefly:

The railroad company gives a purchase money mortgage for the equipment to a trustee as security for bonds to be issued. The trustee delivers authenticated bonds to the railroad company, which sells them to a group of investment bankers, who in turn resell the purchase money mortgage bonds to the public. The cash derived from the sale of the bonds and the down payment by the railroad company is used to pay the manufacturer of the equipment at once. When the railroad company has retired the purchase money mortgage bonds, title reverts to it. In the meantime it has but a residual equity claim against the equipment. The plan is best used where there do not exist mortgages with after-acquired property clauses, though the disadvantages of its use in conjunction with after-acquired property clauses are much more apparent than real.⁹

Evaluation of the Different Plans

The plans described cover more than 99 per cent of the equipment financing which is done in the United States. To state with finality that any one

equipment is to remain in the trustee for equal and proportionate benefit of the bonds at any time outstanding. When all requirements have been complied with, and upon the payment of \$100 to the trustee, it will transfer the title to the applicant."

⁷ For an example see Southern Pacific Co. conditional sales agreements—promissory notes.

⁸ The notes are in bearer form and are not usually endorsed by the manufacturer of the equipment. Such an endorsement might be of value in reinforcing the investment position of the notes, but it would operate, in effect, to a guarantee of the notes of the railroad by the equipment manufacturer. Weak railroads might be thus aided in buying equipment.

⁹ Duluth Missabe and Northern Railway Co. Equipment 2½'s, due serially to 1952.

of the plans is good, or bad, or best, cannot be done—certainly not without further experience. At least three points of view must be considered: (1) that of the manufacturer of the equipment, (2) that of the railroad, and (3) that of the investing public. The bondholders and the stockholders of the railroad, if they may be considered as representing group interests distinct from the corporation, must also be given some attention.

Nature and Amount of Security

In the various plans there is a difference in the quality, though not necessarily in the quantity, of the security.

Earlier, about nine-tenths of the value of the equipment was covered by the issue of bonds; hence there was but a 10 per cent equity protection at the outset.¹⁰ In 1948 the original equities of the railroads in equipment appeared well concentrated in the zone of from 20 to 30 per cent.¹¹ Marine equipment obligations have a larger equity protection than those for land equipment.¹²

Equipment issues in 25 per cent of issues in 1915 were secured by a single type of equipment,¹³ whereas modern equipment trust obligations often include more than one type of equipment.¹⁴ In fact, it is not uncommon to

¹⁰ Cf. Kenneth Duncan, *Equipment Obligations*, p. 43.

¹¹ An investigation of 400 issues outstanding in 1931 showed the following distribution of original down payments as a percentage of the cost of the equipment:

Less than 10 per cent	1
10 to 14	2
15 to 19	16
20 to 24	112
25 to 29	195
30 to 39	44
40 to 49	25
50 and over	5

In 1941 the Freeman report on 279 issues showed that original down payments averaged 24 per cent of the cost of the pledged equipment. Studies in 1948 verify the 24 per cent average.

¹² Hamburg-American Line 6½'s, Marine Equipment Gold Bonds (Serial) were issued only to the extent of 26 per cent of the \$25,000,000 purchase of ships in 1925. The company made a down payment of \$18,500,000. The Pacific Atlantic Steamship Co. paid \$4,068,759 cash against a purchase of \$5,818,759. Their equity was 70 per cent, and equipment trust bonds were issued to the extent of 30 per cent, or \$1,750,000. In the case of both steamship companies, maturities were deferred two and three years, respectively, to 1928 and 1931. The deferment of maturities and the larger degree of risk involved in marine equipment possibly account largely for the greater original equity of the corporation.

¹³ A. S. Dewing, *Financial Policy of Corporations*, 1926 ed., p. 195.

¹⁴ A typical modern equipment trust issue would be the Equipment 2¼'s, Series N, of the Pennsylvania Railroad Co. which were issued in 1943 and guaranteed as to principal and interest by the Pennsylvania Railroad Co. The equipment included under this issue for \$12,400,000 was:

- 5 electric passenger locomotives
- 51 steam locomotives and tenders
- 30 steam locomotive tenders
- 1000 composite (steel and wood) gondola cars
- 6 Diesel-electric switching engines

find quite a variety of equipment other than rolling stock included in the listed security for equipment obligations.¹⁵ Guarantees are common—in fact, the ruling practice under some of the plans.¹⁶

The Term and Maturity of Date

Before 1900 most equipment obligations were for five years or even less; from 1900 to 1910 there was a definite trend toward ten-year terms; and from 1910 to 1920 a good many issues were put out with fifteen-year maturity. At the present time a fifteen-year maturity date is much more common.¹⁷ Where commercial banks have entered this field, they have usually adhered to a five- to ten-year term. In the competition since 1940 for satisfactory loans many of the major commercial banks have entered the equipment note field by the purchase of entire issues. The increase in the average maturity of equipment obligations may be traced to several factors, among which the more important are (1) increasing financial stability of the railroads; (2) closer supervision over the companies, especially the adoption of uniform accounting methods; (3) the past record of equipment obligations as investments, which has been most satisfactory; (4) the better grade and longer life of equipment, due especially to all-steel construction, which has not only increased the period of usefulness but greatly reduced hazards of fire and destruction through accidents,¹⁸ and (5) the

¹⁵ In addition to security of 28 locomotives and 2426 cars Southern Pacific Co. Equipment 2¼'s, Series O, due serially to 1952, are also secured by 1 gasoline-operated locomotive crane.

¹⁶ For illustrations of guarantee contracts see New York Central Railroad Co. Equipment 2's, due serially to 1953; New York, Chicago and St. Louis Railroad Co. Equipment 3's, due serially to 1951; Chesapeake and Ohio Railway Co. Equipment 1¼'s, due serially to 1951; Chesapeake and Ohio Railway Co. Equipment 1¼'s, due serially to 1953; and Pennsylvania Railroad Co. Equipment 2¼'s, Series N, due serially to 1958.

¹⁷ Kenneth Duncan, *op. cit.*, p. 51, states: "Equipment obligations usually have a maximum term of ten years, although there appears to be a decided tendency in very recent years to bring out fifteen-year issues. In the early history of equipment obligations five years or less was the usual term." The outstanding issues in 1948 for the major railroad companies showed 45 per cent in the ten-year maturity class and 55 per cent with maturities of fifteen years or over. The issues in the first three months of 1948 showed 66⅔ per cent in the ten-year maturity group and the balance in the fifteen-year group.

¹⁸ The actual rates used by railroads in depreciating equipment would give an apparent life to rolling stock of some twenty-five years. A tabulation of the rates of depreciation of the larger railroads appeared in *Statistics of Railways in the United States*. The following is a summary:

	Locomotives	Passenger Cars	Freight Cars	Work Equipment
Minimum rate of any road	2.7%	2.4%	2.4%	2.6%
Average rate of all roads	3.2	3.0	3.4	3.8
Maximum rate of any road	4.8	4.7	4.3	4.9

The rates are applicable to the cost value of the equipment and would permit a useful life of about twenty-five years if a junk value of 15 per cent is assumed.

The cost of depreciation and retirement of equipment is but a fraction of the total cost to the railroad company, since it represents, on the average, less than one-half of the

ease with which equipment may be disposed of in the open market. Undoubtedly the favored position given equipment obligations in receiverships has aided.

Rate and Method of Retirement

Equipment obligations are almost universally paid off through annual payments with about nine-tenths of the equipment obligations retireable through level annual payments.¹⁹ The remaining 10 per cent of the equipment securities fall into two classes: those with increasing maturities and those with decreasing maturities.²⁰ Of the various methods, that of decreasing installments appears to be financially the soundest. The total cost of capital to a corporation must be the cost of rentals (if that method is used

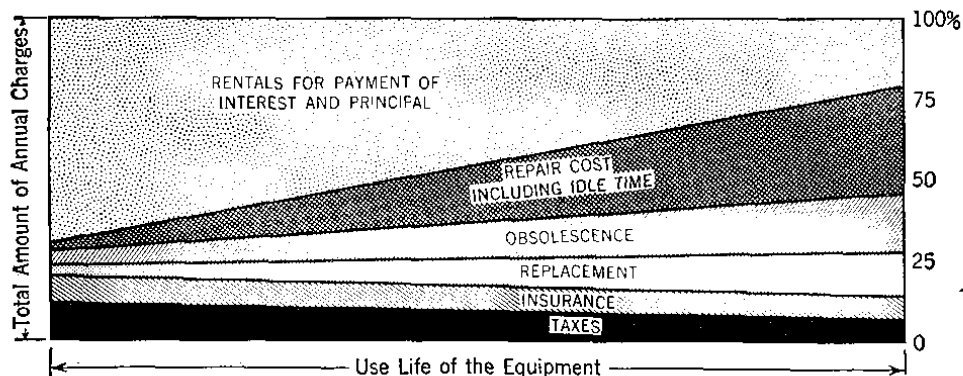


FIG. 16. The Availability of Charges to Meet Interest and Principal of Equipment Obligations from a Constant Payment (Total Cost) by the Railroad Company.

as an example) plus the costs of repair, insurance, taxes, and replacement in the event of destruction. Insurance and taxes would probably be decreasing in amount, replacement by reason of destruction slightly increasing, and repairs rapidly increasing. The sum of these costs, when considered from year to year, would be of an increasing order. The usefulness of the

repair cost. For 1945 the average, per unit of equipment, for the entire United States, was:

	Locomotives	Passenger Cars	Freight Cars	Work Equipment
Cost of repairs	\$4406	\$67	\$927	\$79
Cost of depreciation and retirement	1132	53	430	70

¹⁹ New York, New Haven and Hartford R.R. Co. Trustees' Equipment Trust 3's, Series of 1936, are due serially to 1951 in the amount of \$205,000 to be paid each September 1. Cincinnati, New Orleans and Texas Pacific Railway Co. Equipment 1 1/4's, Series J, are due serially to 1953 in the amount of \$98,000 to be paid each April 15 and October 15.

²⁰ For an example of decreasing maturities, see Boston and Maine Railroad Equipment 4's, No. 6, due serially to 1949. On December 1, 1943, a payment of \$88,000 was made; and each June 1 and December 1 thereafter until maturity the amount of \$87,000 was to be paid. Chicago, Burlington & Quincy Railroad Equipment 1 1/2's, due serially to 1948, have an increasing maturity. On August 1, 1944, the amount of \$498,000 was paid; thereafter on each August 1 until maturity the amount of \$499,000 was to be paid.

equipment would be of a decreasing order, owing to the growing extent to which idleness for repair is induced with the age of the equipment. In order, then, properly to adjust the burden on the railroad, assuming that it has a constant opportunity to use the equipment, the larger installments would be made to fall in the early years. Figure 16 will illustrate the total of these effects.

Less than 5 per cent of the equipment issues make provisions for call or redemption prior to maturity.²¹

The Equity Problem in Equipment Obligations

The theory upon which the acquisition of capital through the lease and equity-purchase obligation is based is that of increasing equity, namely, that the relatively large down payment gives a substantial equity protection to the purchasers of the equipment securities at the outset and that the rate of retirement of the securities will more than offset the decrease in the

TABLE 18. SHOWING THE EQUITY PROTECTION IN THE 2½'S, DUE IN 1952, OF THE NEW YORK, NEW HAVEN & HARTFORD RAILROAD AT ASSUMED RATES OF DEPRECIATION APPLIED TO THE ASSETS

Year	Amount of Issues Outstanding	Amount Retired in Year	Value of Property	Per Cent Depreciation on Original Cost of Property	Amount of Depreciation	Margin of Safety
1942	\$2,940,000	\$	\$3,735,000	10	\$373,500	27.04%
1943	2,646,000	294,000	3,361,500	9	336,150	27.04
1944	2,352,000	294,000	3,025,350	8	298,800	28.63
1945	2,058,000	294,000	2,726,550	7	261,450	32.49
1946	1,764,000	294,000	2,502,450	6	224,100	41.86
1947	1,470,000	294,000	2,315,700	5	186,750	57.53
1948	1,176,000	294,000	2,166,300	4	149,400	84.21
1949	882,000	294,000	2,016,900	4	149,400	128.67
1950	588,000	294,000	1,904,850	3	112,050	223.95
1951	294,000	294,000	1,792,800	3	112,050	509.80
1952		294,000	1,680,750	3	112,050	

The values in the first column are as of the end of the year.

value of the equipment against which the outstanding securities have a lien. If the rate of decline in the value of the assets exceeds the rate of reduction in the debt, the equity protection would decline. Maintenance of a substantial excess value over the outstanding liens then becomes an exceedingly complex function of many elements, among which depreciation, obsolescence, state of repair, book value of assets, sale value, earning capacity value, and quantity of debt are the more important. Deferment of the initial

²¹ In 1948 a study of 75 equipment trust securities of 19 major railroads showed only 3 of them were callable. By contrast a tabulation of 463 equipment trust securities outstanding in 1932 indicated that 88 of them, or approximately one-fifth, provided call or redemption prices.

retirement installment on the debt operates to reduce the equity by the amount of the decline in the value of the asset during the deferment interval.

Table 18 has been prepared to illustrate in a simple manner the problem of equity. The decline in the value of the assets is merely an assumed rate, but it is reasonable in the light of railroad experience. The use of a greater rate of debt retirement in the initial years would have been desirable in this instance. In fact, it appears that the rate of retirement of the debt should be a function of both the financing ratio and the depreciation rate. A properly formed trust would provide for the retirement of debt at such a rate as would keep a constant ratio of protection between the asset value and the outstanding debt.

Cost of Capital Under Equipment Financing

Analysis of the coupon rates of equipment securities shows that they, like other securities, respond to the periods of the business cycle and general financial conditions. Figure 17 shows the average coupon rate for issues

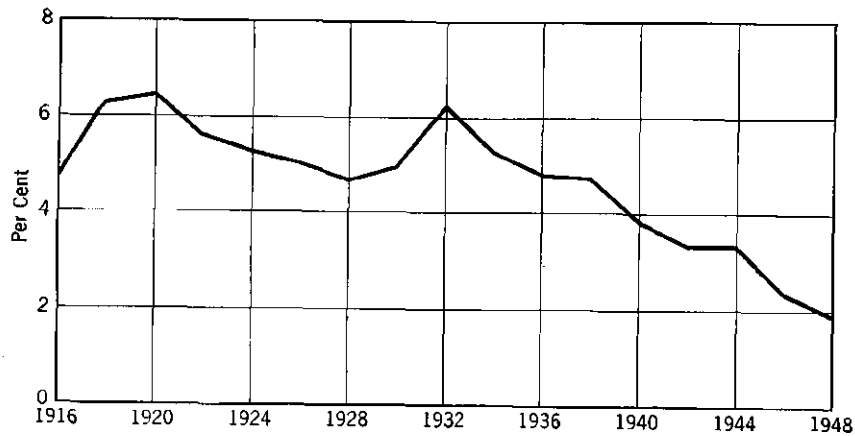


FIG. 17. Changes in the Average Coupon Rate of Equipment Obligations, 1916 to 1948. (1916-1930 Based on Offerings; 1932-1948 Based on Maturing Issues.)

from 1916 to 1948. Because of the relatively short term for which equipment obligations are issued, they carry a coupon rate which closely approximates their yield rate. It follows that the coupon rate would reflect the cost of acquiring capital with a reasonable degree of accuracy.

The cost of borrowing capital on the equipment obligation is essentially a reflection of the quality of the securities issued as investments. If they offer better than usual investment characteristics, the cost of obtaining capital under equipment obligations will be less than under other forms of financing; but if the equipment obligations are poorer than other securities, then the cost of obtaining funds in this manner will exceed the cost by ordinary financing. The essential characteristics of an investment include the following elements: (1) safety of principal; (2) certainty of income;

(3) adequacy, stability, and continuousness of income; (4) stability of market price; (5) marketability; (6) legality of the claim represented by the instrument (validity); and (7) potential appreciation.²²

Reinforcement of Lease and Purchase-Equity Obligations

The value of some of the plans for issuing equipment obligations is partly based upon a reinforcement through a guarantee of the rental under the lease, or a guarantee of the principal, and interest or dividends under the bonds or certificates. There are five methods of reinforcement:

1. Guarantee of rentals.
2. Guarantee of conditional sales notes.
3. Lease and guarantee of principal of certificates.
4. Lease and guarantee of interest of certificates.
5. Lease and guarantee of interest and principal.

By far the most common practice is the guarantee of principal and dividends under the Philadelphia plan.²³

Equipment Obligations in Receivership and Reorganizations

Because of the dominance of the Philadelphia plan of issuing equipment obligations,²⁴ under which the railroad acquires no vestige of title to the equipment until completion of payments upon the lease, or, under the New York plan, until the completion of the payments of the conditional sales contract, the holders of these securities find they occupy a very favorable position in all receiverships and reorganizations.²⁵ The courts have recognized on several occasions that the payment of the outstanding equipment obligations operated to improve the relative position of the company's creditors and bondholders.²⁶

²² This list does not include those additional elements which are commonly stated as requisite for a good investment to the individual. It defines the *quality* of the investment; its *suitability* for any individual investor must be further tested by other elements, among which the more important are (1) satisfactory denominations; (2) satisfactory maturity dates; (3) freedom from care and management; (4) diversification position and possibilities; (5) ease of determining current price, i.e., listed vs. unlisted securities; (6) location of remainder of the issue; (7) public attitude toward the particular company and security; (8) position of the security with respect to tax laws; and (9) ability of the individual to protect his position.

²³ Under the Philadelphia plan the interest which is paid upon the certificates is called a "dividend." The public regards these payments as interest while the courts merely refer to them as dues.

²⁴ Out of all equipment obligations outstanding in 1943, over 90 per cent were issued under the Philadelphia plan.

²⁵ The receiver of a railroad is not bound to assume the liability of the railroad under the various equipment trusts involving mere contracts for use under a lease or conditional sale, and he may within a reasonable time after accepting the position of receiver elect to adopt or to reject these contracts.

²⁶ See Chicago, Milwaukee, St. Paul and Pacific Railroad Co. trustees' equipment; Chicago, Rock Island and Pacific Railway Co. trustees' equipment; Denver and Rio

Receiver's certificates have been issued in a number of instances to retire the outstanding equipment obligations;²⁷ in others the courts have specifically ordered the receiver not to default on the equipment obligations.²⁸ Even in those cases in which the railroad receiver has permitted the equipment to be taken by the trustee, the holders of the equipment obligations have usually been able to secure their full payment.²⁹

It is positively averred by one writer that equipment obligations occupy an exceptionally strong position in both receivership and reorganization, there being but few instances in recent years in which the holders of these securities were required to accept any compromise of their claims.³⁰

SUMMARY

Equipment obligations have been developed to fit the special needs of railroads, primarily as a method of cheapening equipment purchases and avoiding the after-acquired property clause in their mortgages. The procedure used in the equipment certificate has been applied in limited degree outside the railroad field, chiefly because the equipment is not standard or is not easily moved. The need for reequipping plants to overcome rising labor costs and *factors of obsolescence will strongly influence the added use of this contract in the industrial field.* Some use is made in the public utility field for buses and small municipal generating power installations.

QUESTIONS

1. What general objectives are served by the purchase-equity obligation when employed by a concern?
2. Name the several methods by which the obligations may be set up, and outline briefly the major points of difference in their legal effect.
3. Explain how the amount of the down payment and the rate of depreciation on equipment are related in the soundness of the obligation.
4. The rates on purchase-equity obligations seem small compared to the interest on mortgage obligations of companies. Are there costs in the former not accounted for by the rates?
5. Why has the issuance of purchase-equity obligations been confined so largely to the railroad field?

Grande Western Railroad Co. trustees' equipment; and New York, New Haven and Hartford Railroad Co. trustees' equipment trust, all being undisturbed in their respective receiverships created since 1933 and terminated by 1948.

²⁷ See Central of Georgia's Receiver's Equipment 4's, Series T, due serially until 1952.

²⁸ See the most current study of Freeman and Co. *Equipment Trust Securities* (New York), a publication which has been issued in series for more than twenty years.

²⁹ An exception is the case of the Florida East Coast Railway Co. Equipment 5's to 1939. When these were defaulted, the trustee sold the equipment. Each holder of a \$1000 certificate has received about 60 per cent of the par value of his certificate.

³⁰ For the period 1931 to 1940 only three bankrupt railroads extended maturities and two roads exchanged their certificates for other obligations of the same par value but at a reduced rate of interest. Freeman and Co., *Equipment Trust Securities* (New York, 1940).

6. What treatment is usually accorded the obligations in the event of the firm's receivership? Why has it been allowed?
7. In comparison with general interest rates, do the rates of purchase-equity obligations seem to have gained or lost in their relative position? What is your explanation?

PROJECTS

1. Report on the types of equipment issues offered in the past year, including classification of interest rates, types of security, amount of equity, and length of issue.
2. Examine the situation in three railroad reorganizations completed since 1940 and report on the treatment of equipment obligations.

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CHAPTER XIII

Short-Term and Current Finance Instruments



CORPORATIONS seldom obtain their entire capital by long-term financing; in fact, unless the concern does solely a cash business—that is, pays cash for all purchases and receives cash for all sales and services—it will either give or receive the use of capital through the extension of credit for a longer or shorter time. In the immediately preceding chapters the instruments of long-term financing have been discussed. Although the dividing line between long- and short-term financing cannot be drawn with precision, the different provisions found in the instruments of short-term finance are sufficiently important to warrant separate consideration.

For purposes of the discussion here, the following more or less arbitrary distinction has been adopted: (1) long-term financing will include financing of ten or more years; (2) short-term financing will cover periods of from one to ten years; and (3) current financing will cover less than one year.¹

The Sources of Short-Term and Current Funds

Capital or its practical equivalent, credit, for short-term use is to be obtained from a wide variety of sources. The following tabular presentation will provide a means of obtaining a bird's-eye view of these sources:

- I. Financial institutions
 - A. Banks—commercial
 - 1. Loans
 - 2. Discounts
 - 3. Acceptances
 - 4. Overdrafts (in England)
 - 5. Warehouse receipts
 - 6. Trust receipts

used as collateral

¹It is recognized that this distinction is not entirely in universal use, completely logical, or consistent with current business usage. Some business financiers contend that financing of more than five years is long-term financing; others argue that long-term financing should be for ten years or more. The expression "current financing" has not been widely used, but has merit. Short-term financing, if new, is essentially for capital during a period of favorable activity, or, if refunding, to forestall maturities. Both types are characteristic of points in the business cycle, and hence should be eliminated by repayment, if for the former; or by long-term refinancing, if the latter.

- B. Commercial paper houses
 - 1. Sale of receivables
 - 2. Discounts of notes
- C. Note and acceptance dealers and brokers
 - 1. Sale of customers' acceptances
 - 2. Sale of own acceptances
 - 3. Sale of bank acceptances
 - 4. Sale of customers' notes
 - 5. Sale of own notes
- D. Commercial credit houses
 - 1. Pledge of receivables
 - a. notes
 - b. acceptances
 - c. open accounts
 - 2. Sale of receivables
 - 3. Pledge of inventory
- E. Finance companies
 - 1. Installment contracts
 - 2. Other customer paper based upon property security
 - 3. Pledge of inventory
- II. The investing public
 - A. Sale of stock
 - B. Sale of bonds
 - C. Sale of notes
 - D. Sale of debentures
- III. The trade
 - A. Open accounts
 - B. Trade acceptances
 - C. Notes
 - D. Direct loans
- IV. Customers of the business
 - A. Advances and/or guarantees on contracts
 - B. Discounts to speed up payments
 - C. Guarantees of securities
- V. Affiliated companies
 - A. Advances on contracts
 - B. Direct loans
- VI. The business itself
 - A. Cumulated past earnings
 - B. Temporary investments
 - C. Current receipts

Which of these sources will be used by a corporation depends upon many things. A general discussion of the policies, problems, and principles involved will be the subject of Chapters XXVIII and XXX.

INSTRUMENTS OF SHORT-TERM FINANCE

"Short-term finance" may usually be considered as occupying an intermediate position between current finance and permanent finance. While current financing definitely belongs to the realm of normal, day-to-day operations, it is sometimes utilized for the temporary financing of permanent capital. Permanent financing is fixed financing and should be used only for permanent capital.

Practically every instrument of long-term financing is on occasion used for short-term fiscal operations. Common stocks, preferred stocks, bonds, debentures, etc., all come in at some time. There are some special instruments which are used for short-term financing, and a brief discussion will acquaint the student with their characteristics. The principles of their use are discussed elsewhere.

The Short-Term Note²

The short-term note often takes the place of the bond in temporary financing, especially if long-term bond prices happen to be depressed,³ and quite as cheaply as either stocks or bonds, and perhaps better. Thus the short-term note will be used (1) when the cost of long-term funds exceeds the cost of short-term funds;⁴ (2) when maturing obligations exceed cash available and long-term funding is not desired; (3) when expansion of operations must be arranged without pledging properties, or when properties are already pledged; (4) when public psychology is adverse to bond financing, and stock financing is undesirable for any reason; and (5) when the company is relatively certain of large earnings and is not desirous of expanding its fixed debt.

As a general proposition, corporations can finance through short-term notes more cheaply than through long-term bonds. The reason lies in the greater risk of changes in the value of assets or earning power over, say,

² There is no precise line of demarcation between bonds and short-term notes. While it is usually true that corporation bonds will bear the corporate seal and corporation notes usually do not bear such a seal, notes are sometimes issued under the corporate seal. It is common to have a trust indenture to secure bond issues, but most note issues are without these instruments, or if issued with them, it is under much simplified form. Notes are commonly regarded as simplified bonds and are quoted in bond price records.

³ The degree to which a bond will fluctuate in price is partly dependent upon the length of the term of the bond. If there is a tendency for bond prices to fall, the short-term issues will sell nearer to par, hence may prove more advantageous for financing. There is, of course, a lesser opportunity for asset dissipation or depreciation over a short term than over a long term; obversely, there is a greater dependence upon incomes to be earned in the future in the case of long-term instruments.

⁴ In 1948 there were relatively few note issues outstanding and a number were on a serial payment basis. Those with a fixed maturity showed maturities of ten to twenty years in the majority of cases. A portion of this showing is traceable to the consolidation of debts during the favorable market period of 1940-1948 or the substitution of bank loans for the publicly issued notes.

twenty or fifty years, as compared to the changes which may occur in three or five years. Firms may adopt short-term loans for interim financing when they find the security market depressed or interest rates at what are believed to be temporarily high levels.

Short-term notes may be secured or non-secured. If unsecured, they are judged by investors in the lights of the liquidity of the assets of the company and the effects which their use may have upon the capital of the concern. By far the more common practice is to have the notes secured, most frequently by collateral of one sort or another. However, unless the business is almost certain to be in a position to redeem its notes at their maturity, the pledging of securities held to control key companies in a holding company structure may be fraught with danger. As a general rule, unsecured notes are for three years or less.⁵

Short-term notes often have many other characteristics of bonds. Thus some notes are issued in registered form, and in coupon form; and sinking funds or serial maturities are provided.⁶ A redemption clause may be inserted in the notes, as may be conversion privileges.⁷

There are decided dangers in the use of short-term notes under some conditions. The fact that they have a short maturity creates a more or less steady drain upon the finances of the company, cash is constantly being depleted; and unless a relatively large amount of assets is available to be liquidated over the period of the life of the notes, current operations will have to provide, out of new profits or the existing working capital, the funds to meet the obligations. Even if refunding is resorted to, or definitely planned for the note issue, its costs must be saved from the interest payments or the principal of the debt, else the refunding costs will be an added burden. *Short-term notes should be used to acquire new assets only when those assets may be expected to prove self-liquidating within the life of the note issue.* Within the past decade the larger firms have developed the prac-

⁵ Of recent years, owing to the solicitation by commercial banks for loans, a number of serial bank loans have been arranged for industrials, and this practice has given the borrower the benefit of exceedingly low rates, often 2 per cent and less. Sometimes railroads and utilities may use authorized but unissued bonds as collateral on such loans, thus giving the loans legal status for savings banks and trust companies.

⁶ The serial notes of the Ohio Public Service Co. are due \$600,000 each June 1, 1947 to 1956, inclusive. Another example of serial notes is the Green Mountain Power Corp. 4¼ per cent serial notes, due 1946 to 1953, inclusive. For an illustration of notes with sinking fund provision see Citizens Utilities Co. 3 per cent income notes, due 1955.

⁷ The problems of convertible notes are parallel to those of convertible bonds and preferred shares, to which discussion the reader is referred. Owing to the shorter life of the note, it is common, and to be expected, that the terms of conversion must be designed to bring about an exchange within a short period of time. It may be pointed out that conversion privileges in corporation notes are most often to exchange for bonds instead of for stocks only as in the case of convertible bonds. However, Montreal Light, Heat and Power Consolidated 3 per cent convertible note certificates due in 1949 (now retired) were convertible into capital stock of the company on the basis of 1½ shares for each \$50 of notes.

tice of preparing for their short-term financing by contractual commitments with the banks for revolving credit agreements. A small commission fee is paid the bank for the agreement, and the firm thereafter possesses the option to draw any part or all of the agreed sum as a term loan. In a sense this is a valuable insurance agreement, for the corporation can make plans upon the assured knowledge of the necessary financing regardless of general market changes.

A new development by the insurance companies for working capital funds has been the making of agreements to purchase the land and buildings of firms and to lease them to the seller for a net interest return. These agreements have been evolved because the insurance companies have sought outlets for the investment of funds in capital assets and the companies have found this a convenient method for unfreezing investments in properties. The sale price is usually added to the working capital balance of the operating concerns.

The Receivership Certificate

The receivership of a corporation is often brought about by a lack or an insufficiency of funds to meet current requirements by reason of maturing obligations or by reason of operations. Upon the appointment of the receiver, funds must be raised to meet the various requirements of the receiver. To secure these funds, what are known as receivership certificates are issued by the receiver.⁸ Receivership certificates automatically take precedence over the obligations of the company itself.⁹ Because of the historical safety of receivership certificates, they usually sell upon a low interest basis.

The purposes for which receivership certificates may be issued have not been definitely settled at law. Improvements may be proper for the issue of such certificates if the improvement may reasonably be expected to increase the value of the assets by an amount at least equal to the issue of the certificates. The rule has long been established that receivers may go beyond the mere conservation and operation of properties held by them. All public service receiverships are permitted to use a broader interpretation of borrowing than is permitted in private companies. Because of the reluctance of the courts to permit impairment of the bondholders' position in

⁸ Receivership certificates may be issued only upon consent of the court under which the receivership is vested. Besides passing upon the general policy of issuing them, the court will specifically cover the following details of the certificates: (1) the total amount to be issued, (2) the price at which they may be sold, (3) the interest rate to be paid, and (4) special provisions pertinent from a fiscal point of view. The extent to which previously created liens may interfere is limited, and under ordinary circumstances they are helpless in the matter.

⁹ The receiver is not personally liable for the payment of receivership certificates. The beginning of most receivership certificates will read: "This is to certify that for value received, Richard Doe and John Doe, as receivers for the Blank Corporation, *and not individually*, are indebted to the bearer hereof in the sum of one thousand dollars (\$1000), payable . . ." Italics are the authors'.

private corporations, and their apparent readiness to subserve the interests of bondholders in the case of public service companies, a distinct controversy has arisen. Enforcement of claims against assets of a private concern not affected by a public interest may be permitted to terminate the service; but enforcement of creditors' claims against public service corporations will usually not be permitted to interfere with service, much less to terminate it. If the acquisition of new capital is necessary for the continuation of service, the courts will normally concur with the recommendations of the receiver.

CURRENT FINANCE INSTRUMENTS

The instruments of current finance are employed for purposes of obtaining the use of capital for less than one year. In the balance sheet they are usually termed "current liabilities"; they are expected to be retired, within less than a year, from the normal and regular revenues, and in the normal and regular course of business. They are used to acquire currently used funds—*working capital*—for materials, wages, operating expenses, and temporary financing operations. When, as will occasionally happen, they are used for purposes of acquiring fixed assets,¹⁰ they must be replaced by long-term instruments in the near future, and are so used purely for emergency purposes, or temporary financing. The financial policies with respect to the use of these instruments are considered elsewhere, and in this chapter only a technical description of the more common instruments will be included.

The Open Book Account

The open book account is an informal instrument, if the description be permitted. There exists no other evidence of the transfer of wealth than (1) an entry on the books of the credit-extending agency and, usually, (2) a receipt of the proceeds (usually goods) thereof signed by the credit-receiving corporation. It sometimes happens that the second item, the receipt for the proceeds (in whatever form) is not present. On the books of the credit-giving agency an item of "accounts receivable" appear; on the books of the credit-receiving company a corresponding "accounts payable"

¹⁰ The authors take the position that current financing should not be continuously employed where the capital goes into fixed assets. The mere fact that some such loans have been promptly met or refunded in the past is insufficient argument. Nor can the statement that there is close affiliation between commercial and investment banking be accepted as a basis for the practice. In America, the separation of investment and commercial banking has been opposed chiefly by the banking interests. While it is admitted that some evidence may be presented to support the coalescence of the two branches of financing, the preponderance of evidence is for their more complete separation. The Banking Act of 1933 (Public Resolution No. 66, 73rd Congress), Section 20, provided for the divorce of security affiliates from member banks in the Federal Reserve System. The commercial bank must maintain a highly liquid position; and this it may not achieve if it permits its loans to corporations to become embodied in fixed assets, and simply renews the loan from time to time. Cf. E. E. Lincoln, *Applied Business Finance*, 4th ed., pp. 393-395.

item is entered. Because of the absence of tangible formal instruments there are serious drawbacks to this particular financing device. The credit-giving agency has little or no assurance of its legal position, and sometimes encounters difficulties in proving its claims in the event of bankruptcy or receivership.¹¹ To the credit-extending agency another disadvantage arises because of the poor negotiability of such credit contracts. While accounts receivable may be sold, the cost of liquidating them is extraordinarily large, and few concerns go to this extreme. In general, the system of financing by open accounts imposes a banking function upon the businessman which he is neither properly qualified for nor entirely willing to accept.

The Promissory Note

The promissory note is one of the commonest and oldest forms of current finance instruments. It is ordinarily in negotiable form, consequently overcomes one of the major disadvantages of the open book account. In the case of the corporation, it must be signed by an authorized person or officer and the proceeds used for proper corporate purposes.

Corporation promissory notes, usually of fairly large denominations,¹² are given essentially (1) to commercial paper houses, (2) to bankers, (3) to owners of substantial properties which have been purchased, and (4) to holders of open book accounts which the corporation is not in a position to pay at once, but which it expects to pay in the relatively near future. The period for such borrowing is rarely more than six months. It is commonly done on an unsecured basis, the banker relying upon the management's honesty and the past record of the company as security.

The use of the promissory note in financing through the commercial paper house is presumed to enable the corporation to borrow on the open market when its local bank happens not to be in a position to meet the situation, to borrow at the most advantageous rate in the country irrespective of local money conditions, to secure more funds than could locally be expected under normal conditions, and to conserve a line of credit at the local bank for emergency use only. The practice of borrowing on the open market has some small advertising value and establishes the reputation of the company in prompt payment, hence oftentimes facilitates future financing either by stocks or by bonds.¹³

¹¹ Most states have special statutes governing open book accounts. It is important to know the regulations and the laws upon questions of (1) interest, (2) proof of debt, and (3) outlaw term.

¹² It is seldom that corporations issue to bankers or commercial paper houses promissory notes for less than \$2500 in individual size. If financing is done through the sale to commercial paper houses, the total of the notes is seldom below \$10,000. An issue borrowing \$100,000 would be composed of several notes of varying denominations, say, \$2500, \$5000, and \$10,000.

¹³ It may be pointed out that banks find some advantages from this method of financing by corporations. The bank's commercial loans are distributed over a wide area and in many industries; it is under no obligation to renew or extend the loan since there is no direct contact with the corporation at the outset; it may, by selection, have its

Drafts, Trade Acceptances, and Bills of Exchange

Another class of instruments in common use by corporations in their current financing, though of relatively recent utilization in the United States, is represented by drafts, trade acceptances, and bills of exchange.¹⁴ These instruments, like promissory notes, are self-contained in that they are, in the absence of the absolute defenses recognized by the courts, self-confessed evidences of debt.

Before an acceptance is in its completed form it must be "accepted" by the payer. That is, the party who is to make the payment must make an unconditional acceptance of the bill of exchange drawn against him.

The trade acceptance may be rediscounted under certain conditions at a Federal Reserve Bank, whereas open book accounts enjoy no such privilege. For some years after the inauguration of the Federal Reserve System the use of the trade acceptance grew rapidly; since 1922, however, it seems to have declined somewhat in popularity.

The decline appears traceable primarily to the following facts: (1) The increasingly close interrelationships between banks and commercial and industrial concerns led many banks to extend loans, both secured and unsecured, much more freely than before. (2) A continued period of prosperity led to an increasing credit status of businesses in general, hence a tendency to an open book account simply upon the past record. (3) Banking legislation and policy favored the increased use of the banker's acceptance; hence this instrument was substituted in transactions where the trade acceptance had formerly been used.

The Bank Acceptance

The bank acceptance is a form of bank borrowing. Its operation may be explained very briefly: The M corporation, being desirous of purchasing

funds in maturities exactly fitting its own desires and therefore make the maximum use of its funds not currently needed for local short-term financing. If the bank happens to be in an area which has an abundance of capital and low interest rates, it increases the average rate earned by buying paper at higher rates in communities with a relatively greater scarcity of capital. In so far as the commercial paper house investigates the condition of businesses whose commercial paper is offered to banks, the purchasing bank can forego the trouble and expense of such inquiry, though some banks check with their correspondent banks in large centers.

¹⁴The passage of the Federal Reserve Act, designed for the express purpose of providing an elastic currency to meet the legitimate needs of business, and the subsequent emphasis by the Federal Reserve Board upon the use of the trade acceptance, which had long been widely used in Europe, may be taken as the source of the extension of trade acceptance use in the United States after 1915. The fact that the Federal Reserve banks were desirous of sharply distinguishing between needed and unneeded funds, and between speculative and non-speculative uses of funds, was instrumental in furthering the used of credit instruments which would automatically eliminate undesirable loans. This the trade acceptance does rather effectively, because it contains both parties to the transaction, the purchaser and the seller, and therefore confines the use of funds to relations between the maker and the acceptor and payer of the acceptance.

certain goods, goes to its bank and makes an application for the issue of acceptances by the bank. If the application is approved, an acceptance agreement is entered into between the bank and the borrowing company. This agreement defines the conditions, amounts, terms, etc., under which the bank will make acceptances, i.e., agree to make payments at the order of the corporation. Proper evidence¹⁵ of the agreement is commonly given to the corporation to be sent by it to the parties from whom purchases are to be made. The corporation when ordering the goods will inform the seller that he is to "draw" on the X bank. After filling the order and shipping it, the seller draws a draft on the bank and forwards it to the bank accompanied by the bill of lading or other evidence of ownership and title. The bank "accepts" the draft, hence becomes liable for its payment. Upon arrival of the goods, the title to which under the terms of the acceptance agreement rests in the bank, the corporation will execute a trust receipt and receive the goods as trustee for the bank. When the draft is due, according to the terms in the agreement, the bank will debit the account of the corporation, or will call upon the corporation for reimbursement for the amount of the draft. Naturally the corporation hopes to have sold the goods and to use the proceeds derived therefrom to retire the draft.¹⁶

Notes and accepted drafts are freely negotiable in the open market, under certain conditions may be rediscounted at the Federal Reserve banks, and generally constitute a liquid form of asset to the holder. They accordingly bear relatively low interest rates. A bank, in entering into agreements to make acceptances, will inquire into the uses to which the funds are to be put as well as the financial condition of the corporation. In obtaining credit by means of open accounts, notes, and trade acceptances, too little concern is likely to be manifested in regard to the position of the credit-receiving concern. The trade creditor relies essentially upon assets and liquidity, whereas the bank will, in addition to these, *consider the wisdom of the act of making use of the additional credit.*

Warehouse Receipts

Warehouse receipts normally represent a form of collateral for temporary financing in seasonal industries or in industries having staple products of a non-fashionable and non-perishable nature.

Drafts drawn against customers are commonly discounted at the local bank, with the warehouse receipt covering goods sold. The warehouse receipt thus held under pledge by the bank furnishes strong collateral security for the loan or credit extended on the draft. If the property is to be released, the bank will ask for a trust receipt to cover the goods, thus continuing its security while the goods are in the buyer's hands for processing or sale. The

¹⁵ Usually called a letter of credit.

¹⁶ For an extended description of the use of the banker's acceptance, see any good textbook on commercial banking.

quantity of credit through this type of collateral attached to drafts is large in American banking practice.

Any firm such as those in the flour milling, tobacco, cotton, and rubber industries where large inventories of raw material are carried in storage may find this a very important avenue for credit. The owners of these staple commodities, too, as producers of them may use the same procedure. In an ever increasing measure this procedure has been made available to the farmers of the country with a special type of farm warehouse loan, as well as the regular licensed public warehouse receipt, though the procedure is identical in legal effect.

Pledge or Sale of Receivables

The pledge or sale of receivables represents a method rather than an instrument of finance, which has only of late years arisen in the financing of American industry, having been traditionally interpreted as a sign of weakness in a company. The growth of installment selling has been possibly more responsible than any other one thing for the development of a newer attitude. The theory is that of the use of the same capital many times. That is, once the capital has completed the circuit from working capital to receivables, instead of waiting for the maturity and consequent cash liquidation of the receivables, realization is secured at once. Thus a company having \$100,000 capital available for current financing could, by selling the receivables repeatedly, accomplish as much business as one having \$300,000 and not so doing. The corporation has to assume a contingent liability in such financing.

The Installment Contract

It would perhaps be more logical to recognize installment financing as a special problem, since it has arisen to considerable importance since 1920. The distribution of automobiles, books, electrical household appliances, furniture, musical instruments, agricultural implements, and even clothing has come to be a credit problem of vast proportion. The sale of these articles is largely made on a time basis of from six months to two years. It is at once clear that the working capital of the company selling under such conditions would be exhausted quickly or would have to be extraordinarily large. *Finance companies* make advances upon the contracts, that is, they give to the company holding the contract anywhere from 75 to 90 per cent of the unpaid value, and thereby release working capital for re-use. If the process is repeated several times, the effectiveness of the working capital of the selling company may be increased seven or eight times. This plan of financing appeals to the small concern, although larger ones may adopt it.

The cost of obtaining funds is likely to be quickly offset through added sales by concerns whose energy, ability, and plant capacity are out of proportion to their invested capital. Indeed, such concerns often look upon the finance company as a silent partner and will accept it as such rather than

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admit new active partners who would supply the same capital but demand a proportionate share of earnings. If the concern should borrow from a bank, the application of the 20 per cent rule would tie up a considerable amount of money. Moreover, the policies of the management or the nature of the assets of the concern might be such that commercial bankers would refuse to extend sufficient funds. Many companies with a large volume of business would find themselves seriously handicapped if limited to the bank facilities of their local banker, and accordingly they seek capital in the larger centers from the commercial finance company.¹⁷

The "Overdraft"

The method of financing current operations by overdraft is not often used in the United States but is very common in European practice. It consists of permitting bank customers (really borrowers) to write checks against their accounts beyond the exhaustion point; that is, the bank honors checks when no funds are in the account.

QUESTIONS

1. Why may the instruments for short-term financing be relatively simple in legal terminology?
2. Name and distinguish the principal types of short-term finance instruments.
3. How may a warehouse receipt provide better security for a bank loan than a general inventory loan? Distinguish a trust receipt from a warehouse receipt as an instrument of collateral.
4. Discounting receivables is now a common practice but was originally frowned upon. Can you give any reasons why the receivables might be regarded as weak loans?
5. Explain why business is cautioned against using short-term loans to finance plant expansion or the acquisition of new plant equipment. Would moderate long-term loans with regular serial retirements produce the same problem?

PROJECTS

1. Examine the balance sheets of ten industrial concerns and report on the types of short-term claims as compared to others which are shown; also report on the types of short-term debts due creditors.
2. Report the current percentage distribution of types of consumer credit and contrast this distribution in 1940 and 1945. What is your explanation for the patterns?

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¹⁷ *Financial Handbook*, pp. 1248-1261.

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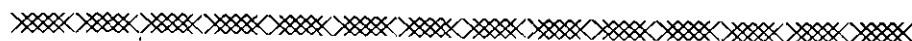
PART THREE



Policies of Capitalization

CHAPTER XIV

Functions, Types, and Methods of Promotion



BUSINESSES do not just happen. There may be accidental factors involved in the idea, in the successfulness of the management, and in obtaining funds; but, in the final assemblage of any enterprise, a considerable quantity of intelligent judgment is utilized and is essential. The peculiar problems connected with the origination and initiation of businesses require special aptitude and judgment; men capable of managing great corporations may fail utterly in the complete initiation of an enterprise. Those possessing the special faculties which enable them to judge the quality of a business opportunity, to inspire others to the visualization of a profitable business from the description of a mere idea, and to impel others to follow their judgment are known as *promoters*. The work which they perform is known as *promotion*.

The Promoter

Probably the most often quoted definition of a promoter is that of Cook: "A promoter is a person who brings about the incorporation and organization of a corporation. He brings together the persons who become interested in the enterprise, aids in procuring subscriptions, and sets in motion the machinery which leads to the formation of the corporation itself."¹ Another, contained in the opinion of the court in one of the most famous promotion cases in the United States, reads: "A promoter is one who seeks opportunity for making advantageous purchases and profitable investments in industrial and other enterprises, who interests men in such a project when found, organizes them into a corporation for the purpose of 'taking over' the project, and attends upon the newly formed company until it is fully launched in business."² Sometimes the promoter would be one of the incorporators,

¹ W. W. Cook, *Principles of Corporation Law*, 6th ed., p. 651. For other discussions of the nature of a promoter, see *Detwiler v. Clune*, 247 Pac. 264 (1926); *King v. Barnes*, 109 N.Y. 267 (1888); *Richlands Oil Co. v. Morriss*, 108 Va. 288 (1908); *Hupp v. Lawler*, 288 Pac. 801 (1930); and *Clark v. Daniels*, 250 Mich. 22 (1930).

² *Dickerman v. Northern Trust Co.*, 176 U.S. 181 (1900). The distinction between promoters and incorporators seems never to have been clearly drawn. It has been pointed out that the sole purpose of the "incorporators" is to bring into existence a corporation, which is a condition of fact between a body of shareholders. Some have stated that it is doubtful "whether any but a technical distinction can be made between

though often his relations to the corporation would be terminated when it was chartered.

The Meaning of Promotion

Like the word "promoter," the term "promotion" has two contrasting connotations: a popular, layman's use and an economic and business use. But when employed in serious discussion, the term means *the business of bringing together the elements necessary to the inception of a business—capital, management, and the idea.*

Promotions are generally of three types: (1) those having to do with an entirely new business concern, such as the promotion of a new railroad between Chicago and New Orleans; (2) those having to do with the bringing about of consolidations and mergers; and (3) those in which some unusual profit is sought for the personal aggrandizement of one or more of the promoters, as in the famous Old Dominion Case.³

Promotion is a necessary function in our highly specialized economic organization. Those with ideas of commercial value frequently have no funds with which to exploit them; or, although they may have ideas, and money, they may have neither the training nor the inclination to undertake the management of a business. They lack not only that peculiar capacity which enables a man to visualize a great enterprise growing from the simple business but also that vigor and those qualities of leadership necessary to impel and guide other men to the ultimate consummation of the dream; in short, they are not entrepreneurs. On the other hand, entrepreneurs often have no ideas of commercial value, and frequently can interest capital in their enterprise only to a limited extent. The capitalist has no time to be

promoters" and incorporators. Certainly in economic writings on the subject there has been a failure to note the difference. Legally there is a large difference in the liabilities, rights, and duties which exist between several persons engaged in a promotion and several persons who are incorporators. See *Beck v. Stimmel*, 39 Ohio App. 510, 177 N.E. 920 (1931); and *Benton v. Minneapolis Tailoring & Manufacturing Co.*, 73 Minn. 498 (1898); also, *Old Dominion Copper Mining & Smelting Co. v. Bigelow*, 74 N.E. 553 (1905).

³ A brief summary of this famous case would include these facts:

Bigelow and Lewisohn secured control of the stock (\$500,000 par value) of the Old Dominion Copper Co. of Baltimore (called the Baltimore Co. to distinguish it from the New Jersey corporation of same name formed later) and the title to four mining claims, a mill site, and other real estate for purposes of selling them to another corporation (to be formed later). Options were secured on outside properties, for which \$1,000,000 was to be paid. The new company was incorporated in New Jersey for \$3,750,000 (150,000 shares of \$25 par). During the summer and fall of 1895, 20,000 shares of stock were sold to the public at par. While the promoters and their dummy directors were in control of both the Baltimore Co. and the New Jersey Co., they caused the latter company to purchase the former for 130,000 shares of stock. The promoters thus sold to the new company for \$3,250,000 properties which cost them (court testimony) \$788,319.50, making a clear profit (court records) of \$2,460,000. At the time, the stock was selling at par.

Reports of this case will be found in 203 Mass. 159 (1908-1909); 74 N.E. 653 (1905).

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bothered seeking new ideas; neither does the entrepreneur, whose function it is to exploit those ideas which do have commercial promise. Clearly, if these three agencies are to cooperate in the ultimate upbuilding of a business, they must be brought into contact with one another under favorable circumstances. The promoter does exactly this; and he usually tries to keep them in contact until the business is fully launched or its possibilities have been abandoned.

FUNCTIONS OF THE PROMOTER

In a general way the work of the promoter has been outlined. But more specifically his functions are (1) discovery of the business opportunity, (2) investigation, (3) assembly, (4) arrangement for financing, and (5) overseeing in a general way the preliminary organization of the business. In some promotions, the last two functions consist only of bringing the business opportunity to the attention of those who have funds or access to capital and who are qualified to perform the organization work themselves.

Discovery of the Opportunity

The vital step is to discover a business opportunity which has potential profits in it. The promoter is continually scanning the business field for possibilities. They may arise (a) in starting an entirely new business growing out of a new commodity or service, (b) in starting a new concern to produce an old commodity or to render a familiar service, (c) in combining old businesses to eliminate expenses incident to separate operation, (d) in developing a new process or technological method which will reduce costs in old and established businesses, (e) in extending market areas for all businesses, etc. In fact, opportunities are to be found in new ways of doing old things, or in the creation of entirely new things.

The methods of discovering these opportunities appear not to follow any set rule. Often the promoter takes the initiative himself. Some promoters follow up only patents, franchises, copyrights, etc., all of which give some degree of monopoly to the possessor. Other promoters study the shifting trends of organization generally and bring about mergers if mergers prove popular, or develop voting trust arrangements if they are popular. This group of promoters are very close students of the investment markets. Still other promoters specialize in the discovery of weak spots or gaps in the competitive fabric, filling them with new businesses where competition is lacking; they account for much of the efficiency of our competitive organization. They are continually analyzing bankrupt and insolvent enterprises to see if they may be revived, as well as observing the faults of current attempts at revival.

Investigation

Having discovered what appears to be a business opportunity, the promoter must next diagnose the possibilities. He usually begins by making

rough estimates of the cost of operation, the market areas, and probable revenues. These first approximations are often but a handful of figures, perhaps largely empirical or gained by a discussion of the idea with others in a general way. If the preliminary estimates indicate a sufficient probability of success, the business is examined in detail. Cost estimates are made up with the greatest possible accuracy; in fact, a set of operation cost accounts is actually prepared for the hypothetical business. Proper errors of estimates are allowed and the profits estimated accordingly.

Frequently several sets of costs of operation are prepared for various scales of operation, so that should an error be made in the estimated market area, costs of operation, etc., the probable profits would be known with a greater degree of certainty. In these calculations an assumed capital cost is used which corresponds to the capital costs of other going concerns in similar lines of activity. A net profit estimate is obtained, but this must be equated against the probable promotion costs and the costs of raising capital. The detailed estimates were based upon a "going concern"; and before the promoter can hope to obtain anything for his own use, he will have to meet the costs of getting the business under way, namely, the expenses of raising capital and of promotion itself.

Checking the sales estimates may be done by "sampling" the market, or a good statistical analogy may be found. In many types of markets statistical data may be employed to closely estimate maximum possibilities. On occasion a tested product can win enough contract orders to permit the promotion to be assured of its early production volume.

Assuming that the results of the calculations indicate a possible and probable profit, the investigation must be carried on to reach a decision as to the scale of operation and exact scope of the enterprise. It is one thing to build a business which performs a single service, and quite another to build one which extends from the raw materials to the finished product. To organize a purely local business is relatively simple; to organize on an international or even national scale requires some of the finest business brains of the land.

Current Asset Needs. The needs of the various fields will not be alike for each type of asset investment. In the estimating of current assets two demands in the early life of the business will be made. Those customary amounts must be provided to allow for normal sales and production operations. In addition, there must be an extra allowance in cash for extraordinary, non-repeating expenses which will be encountered in launching an enterprise and bringing it to a point of stable and profitable operation.

For the cash needs, the business types will offer different estimates of adequate amounts. The utility enterprise will be on a cash sales basis so it will need only a moderate allowance for this portion of its assets. The merchandiser will need a large sum sufficient to absorb the unexpected in sales volume, the unusual in promotion expense for his sales efforts, and the demands of his customers for credit. A manufacturer will find a similar need.

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Both of these firms will probably have to finance sizable accounts receivable items in order to enlarge their sales volume. The utility will, however, have a modest need for this item in its current assets; and nowadays the cycle billing method will do a great deal to keep this demand low.

Inventories for both the merchandiser and the manufacturer will be of extreme importance as factors of current asset volume which must be provided. Such accounts not infrequently amount to half of the current assets to be supplied. In the case of the utility, sales are made for service, and the inventory need only cover materials and supplies for plant operation.

Fixed Asset Needs. The problems in providing fixed assets will ordinarily run in reverse order to the current assets requirements. The utility will need large sums in plant and equipment, often 90 per cent of the total investment. A manufacturer or merchandiser will have to have much less for plant and equipment, with the manufacturer probably needing the larger sum. In this field, too, much can be done by the merchandiser to lighten his capital requirements by renting his place of business, and the manufacturer can do likewise. Moreover, the manufacturer may frequently be able to subcontract much of his production work, thereby avoiding investment in both plant and equipment. Until the exact nature of the market is tested, this may be the greater part of wisdom from the standpoint of raising adequate capital. It is true that sometimes the processes will not admit of such subcontracting, but where it is feasible it should not be overlooked.

Intangibles. Organization expenses and sales promotion costs may easily mount to disastrous totals before sales margins will contribute to replacing the current assets. This is a problem the optimist may overlook in his estimates, but it very shortly proves deadly to the new enterprise which exhausts its capital resources in setting up the initial operation. A margin over the estimates is the only safe practice. It is true that some of these costs may later be taken into the records and set up as assets in recognition of their contribution to creating the going business. But whether this policy is pursued or not, the cash necessary to replenish the current asset position will not be produced. Difficulty will come over the problem of immediate resources, rather than the accounting policy of book records.

Assembly

Even ideas well tested are not yet assured of financing. But before the financing is obtained many of the estimates may be completely invalidated by shifting costs and market calculations. The promoter who takes the precaution at this point to stabilize his investigation will offer the sounder case for the banker to consider. The usual procedure to accomplish this stabilization is to put as many elements of cost under optional contract as it is possible to do. For example, the plant might be arranged on an option to lease, as might the leasing or purchase of equipment. Sources of material supply would often be willing to contract for future delivery, if the option

were exercised within a reasonable period of time after the investigation.

In many promotions the key personnel would be just as important as the physical plant. A banker who respects the position of the investor would expect to know that definitely capable managers could be obtained. In fact, he would want to investigate their past record of achievement. Thus, the key management figures should be definitely lined up and optional contracts entered providing that upon proper financing they will take the posts in the company operation.

Even the sales field is not to be overlooked. It might be possible for some goods to be sold on future delivery agreements, which would furnish a known market for the first production steps. An illustration of this was the payments made by dealers for Tucker car franchises in 1947 before ever a car was produced, in fact before the public sale of stock assured the purchase of the plant.

A well-assembled promotion thus not only presents to the banker the results of investigation but even makes the costs known factors to a certain degree. The time consumed in financing will not then upset all plans and inject new costs not allowed in the estimates.

Arranging for the Financing

If the detailed cost estimates indicate a sufficient probable profit, the promoter next seeks to arrange financing for the enterprise. He is acquainted with investment bankers, and to them he presents his case. In order to secure capital on the best possible terms he may submit his plans to several investment bankers and force a certain degree of competition on their part, especially if investment banking operations are at a low ebb at that particular time. Although outright gifts of stock on a fixed or percentage basis have been known, it is not a common practice to secure financing consideration by this practice. Sometimes both options to buy and stock gifts are employed by promoters.

If the promoter is strictly professional, he will not be likely to undertake the distribution of the securities himself; but in some types of promotion he will be an investment banker and will accordingly aid in, if not undertake, the distribution of securities.

Organization of the Business

Strictly speaking, the promoter's work is terminated when the idea, the management, and the capitalist have been brought together under such circumstances as make it probable that the proposed business will become a reality in the near future. Actually, however, but few promoters sever their connections with the business at that point. They will aid in organizing it, for they have, in their investigations, formed a very clear but imaginative picture of just what it will look like. In fact, in this work the promoter crystallizes into steel, mortar, and wood his hypothetical business previously erected only on paper, and it becomes an actual going concern.

Promotion Profits

It has previously been pointed out that promoters are remunerated for their efforts by cash, by stock, by options to buy stock at a low price, and by combinations of these methods. The exact scheme which is used to compensate the promoter is not nearly as perplexing as the amount of the compensation. In some promotions the profits taken are enormous; in others the losses are of considerable proportions.⁴ On the average, the profits must be large enough to attract the promoter; but there appears scant justification for receiving enormous profits from some promotions to be squandered in attempting to exploit futile businesses. Society can afford to pay the promoter no more than the total net gain from the new business.

Promotion Expenses

Large amounts of money are expended in promotions, some of which may be acquired by borrowing, some from the other enterprises of the promoter, and some from the investment banker, the prospective entrepreneur, and the individual supplying the idea. If the promotion is an extension of a business already existing, some of the funds may be obtained from it.⁵ Not infrequently, especially in new promotions, the promoter will use his private funds, expecting to replenish them by profits derived from the promotion.

The purposes to which the promotion funds are devoted are varied and in some instances difficult to justify. First of all, there are the promotion expenses proper. Contracts with the person having the idea may have to be obtained and signed, especially if a patent, franchise, copyright, trademark, etc., are involved. Then the management and capital agents must be interested. The accountants, engineers, lawyers, and other expert and professional aids will command a price which quickly cumulates to appreciable sums. But, having brought the agencies together for a prospective profit, the proper work of the promoter is ended.

Going Business Expenses

The business must be organized. Rent must be paid; furniture, office equipment, plant equipment, etc., must be obtained and used long before the enterprise is launched on the sea of business operation. Fixed assets must be purchased, installed, and broken in; interest on capital used must be paid from the date of borrowing, whether the business is operating or not. Even after the concern is launched into actual operation, time and expense are necessary in placing the product on the market. District sales and distributing organizations must be set up; advertising literature must be prepared and put into the hands of the marketing groups.

⁴ The *Old Dominion Copper Case* cited in footnote 3, p. 246, is one extreme; that of J. C. Durant's promoting the company to produce cars of that name is an opposite.

⁵ The cases of Foshay and Richfield Oil are typical examples of the use of a corporation's funds for promotion purposes by the leading element in the company.

Even the costs of the physical layout and marketing organization do not cover the complete expenses of beginning the business. There is a lag between revenues and expenditures in the operation of the business. Working capital must be supplied to meet this. Raw material requires money, as do wages, finished goods, trade credit sales, uncollected receivables, etc. Indeed, as we shall find later in our discussion, the lack or inadequacy of working capital is one of the prime causes of business failures.

Common Errors in Investigations

Although promoters frequently go to great trouble to assure themselves of the completeness and accuracy of their investigations, they are peculiarly liable to make some errors. These usually fall into four groups, which we can examine briefly.

1. *Comparison may have been restricted to a single competing or similar concern which fails to weigh many variables.*

2. *The dynamic nature of economic society* which takes into consideration the trends of the evaluated factors must be studied.

3. *Intangible items may have been omitted.* Except in basic industries, fads and fancies may have a large influence. Even as basic an industry as the textile trade was seriously affected by short dresses, which required two to three yards of material as compared to eight or ten yards but a few years before, and must now readjust again. The meat packing industry once felt the effects of the anti-meat food faddists to an extent necessitating public advertising on a national scale. The miniature golf craze represented an extreme case of public fancy.

Peculiar cases of management personalities have been the cause of many failures of promotion. This factor is of unusual importance where the element of personal service enters in, or in small, localized businesses where a direct contact between management and customers is frequent and unavoidable. Promotions proposing to extend a small business to a national scale must examine with great care the result of changing the scale of operations.

4. *Reserve strength* is another intangible element frequently the source of error in promotion investigations. A concern may have been successful in a small way simply because of an enormous reserve strength of wealth possessed by its owners which has tided the company over hard points in its life.

SOME FURTHER LEGAL ASPECTS OF PROMOTION

The courts of this country have many times held that a promoter is a temporary and limited trustee as far as any relationship to other shareholders is concerned.⁶ As a trustee he is subject to the limitations of secret profits,

⁶Nathan Isaacs, 38 *Harv. L. Rev.* 900-902, concludes: (1) that a clear distinction should be made, in law, between those who act for and those who do not act for the corporation; (2) that the doctrine of a corporation's being born free needs "toning down"; and (3) that the scope within which promoters may prepare the ground for corporations should be defined and limited, perhaps under administrative law.

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and liability to shareholders may result from a breach of faith on his part. By neither subterfuge nor direct action may the promoter exploit the shareholders in his prospective company.⁷

Promoter's liability for deceit appears to be a question propounded by the sphinx of the law, rather than by the businessman. It appears that the jurist will insist that promoter's liability accrues (1) when the actual facts were known by the promoter, (2) when the statements which misled the public were made recklessly, and (3) when the intention of the promoter was to induce the act which resulted in the injury.⁸ Mere ignorance is apparently not fraud, although all promoters of a given venture will be held liable where misrepresentation by a common agent occurs.

The root of the matter appears to lie in the misapplication of capital by promoters during the interim that control of the infant corporation rests in their hands.⁹ As long as the promoter retains control over the assets of the promotion or of the corporation, he is a fiduciary for those subscribing to stock.¹⁰ This fiduciary relation is presumed to begin when the promotion has progressed to the point of seeking prospective stock subscribers.¹¹

⁷ The case of *Dickerman v. Northern Trust Co.*, 176 U.S. 181 (1900), is one of the leading cases on the subject of secret profits. The court stated: "His [the promoter's] acts are scrutinized carefully, and he is precluded from taking a secret advantage of the other stockholders. Accordingly it has been held that if persons start a company, and induce others to subscribe for shares, for the purpose of selling property to the company when organized, they must faithfully disclose all facts relating to the property which would influence those who form the company in deciding upon the judiciousness of the purpose."

⁸ Under the Federal Securities Act of 1933 the rule is general, for the omission or misstatement of a material fact creates liability. The publicity contemplated by the act of 1933 may affect the responsibility of promoters to investors. However, since the act does not cover relations between the promoter and the corporation, the amount of improvement is uncertain.

⁹ See 38 *Yale L. J.* 1011-1046. This article gives an excellent summary of the rights and liabilities of promoters and their contracts. The interpretation of promoters' contracts finds a great conflict in law between technique and dynamic reality. It has been described: "If we figure stability and progress as opposite poles, then at one pole we have the maximum of *stare decisis* and the method of decision by the tool of deductive logic; at the other we have the method which subordinates origins to ends. The one emphasizes considerations of uniformity and symmetry, and follows fundamental conceptions to ultimate conclusions. The other gives freer play to considerations of equity and justice, and the value to society of the interests affected. The one searches for the analogy that is nearer in point of similarity, and adheres to it inflexibly. The other, in its choice of the analogy that shall govern, finds community of spirit more significant than resemblance in externals."—Benjamin N. Cardozo, *The Paradoxes of Legal Science*, p. 8.

¹⁰ *Yeiser v. U.S. Board & Paper Co.*, 107 Fed. 340 (1901); *Central Trust Co. v. East Tenn. Land Co.*, 116 Fed. 743 (1902); *Gates v. Megargel*, 266 Fed. 811 (1920); *Smalley v. Bernstein*, 165 La. 1 (1927); *Spellman v. Bradley*, 165 La. 115 (1927); *Land Co. v. Broom*, 96 W. Va. 586 (1924).

¹¹ *Dickerman v. Northern Trust Co.*, 176 U.S. 181 (1900); *De Klotz v. Broussard*, 203 Fed. 942 (1913); *Central Trust Co. of N.Y. v. East Tenn. Land Co.*, 116 Fed. 743 (1902). For discussions of the interesting problem of the legal position of the promoter,

SUMMARY

Promotion is a necessary initial step in the life of every business, whether performed by persons we would call promoters or not. The basic idea, its investigation, assembly of the component elements of the proposed enterprise, preparation of the financial plan, and selling the securities for the enterprise are integral steps in the creation of the business. This process goes beyond the establishment of a new business, though the current discussion centers upon this phase, to the merger of old ones or to the additions of divisions to a going-business enterprise.

New businesses are marked by much uncertainty in their early years, so financing plans should rely chiefly on the investment of shareholders. Efforts to start on a small scale and to build the enterprise from earnings may be wise though this is a phase of current tax policy which is a deterrent.

QUESTIONS

1. Why is promotion still needed when the country is generally settled and we have many big business units?
2. Indicate the general functions with which promotion is concerned. Why is a well-promoted situation more certain of success as an enterprise?
3. In what way can a promoter's profits be justified? Are these profits usually in the form of cash paid at the time of organization?
4. Explain why the promoter's relation to the company is so important in terms of future liability for representations and expenses incurred before the concern is actually created.
5. The problem of capitalizing the promotion and organization expenses of a new concern is difficult. Why? What produces it?

PROJECTS

1. Report the number of new business firms by fields for each year after 1944, and construct index numbers, using 1939 as the base. Discuss the causes of change in those fields showing the greatest and the smallest change.
2. Prepare a five-item bibliography of accounting texts and summarize their recommendations for capitalizing promotion and organization expenses.

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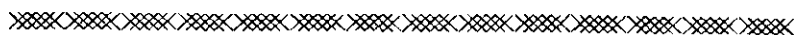
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CHAPTER XV

The Elements of Financial Structure



THE entire subject of corporation finance deals generally with the problems of financial structure. Financial structure is to the affairs of the corporation what architecture is to the bricks, wood, and other materials which ultimately make a house. That is, financial structure provides the basic framework or design of the relations between the several elements composing the assets and liabilities as reflected in the balance sheet. On the asset side the major divisions as they are apportioned among current assets, fixed assets, intangibles, and miscellaneous make up the asset structure; the current liabilities, funded debts, and *net worth*, including surplus and the various kinds of stock, constitute the structure of capital sources. Financial structure, therefore, requires that a proper balance be maintained between the structural elements of the corporation's financial make-up. The general application of the terms may be illustrated as follows:

THE BALANCE SHEET

Assets	Liabilities
$C \left\{ \begin{array}{l} \text{Current assets} \\ \text{Fixed tangible assets} \\ \text{Fixed intangible assets} \\ \text{Miscellaneous assets} \end{array} \right.$	$\left. \begin{array}{l} \text{Current liabilities} \\ \text{Miscellaneous liabilities} \\ \text{Fixed borrowing} \\ \text{Capital accounts} \end{array} \right\} \begin{array}{l} B \\ A \end{array}$

Financing (or financial) plan considers items included in B.
 Capitalization (or capital) plan considers items included in A.
 Financial structure considers both A, B, and C, all items.

The strength of the financing plan, the capitalization plan, and the financial structure of the corporation is related to the nature of the income and expenditures as well as the items on the balance sheet. What will be a strong and desirable financial structure under one condition of operation may be a very weak structure under another.

Nature of the Problems of Financial Structure

Formulation of a proper financial plan for a corporation necessarily involves two questions: How much capital shall be acquired and used? And what methods should be employed in gaining this capital? That is, should

capital be obtained through the sale of bonds, stock, or both, and to what extent? The first portion of this chapter will be devoted to answering the question in general principles of how best to obtain capital, the latter will consider the question of how much, as it is influenced by common conditions.

THE NATURE OF THE FINANCIAL PLAN

Formulation of the Financial Plan

The formulation of the financial plan is the first step in the corporation's fiscal history. How carefully that plan is thought out and adapted to the peculiar circumstances probably to be encountered in the life of the company will largely determine the success of the plan and of the corporation. A plan based solely upon current thought, facts, and conditions will be quite as certain to prove troublesome as one which ignores the present and considers only possible future exigencies. Every financial plan must fit the needs of the present, yet must contain a degree of flexibility which will permit it to be altered from time to time to conform to the changing styles and fads in financial affairs.

At the outset there will, therefore, probably be several distinctly variant financial plans: that of the promoter, that of the investment banker, and that of the management. Should the corporation be operating in a basic industry, its financial plan must be largely dependent upon (1) fundamental economic conditions of the entire nation and (2) the trends in the industry of which it is a part and of those to which it is related. If the trend of affairs is in the direction of large-scale enterprise, provisions should be made for expansion. If the industry caters primarily to fashion, little faith can usually be placed in the long-time factors, for they are so uncertain as to belie forecast.

Fundamental Factors of the Financial Plan

In preparing a financial plan, certain widely accepted principles should be applied, provided intelligent care is exercised to see to it that they are not mechanically used. Although there are many violations of these fundamentals, a few of which are successful, the principles are sufficiently well defined in the better practices to warrant a strict statement and some discussion.

1. *The Nature, Value, and Cost of the Assets.* The nature of the assets will have a bearing upon whether the plan is heavily laden with fixed charge securities. In the case of railroads, most public utilities, great industrial companies in basic industries, etc., the permanency of asset values is an important factor in justifying a high ratio of fixed charge securities. In those concerns having monopolies of a semi-permanent nature, a higher ratio (provided retirement provisions are properly included) may be used than in concerns in purely competitive lines. The normal situation is likely to be that basic and essential industries have higher fixed charge ratios than highly competitive concerns or those with few fixed assets engaged primarily in merchandising operations.

Periods of high prices should reduce the proportion of fixed charge financing for the reason that the cyclic fluctuations in prices will probably mean declining price levels in the not far distant future, hence operate to reduce the equities behind bonds. Under these ideal conditions, the bond ratio should be low in periods of high prices, but may be high in periods of low prices. Rising price levels would permit an increase in the permissible bond ratio; falling prices would operate to lessen the ratio of bonds which could be used. The nature of the financial plan will accordingly vary, depending on whether the plan is formulated in high or low price periods.

2. *Volume, Certainty, and Regularity of Earnings.* Whatever the type of security offered to the public, sooner or later interest and dividends will have to be paid if the credit of the corporation is to be maintained. To pay these will require earnings, since such payments may not be made from capital. The volume, certainty, and stability of the profits from the enterprise will therefore be an essential consideration in erecting the financial plan. If highly favorable earnings, large in volume and regular in amount, are the prospect, the corporation may safely issue a comparatively high ratio of bonds and fixed charge securities; the reverse situation would restrict the financing to stock only. In new companies particularly, the existence of an actual business opportunity is paramount to any permanent probability of earnings. And in any concern, stability of earnings makes for ease of financing. Stability will most probably be found in companies engaged in the business of producing a necessity or rendering a service which is generally thought to be a necessity. There will probably be some elements of monopoly in most cases; severe competition will reduce business operations to a status of sporadic profits and losses.

It appears that some types of corporations must necessarily restrict their financing largely to stocks because of the fact that they have untried managements. Others are in a new industry, such as technicolor or air operations; the future, while bright, is uncertain, and earnings are likely to be irregular even though sufficient in quantity. Again, corporations in decadent industries find their borrowing power restricted, despite their having a thoroughly experienced management and a long earning record.

3. *Status of the Market in Which the Securities Are Sold.* No financial plan is ever completed without considerable attention being given to harmonizing the offerings with the current and prospective investment market conditions. In some investment markets stocks must be offered; in others, bonds. Sometimes any type may be sold, but at other times no security can be distributed at a satisfactory price. As a general rule, stocks sell best during the upswing of the business cycle, and bonds best during the downswing.¹

¹The explanation of the phenomenal drop in the price of bonds in 1931, when all bonds on the New York Stock Exchange dropped approximately fifteen points in the months of September and October, is a study in itself. Although price changes and

Of course the business cycle is a double-edged sword in that it affects the financial plan in two quite different ways. On the one hand, the general investment psychology will be subject to variation in the various periods of the cycle, hence will limit the type of security and the price at which it may be sold; it affects the conditions under which capital will be offered in the capital markets. On the other hand, the operations of every business are influenced by the cycle, and therefore the concern will find both the amount of capital needed and the new financing which can be justified drastically affected. The general reputation of the type of enterprise and the kind of business conducted by the corporation will tend to open only certain portions of the investment market. Some investors will fight shy of mining stocks, others dislike petroleum securities, and so on. No single business appeals to the whole of the market; hence it is necessary to analyze carefully that particular area of the capital market which will be appealed to by the capitalization plan under consideration.

Finally, the character and influence of the investment banking house through which the offering is made will have an important bearing upon the plan. In an investment market in which only stocks sell on good terms, a strong investment banker may distribute bonds to advantage, and, vice versa, when only bonds sell well in the security markets, a strong house may distribute stocks on good terms. This is because their long-established clientele responds to the bankers' advice. As a general proposition, it may be said that the stronger the financial house through which a corporation accomplishes its financing, the greater the degree of independence which may be maintained between the financial plan and the general investment market psychology.

If financing is accomplished exclusively through weak investment banking institutions, the corporation may continually be in the process of adjusting its capitalization plan. Such an investment bank will fail to give strong leadership to protect the market; the financial plan will be constructed largely according to fads; and securities so distributed are likely to get into the hands of speculators. In conclusion, it may be remarked that in the long run the cost of obtaining capital through a weak investment banking house almost invariably is greater than the cost of obtaining capital through a strong institution.²

decreased earnings were important, there were many other factors. Political uncertainties in foreign countries, gold movements, curtailed incomes in the case of the unemployed, hoarding of money, manipulations of one sort or another, operated to undermine completely the bond markets. The decline had been progressing slowly from the month of August, 1930. Another somewhat similar decline occurred in 1933, from August to November.

²In 1934 investment banking was separated from commercial banking. There is reason to believe that eventually the two institutions may be more completely segregated and perhaps a centralized institution developed for the investment banking field which would be a counterpart of the Federal Reserve System of the commercial credit institutions. There is much argument to be presented both ways.

4. *Control of the Corporation After the Distribution of Securities.* In planning the finances of a concern, due care must be given to the problem of controlling the concern after the financing has been completed. The study of errors made in the financial plans of corporations would indicate that this is overlooked more frequently than would be suspected. The problem of control usually emerges unexpectedly because of some seemingly innocent clause inserted in the stocks, deeds of trust, or other instruments of financing.³

The Limits of Fixed Charge Securities in the Financing Plan

Because income flows at a variable rate into a corporation, a limit is necessarily set beyond which fixed charge securities⁴ cannot or should not be used. In some states the maximum percentage of bonds is fixed by statute; in others the statute merely covers a "reasonable ratio," leaving the determination of what is a reasonable ratio to a commission or other administrative body; and in a few states nothing is said, but regulatory bodies have assumed the control of the bond and preferred stock ratio to be within the general functions delegated to their administration.⁵

Theoretically, the limit to fixed charge securities is the amount of such securities upon which the earnings of the concern will pay interest and dividends and leave a sufficient residue for the common shares to cover their risks and investment. Assuming perpetuity, no income may be required for purposes of repayment; assuming future ability to finance, no income need be retained for future expansion. Both assumptions are contrary to experience; and both repayment and termination of the business should be kept in mind when fixed charge securities are issued.

The experiences of the markets in 1925-1935 taught, at a terrific cost, that fixed charge securities had been issued in too large quantities, not only in holding companies but in operating companies. The following table is suggested as a somewhat saner basis for the use of such securities:

³ The early history of the National Cash Register Co. is an excellent example of how nearly a corporation may be under the domination of a banking group and still escape. Cf. C. W. Gerstenberg, *Financial Organization and Management*, 2nd rev. ed., p. 450.

⁴ The position may be taken that to consider only bonds in the fixed charge calculation is improper. More and more it appears that preferred shares should be considered as fixed charges; and there is some evidence being presented to show that common stocks of public utilities cannot be completely ignored in preparing estimates of capital income and expenditure for purposes of capitalization. Cf. E. Jones and T. C. Bigham, *Principles of Public Utilities*, pp. 511-518.

⁵ The position taken by some public utility commissions may be of interest. It may be noted that commissions generally have considered the distribution of various types of securities in the financial structures in the light of the use of the proceeds. When tangible assets only are acquired, the fixed charge security ratio is permitted to be higher; to acquire intangibles, only common stocks are ordinarily permitted.

Type of Corporation	Maximum Percentage of Financing By:			
	Mortgage Bond	Debenture Bonds	Preferred Stock	Common Stock
Operating companies				
Very low risk	50		20	30
Low risk	40		25	35
Medium risk	30		30	40
Above average risk	15		30	55
High risk			30	70
Holding companies				
Very low risk	20	30	20	30
Low risk	10	30	25	35
Medium risk		30	30	40
Above average risk		15	37½	47½
High risk			45	55

Very low risk companies could include nothing but the highest class of utilities with long earnings records, conservative managements, and a record of stable operations. Low risk companies would include the better-grade utilities, railroads, and perhaps a few industrial companies in which a large *element of monopoly*, conservative management, and stable operations were a matter of history. Any concern with a violently fluctuating revenue history should be placed far down the table.⁶

Since the earnings are not known for new businesses, the only thing which can be done is to estimate them. Such estimates are not made to recognize unusually good or bad periods. Consequently a normal minimum can be obtained only by estimating on the basis of the experiences of other, similar corporations. The earnings of new businesses are usually much over-estimated, hence unusual caution should be used.

Relation of Capital Plan to Type of Security Sold

Experience sooner or later will show that every type of economic activity of a corporation will have a bearing upon its fiscal structure and policy. Unfortunately it has not been possible to deduce on a purely empirical basis the best possible type of capital structure for every case. The painstakingly slow, but inexorably certain, processes of evolution and experience

⁶The degree of fluctuation in net revenue from time to time is a valuable index to the amount of risk in an industry. It is submitted that the following net revenue fluctuations (on the average) would be characteristic of the various types of risks:

Very low risk	10 per cent
Low risk	15 " "
Medium risk	20 " "
Above average risk	25 " "
High risk	30 " "

The percentages suggested would be the average percentage by which the net revenues of one year would deviate from the net revenues of the year on either side of it, when computed over a period of not less than ten years. The shorter the life history of a company, the larger will be the probable error of the calculations, hence the higher would be the risk element with a given percentage of average fluctuation.

have cost much money. Long-established businesses whose financial problems have had several shocks from the business cycle are likely to have fairly well-defined limits to their structure, and they are likely to be judged by investors in the light of old and well-seasoned standards.⁷

At all times, when corporations offer many types of securities to the investing public, they do so on the grounds that the several securities constitute a sort of stepladder of safety, certainty of income, stability of value, etc., upon which investors may occupy any position they desire. The various types of securities offered are for the prime purpose (as far as the investing public is concerned) of obtaining capital from those desirous of standing in a specific relation to the corporation. Since there have gradually evolved rather limited and fixed standards which are expected to be found in industries of various types, the securities come to stand for generally defined degrees of risk, etc. The usual rules which apply to these cases are:

1. If the financial structure as a whole is regular, the ratio of bonds may be high.
2. If the financial structure is slightly irregular, preferred stock is probably best used entirely in the place of bonds.
3. If the financial structure is distinctly irregular, only common stock should be used.

Interfering Factors in the Formulation of a Financial Plan

As has previously been mentioned, it is seldom that a corporation is able to start off with a financial plan exactly to the liking of all concerned. Nowadays every state in the Union has a corporation commissioner or his counterpart, whose functions include some control over the capital structure of corporations. In conjunction with the administration of blue-sky legislation, these commissioners have steadily increased the scope of their activities until at present they are possibly as influential, if not more so, than any other state official in controlling the financial plans of corporations. Today if issues are over \$300,000 and sold to the public, the Securities and Exchange Commission of the federal government has jurisdiction. Requirements of the law are stringent and vigorously enforced.

Besides the general corporation commissioners, some specific types of corporations will be subject to the regulatory action of commissions such as public utility commissions, railroad commissions, and the Interstate Commerce Commission. The public utility commissions presume to regulate the operations of the enterprises concerned. Removal of the control over rates, service, etc., from the hands of the public utility regulatory bodies might

⁷The wholesale receiverships of railroads in the last decade of the nineteenth century apparently were not completely successful in righting the financial structure of railroads, for the 1930-1935 period again found many weaknesses. The changes in the position of the railroad in the economic system, coupled with the decadent condition of agriculture and the general economic depression after 1929, are taken superficially to be the major causes of present-day defaults. But there is evidence that railroads as a whole are overburdened with fixed charges of bonds and preferred shares.

make control of financial structure and capitalization vague and unsuccessful. The general regulation of securities is discussed in Chapter XXIV.

All regulation finally simmers down to the control of three aspects of the financial structure to the end that each may reasonably be related to the others: (1) the investment element, (2) the risk element, and (3) the control element. To separate the investment element from both risk and control is permissible; but to separate it completely from control without separation from risk is neither sound theory nor tolerable.⁸ To separate risk from control is not generally desirable, and is often condemned.⁹

As at present constituted, the control of capital structure in corporations is only negative. The regulating bodies may only refuse; their suggestions are limited to stating what will be acceptable to them. Once accepted, there appears no way, at present, by which future adjustments may be imposed; the administrative officials are compelled to stand by, irrespective of how faulty a given capital structure may seem, and wait for new financing as a remedial measure. It is proposed for serious consideration that regulatory bodies should be permitted, upon show of proper evidence, to force adjustments in capital structures even though the latter have previously been approved.¹⁰

AMOUNT OF THE CAPITALIZATION

In planning the financial structure of a corporation, a solution of the nature of the financing plan accomplishes but half the task of the final capitalization. The selection of the capitalization plan involves a choice between the different types of securities to be offered to the public and must also be related to the size of the capital to be employed. A corporation having been properly capitalized for \$100,000, the common presumption is that the resultant capital structure would be approximately correct, for progressively larger needs. To check the quantitative aspects of capitalization is a further task.

The Scale of Operation

The fundamental determinant of the quantity of capital requisite to the successful operation of any enterprise, other things being equal, is the scale of operation. To produce 100 or 1000 automobiles per day, or to generate

⁸ But see discussion in A. A. Berle and G. C. Means, *The Modern Corporation and Private Property*, especially Book IV.

⁹ This position was rather flatly stated by the Maryland Public Service Commission in 1931, when it refused to permit the issue of stock of one cent par value by American Toll Properties, Inc., stating: ". . . This stock is for the purpose of giving control of the enterprise to a few persons at a purely nominal price and . . . this ought not to be permitted."

¹⁰ The S.E.C. has broad power under the Holding Company Act, 1935, to control the capital structure. In a series of cases, the rule has been established that all stock must be voting and that bonds and preferred stock can equal 75 per cent of the capitalization only in special cases.

250,000 kw. or 1,000,000 kw., is a question of sheer size. The quantity of assets needed will turn on this point. Likewise, upon the scale of operation will depend both the relative and the absolute amount of profits, and profits finally are the requisite with which to pay the charges on the issued securities.

Assets. The quantity of assets needed will, of course, set a first requirement. The power station of 250,000 kw. capacity will require the investment of millions. A merchandising business such as a department store would be able to produce an equal gross income per year with asset cost of a fifth of the power plant. In the case of Pennsylvania Power and Light Company we find an investment of 257 million dollars in capital, for which an annual gross sale of 52 million dollars is obtained for the service; the 63-million-dollar investment in Macy and Company results in annual gross sales of 250 million dollars.

Margin. In these same cases the firms operate on vastly different margins. The utility has a 35 per cent margin after direct operating costs to pay for the heavy capital investment. Contrariwise, the merchandiser shows a 4.2 per cent margin for charges, which must not be burdened heavily with capital costs.

This principle may be illustrated in a simple table:

	Utility or Railroad	Merchandising
Assets	\$1.00	\$1.00
Sales	.25	6.00
Operating expense	.15	5.90
Profit as return of 10%	.10	.10
Turnover, total assets—sales	¼ times	6 times
Operating ratio (operating expense divided by sales)	60%	98.3%
Margin on sales dollar	40%	1.7%
Capital charges (interest compared to operating income)	25%	.2%

Thus it is apparent that heavy investment in assets for the utility is accompanied by a small relative sales figure. Out of the annual sales only a comparatively small portion can go for operating expense; the balance must be available for large capital charges. The merchandiser has a swift turnover; his capital does a great deal of business in a year.

The speed of subsequent growth will have bearing on the future issue of securities, for quick growth will require much outside capital to be raised in large sums and before full earnings result. Thus growth by the reinvestment of earnings will be too slow, until a much later stage in the life of the company, unless the margin is extraordinarily large and capital needs but moderate.

When estimating profits for industries with small margins of profits per unit of operation, a large allowance should be made for errors in (1) cost calculations, (2) the existence of competitive goods, (3) the possibility

of a reduction in the price of the competitive or substitute good. It is easy enough to overlook the factor (price changes) which makes possible profitable operations in the present and which may quickly become so altered as to eliminate all possibility of profit. Clearly, to put capital into an enterprise under conditions which leave a reasonable doubt as to whether profitable operations can be expected for a sufficient length of time either to permit recovery of the capital invested or to permit adjustment to the possible change, is to jeopardize the capital committed. Concerns having a doubtful and slight earning capacity should have a total capital as small as possible.

In contrast with the above industries, there are those with a wide margin of profit and a semi-monopoly or monopoly position in the economic fabric. A wide margin of profit will necessarily shift the emphasis in estimating total profits from the price-and-cost aspect to the demand aspect. A substantial error in estimating the size of the demand may prove especially unfortunate when there is a violent change in the rate of profit with a shift in the rate of operations.¹¹ Corporations which engage in the production and distribution of commodities dependent for their demand upon fads and fashions must be particularly careful in estimating the demand size.

Finally, it may be noted that the scale of operation is not always set in accordance with the minimum cost-per-unit or the maximum profit-per-unit scale. Some corporations must look forward to a condition of greater or lesser intermittence in operation—especially where violent fluctuations occur in the demand. In some such cases it may be wise to capitalize on a small scale to secure greater continuity of operations, especially if a comparatively heavy fixed charge has been assumed in the capital structure.¹² Anticipation of future needs by overbuilding in the present may be more economical in the long run than accommodation only of the present.¹³ This particular problem is likely to be very important in industries where machine fabrication is large, such as the electric power utility.

The Purpose for Which Capital Must Be Supplied

If a new corporation is being formed, the capital structure will present many intricate problems in the matter of size, for the capitalization must cover (1) initial or organization expense, (2) working capital, and (3)

¹¹ Economists have more or less categorically classified all business into three groups with respect to the rate of change in their costs per unit of output over various scales of operation: (1) industries of increasing costs, (2) industries of decreasing costs, and (3) industries of constant costs. The classification is arbitrary and true only within the more likely range of operation, since all industries are of decreasing costs for very small scales of operation, and of increasing costs for very large scales of operation.

¹² See Chapter XXIX for a discussion of operating ratio and plant capacity; also J. M. Clark, *The Economics of Overhead Costs*, pp. 186-191.

¹³ The limitations on the amount of capital obtainable may reverse the reasoning. That is, instead of deciding how best to capitalize, the decision may be conditioned by how much capital can be obtained. Many businesses suffer losses in their early career, and a slight overcapitalization to offset this fact is often definitely planned.

fixed assets. If the corporation is already a going concern, the problem of capital size will be involved only with the increase or decrease in fixed or working capital to bring them into conformance with the requirements of the normal capital structure.¹⁴ In determining the quantity of capital for any purpose, a margin of safety should be provided; hence most capital plans are in excess of the minimum engineering requirements.

The *initial expenses or organization costs* will include the expense of organization, incorporation taxes, costs of obtaining a certificate of public convenience and necessity in the case of most public utilities, preliminary engineering expenses, expenses of procuring the authorization for the issue of stocks and bonds, expenses of marketing the securities, discount upon bonds provided they cannot be sold at par, interest upon the bond issue during the period of construction and prior to the beginning of operations, expenses of obtaining local licenses, franchises and consents, promoters' fees and expenses, and other similar expenses. All these are incidental to the creation of the physical assets of the concern in a form ready to be used in the conduct of business.

Working capital is that capital which is necessary, in addition to the investment in plant and facilities, to enable a business to conduct its affairs during the interim between the rendition of services or the production of commodities and the receipt of the revenues therefrom. The amount of working capital requisite to the successful consummation of the affairs of a business is a widely variable element. Even in the public utility field, where the most careful control has been exercised, the amount varies tremendously.¹⁵ It is necessarily a function of the stability of operations, certainty of collections, and duration of the production cycle,¹⁶ as will be presented in Chapter XXVIII.

Fixed capital will normally represent properties at the value current on the date of the issue of securities for their acquisition.¹⁷

¹⁴ This discussion does not cover the case in which an adjustment in capital structure is brought about solely by reason of the amount of earnings being such as to warrant an increase or demand a decrease in capitalization. That is, the statement is true only for the conditions of intrinsic capitalization; it covers the subject within the assumptions involved in the application of the rule of free competition.

¹⁵ By no single criterion can the amount be stated for all types of industries. Public utility commissions have allowed flat percentages of fixed capital (Michigan), "one-fourth of the annual operating expenses," "operating expenses for two months, plus the materials on hand," and a dozen others.

¹⁶ One of the relatively common methods of exploiting corporations and stockholders is that of dissipating the working capital through numerous relatively well-known bad practices, such as high salaries, bad debts, loans to officers and employees, advances to subsidiaries, losses on contracts, etc. This particular phase of corporation finance has not always received the attention it deserves, from either a legal or an accounting standpoint, though regulations of the S.E.C. will now have a powerful influence.

¹⁷ It is a moot question whether securities should be permitted to be issued for a mere increase in price levels. The Wisconsin Railroad Commission has been a leading agency in opposing the issue of additional securities because of increases in value by reason of price fluctuations. It takes the stand that there exists a fundamental difference

Valuation of a Business for Capitalization

The valuation of a business appears to be one of the unsolved elements in economic affairs. There have been many cases in which all sorts of points of view and methods have been applied.

Among the ideas on capitalization is a great variety of approaches, and we may list:

1. Original investment, less depreciation and plus betterments.
2. Prudent man theory.
3. Capitalized earnings: past, present, prospective, including estimated trends, normals, etc.
4. Going concern value.
5. Reproduction basis for present status: value new, less depreciation, gives the reproduction value.

To apply these ideas, we find that the first or original cost was the basis of all early railroad construction in this country. Today many real estate mortgage setups for homes have proceeded on this basis. On the construction cost of, say, \$10,000, a 60 per cent mortgage is allowed. The balance may be in a second mortgage or in combination with an equity payment. The point is that this entire plan may not be checked against long-time rental income and operating costs. The plan simply moves as the costs of construction do—60 per cent first mortgage on \$7,000 or \$15,000, whatever is the cost. Thus capitalization totals reflect the costs of the assets.

In banking we see the prudent man theory at work; for when the assets are reviewed by the bank examiner, if the value is found to be less than the cost, a replacement of value must be made. The capital value at prudent value which is lost requires further contribution by the stockholder. Thus the assets at prudent values balance the security value in the hands of the stockholder. This is not a very practical method for competitive industry, but may be made to function in state-licensed fields of monopoly type.

The third method of setting total capitalization proposes that total securities be issued for an amount determined by dividing the representative operating earnings by the rate of risk return for the field. Thus we have:

$$\frac{\$100,000 = \text{total capitalization}}{12\% \text{ rate of risk}} = \$12,000 = \text{representative operating earnings}$$

The idea in this procedure is that if 12 per cent is the rate of risk at which the capital is committed, then the total capital invested may properly be the sum which at 12 per cent per year would yield the amount of the typical

between valuation for rate making and valuation for capitalization; the former reflects current, present-day value, while "there is no constitutional requirement that appreciation in values due to changes in price levels shall be capitalized by the issue of additional securities for the purpose of a stock dividend."—P.U.R., 1931B, 446.

operating earnings. So \$100,000 invested at 12 per cent return is \$12,000 earnings per year. Thus earnings and total commitment are carefully related.

Finally, the idea of reproduction value follows the cost method of capitalization. The value is taken as the *estimated current price of construction* for such an asset as will be received, but allowing for depreciation. This idea functions better in merging existing firms, for this value base brings all assets to a common test. Thus the capitalization is made to equal the values.

Assuming that one arrives at a "reasonable" value, the further problem arises: Shall the concern be capitalized at exactly its reasonable value, or shall it be capitalized at more or less than this amount? In the past it has been fairly generally assumed that to capitalize for more than the reasonable value was antisocial in intent, but there is much to be said on the other side.

Over- vs. Undercapitalization

Even after a reasonably high degree of precision has been achieved in calculations bearing upon the capital structure, it does not follow that the capitalization will be in exact accord with these. Financial structures prepared in periods of prosperity and under conditions of speculative market psychology are easy to overcapitalize; that is, it is easy to sell securities the par or stated value of which is in excess of the current value of the assets.¹⁸ Because funds are easily obtained, corporation managements not infrequently try to secure capital in periods of easy money for future expansion in less propitious investment markets. During these periods the earnings are perhaps larger than normal, and to capitalize current earnings in a period of prosperity at a normal rate will usually result in overcapitalization. Withal, the alleged overcapitalization evil has been more apparent than real, except in monopoly concerns, and the effect of public criticism seems not to have been fatal to many businesses. But overcapitalization appears to be much more fraught with danger in holding companies than in operating companies. Upon this basis the Holding Company Act was founded in great part.

From the strict point of view of the corporation, overcapitalization has many arguments in its favor. Losses can be absorbed without endangering the financial existence of the company; capital obtained in a free money market is likely to be cheap money obtained through the sale of stocks, hence overcapitalization is not likely to result in an increase in the fixed charges of the company in concerns overcapitalized in cheap money markets. An excess of capital, if conserved, may eliminate costly financing at future dates when added capital for expansion could be obtained only under diffi-

¹⁸ There appear to be as many definitions of overcapitalization as there are writers on the subject. What causes the discrepancy between asset value and "capitalization" is largely a matter of the method and basis of valuation, though such discrepancies may arise in numerous ways. Losses may occur, price levels change; there may be improper depreciation policy, incorrect accounting methods, etc., no one of which is, *per se*, a *sine qua non* of overcapitalization.

culties. Undercapitalization, resulting in too little capital, must be corrected by additional financing. Naturally, added financing in the case of an already none too successful concern is no simple task. But if done, it is usually accomplished by arranging a bank loan for temporary use, especially if the underwriting groups do not find themselves in a position to foster added financing. With this temporary fund the business may succeed, and the *permanent financing* may be facilitated at a later date. But the borrowing may mean in itself cause for a default of the business. Thus the fat is in the fire and a reorganization must be arranged with the capital structure, if largely stock, scaled down, and unproductive or overvalued assets written off.¹⁹

Publicly Regulated Fields

Corporations may not always capitalize in exactly the manner they desire, nor may they always capitalize for the amounts they desire. This does not hold in the case of banks, for the law not only states the nature (only stock) but also prescribes the minimum quantity of capital. The same is true for insurance companies, and directly or indirectly all fiduciary institutions may be covered. If the law does not state the minimum capital it may delegate such power to other agencies such as corporation, public utility, and railroad commissions. Public utility commissions will be likely to insist that the capitalization be such as will assure ability to render service to all who may demand it, but not greater than the *allowed value for purposes of capitalization*. The same will be true of railroads. In these instances the nature of the population, number, and rate of growth will fix a limit below which the proposed corporation will not be permitted to organize. Moreover, in some corporations the unit of expansion is large, hence the capitalization must necessarily be fixed at that point which will represent a multiple of the unit of expansion.

SUMMARY

In the final analysis, from both an internal and an external standpoint, earnings constitute the acid test of capitalization propriety. To overcapitalize at the outset will make financial problems easy of solution during the youth of the corporation; but as the firm approaches adolescence and adult growth, overcapitalization may provide the substances which undermine the financial structure. Heavy interest charges, large preferred dividends, and

¹⁹ The treatment of overcapitalized corporations by regulatory bodies affords an interesting, but relatively unprofitable, study for, almost without exception, they let bygones be bygones, treating each new application for the issue of additional securities upon its own merit. Of course, if the commissions approve each successive issue upon its own merit, any excessive capitalization once in the financial structure must be perpetuated, though relatively reduced in importance. The State of Massachusetts has been the one notable exception, for it has avowedly required the elimination of watered stock before new issues will be sanctioned.

small residual earnings for common stock are what destroy the corporate body. To undercapitalize is to find great difficulty, perhaps, during infancy and early youth, but probably to have a corporation living to grand and peaceful old age (as corporations go). Inexperienced management appears more likely to undercapitalize than to overcapitalize; no particular trend seems evident for experienced management, though there may be a slight tendency toward overcapitalization. Corporations which are financed during periods of prosperity and speculative hysteria appear more likely to be overcapitalized; the reverse will be found in those originated in periods of liquidation and depression. Price trends may cause capital structures to appear much awry irrespective of the care exercised in their formulation. Subsequent fundamental economic changes may completely destroy any financial plan, especially if large amounts of intangibles were included in the capital structure. If there are unusual features in the financing plan, it is probably best to limit intangibles or to place them in the capital structure in nominal amounts.

Generally to conclude that over- or undercapitalization is preferable is dangerous, for such a conclusion must be predicated upon the experience of the management, the nature of the enterprise, the degree of monopoly, the state of the securities market, the prospects of the concern, the extent of intangibles such as patents, franchises, etc., and many other elements. From a social standpoint, overcapitalization is probably to be condemned when substantial in quantity and when it affects the price of the product or services to the ultimate consumer.

QUESTIONS

1. How is a good financial plan related to the ultimate success of a concern?
2. Indicate the prime elements in the creation of a financial plan, and the relation of each element to the variations which must be allowed for in preparing the plan.
3. How may the very volume of capital employed in a certain type of business be related to the financial plan created? Give examples.
4. As long as the firm needs the same quantity of assets, why should regularity of earnings be regarded as important in the type of financial plan?
5. Indicate the methods which might be employed for determining the total capitalization of a concern.
6. Criticize the various capitalization concepts, and indicate the particular fields in which they might be applied most usefully.
7. Explain how public regulation may be related to the capitalization plans. In what cases are the requirements not in conformity with common practices? Why?

PROJECTS

1. Prepare a summary of the respective capitalization plans of five industrial companies in a common field, showing their relation to the average earnings of each company in the past five years.

2. Examine the merger proposal of the New York, Chicago and St. Louis Railroad and the Wheeling and Lake Erie Railroad, on the basis of (a) cost of assets and (b) capitalization of earning power. What capital plans would you propose for each method?

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CHAPTER XVI

Industrial Financing



“INDUSTRIALS” is a broad term covering all enterprise apart from the public service groups, real estate, and financial enterprises. This covers a very broad range of enterprise, of course, much greater than we can hope to discuss fully in a single chapter. But general policies which apply broadly can be outlined and the reader cautioned that deviations may be expected. Thus we will be concerned primarily with manufacturing, distributive, and extractive enterprises and their common financial practices.

Types of Financial Structure

As outlined in Table 19 showing the combined capital structures of the corporations, industrial, public utility, and railroad, in the United States, the use of the various sources is patterned quite differently in each field. The

TABLE 19. CAPITAL STRUCTURES—INDUSTRIALS, PUBLIC UTILITIES,
AND TRANSPORTATION
(in billions)

	Industrials		Public Utilities		Transportation	
Current liabilities	\$ 11.4	11.2%	\$.5	2.0%	\$ 1.1	3.1%
Long-term debt	13.2	12.9	9.7	38.6	14.5	40.8
Preferred stock	6.9	6.8	2.5	10.0	1.2	3.3
Common stock	29.0	28.4	8.9	35.5	9.4	26.3
Surplus	33.0	32.2	2.5	10.0	6.0	16.8
Other liabilities	8.7	8.5	1.0	3.9	3.5	9.7
	\$102.2	100.0%	\$25.1	100.0%	\$35.7	100.0%

greatest difference among the three fields, however, exists between the industrials and the other two groups. The combined stock and surplus sources account for 67 per cent of the funds provided for the structure of the industrial field; this is quite by contrast to the 56 and 46 per cent of the other two fields.

This cushion, so to speak, in the capital structure of the industrials is needed because of the known hazards of competition and price-cost relations. In the year 1925, a very similar showing existed in the proportions of the capital structure, which then showed 90 per cent contributed by all

stock and surplus sources, as compared to the present 67 per cent. This increase in debt as a source does not indicate any new trend.

The hazards of earnings shifts are made real by a glance at the results in Figure 18, which charts the net earning results of all industrial enterprises in contrast to the earnings for the electrical utilities. The rise and fall in the industrial chart line is ready evidence as to why a "cushion" needs to appear in the structure of such a concern. Thus the attachment of the instability in income to the type of capital structure is a rather obvious one.

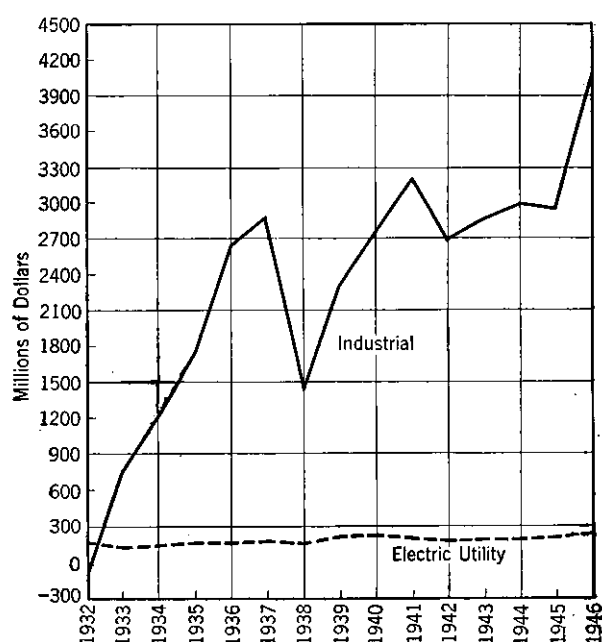


FIG. 18. Comparison of Industrial Earnings and Electric Utilities.¹

The very large portion of the industrial structure which is represented by the surplus, an investment for which no security has been created, is at once evidence of two things by contrast to the policies in the railroad and utility fields. First, the large surplus of the industrials indicates the general policy of retaining substantial portions of income for the business from its earnings. This practice is followed only to a limited degree in the other two fields. Second, the industrial structure finds the creation of such a surplus a necessity to bridge the gaps in earnings as they vary from year to year. In Table 20 the industrials show retained earnings, 1945 and 1946, to average over 50 per cent of profits; this runs at 15 per cent for the utilities and about 10 per cent for the railroads.

¹Source: *Moody's Manual of Industrials and Public Utilities; Statistics of Railways in the United States; Statistics of Income.*

CORPORATION FINANCE

TABLE 20. RETAINED EARNINGS
(in millions)

	1946		1945	
		Per Cent to Profits		Per Cent to Profits
Manufacturing	\$3487	54%	\$2125	47%
Mining	213	50	166	50
Railroads	-53	-53	330	65
Trade	1953	69	848	60
Utilities	218	25	49	7

Structures by Industrial Fields

The pattern of sources for industrial capital which we have thus far explored constitutes an aggregate, so it will be interesting to examine the practices of the several groups within the whole field. In Tables 21 and 22

TABLE 21. CAPITAL STRUCTURE BY INDUSTRIAL GROUP
(in billions)

	Total	Manufacturing	Mining	Trade
Current liabilities	\$ 11.4	\$ 6.4	\$.5	\$ 4.5
Long-term debt	13.2	8.5	1.2	3.5
Preferred stock	6.9	5.5	.2	1.2
Common stock	29.0	19.9	2.8	6.3
Surplus	33.0	24.3	2.7	6.0
Other liabilities	8.7	6.8	.4	1.5
	<u>\$102.2</u>	<u>\$71.4</u>	<u>\$7.8</u>	<u>\$23.0</u>

TABLE 22. CAPITAL STRUCTURE OF INDUSTRIAL GROUPS BY NUMBER

	Total Companies	Common Stock Only	Common Stock Plus:			
			Bonds	Preferred	Bonds and Preferred	
Manufacturing	1034	470	45%	8%	33%	14%
Extractive	247	198	84	4	6	6
Merchandising	169	56	33	4	51	12
	<u>1450</u>	<u>724</u>	<u>50%</u>			

we have summarized the general sources of capital relied upon by manufacturing, extractive, and merchandising enterprises. The strong reliance of all of them upon common stock is noteworthy.

Extractive. The fact, however, that 84 per cent of the companies among extractive industrials rely on the common stock source is to be commended. The total capital employed shows that debt serves as a source for 21 per cent of the structure. Probably a few major units account for the higher than average use of debt among the companies. In view of the great un-

certainties in this business, beset as it is by wide price variations, unusual costs, and the depleting nature of the assets, a low debt ratio is wise policy. A review of the net earnings records for the petroleum field in

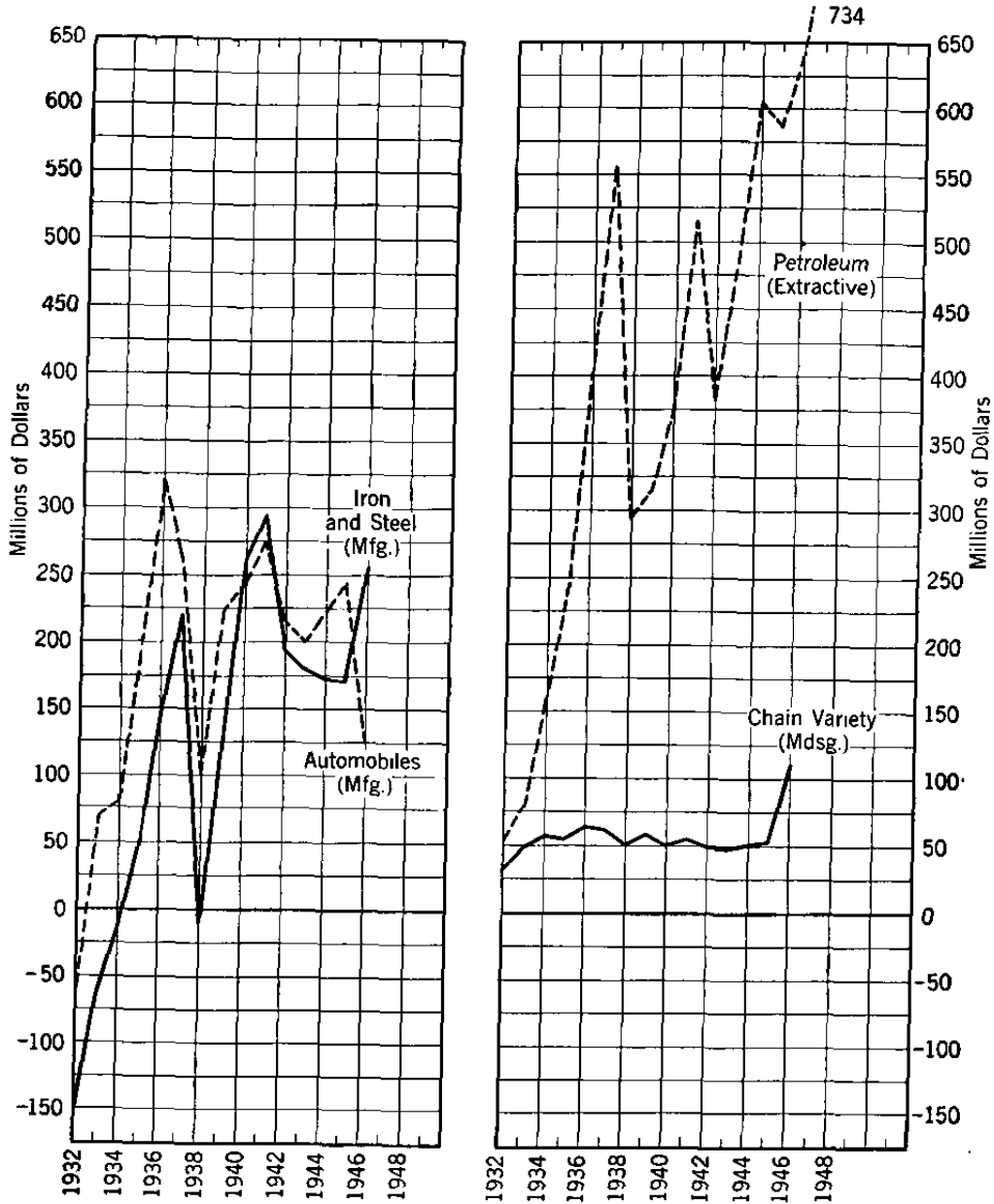


FIG. 19. Corporation Net Earnings Annually, 1932-1946.²

Figure 19 shows the wide swings in earnings. These results contrast greatly with the merchandising group and show clearly the extreme movement in earnings variation.

Merchandising. Quite by contrast is the rather extensive use of debt and preferred stocks which appears in the structures of the merchandising

² Source: *ibid.*, 1947, p. 214.

group. The preferred stock issues which have been created in the case of 51 per cent of the companies are no doubt fostered by the desire to trade on the equity. Or the purpose may be to tap the investment market at the conservative level, assuming only the risk of a priority in dividends. Such

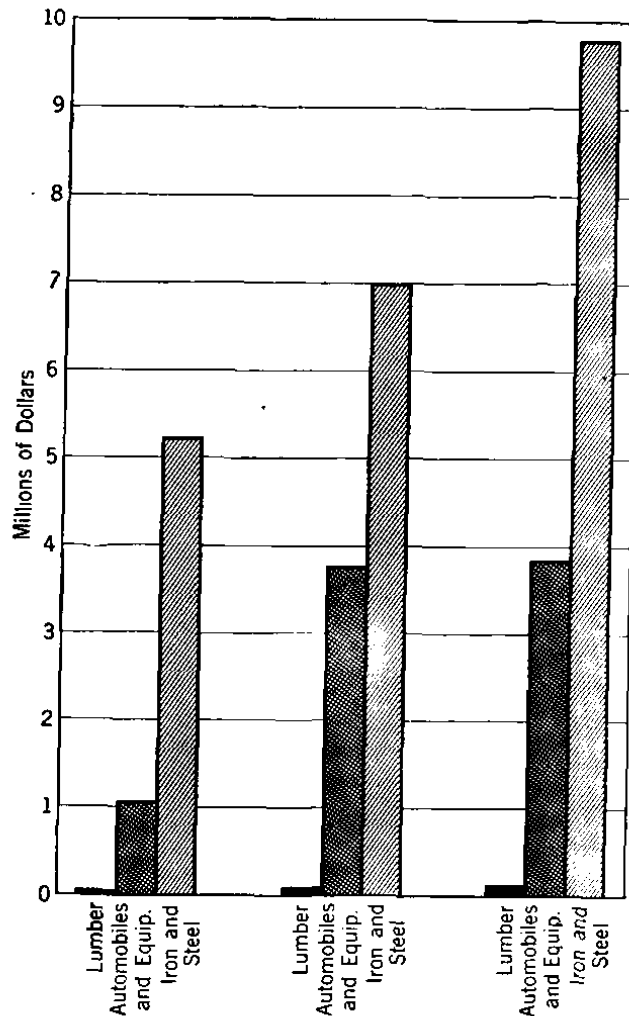


FIG. 20. Manufacturing—Value of Product per Establishment.³

stocks account for 5 per cent of the structure. The use of funded debt is a logical result of the use of the preferred stock in the structure, the two sources combined amounting to 20 per cent of their structure, and particularly since this field would not ordinarily have large investments in plant or establishments.

Manufacturing. The manufacturing field shows the greatest number of

³ Source: *Statistical Abstract of the United States*, United States Department of Commerce.

companies using debt in the structure, coupled with a moderate use of preferred stocks. The debt as 12 per cent of structure is, however, very moderate. In Figure 18 the earnings variability suggests the need for a conservative policy, yet it is probably true that the average investment per establishment in this field makes it necessary to borrow. It is surprising to find the field on a par with the others, with 22 per cent of capital structure on a fixed charge basis. From the comparison of the value of products per establishment shown in Figure 20, we find some evidence of the capital needed by the manufacturing group in the industrial field. The enormous volume flowing through the automobile and steel plants is clear

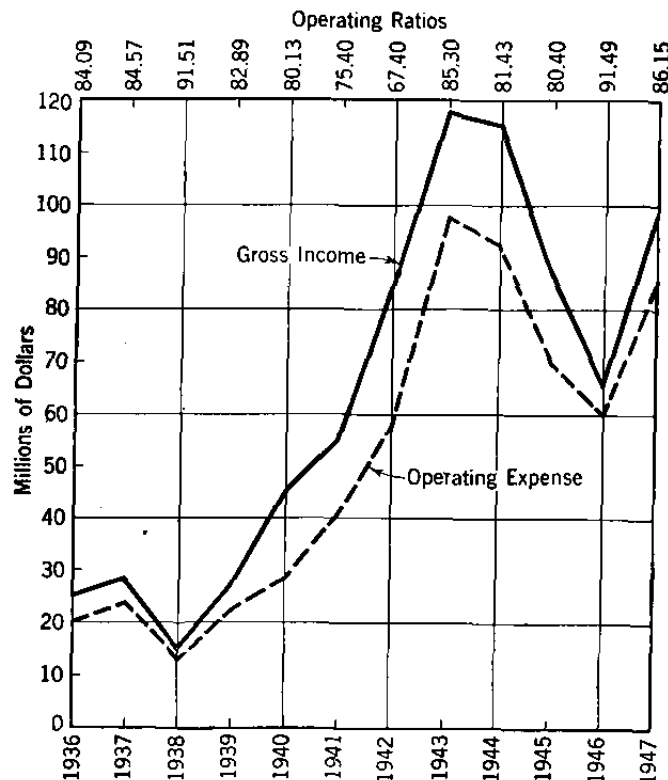


FIG. 21. Operating Ratios of the Eaton Manufacturing Company for the Years 1936-1947.

evidence of the need of these establishments for a heavy investment per establishment, thus justifying the use of the debt source to a greater degree than the smaller productive unit exemplified by the lumber industry on the chart.

Operating Ratios

The margin between operating costs and sales income is not great in the manufacturing field; it is even less in the merchandising field. For this reason a large shift in prices and costs which cuts the margin cannot be absorbed

without danger if there is also a substantial fixed charge to be paid. Figures 21 and 22, which chart the record of a typical manufacturing firm and a typical merchandising firm, show the nature of the fluctuations and the type of margin found in these fields. The pictorial statement of the problem is more impressive than dollar items alone.

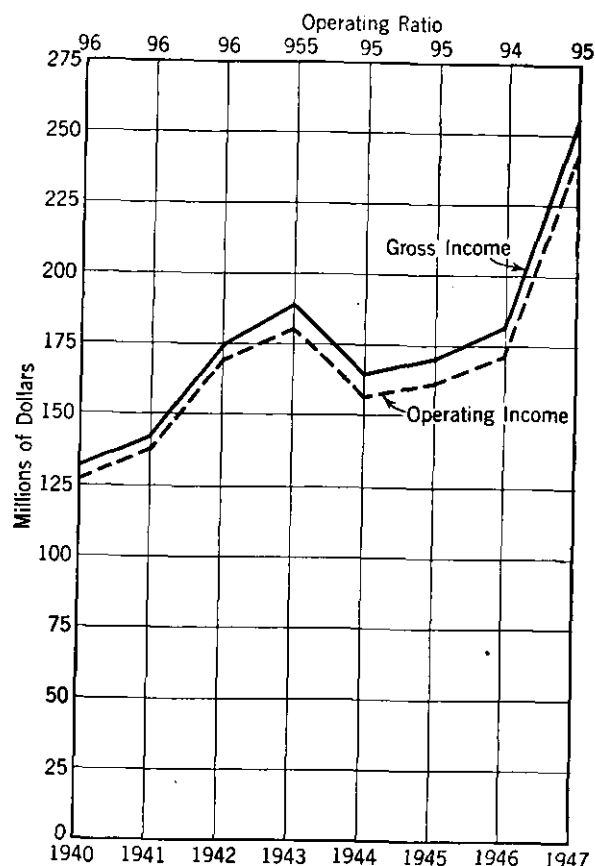


FIG. 22. Operating Ratios of First National Stores Inc., for the Years 1940-1947.

Because of the competitive nature of manufacturing and merchandising this narrow margin after operating expenses makes all interest burden an unusually dangerous problem. It is very often true that when prices change directions the control of costs cannot be established in direct relation. Thus the possible loss of working capital is encountered. If the loss is not increased by payments for fixed charges, the absence of such charges will be helpful in recovering the proper current position.

*BONDS FOR THE INDUSTRIAL STRUCTURE***Reasons for Use**

Strong reason has already been presented as to why the industrial concern should look with disfavor on an extensive issuance of bonds. The danger to insolvency which it might invoke in view of the wide movement in earnings is a good reason. But a number of reasons to the contrary may develop in the course of the life of the enterprise.

First, many of the industrials require large investments per unit of production. This heavy demand for capital funds may make it necessary to borrow because a favorable market for stock issues will not be present regularly when plant additions are needed. As a matter of fact the advantageous time, price-wise, to construct will usually be during a period of relatively low business activity. In such periods the market is invariably poor for the sale of stock, except at large cost to the firm.

Second, many of the industrials are small units and have some difficulty in getting their stock issues accepted in the market. The public in such cases may be willing to buy a bond, but certainly is not attracted to stock issues. Buyers in these cases are less concerned with future marketability of the bond than are those who buy stocks. The latter are inclined to prefer issues with public market listings and current quotations.

Third, the sale of small properties to larger concerns is especially the occasion for offering the sellers bonds and preferred stocks for their properties. This is a typical pattern of such *merger procedures*. The purchaser is usually willing to assume this burden for it involves no control problem, all the voting stock remaining in the purchasing company without disturbance.

Limitation on the Debt

The recognition of the danger of debt for industrial concerns raises the question of just how far to go in the creation of debt issues. Much of the answer comes from custom, though there is ample evidence furnished also from the experience of firms. Generally, the first question to be asked in discussing a debt issue for the industrial enterprise is the amount of the fixed assets. That is, the capital committed to plant and equipment but excluding all intangibles even though they be purchased. A bond issue in customary mortgage proportion of 50 to 60 per cent of the plant value becomes the general maximum which it is regarded as feasible by the banker to offer. This seems to be a practice inherited from the old real estate mortgage practice on small business buildings or dwellings.

The theory of this old practice is on the assumption that if there is a default, the property could be seized by mortgage foreclosure and sold to another user. This was true of small business enterprises, too. In this day of specially designed plants and even more specialized machinery, such a test becomes something of a fiction. But this is still the market psychology

of the bond buyer, other than institutional investors, and must be given due regard in making the decisions. It is for these reasons then that most bond prospectuses make careful mention of engineer-appraisal figures as to the plant and equipment of the industrial firm, their present condition of repair and general efficiency.

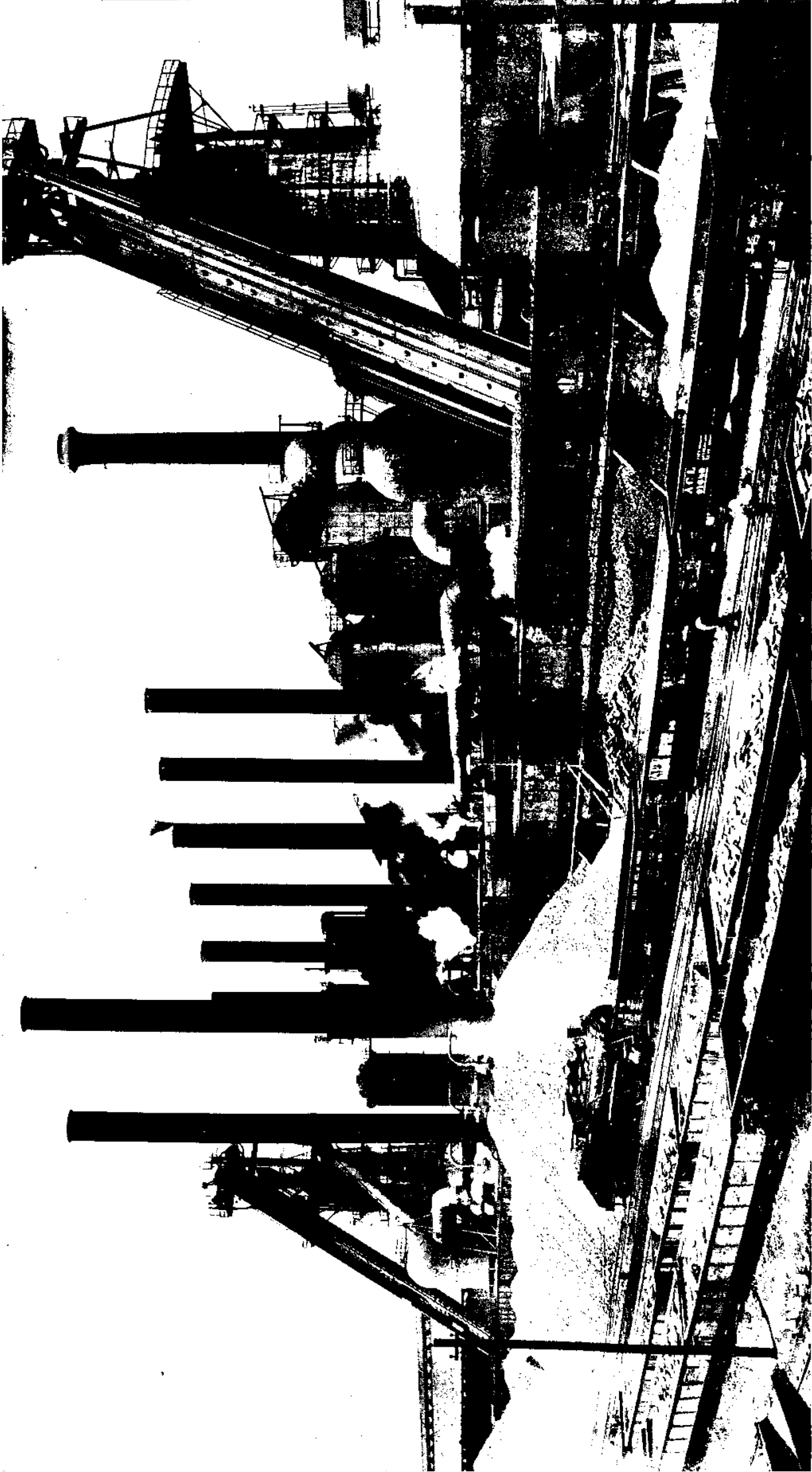
Net Current Assets

It has long been the practice in bond circles to proceed upon the rule that the net current assets should exceed any funded debt created by the industrial firm. This approach is reasoned on the basis that if the firm can show such a balance of current assets over the current liabilities, it will be quite certain of sufficient assets to pay the charges on the funded debt. Thus if this position is maintained, little danger that it could not be paid or properly refunded would be encountered in the life of the bond issue. In the interim all sinking fund charges and interest payments could be met promptly because the current operations of the business would consistently supply the ability to pay.

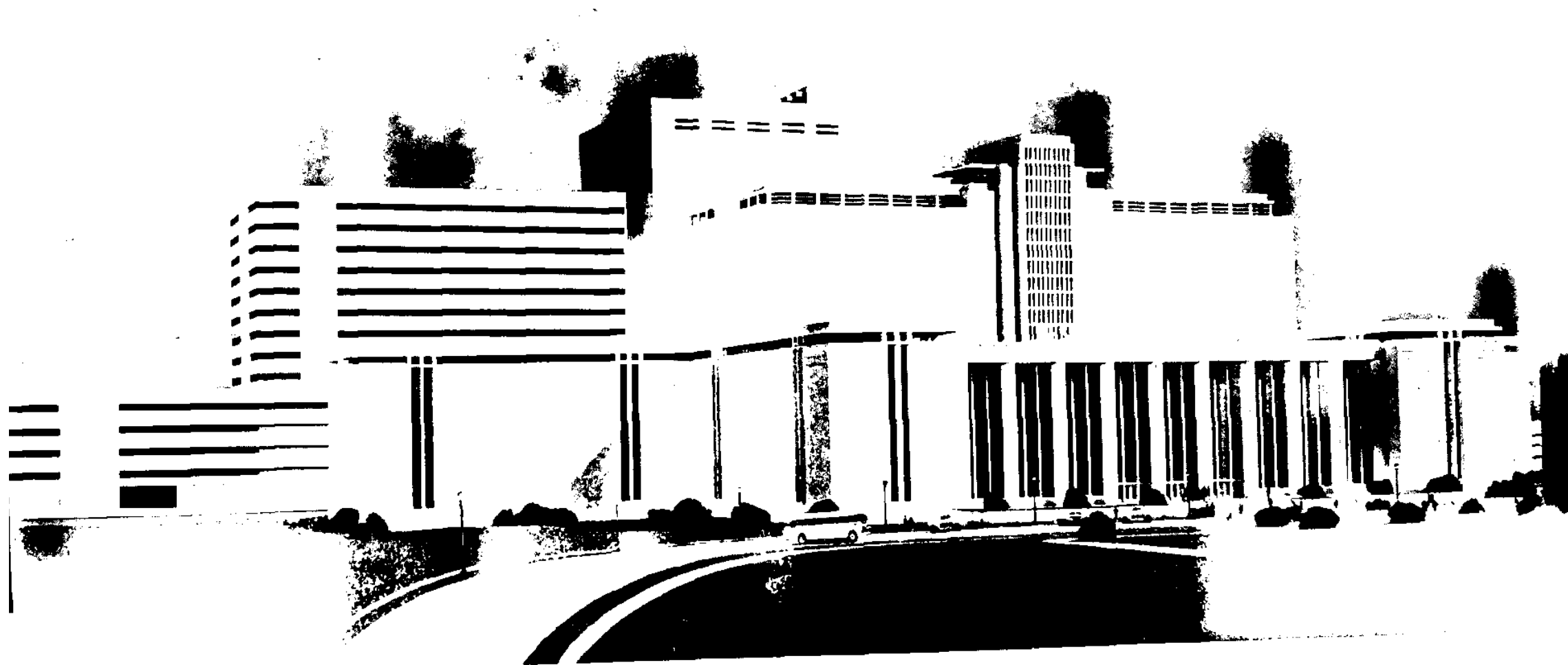
There is nothing wrong with the idea of the test at the time the debt is created, but there is no assurance that it can be maintained. As a matter of fact, if this condition of net current assets is made a term of the loan, it may create a default at a very inopportune time for the creditor as well as the company. Among the practical problems of the test is the fact that there is no assurance that a margin can be maintained on the sales of the firm. If this is not done, the pressure on the cash resources of the firm will shortly develop into a crisis. This operating difficulty can occur, as a matter of fact, by reason of frozen inventory even though the net current assets still meet the loan condition.

While such provisions are common for debenture issues, which are regarded as a debt form peculiarly subject to the current asset condition of the company, there is probably no substantial difference between them and the needs of a mortgage. The mortgage bond in any case will have the advantage of any move for liquidation by reason of its priority. Debentures will usually be sold by a firm in the better markets. Many buyers may not consider debentures as sound as the mortgage debt. If the debenture is simply protected by conditions of maximum debt issue, it is quite possible the distinction will be academic. In the end, the values of the property at a liquidation are not security unless the total debt is small as a portion of the whole investment. Thus the first limit of debt to fixed assets creates a limit which in most cases is critical enough, and if this is passed, the second limit would probably be complied with whether provided or not.

This is true because most industrials have less than 60 per cent of their total assets in fixed assets. Thus if half the value of the plant was made the debt limit, this would be 30 per cent of the total capital structure. If the business maintained a ratio of 3 to 1 in its current assets, then the 40 per cent of the total structure divided into four parts would allow 10 per cent

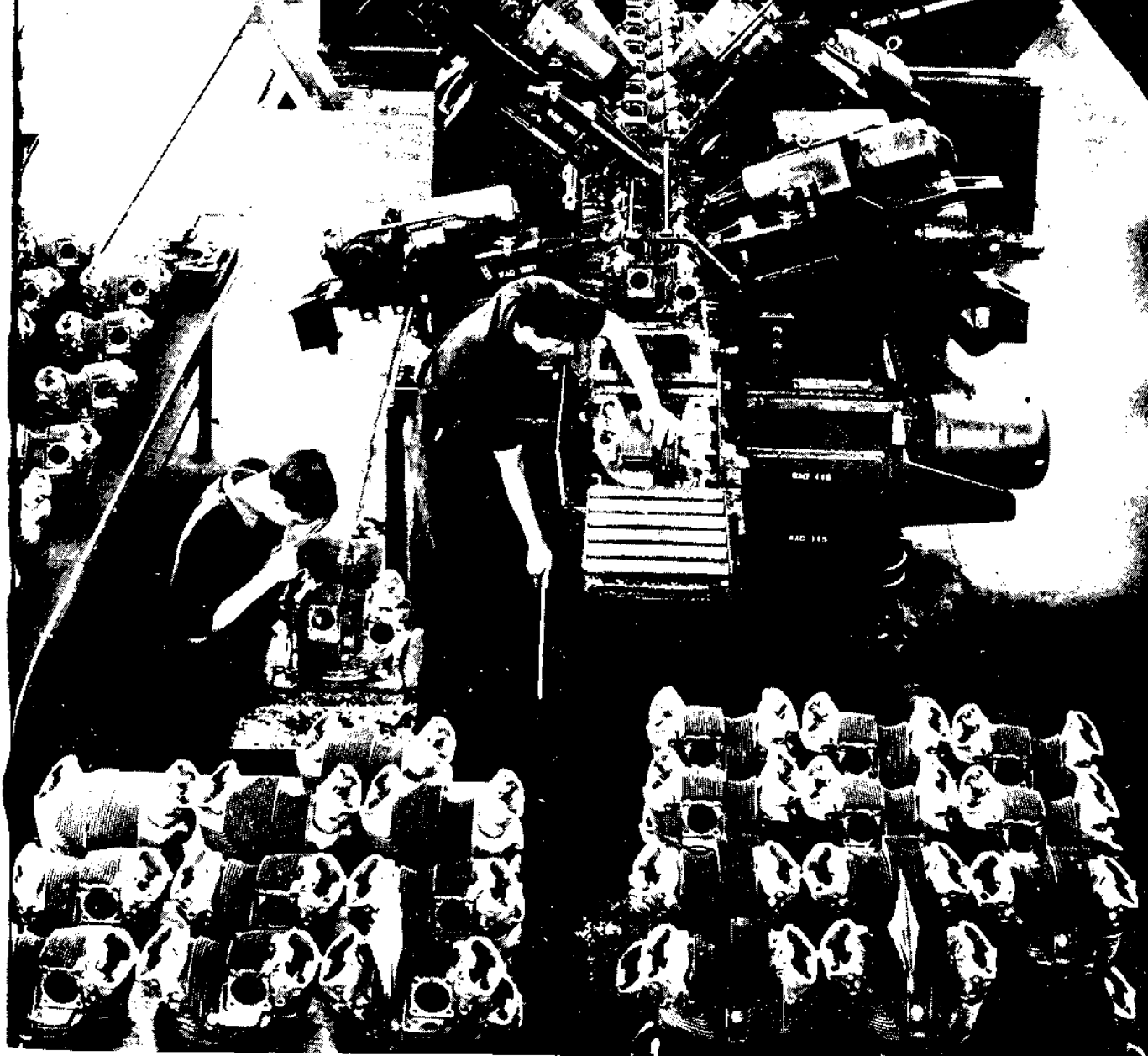


The Size and Massiveness of Equipment and Plant Indicates Why Capital Is Needed by Industry. (Courtesy of Sloss-Sheffield Iron & Steel.)

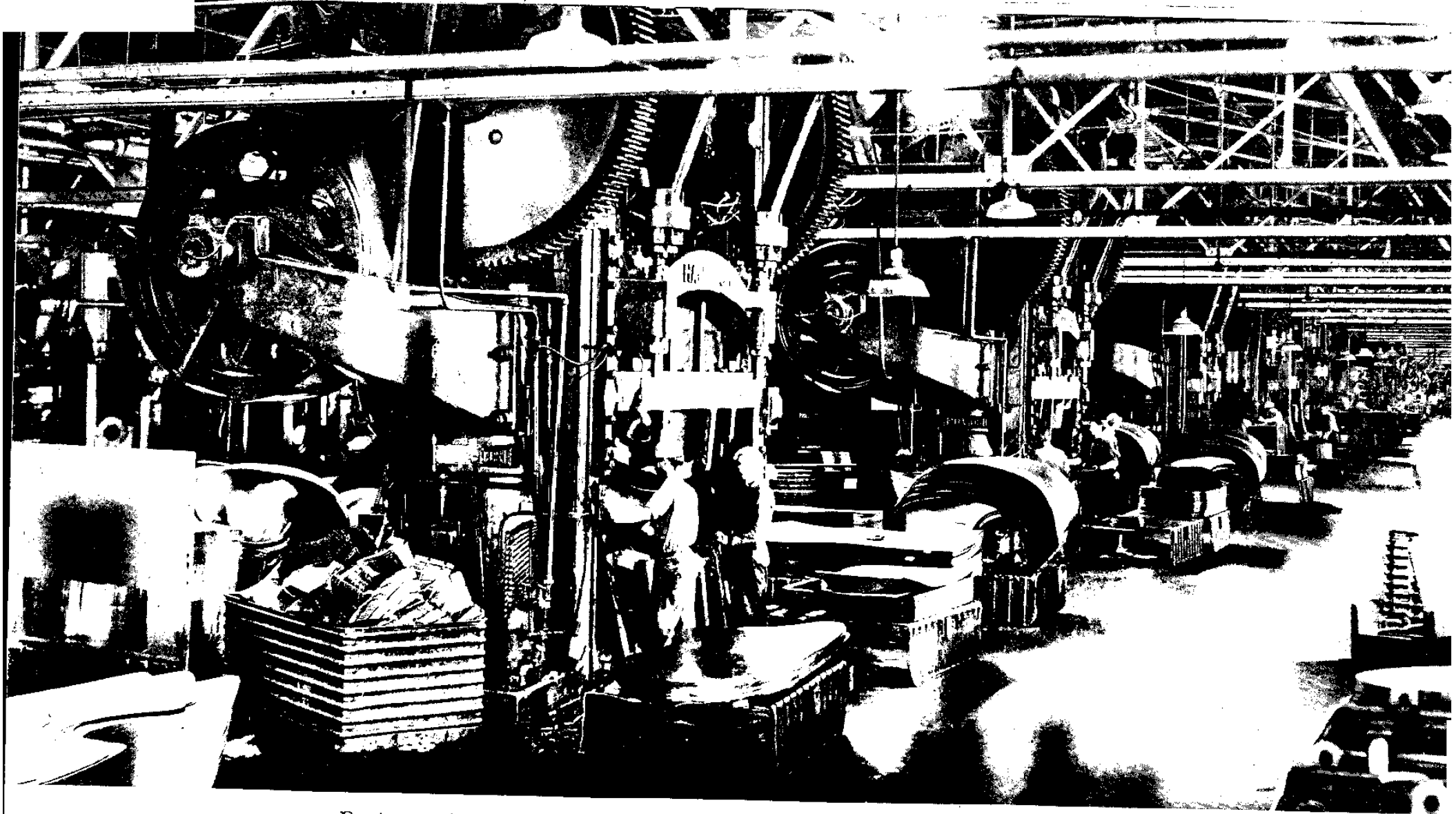


The Modern Industrial Plant Must Keep Pace with the New Techniques—
This Requires Further Investment. (Courtesy of the Austin Co.)

This Requires Further Investment. (Courtesy of the Austin Co.)



A Special-Purpose Machine Is Expensive but It Performs a Lot of Work.
(Courtesy of Wright Aeronautical Corp.)



Equipment Which Depreciates Is a Constant Financial Problem for the Business—
These Machines Cost over \$50,000 Each. (Courtesy of General Motors Corp.)

to cover the current liabilities and leave 30 per cent as net current assets. The condition of the second case, therefore, would be typically provided in a well-managed firm, and add nothing further to the obligation of the enterprise.

It is perhaps one of the anomalies of finance that many of the firms which show wide variation in earnings records are those showing extensive use of debt as a capital source. In Table 23 it appears that the rubber,

TABLE 23. CAPITAL STRUCTURE FOR FIRMS WITH HIGH DEGREE OF EARNINGS VARIATION

Field of Industry	No. of Cases	Total Capital (billions)	Per Cent Distribution		
			Bonds	Preferred	Common and Surplus
Iron and steel	18	\$3.0	15	19	66
Meat packing	4	.7	35	13	52
Rubber	9	.6	31	39	30
Theaters	3	.3	40	8	52

meat packing, and iron and steel industries show small equities ranging from 30 per cent to 66 per cent of the structure. As was suggested earlier, many of these cases are probably instances of sudden growth and the use of sizable plant installations which left little choice in the matter of financing at the time. Plagued thereafter by rapidly shifting earnings, these concerns have been able to reduce their debts only moderately in ordinary years. The result of operations in the period of World War II has been to relieve this situation considerably, and these firms have shown particularly strong consciousness of their problem. It is to be remarked that they should have been aware of it, in view of the record in 1920-1921 when all the major packing companies except one ended in receiverships and many of the rubber companies underwent reorganizations at the same time. The iron and steel field was no exception though the major concerns were not as heavily involved as in the other two fields.

Earnings to Interest Ratio

As was suggested by the earlier discussion, the ultimate solvency of a concern is the most important matter for the security holder, be he stockholder or debt holder. This condition is reflected in the earnings factor more completely than in any other one test. Only by the poorest of management would a firm capable of showing profits regularly not be able to make a satisfactory showing on its debt obligations. More normally the difficulties with debt arise from the continuing fixed charges to be paid in times when there are deficits instead of earnings. All of the interest payments then operate as reductions of the current asset position; and if long continued, this is destructive of the ability to operate. Thus a crucial test is supplied by the consistency of the earnings and their excess by some fair margin over the interest and sinking fund charges of a debt. Satisfactory results

on this point will prove the soundness of the debt in the capital structure.

Simply stated, if the average earnings over several recent years are four times the amount of interest proposed on the entire debt structure, there is strong probability that in the future such interest will be earned. Therefore, a debt of the proposed size meeting this test would be reasonable for the enterprise. It is true that in times of unusually low interest rates, as in 1944-1947, the application of this proposal might allow, by capitalizing the allowable sum out of earnings, a debt beyond the usual bounds of 50 per cent of the fixed assets. In such a case, the safe answer is to proceed within the limits of the more stringent test. This double checking of the two rules should serve very well to check overly good showings in earnings and likewise unusually high cost assets as a proper test.

Two comments need to be made for the administration of any interest to earnings ratio. First, the ratio of four to one is not magical, or necessarily correct for all cases. The proper interest ratio will change with the degree of variability in the earnings record of the general average of the field. Thus, as presented in Figure 19, it would seem apparent that the iron and steel industries might use much higher ratios than the chain-store variety merchandisers. It is equally clear that the electric utilities are entitled to very low ratios.

Second, it should be noted that care must be taken to define the earnings which are used in the ratio test. These earnings should be, after all regular taxes, charges for depreciation and other capital expenses. Likewise, all interest charges should be included in the calculation, other than discounts on current liabilities and bank notes, covering as well the charges for rent of equipment, royalty, or license payments unless previously charged directly to operations.

TABLE 24. BONDS ISSUED, 1944-1946
(in millions)

Size of Issues	1944		1945		1946	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
\$50 and over	....	....	\$ 827	48.8%	\$1469	50.9%
20-49	\$327	51.3%	531	31.4	985	34.2
5-19	249	39.0	272	16.0	334	11.6
1-4	59	9.2	62	3.7	88	3.1
Under \$1	3	.5	1	.1	5	.2
All sizes	\$638	100.0%	\$1693	100.0%	\$2881	100.0%

Recent Industrial Bond Issues

The record indicates a market movement on the part of large enterprises to sell bond issues. In Table 24 appears the record of all bond issues floated over the period 1944-1946, classified in size of issue. In all the years better than 50 per cent of the issues sold have been in the size of 20 million

dollars or greater. Much of this may be accounted for by the major utility financing, which this figure includes, because such issues will commonly run in large units owing to the heavy plant costs for any installation. A test of the 1948 manual shows industrial issues, as a rule, in the lower-sized brackets of issues sold, with 56 per cent of the issues under 10 million dollars and 45 per cent less than 5 million dollars.

PREFERRED STOCK

Although no general rules may be said to exist for preferred stocks as a part of the capital structure in the case of industrials, it is clear that they should be used to an even greater degree than bonds. The very elements of uncertainty in earnings which we have discussed in connection with the creation of debts for the industrial argue strongly for the use of preferred stocks in place of debts. This, it is recognized, is not possible in all markets, and there is some disadvantage in the rates to be paid. But the rates paid may be happily offset by the less embarrassing results which can come with interest defaults.

TABLE 25. EMPLOYED CAPITAL, 1937
(add 000,000)

Industry	Total	Net Funded Debt	Net Preferred Stock	Net Common Stock and Surplus	Interest-Bearing Other Funded Debt
Extractive	\$ 1,579	\$ 223 (14%)	\$ 137 (9%)	\$ 1,143 (72%)	\$ 74 (5%)
Manufacturing	29,538	2,285 (8%)	3,835 (13%)	22,188 (75%)	1,228 (4%)
Merchandising	2,556	99 (4%)	364 (14%)	1,911 (75%)	181 (7%)

In the structures surveyed in Table 25 for the manufacturing, extractive, and merchandising groups, it is plain that all of the companies, in the aggregate, have set up a commendable policy of using common stock and surplus, centering very largely at 75 per cent of the structure. This leaves the 25 per cent to be raised optionally between debt and preferred stock. The tendency so far as numbers is concerned shows, in Table 22, that the merchandising firms chose to use the preferred stock group most frequently. Tested by the dollars of capital structure involved, this is not borne out. The difference in policy for the three groups of industrials is not sufficiently marked for a general conclusion to be drawn.

It is to be recognized that in many markets the debt contract is the only one which would have a good sale from an industrial field. Even a substantial differential in rates might not be sufficient selling attraction. Moreover, there are apt to be tied with a sale of preferred stock in difficult markets some terms relative to the control of the voting position. This is not a likely risk for any debt issue, unless a conversion privilege has to be granted.

Dividends Covered

The same concept of the relation of available earnings to the dividend to be paid which seemed to supply a good test for the control of debt appears to be applicable to preferred stock. It is the *availability of earnings* which will keep the payment record clear and give the instruments of the company a recognizable market status.

In Table 26 appears the record of dividend to earnings ratios of a number of industrial preferred stocks. Where the stocks are part of a structure in which no more than 25 per cent of the structure is in debt and preferred stock, the coverage is favorable. This evidences a correlation which is useful

TABLE 26. NUMBER OF TIMES PREFERRED DIVIDENDS EARNED

Company	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Allis-Chalmers—Pf.	....	....	....	....	....	....	....	....	10.94	6.65	.28
California Packing—Pf.	....	....	22.47	def.	20.32	17.50	21.04	21.60	20.74	19.96	17.57
Peabody Coal—Pf.	....	....	....	....	.81	1.05	1.14	2.35	2.40	1.70	2.26
Paramount Pictures— First Pf.	3.90	7.80	3.60	4.00	9.00	13.40	16.50	16.00	retired		
Remington Rand—Pf.	....	....	5.85	2.14	2.80	5.13	7.45	5.19	5.22	8.10	14.19
General Motors—Pf.	26.01	21.43	11.15	19.98	21.31	21.97	17.83	16.32	18.63	20.51	8.95
Tide Water Assn.—Pf.	1.81	6.83	4.80	4.43	3.01	5.70	5.50	6.64	8.71	18.77	20.43
Twentieth Century— Fox—Pf.	....	5.74	5.12	3.04	def.	3.53	7.74	7.92	9.07	11.37	56.12

in setting a standard. It would appear that in the industrial field the earnings variability requires that a 2.5 ratio of earnings to both interest and dividend on preferred will withstand most variations. The practice, if reduced to stating the coverage for the preferred stock only and after interest payments are allowed for, would show an increased ratio statement. This would run at a minimum of about 3 to 1 as a ratio of earnings available for dividends to the preferred dividends.

Contract Terms

It is necessary to add a great number of terms to preferred stock in order to make it marketable. This is true in greater degree than for most bonds. The element of security received in the debt obligation can usually be traded by the company for a somewhat less involved contract, one which agrees to place much fewer limitations on the freedom of action of the management.

COMMON STOCKS

It has already been demonstrated that there is considerable need for the use of common stock in large amounts in the structure of industrials. The reasons have been reviewed with the stress laid upon the highly variable record of earnings factors which characterize this type of concern. The variations in prices and costs have been reviewed. A further risk which is

of considerable importance in the record since 1940 has been the risk levied upon the earnings of these concerns by taxes, particularly the federal income tax and its inclusions.

The record of the burden of taxes on the earnings of various concerns is available in Table 27. It is apparent that the rise in earnings was strongly suppressed as to net earnings retained after taxes by the tax payments. In the case of the manufacturing firms, there is a distinct tendency to actually

TABLE 27. TAX BURDEN FOR INDUSTRIALS
(in millions)

	1940	1941	1942	1943	1944	1945	1946
Allis-Chalmers Manufacturing Co.							
Earnings	\$11.2	\$19.3	\$34.3	\$53.3	\$65.0	\$30.8	d. \$22.0
Income and excess profits tax	2.5	9.1	23.2	37.2	43.4	16.6	cr. 25.0
Tax (other than inc. and excess)	2.6	3.0	3.3	5.6	7.3	4.2	....
Net	\$ 6.1	\$ 7.2	\$ 7.8	\$10.5	\$14.3	\$10.0	\$ 3.0
International Harvester Co.							
Earnings	\$37.0	\$59.4	\$68.9	\$59.7	\$65.4	\$49.0	\$27.0
Income and Excess profits tax	5.4	17.9	31.4	24.7	28.4	12.8	8.2
Tax (other than inc. and excess)	8.4	10.7	10.7	9.1	11.6	11.7	....
Net	\$23.2	\$30.8	\$26.8	\$25.9	\$25.4	\$24.5	\$18.8
Ely and Walker Dry Goods Co.							
Earnings	\$.8	\$ 2.6	\$ 6.1	\$ 6.9	\$10.7	\$11.0	\$15.9
Income and excess profits tax	.1	1.2	5.1	6.2	8.7	7.9	6.7
Tax (other than inc. and excess)	....	....	....	....	....	....	....
Net	\$.7	\$ 1.4	\$ 1.0	\$.7	\$ 2.0	\$ 3.1	\$ 9.2
Safeway Stores, Inc.							
Earnings	\$10.6	\$14.1	\$15.5	\$14.0	\$22.0	\$22.2	\$27.2
Income and excess profits tax	1.7	3.6	5.0	3.5	4.8	3.7	7.6
Tax (other than inc. and excess)	3.4	3.8	4.4	4.3	4.6	4.6	5.3
Net	\$ 5.5	\$ 6.7	\$ 6.1	\$ 6.2	\$12.6	\$13.9	\$14.3

d=deficit

restrict the final net earnings. Because of the small proportion of capital investment to volume, the merchandising firms show an ability to make some real gains.

The most important influence of this review of tax burden is the ultimate effect on the capital formation by the concerns through their surplus accounts. The suppression of the earnings, which clearly occurred in the manufacturing situations, means a distinctly lessened capacity to replace capital and to add new capital. This inability to accumulate surplus will show itself in the effort to finance replacements. Ultimately it may mean very high costs to the concerns by virtue of outlays in high-price periods and also the forced sale of securities for the funds and thus it may incur interest or dividend obligations.

In any event, the burden of such taxes is a special risk for the future development of the concerns. Clearly those with large common stock

equities will probably be the ones which will most successfully meet the problems. Difficult as the shortage of surplus may be, these concerns will still have large resources to call upon in their credit possibilities to solve the capital demand their business develops. But in the meantime, if any risk must be taken, it is good that common stock represents that risk. No pressure for liquidation can be produced by this contract.

QUESTIONS

1. Explain the factors which suggest that industrials should be treated as a separate group in the creation of capitalization plans.
2. Do all industrials have like degrees of regularity in earnings and employment of assets? What is the relation of these factors to the size of retained earnings?
3. Why do the margins of the various industrials differ so widely? Explain the relationship of such differences to the use of debt.
4. Indicate the general rule-of-thumb for the maximum debt to be created by an industrial. Is this a defensible policy? Give reasons for your answer.
5. Explain why net current assets should be regarded as a gauge of the debt creation policy.
6. If the interest-to-earnings ratio is to be a guide for maximum debt, why is not a 2-to-1 relation always adequate? Explain your position.
7. Do you regard the showing of preferred stock in the structure of industrials as being wise or unwise?
8. Explain why the tax burden of industrials might shape their financial plan in favor of debt.
9. What factors account for the tendency to issue bonds rather than stocks in the markets since 1945, since there has apparently been a market for both? Is there any reason why the market for stocks might be less strong, even though profits are substantial?

PROJECTS

1. Prepare a report on five industrial companies showing the debt relation to the total structure, the debt relation to net current assets, and the times interest has been earned over the past five years.
2. Report on three industrial companies, showing both debt and preferred stock in their structures. Analyze the structures as to total amounts raised by such securities and the times charges to interest were earned over the past five years.

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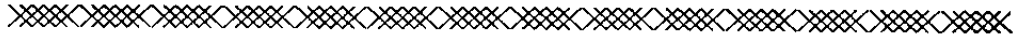
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CHAPTER XVII

Utility Financing



The Public Utility Field

A wide number of companies are nowadays to be considered public utility concerns, all serving the public with generally needed services of community life and under exclusive or monopoly franchises. These utilities include the electrical power concerns, gas companies, telephone and telegraph system, traction companies, and water utilities. The relative importance of the fields is indicated in Figure 23 which shows the earnings

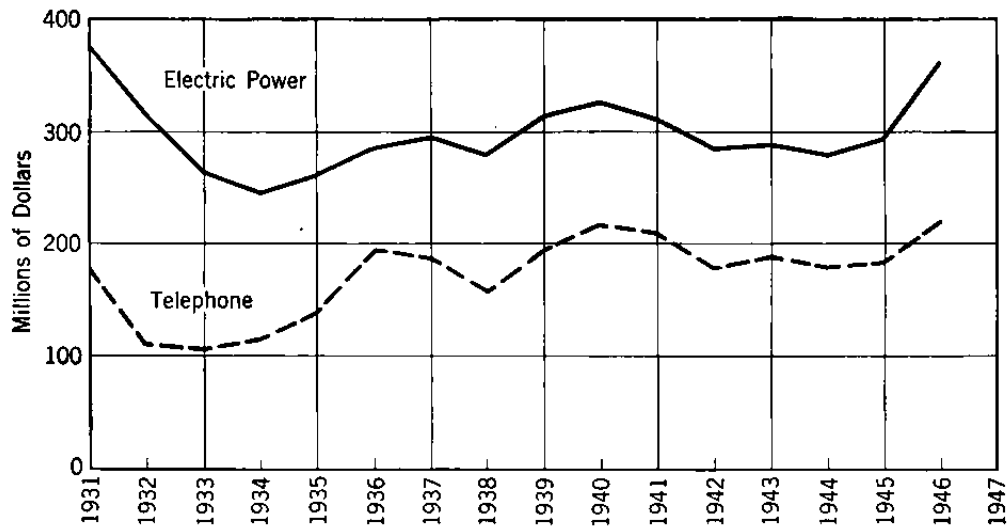


FIG. 23. Earnings for Dividends in Two Utility Fields.

available for dividends over the period 1935-1946 for each of the various utilities. The electrical power utility stands prominent in the group, with the communications industry next in importance.

The electric power industry now represents the largest not only in earnings volume but in plant investment. Since the characteristics affecting the financial policy for the field is well exemplified by this industry, it will serve for the basic discussion.

ELECTRIC POWER INDUSTRY

Capital Structure

The composite capital structure of the electrical power industry appears in Table 28. The heavy investment in fixed assets—about 80 per cent of the total capital—is the typical pattern, emphasizing the chief problem as one of long-term capital sources. Even the small amount of current assets is a relatively permanent part of the operating setup and thus must be supplied by the fixed sources of capital, unlike the more variable current asset characteristic of the industrials.

TABLE 28. COMPOSITE CAPITAL STRUCTURE OF THE ELECTRICAL POWER UTILITIES¹
(in millions)

	1944		1932	
Plant	\$11,933	78%	\$13,200	83%
Current assets	1,679	11	943	6
Other assets	1,674	11	1,611	11
	<u>\$15,286</u>	<u>100%</u>	<u>\$15,754</u>	<u>100%</u>
Current liabilities	\$ 959	6%	\$ 641	4%
Funded debt	6,397	42	6,678	42
Preferred stock	2,143	14	6,935	44
Common Stock	4,237	28		
Surplus	1,550	10	1,500	10
	<u>\$15,286</u>	<u>100%</u>	<u>\$15,754</u>	<u>100%</u>

The sources of capital for the electric power industry are divided into fixed charged instruments, bonds and preferred stocks, for 56 per cent of the total, and the balance of 44 per cent is supplied by the equity of common stock and surplus. This is, of course, almost the complete reversal of the structure in the case of industrial concerns.

The heavy reliance on the fixed charge instruments is justified by the operating record. The electrical power industry has had a constant growth in sales volume since 1910, as the public demand for the essential service has been augmented by the rising use of electricity for industrial power. Apart from this general trend upward, it is also characteristic in the industry that annual variations are very small because of the essential character of the service to the users. This record is well presented by Figure 24, which traces the sales revenue and operating expense costs of one of the firms typical of the electrical utility pattern.

Operating Expenses

An equally important element in the financial record of the utilities is in the operating expense showing. In Figure 24 it is apparent that the operating expenses are not a large part of the sales revenue; that is, typically

¹ Source: *Moody's Public Utility Manual*, 1936, p. a26; 1946, p. a11.

they are less than 50 per cent.² Moreover, this expense line has a general characteristic of not rising as fast as the sales volume, thus evidencing the strong tendency to decreasing cost. The wide margin between the expense and sales revenue curves evidences the capacity of the electric utility to

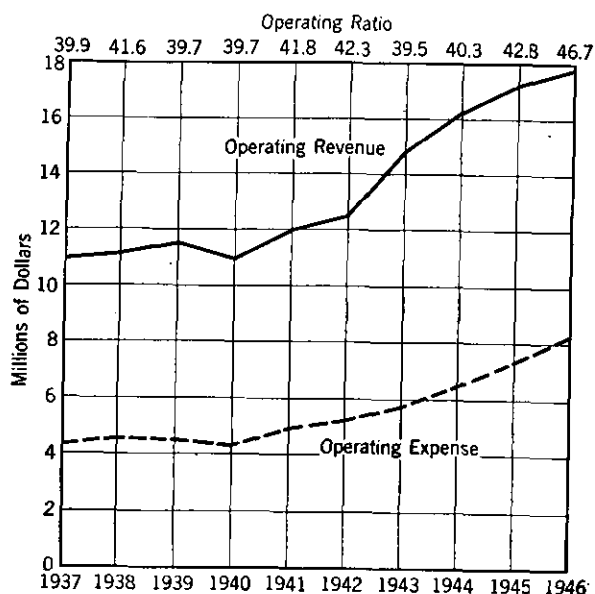


FIG. 24. Operating Revenues and Expenses of the Texas Power & Light Company for the Years 1937-1946.

create heavy fixed charges. The very regularity of the earnings and the wide margin both give strong assurance of the safety factor in such a plan of financing.

Surplus

One factor observable from Table 28 is the comparatively small percentage of capital supplied the electric power firms by the use of accumulated earnings. Much less capital is furnished than in the case of industrials and even railroads. This is not entirely a matter of neglect, for the concerns have considered the tremendous potential growth as necessitating the maintenance of excellent showings on the securities in payments for dividends. It was apparent in the early expansion of the industry that the internal resources of the earnings could not supply the capital at the rate of growth needed. Thus all classes of securities needed to be held at the level of investment or near investment status by good payment records so as to attract sufficient capital in all forms. In general the record to date has substantiated

² Hydroelectric installations will show an even lower operating ratio, at 40 per cent or less, because there is no cost for materials for generation. The plant investment, however, tends to run higher, and thus the operating expense is offset by the capital charge which must be paid for the larger capital investment.

this policy, for the utility industries led by the electrical concerns have surged ahead since 1920 into the field of investment with the best record by operating companies and thus the greatest investment preference. A number of evidences might be cited, two of the most important of which are the rapid growth of this investment in the portfolios of the life insurance companies and the fact that the yield on such bonds has shown the greatest relative decrease in the investment market since 1920.³

General Policy

Early practice of the industry showed a use of bonds in many cases to an amount of 70 per cent of the capital structure. Those concerns that did not recognize the possible danger in this level and take steps to reduce the heavy percentage of debt in the structure are probably the ones that labored through the 1930's if not with default at least with great difficulty. Concerns regarded as among the most conservative of the industry have shown a tendency to retreat to a maximum of 60 per cent and usually down to 50 per cent of the structure in debt.

In Table 29 are presented the capital structures of Pacific Power and Light Company and Commonwealth Edison Company, for the periods 1925

TABLE 29. CAPITAL STRUCTURES⁴
(in millions)

Commonwealth Edison Company				Pacific Power and Light Company					
	1945		1925			1945		1925	
Funded debt	\$298	43%	\$104	43%	Funded debt	\$20.5	57%	\$ 9.1	43%
Common stock	325	49	108	46	Preferred				
Surplus	58	8	28	11	stock	6.8	19	5.8	28
	<u>\$681</u>	<u>100%</u>	<u>\$240</u>	<u>100%</u>	Common stock	7.0	20	5.7	27
Dividends continuous since 1907.	on common stock				Surplus	1.6	4	.5	2
						<u>\$35.9</u>	<u>100%</u>	<u>\$21.1</u>	<u>100%</u>
					Dividends on preferred stock irregular after 1933, arrears cleared in 1939.				

and 1945. The former company was forced to allow the preferred dividends to cumulate through the difficult 1930's but succeeded in clearing this record in 1939.

The record for the latter concern is quite by contrast. Early steps were taken to refinance at the lower levels of the market for its bonds, and throughout the period high dividends were paid on the common stock, which was thus made an acceptable financing medium.

Under the Holding Company Act of 1935, the Securities and Exchange Commission is granted the power to supervise all security issues of the operating companies of a holding company. Although the commission has

³ Yields on industrials, railroads, and utilities were respectively 6.01, 5.79, and 6.73 in 1920 and 2.61, 3.10, and 2.72 in 1947.

⁴ Source: *Moody's Public Utility Manual*.

never formalized a rule on this policy for a debt maximum, it would appear by their rulings that 60 per cent is regarded as the upper limit. This has been adhered to for the most part except for a few unusual cases. It is probably deemed to be the desirable limit for any combination of fixed charge instruments, so that if preferred stock was to be used the bond total would have to be lowered.

A limit of 60 per cent of the capital structure is almost a parallel of the 60 per cent rule based on quantity of fixed assets. As pointed out earlier in the chapter, the bulk of the property of the utility is fixed property, and even the small current asset sum is in effect permanent in amount for the usual running expenses. Thus the limit appears justifiable from this test. Obviously practice is not so uniform that it should be concluded that this is the point to be used as standard, but it does seem to warrant the 60 per cent relation as the outside bound.

In this field as in the railroad field the very great sums required for the plant of the utility make debt a necessary source of funds. The regularity of earnings likewise supports the practice as a proper one, for the wide margin between operating expenses and sales volume is capable of absorbing the capital costs. Historically this pattern was forced upon the field, both by the size of the property account and by the willingness of buyers to take the bonds as a security. Today the policy of debt in the utility structure is justified by the theory of perpetual debt, if kept at levels of demonstrated ability to carry charges. The industrials, it was pointed out, are not favored with prices set by public regulation, which minimizes sales volume changes. Competitively, the changes of techniques likewise are a must in the case of the industrials, for their markets are not held under the power of a monopoly grant. The electric utility industry has both of these advantages, consequently its capital structure is not likely to be called upon to absorb the strain of unusual shifts in either market or price as is that of the modern industrial concern.

Because of these factors as well as the net result pictured in Figure 24, it is apparent that great reliance must be placed on the steady earnings of the utility. Thus the large debt employed becomes an important element in trading on the equity for these capital structures, and, by reason of such advantage, good dividend records have made the common stock of these concerns grow in acceptability. Now that large plant investments, subsequent to World War II, are needed this investment acceptance will be a real advantage in future financing.

Earnings-Interest Ratio

As is to be seen from the earnings characteristic in Figure 24, the electrical utility concerns may employ a large portion of their operating earnings for interest charges. In this field, more than either the railroads or the industrials, the earnings stability warrants the use of at least half the earnings, or a 2 to 1 ratio. A number of the utilities in the 1920's allowed ratios to

run as low as $1\frac{3}{4}$ to 1, but this is not recognized as good practice in the light of all subsequent experience.

The times interest earned records of several of the utility concerns are presented in Table 30, the results of which indicate that through the various years of the period ample protection for the charges was available. One of the errors which firms are invited to make in the current market with

TABLE 30. INTEREST EARNED IN ELECTRIC UTILITIES
(in millions)

	1944	1943	1942	1941
Net operating revenue—all departments	\$780	\$752	\$736	\$761
Interest and amortization	335	315	312	309
Balance	\$445	\$437	\$424	\$452
Times interest earned	2.03	2.40	2.35	2.46

exceedingly low interest rates is to issue bonds under the 2 to 1 ratio. At the low rate of, say, 3 per cent this could lead to a debt 50 per cent greater than would result at $4\frac{1}{2}$ per cent, which might be the rate effective in the market when the newly created bonds are to be refunded. A substantial sinking fund would help correct this factor, but perhaps an equally effective rule is to keep the bonds in ratio to the value of the fixed assets.

Types of Bonds

Most of the operating utilities have begun as small units and grown in the community as a service industry but without the burden of reaching national markets. Such concerns have developed with simple capital structures, the chief instrument in which has been the mortgage bond. This instrument was preferred by the buyer because he regarded it as a stronger security, and the utility needing long-term funds found that carrying the charges against current earnings was usually amply done by operating revenues. As a result, these operating concerns were less frequently the result of combination of a large number of smaller units, except in the metropolitan areas. The mortgage bonds of the operating utilities thus have been usually either first or second liens, uncomplicated by small divisional mortgages, assumed mortgages and leasehold properties, and a wide variety of special equipment loans.

This picture was not maintained, of course, as to the holding companies in the electrical power industry, nor is it likely to be true wherever the holding company is operating. The complex structures which the holding companies created became so fraught with possible injury to the public service of the utilities and also to the investor in the securities that the special Holding Company Act of 1935 ordering the dissolution of such companies was passed. In the following decade or more the principal task of this order was to unscramble and simplify the security structures and management relations on which the holding company movement in this

field was thriving. The job has been proceeding but there are several major units still to execute their respective dissolution plans.

Early in the life of operating utilities the constant growth factor of their business indicated the desirability of a mortgage which would keep the structure simple but allow added borrowing. Since these requirements were met by the open-end mortgage, it came to be an important financing vehicle for the utilities. The mortgages provided for new bonds under the security in the amount of 60-75 per cent of the property additions. The better mortgages soon added the earnings-interest ratio requirement so that both tests were required.⁵ Thus the debt structure has been kept relatively simple throughout the industry.

At first very few debentures were offered by the utilities with good operating properties. During the 1920's a number of the concerns sold debentures, some being those without any good property security and others being so favorably known that they did not need to give mortgage liens. Today there is a substantial use of debentures but the great share of debt for the utilities is in the mortgage group with open-end terms for further issuance.

As a general practice the utility bonds have not been serial payment instruments, and originally not many included sinking fund operations. In the 1940's with the issuance of debentures the practice of adding sinking funds or serial payments has increased. Concerns which have elected to use debentures in such cases have probably been granted low interest rates for a shorter-term bond than the mortgage bonds usually represent. In those sinking fund provisions found in public utility bonds it has become an increasingly common practice to allow either the deposit of bonds or the acquisition of further property which is made security under the mortgage bond by an after-acquired property clause. As a consequence, the utility which is still in its expansive stage is allowed to meet this need, but the bondholder is protected by the larger property value available for refunding when the debt matures.

The special contract provisions such as conversion are seldom used by the utilities in their bond issues. The investor preference enjoyed by the utilities has made this feature unnecessary. Most of the bonds have been callable so that during the favorable interest period since 1942 these concerns have done a large amount of refunding. Since the market is willing to take these instruments as bonds of thirty or more years in maturity, the electric utilities have created capital structures with very low capital costs. These advantages may shortly disappear, however, in the mounting cost of

⁵ See the provisions of the Detroit Edison general and refunding mortgage, Series I, 1982, for additions to 60 per cent and an interest ratio of $1\frac{3}{4}$ to 1; or the provisions of Public Service Co. of Indiana, Series F, 1975, for additions to 60 per cent and an interest ratio of 2 to 1. Notice both bonds have definitions of interest requirements less than overall debts.

new installations after 1945, for the industry has a long-delayed program of additions to undertake.

Industry Regulation

As an influence upon the financing methods of the electrical power industry the regulation of rates should be commented upon. The cost of the assets committed to service usually becomes the first step in determining the rate base; hence this doctrine ties closely with the relation of debt structure to the value of the fixed assets. So far as the concept of reproduction values is employed a disturbing factor is introduced. However, if sufficient allowance is made for the amortization of the debt created, then the security supplied will probably not come under challenge by the buyer.

The effort to set rates so as to allow a "fair" return on the property invested in the public service appears to give the earnings stability of which we have spoken. This ample certainty of earnings is the necessary characteristic for debt financing. Perhaps it is of greater importance to the stockholders of the concern. It is to be pointed out that the courts have been allowing reasonably large rates for return, but these rates have shown a definite decline over the last two decades. The problem which may be provoked in a short time has been demonstrated in the railroad field. While the railroads are permitted to earn rates of return of 6 per cent, the commission has not ordered rates which would return such a level of earnings. An order of this character would mean rate increases, a politically unpopular thing. Up to date the electric utilities have had the benefit of decreasing costs and widely expanding markets for power; but when either or both factors become less important, the problem of getting rates set which actually return what is legally allowable may be very real. Although all the advantage of regulated prices has been with the electric utility field to this date, there is no necessary assurance that this position will continue indefinitely.

Use of Preferred Stocks

Bonds have been the basic element in the capital structure, but the utilities have made consistent use of preferred stocks also. While seeking the full benefits of trading on the equity some concerns have borrowed less and used preferred stocks. Thus the two sources combined have led to a composite showing of 56 per cent of the capital structure in fixed charge obligations. Again these instruments have been used for much the same reasons as the heavy debt portion of the structure. A widespread investor interest was necessary; preferred stock had this status.

Much of the preferred stock offered in the 1920's was the basis of the sales efforts for the employee and customer ownership programs. Usually these stocks were offered at differentials in rates of better than 1 per cent and often 2 per cent over the bond interest rates. The steady earnings of the companies seemed to warrant an investment rating of these securities in

the minds of many buyers. The companies were glad not to sell common stock in this period, so as not to disturb control.

Limits for Use

No precise standard can be stated but 65 per cent of total structure for combined debt and preferred stock would seem to be the outside limit. If these instruments both have their combined charges covered at least one and a half times there is probably a factor of safety as indicated in Table 31.

TABLE 31. INTEREST AND PREFERRED DIVIDENDS EARNED IN ELECTRIC UTILITIES
(in millions)

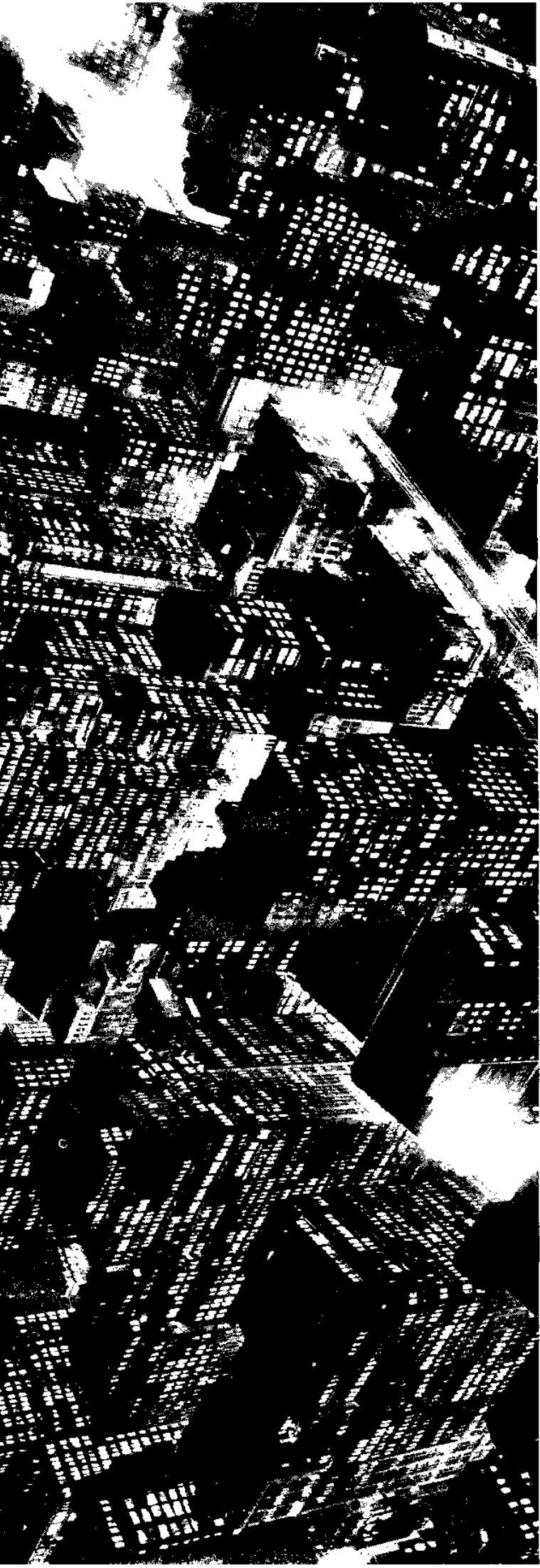
	1944	1943	1942	1941
Net operating revenue	\$780	\$752	\$736	\$761
Interest	335	315	312	309
Preferred stock dividend	116	124	128	127
Common stock dividend	280	285	279	310
Balance	\$ 49	\$ 28	\$ 17	\$ 15
Times interest and preferred dividends earned	1.71	1.70	1.67	1.74

Since there is such a strong stability factor in operating earnings, the use of preferred stock does not seem to be unreasonable if kept under these limits. There are moments, however, when with small cash resources such practices may lead to some difficulty as where major improvements must be made in what proves to be an unreceptive bond market. In such an instance some husbanding of cash might be necessary with a passing of the preferred dividends.

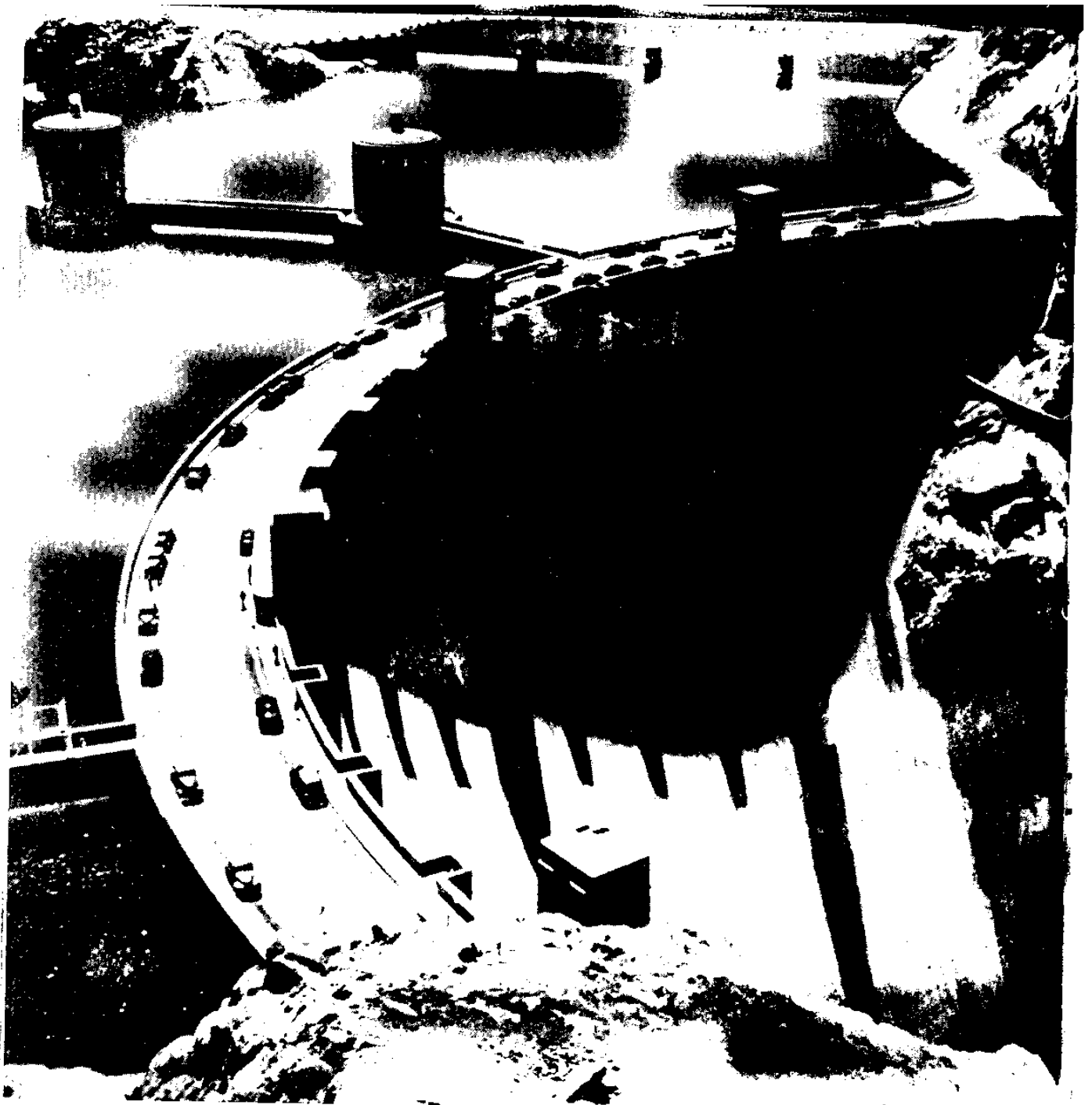
As the market of the 1940's developed a very strong support for preferred stocks at low rates, many of the utilities shifted some of their bond structure to this class of instrument. They undertook in many instances the refunding or refinancing of the outstanding preferred stocks at substantial dividend savings. Like the bonds most of these stocks are not sold with sinking fund or conversion features, but have usually been made callable.

Common Stock in the Structure

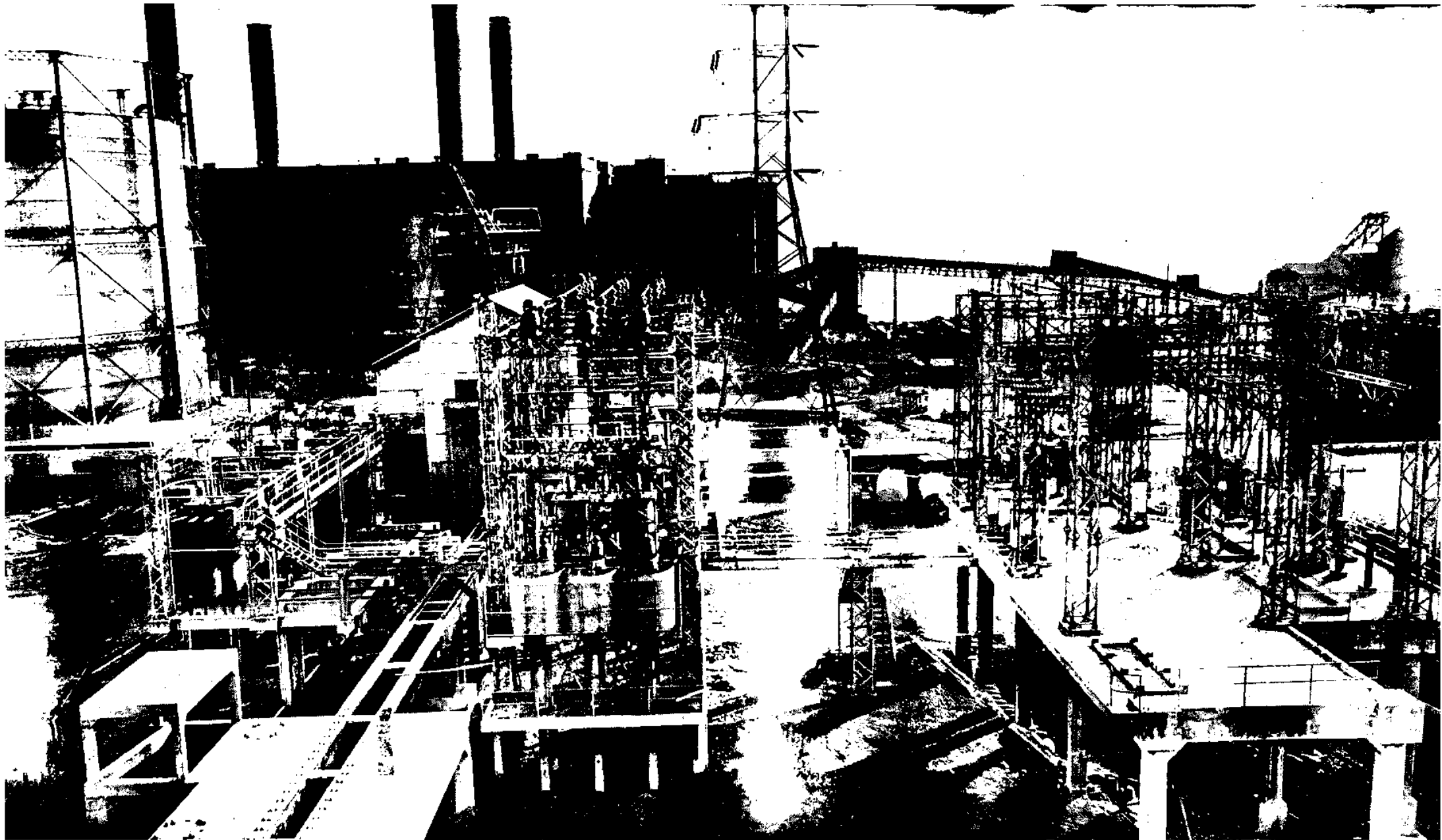
As previously pointed out, the swift growth of the electrical power industry caused heavy dependence upon the use of debt. This was accompanied by the use of preferred stocks but since the trading on the equity proved very substantial and made the common stocks capable of good and continuous dividends, they reached a favorable status despite the large claims ahead of them. Coupled with the problem of financing growth and the limited rate policy of public regulation, it is doubtful if the policies could have been reversed and sizable common stock offerings made without the established history of long years of successful dividend payments. As a matter of fact, even now one of the reasons for the relatively low rates



The Electric Power Industry Makes the Big City Possible—and the Millions of Invested Capital It Requires Is Great. (Courtesy of Consolidated Edison Co.)



A Hydro Installation Is One of the Most Expensive and Requires Large Sums of Capital.



The Steam-Generating Plant and Its Distributing Towers Indicate the Importance of Invested Capital in the Electric Utility—and Nearby Is the Gas Storage Tank. (Courtesy of Cincinnati Gas & Elec. Co.)

allowed for utility property is a result of this trading on the equity. An effort to shift definitely into common stocks under the pressure of rising costs would not meet with great success for the dividends would be forced lower.

The larger companies in the field have been able to move more common stock into their structures than the smaller concerns. Perhaps as important a move to strengthen structures would be to put the current advantage of low interest rates into the surplus account, that is, property development. As mentioned in the initial analysis, it is at this point that the electric utility structure shows its largest element of doubt for good proportions in structure. To meet the adversity of leveling off in growth and slowness in rate increases sufficient to cover costs, this step of building accumulated earnings is to be recommended.

GAS UTILITIES

The gas utilities represent a field in operation before the electrical industry. The gas utility had its heyday, only to meet the experience of a disastrous slump when electricity became a real competitor as a source of light. Strangely, this depressed stage lasted until electricity became important even for industrial uses, when the gas utility field was finally jarred into action. A revival of the gas industry on the basis of the use of natural gas has been in progress these past twenty years.

In actual practice we cannot divide the gas companies as operating properties from all electrical concerns for in many cities they serve the community with both utilities. This has proved to be of some advantage in financing and presumably is chiefly in favor of the gas operations, inasmuch as the electrical operations have been more certain. There is a word of ~~caution~~ to be inserted in this brief history. Like the electrical industry today, the gas industry in its early days seemed most profitable and without much danger of losing the users' preference. But times did change. The electrical industry could be facing some equally important change ahead though it is not clear at the moment what it might be.

The rise in the use of gas for domestic heating, as well as plant fuel, has been of tremendous importance. The gas pipeline concerns have constituted some of the largest utility financing of the past two decades, as the lines have been laid into all sections of the country for the delivery of natural gas.

Debt has been used extensively for this utility just as it has for the electrical utility. The mortgages have tended to be closed-end and less flexible. Preferred stocks have been used but have less acceptability by the investor unless the concern was a combined operator of gas and electricity. Caution would suggest the strengthening of the structures in this industry, for the experiences already reviewed indicate something of the shifting nature of power use. It is not impossible that natural gas may be exhausted in the not too distant future and the return to manufactured gas may overcome the competitive advantage now enjoyed pricewise.

COMMUNICATIONS INDUSTRY

The communications industry is another important phase of the utility field, as a matter of fact the second in point of operating results. This field has an essential demand for its services but wider variations can develop, for the depression witnessed a substantial reduction in phone installations. Domestic users of electricity made no such proportionate cuts. The telegraph industry is even more apt to follow the irregularities of the general business field, for much of its service is sold incident to the negotiation of business transactions.

Domination of the telephone business is held by the American Telephone and Telegraph Company, now the largest single business enterprise in the country. This concern is basically a holding company receiving much of its income from the dividends of its subsidiaries. A reflection of this fact is the more conservative policy of its capital structure, as illustrated by Table 32. It is apparent that debt is an important part of the structure at

TABLE 32. CAPITAL STRUCTURE, AMERICAN TELEPHONE AND TELEGRAPH COMPANY, 1925 AND 1947 (in millions)

	1947		1925	
Capital stock	\$2061	45%	\$1064	44%
Stock subscription			48	2
Funded debt	1062	23	385	15
Surplus	707	15	196	8
Subtotal	\$3830		\$1693	
Subsidiary debt	693	15	537	22
Subsidiary stocks	114	2	200	9
Total	\$4637	100%	\$2430	100%

the level of 38 per cent. This has been a policy over the past twenty years as is indicated by the contrasting statement of structure. Greater significance will be added to this structure if the proportions in the subsidiaries are equally conservative.⁶

The debts of the subsidiaries are first mortgage instruments for the most part, while those of the parent concern have been either collateral secured bonds or debentures. At the present time, all funded debt of the company is in the form of debentures. Although the subsidiaries have used preferred

⁶ The structures of two subsidiaries show good proportions except for the weak surplus accounts:

	Pacific Tel. (in millions)		S.W. Bell Tel. (in millions)	
Current liability	\$ 70	14%	\$ 45	14%
Funded debt	86	16	75	25
Preferred stock	82	16	...	...
Common stock	246	52	183	51
Surplus	10	2	17	5

stock extensively, none has been used by the parent concern. Thus the combined common stock and surplus of American Telephone and Telegraph Company appears as 60 per cent of the total structure.

The common stock of this concern has come to be labeled an investment type and the company has the largest stockholder list in the United States.⁷ Despite rising volume of business in late years, there has been a decline in earnings available for dividends. Coverage of the dividend is presented in Table 33. This is by no means the showing which obtained in the earlier

TABLE 33. EARNINGS AND DIVIDEND RECORD,
AMERICAN TELEPHONE AND TELEGRAPH CO.

Year	Per Share	
	Earned	Paid
1939	\$10.18	\$9.00
1940	11.26	9.00
1941	10.26	9.00
1942	8.57	9.00
1943	9.46	9.00
1944	8.76	9.00
1945	8.78	9.00
1946	9.41	9.00
1947	7.66	9.00

days of the system, and the question of proper rate schedules now becomes the crux of this record.

Surplus kept in the business has made slow growth over the years. There has been a steady rise in the demand for the communications equipment so the company has made strong efforts to obtain investment to meet the demand. The total surplus as part of the capital structure is not as large as might be expected, but the maintenance of dividends since 1933 has prevented any large additions.

The telegraph business is now in the hands of Western Union alone, with a capital structure as outlined in Table 34. This does not seem to be a disproportioned structure in view of the other fields, but it has not been satisfactory under test. Dividends on stock have not been consistent since 1930, and its bonds are not rated at the highest levels. This position is best demonstrated by the earnings-interest ratio which is outlined briefly in Table 34.

This utility has encountered basic changes in transmission technique which call for expensive plant changes. Such are now under way but the earnings were not sufficiently large until the war to warrant proceeding at a swift pace of modernization. This case is a good illustration of the difficulty to be encountered by rising operating costs, because the best technologies cannot be afforded. As a result the security position of the outstanding instruments gets poorer, sufficiently so that the company has little possibility

⁷ More than 683,000 stockholders at the end of 1945.

of using its credit or selling stock to create the modern plant. Thus the whole structure is caught. This situation is now in process of being adjusted, and a substantially good business period following World War II may permit the whole program to be completed, thus restoring the credit status.

TABLE 34. WESTERN UNION TELEGRAPH COMPANY CAPITAL STRUCTURE, 1945
(in millions)

Current liabilities	\$ 37	15%
Funded debt	96	32
Capital stock	104	33
Surplus	60	20
Totals	\$297	100%

COVERAGE OF INTEREST									
1939	1940	1941	1942	1943	1944	1945	1946	1947	
1.19	1.52	2.07	2.33	2.98	2.84	1.76	d1.80	3.10	

d = deficit.

There are a series of small independent telephone companies doing about 20 per cent of the business for the country. They use the lines of American Telephone and Telegraph for long-distance service but are purely local in their communities. These units have a number of bonds outstanding, and some preferred stock. The common stocks have never achieved the investment status of the large and dominating concern. This is due in part to the less diversified character of the companies, which exposes them to concentrated risks of property loss and unusually strong local pressure on rate structures. Their general financial practices are much like the other companies but they are not free to be as conservative as perhaps they would like to be in operating the capital structure.

OTHER UTILITIES

Traction and Bus Companies

The companies engaged in local transportation do not have the strong characteristics of sustained sales and decreasing costs which in general have been the fortune of the electrical and gas utilities, and to lesser degree of the telephone industry. The problems of this field are related to those of the railroads both as a matter of history and in the light of subsequent results, though today the railroads are still such an essential service that their complete replacement is improbable. In many small communities the auto has displaced the operation of public transportation companies. The only resort in such cases has been the municipal ownership of the services deemed as minimum for the community.

Few of the securities of this field have a record that is anything but checkered. In the early days many bond issues were created, and these have

long since disproved the element of security in mortgage rights to property as a method of payment. Most of the property consisted of franchises and moveable equipment and very little real estate. Preferred stocks exist in a large number of the major traction systems and these have had a very poor record of dividends with the common stock appearing useful only as a matter of control.

Some of the traction companies have been converted to bus systems; but while this proved profitable for a while, the rising cost factors for material, replacements, and labor have struck hard at the earnings record. The lesser use of fixed equipment has generally combined with high labor costs and operating costs to take the experience of this field outside that of the utilities. *More than any of the other fields this group has made use of the equipment certificate type of financing in order to reequip the systems.*

Water Companies

One of the oldest utility fields is that of the local water service. Large plant investments have been raised generally with a substantial amount of bonds, preferred stocks, and a small equity. This approach was justified on the essential character of the service. Generally where the operating revenues have been satisfactory the expenses have been in the ratio of 40 to 50 per cent, leaving a margin capable of carrying the debt structure.

There has been a growing tendency especially in the Middle West for municipal governments to purchase and operate the water systems. An advantage at the outset is gained by this process of using the public credit, which ordinarily carries a much lower rate than the private utility would obtain. This interest charge is, of course, a substantial part of the cost of service, since the property is the major investment element.

Because of the stability of earnings and the avoidance of large changes in the operating costs as a portion of the total revenues, most of these concerns have kept their securities in good standing. Heavy replacement costs now being encountered, unless they have been prepared for wisely with large plant depreciation allowances, may offer some real problems of financing.

QUESTIONS

1. Account for the heavy plant investment by public utility concerns and show how this is related to the financial plan.
2. Why are the operating expenses of an electric utility so low in comparison with those of a manufacturing concern? Does this wider margin indicate larger profits on the capital employed?
3. State your position relative to the surplus in the financial plans of most utilities. If you do not support the present policy, relate your suggestion to changes it would cause in dividend records.
4. As long as interest rates are low, why be concerned with reducing the debt ratio of the utilities below 70 per cent? Explain.
5. Support the general position that the interest-to-earnings ratio of a

- utility capital plan can be about 2 to 1. In view of current interest rates do you maintain this position?
6. Explain why a utility's position as a regulated field is any cause for concern to the stockholder in such a concern.
 7. Do you regard preferred stocks as better than debt for utilities to use in their financial plan?
 8. What appears in the historical record of the gas distribution utility that cautions management against too optimistic a projection of earnings? How is this related to a large debt structure?
 9. Comment on the change and current strength of the capital structure of the American Telephone and Telegraph Company. Is this related to the dividend policy?
 10. Examine the earnings record of Western Union and American Telephone and Telegraph as to stability of earnings, and express your opinion on the two capital plans.
 11. Indicate the contrasting characteristics of water and traction companies concerning the use of debt in their financial plans.

PROJECTS

1. Examine and report on the surplus in relation to the structure in six electric power companies. Give the annual earnings and dividends in these companies for the past five years. Comment on good or bad features.
2. Contrast the interest ratio provisions of three utility mortgages and indicate the additional debt, if any, each company might create at 3 per cent interest. Discuss the results.

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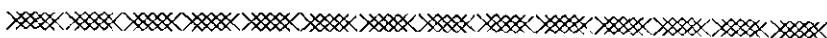
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CHAPTER XVIII

Financing Transportation



RAILROADS

OVER a longer period of time than any major field of business the railroads have been an important phase of business financing. Not only was the influence of this transportation medium felt in the opening of the trade areas of the country; but as a consumer of vast sums of capital, it was preeminent in the nineteenth century. Somewhat fallen from grace, it is about to enter the second half of the twentieth century in a revived state as to its financial condition.

Importance in the Economy

Today the railroads of the United States carry more than 65 per cent of the freight for the vast interexchange in the markets of the country. As given in the 1947 report of the Interstate Commerce Commission, the tonnage division between the various transportation groups was as follows:

TABLE 35. INTERCITY TRAFFIC
(billions of tons)

Transportation Group	1946	Per Cent
Railroads	602.	68.13
Motor carriers	66.	7.47
Inland waterways	123.	13.93
Pipelines	92.	10.46
Airways	.07	.01

The average individual does not credit this system with the importance which it has in everyone's life. Cheap transportation has been one of the real assets of this country. Nowhere else in the world is the vast network of rail lines as developed, equipped with as much motive power, and operative over such vast distances on speed schedules as the railroads now serving this nation.

Within the field of finance, this industry stands second in total investment for plant and equipment, having relinquished its first place to the manufacturing field in this century. In Table 36 appears a composite showing of divisions in both the assets and the capital structure of the railroads at

the present time. This structure is characterized as previously stated with a section of better than 80 per cent in fixed assets and a section of less than 15 per cent in current assets. The capital has been provided by a large number of security holders and only a very modest portion of accumulated earnings. The funded and current debt is the largest class of capital source

TABLE 36. COMPOSITE BALANCE SHEET
(Class I, Line-haul and Lessor)
December 31, 1945
(in millions)

ASSETS		
Investment in transportation property	\$25,764	
Less: Accrued depreciation and adjustments	6,436	
	19,328	
Investment in affiliated companies and others	5,155	
	24,483	83.2%
Current assets	4,415	
Deferred assets	334	
Unadjusted debits	212	
	\$29,444	100.0%
LIABILITIES		
Capital stock	\$ 9,331	31.7%
Long-term debt	11,088	37.7
Current liabilities	2,161	
Deferred liabilities	1,288	
Unadjusted credits	497	
Surplus	5,079	17.2
	\$29,444	100.0%

—51 per cent—with preferred stocks amounting to 5 per cent and common stocks providing 28 per cent of the structure. Surplus stands at 17 per cent of the total structure.

As an industry into which many savers have put their investments, the railroads have a long record. At the end of 1945 there were more than 860,000 stockholders. Unfortunately, the record is spotted. Before 1900 it was uncertain; from 1900 to 1920, it showed a remarkable period of confidence on the part of investors, which it lost and regained in the twenties. The period of the thirties was a disaster for many investors and the extensive confidence became so weakened that only the substantial record of World War II has begun to revive interest. Until recently the investment institutions made it a point to liquidate some of their holdings and refuse to add to them, as did many a private investor. See Table 37 for a review of life insurance railroad investments. While interest rates fell rapidly for the industrials and public utilities, that for the railroads dropped at a much slower pace, as is shown in Table 38.

In the current economy the railroads are still of such importance that

CORPORATION FINANCE

TABLE 37. LIFE INSURANCE COMPANY HOLDINGS OF RAILROAD SECURITIES¹
(in billions)

	Holdings	Per Cent of Total Investment
1906	1.0	34.8
1911	1.3	33.4
1916	1.6	31.3
1921	1.7	22.9
1926	2.4	20.2
1930	2.94	17.0
1935	2.93	13.7
1940	2.99	10.4
1946	2.91	10.1

large programs of improvements and equipment replacement must be prepared. This will call for one of the heaviest capital outlays in the recent history of the railroads, and will require their entry into the capital market on a large scale. The favorable earnings period of the forties must, however, be

TABLE 38. INTEREST RATES²

	Railroads	Utilities	Differential in Railroad Favor
1903	4.1	4.6	.5
1905	4.0	4.4	.4
1910	4.2	4.8	.6
1915	4.9	4.8	-.1
1920	6.9	7.6	.7
1925	5.2	5.6	.4
1930	5.0	5.0	...
1935	4.9	4.4	-.5
1940	4.3	3.2	-1.1
1945	3.0	2.8	-.2

maintained to win sufficient confidence from the investing world. The growth in the surplus evidencing the restraint of managements with their dividend payments and the employment of the earnings for debt retirement has been evidence of the soundness of management policies as contrasted with other days. Surplus has shown a growth as follows:

Year	Millions	Per Cent of Capital Structure
1900	\$ 300	1
1911	1500	8
1925	5100	20
1930	5390	23
1945	3300	17

¹ Source: *Proceedings of the Association of Life Insurance Presidents*, 1935, 1940, and *Spectator*, 1947.

² Source: *Moody's Public Utility Manual*, 1927, p. xix; *Statistical Abstract of the United States*, United States Department of Commerce, 1947, p. 447.

Complicated Financial Structures

The average railroad system has a very complicated financial structure, derived from its growing days. Most systems were the result of mergers, leasing, and stock control over very small roads. Where the old concerns were not actually merged but their corporate identities were maintained, the old financial instruments were left outstanding. Often this series included some parts of each phase in financial structure—the debt, the preferred stock, and the common stock. Thus, a major system could have a large number of liens outstanding on independent small properties, and then, *superimposed over the entire property*, general liens of the complete system now operating the whole enterprise. A series of liens as high as twelve in number was not an unusual record up to 1940. After that date, when the roads were able to finance debt retirement programs and the advantages of subsidiary statements for income tax had disappeared, a general consolidation of debts was the program.

Although the Chesapeake and Ohio Railway has one of the most simple structures, in its report for the year 1946 we find fourteen items of debt obligation. Out of this group, three bonds are of a series created under a common mortgage, thereby reducing the number of distinct liens to a total of eleven. The liens are listed as follows.

1. First Mortgage, Norfolk Terminal & Transportation
2. First Mortgage, Kanawaha Bridge & Terminal Company
3. Extended First Mortgage, Columbus & Hocking Valley Railroad Company
4. Extended First Mortgage, Columbus & Toledo Railroad Company
5. Extended First Mortgage, Greenbrier Railway Company
6. First Mortgage, R & A Divisions
7. Second Mortgage, R & A Divisions
8. General Mortgage
9. Refunding and Improvement Mortgage, Series D, E, G—1 to 25
10. First Consolidated Mortgage, Hocking Valley Railway Company
11. Equipment Trust Obligations
 - Guarantor—jointly and severally
 - Norfolk and Portsmouth Belt Line Railroad
 - Cincinnati Union Terminal Company
 - Guarantor—limitedly
 - Toledo Terminal Railroad Company

Capital Structure

Bond Used in Finance. In the earliest days of railroad construction stocks were used extensively;³ but in the subsequent days of extensive construction which required the selling of securities for other than local projects, the public prejudice against instruments other than debts asserted itself. Bonds entered the structures of the companies in large sums, principally for the

³ See W. Z. Ripley, *Railroads: Finance and Organization*, p. 11.

outright costs of construction; and only in a few of the better systems had the debt ratio prior to 1940 been lowered to less than 50 per cent.⁴

A contrast in the extensive use of bonds in the capital structures of the railroads may be seen in Table 39 showing the pattern at various dates from 1900 to 1946. The improvement of recent years is marked in the lowering

TABLE 39. CLASS I, RAILROAD CAPITAL STRUCTURES
(in billions)

Structure	1900		1911		1925		1935		1940		1946	
Debts	\$5.6	49%	\$11.0	52%	\$12.3	45%	\$12.0	44%	\$11.2	48%	\$9.0	39%
Capital stock	5.8	50	8.3	40	9.4	35	11.9	43	9.7	42	9.3	40
Surplus	.3	1	1.5	8	5.1	20	3.7	13	2.4	10	4.6	21

of the debt percentage with the corresponding rise in the surplus of the companies.

In the minds of the early promoters of the railroads, only the construction of the road was needed to bring great wealth to a community and thus the road. This was a long-run view but handicapped in operation by what the troughs of the business cycle and the time needed for development of industry would do. But even after the initial series of difficulties the economic development did begin to appear, and again the belief held sway that the debt structure of the roads would be permanent because the roads themselves would be permanently needed in the economic operations of the community.

The perpetual debt theory for the railroads, kept within reasonable bounds, may be justified, but what its practitioners did not plan for were the new modes of transportation, the bus and truck, the airplane, and the pipeline, together with more intensive water development. When one looks at the relative positions of these systems in terms of total tonnage moved, he is perhaps set to wondering why the railroads suffered at all, but much of this competition has proved to be the increment of tonnage which might have brought the use of plant capacity for the railroads to peak operation; thus the railroads lost the greatest relative gain of income for their fixed charges. This coverage of fixed charges weakened perceptibly for the roads, as indicated in Table 40. These difficulties were carried to the point of crisis by the business cycle movement.

While the railroads are basically a very great necessity to the country, there is a wide range of expansibility for their use, and the certainty of

⁴ A study of the roads in 1943 operating half the mileage in the country showed the average of 60.6 per cent in debt as compared to the total capitalization. This debt represents an average of 49.5 per cent of the capital structures, including surplus. The distribution was as follows:

	40%	45%	50%	55%	60%	65%	Over 65%
Capitalization	...	2	3	2	3	3	1
Capital structure	5	2	2	1	2	..	2

FINANCING TRANSPORTATION

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TABLE 40. EARNINGS-INTEREST RATIOS⁵
(in millions)

	Balance for Charges	Interest, Rent Charges	Times Earned
1910	\$1052	\$613	1.70
1915	1301	697	1.90
1920	407	781	.52 (crisis)
1925	1316	660	2.04
1930	1210	701	1.73
1935	675	663	1.01 (crisis)
1940	794	590	1.36
1945	1035	612	1.69

demand is not nearly so great as that for electrical power. Thus, the level of gross revenues for the railroads moves more slowly but nevertheless with the general business movements of the cycle. Increasing rigidities have entered the direct costs of transportation, too; therefore, operating expenses cannot be cut in proportion to freight volume since there is a much larger share of the expenses paid for wages and general materials than in the case of utilities generally.⁶

Kinds of Bonds. The basic bond type for the railroad is the mortgage bond, for with their large plant values they can make a very proper showing of debt to fixed asset ratio. There still survives the investor's opinion, too, that such a ratio is a security test of first importance. So the market has been filled with mortgage bonds, ranging at 70 to 82 per cent of the total debt. Debentures or unsecured bonds have seldom been offered, and equipment obligations with their special security have been an increasing source, though never a large one. There is outlined in Table 41 the more recent analysis of the composite debt of the railroads as to type of bonds sold.

The mortgage bonds in the railroad pattern consist very largely of two general types of liens: one, the divisional liens on small sections of lines and/or small independent properties; and two, the general system mort-

⁵ Source: *Moody's Manual of Railroads*.

⁶ For a sample capital structure, see the following:

CAPITAL STRUCTURE OF LOUISVILLE AND NASHVILLE RAILROAD COMPANY
(in millions)

	Amount	Per Cent
Funded debt:		
Underlying bonds	\$155.7	38.0
Equipment obligations	16.6	4.1
	172.3	42.1
Capital stock	117.0	28.6
Surplus:		
Unearned surplus	11.2	2.7
Sinking fund reserves	2.6	.6
Profit and loss—balance	106.3	26.0
	120.1	29.3
Total	\$409.4	100.0

CORPORATION FINANCE

TABLE 41. BOND TYPES OF RAILROAD OBLIGATIONS
(in billions)

Types	1911		1940		1945	
Mortgage bonds	\$ 8.1	73%	\$ 9.2	82%	\$6.7	82%
Collateral trust bonds	1.1	10	.7	6	.3	4
Equipment obligations	.3	3	.5	5	.6	8
Debentures	.8	8	.6	6	.2	2
Other obligations	.7	6	.1	1	.3	4
	\$11.0	100%	\$11.1	100%	\$8.1	100%

gages. This pattern is well illustrated by the liens listed in the Chesapeake and Ohio Railway structure earlier in the chapter. In addition to these direct obligations the fixed charges of a railroad system are made up of a group of leased line payments usually guaranteed under the lease as a payment of the "system" road. The rental payments become in fact the fixed charges of these debts and it is important that such charges are included in determining the ratio of earnings of the "system" to the charges to be paid.

TABLE 42. RAILWAY RENTAL CHARGES
(in millions)

	1906	1911	1925	1930	1940	1945
Rentals	\$122	\$138	\$162	\$120	\$127	\$147
Per cent of capital charges	24%	23%	24%	17%	21%	24%

One factor now more prominent than ever before in railroad history will be the large number of bonds carried in the mortgage classification upon which the interest, in part or in whole, is contingent. This is the result of the many reorganizations in the 1930's, which plans have carried in them a large portion of the debt structure on the contingent interest basis. In some cases these charges are cumulative; in many more, the cumulation runs for only a limited number of years.

Preferred Stock

Use of preferred stocks in the railroad structures is moderate, amounting to about 20 per cent of the stock capitalization section over a considerable

TABLE 43. CAPITAL STOCK FORMS IN RAILROAD STRUCTURE
(in billions)

Stocks	1900		1911		1925		1945	
Preferred stock	\$1.3	22%	\$1.4	16%	\$1.9	20%	\$1.8	22%
Common stock	4.5	78%	6.9	84%	7.5	80%	6.3	78%
	\$5.8		\$8.3		\$9.4		\$8.1	
Stock as total of capitalization		51%		45%		43%		55%

number of years. This is apparent from Table 43. The origin of these stocks in the structure is usually during a reorganization, though there are a few companies of high standing which have issued such instruments, such as the Chesapeake and Ohio Railway.⁷ The New York Central, Pennsylvania, and Southern Pacific systems have none whatever, while in the recent reorganizations the Gulf, Mobile and Northern was left with 44 per cent of the capitalization in preferred stock.

Since the buyer's preference in the days of building the railroads was ordinarily for the mortgage bonds, this group of preferred stock securities did not appeal. There is an advantage in the use of preferred stock as compared to debt for the road itself since trading on the equity is possible without the serious danger of default.

These preferred stocks are both cumulative and non-cumulative, though the latter type has been more usual. In the current issues under reorganizations, the cumulations run for three to five years, after which the right ceases. This is the only way the road can avoid difficult recapitalization proposals to rid itself of cumulative rights and keep the common stock as an issue having the possibility of dividends. To a reorganization this is important; if it is not anticipated, the road will shortly be confined to only a program of debt creation and the advantages of the reorganization will shortly be lost.

Common Stock

The extensive use of the debt instruments indicates of course the relatively small place which the common stock can have in the whole structure. When the matter of control was deemed of first importance, this was one of the most valuable reasons for the practice. The gains of trading on the equity were thus well concentrated as well, and in the early days of the financial manipulations of our railroad systems this was no small consideration. A clear picture of the value of trading on the equity is given in Table 41 covering the period 1923 to 1944, in which the large gains, 1923 to 1930, appear most attractive but are offset by the showing of 1931 to 1940.

Wide variations develop in the earnings available on the railroad common stocks as a reflection of the variations both in gross revenues and in the high fixed charges to be paid prior to dividends. In Table 44 may be reviewed the general earnings record of the field, and a comparison of the earnings on the capitalization, and that remaining after charges for the common stock. The danger for the industry in this variability and its capital structure is well indicated. The extreme advantage for the common stock in good years is more than offset by the risk of forced reorganization, which was the experience of the 1930's.

⁷ Great Northern Railroad has only so-called "preferred" stock in its structure, which is a \$6 non-cumulative issue, with full voting powers. Thus the stock in reality is the ordinary stock of the structure.

Prominent roads which have created original financing issues in preferred stock are the Atchison, Southern, and Illinois Central railroad systems.

CORPORATION FINANCE

TABLE 44. RETURN ON TOTAL INVESTMENT AND ON CAPITAL STOCK
(in millions)

Year	Net Operating Revenue After Taxes	Return on Investment	Earned on Capital Stocks
1923	\$ 975	4.5%	9.2%
1924	984	4.4	9.1
1925	1136	4.9	11.2
1926	1229	5.1	12.9
1927	1077	4.4	10.9
1928	1182	4.7	12.0
1929	1262	4.9	13.5
1930	874	3.3	8.0
1931	528	2.0	2.2
1932	325	1.2	d 1.7
1933	477	1.8	.3
1934	466	1.8	.3
1935	505	1.9	.7
1936	676	2.6	3.1
1937	598	2.3	2.0
1938	377	1.4	d 1.2
1939	596	2.3	2.0
1940	690	2.6	3.4
1941	1010	3.7	7.9
1942	1499	5.5	8.0
1943	1370	5.2	7.4
1944	1113	4.1	5.0

d = deficit

The steadiness of earnings for some systems is, however, quite by contrast to the general record of the field. This is a factor accounted for by the manner in which the revenues are derived. The types of freight movement are a strong influence. Thus, the granger roads of the agricultural area have

TABLE 45. TAX BURDEN OF RAILROADS
(in millions)

Year	Gross Operating Revenue	Tax (Other than income)	Per Cent of Gross Operating Revenue
1900	\$1487	\$ 48	3
1911	2789	108	4
1925	6120	358	6
1936	4052	322	8
1940	4,354	398	9
1946	7,852	554	7

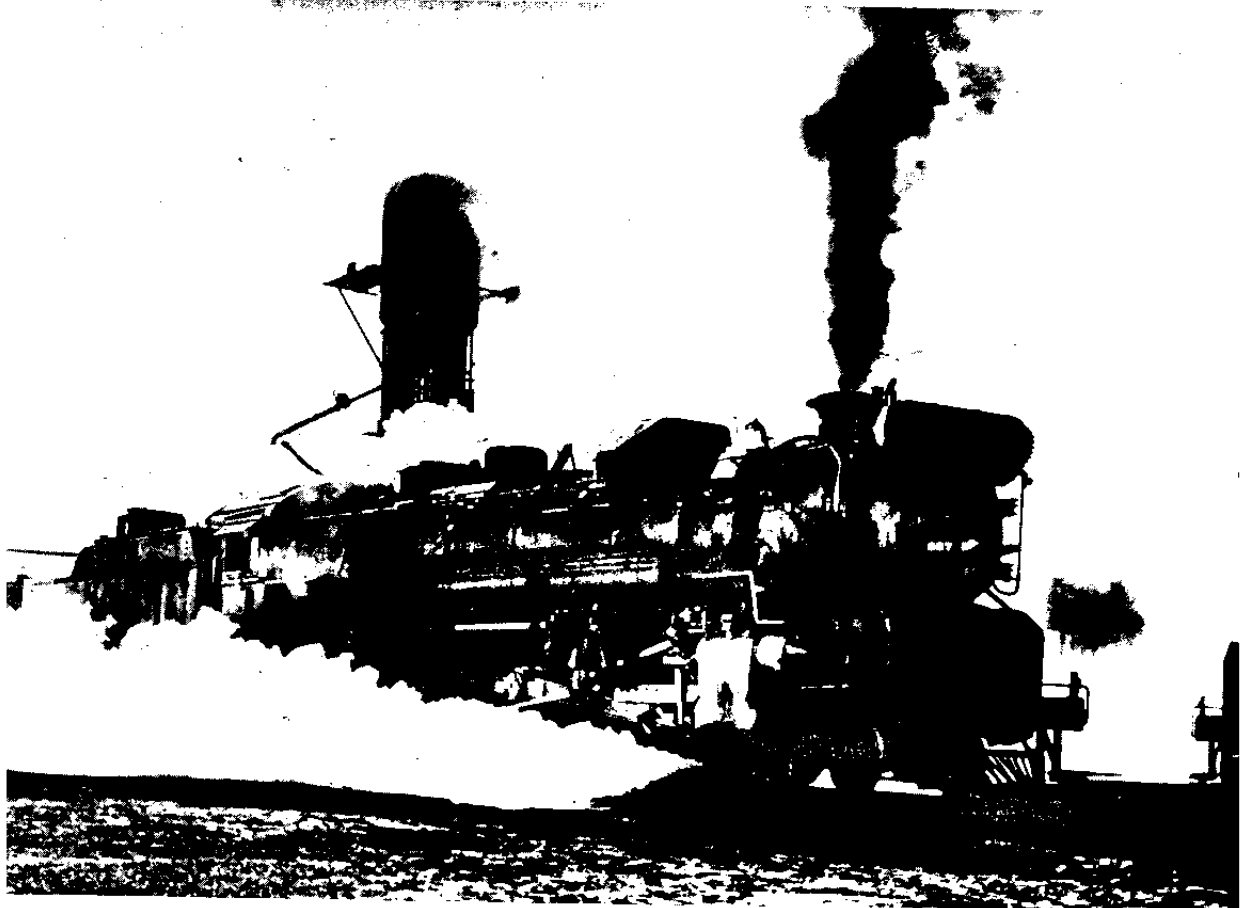
generally shown wider variations than the roads with access to the eastern centers where diversified manufacturing has permitted a lessening of the extreme swings in the freight revenues. Often these systems are handicapped by their passenger division in the times of large swings. In the depression stage



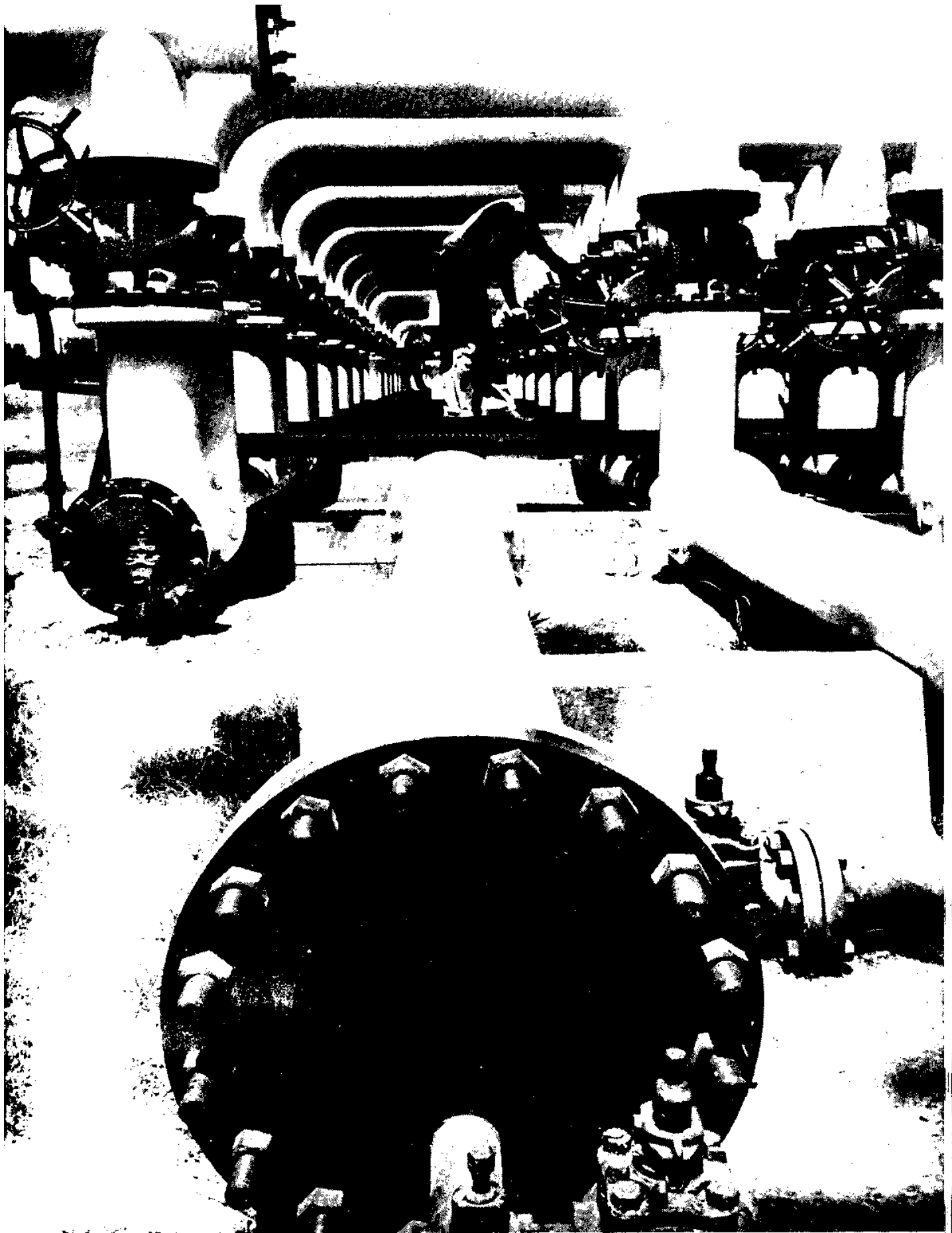
Railroads Are Large Users of Capital—Over \$26 Billion for the Road and Equipment; This Loading Yard Indicates the Sizable Installation Required. (Courtesy of Norfolk and Western.)



A Diesel Engine of This Modern Day Requires an Outlay of \$300,000 to \$500,000. (Courtesy of Milwaukee Road.)



Steam Motive Power Is Still an Important Part of the Equipment Investment of the Railroads. (Courtesy of Texas & Pacific Railroad.)



Pipelines Move Gas and Oil Long Distances but They Are Installed at the Cost of \$60,000 per Mile and Require Expensive Booster and Control Stations. (Courtesy of Steelways.)



The Airplane and the Truck Each Need Replacement in a Short Period. These Capital Needs Are Constant Problems for Management. (Courtesy of Automobile Manufacturers Assoc.)

passenger operations involved deficits while in the more prosperous periods some profit is made; but the public expects good equipment and service, which requires more investment.

One of the most important risks for the stock of the railroads is the tax burden. This portion of the economy has been subjected to an extremely heavy burden of taxes. They are high in proportion to the revenues and have been constantly growing. A brief comparison of this burden is shown in Table 45, which serves to emphasize how large a portion of the gross revenues is consistently being routed into the government treasury. Such a risk for the stockholders is especially severe in view of the slow adjustment of prices or rates under public regulation. The stock equity suffers the loss of this slow adjustment.

Railroad Financial History

Prior to the Civil War. Construction of the early railroads was largely the work of local promoters. In the first burst of enthusiasm for this marvel of the age, each local community could picture the dire results for itself if it did not have a railroad in its midst. By local subscription, most of the small roads leading to the nearest market center or water shipment point were financed as a matter of local pride. The instruments were usually stock in those early days, for a broad public appeal was not made outside of the local communities.

Shortly after this the states became interested in the promotions, as they had with canals and turnpikes, and offerings of state credit were made. Sometimes this was done by state guarantee of bonds to be sold by the road, more often by direct grant to the road from the proceeds of state bonds which were sold. Many of the towns did likewise, selling considerable quantities of their securities in order to subsidize the construction to their community.

The federal government entered the picture finally with its extensive land grant aids, which were made through the state governments at first and later directly to the road. These grants were usually for land alongside the new railroad, running for a mile or more in depth back from the right-of-way. Thus, the road became the promoter of settlements; and from the proceeds of its land sales, it derived funds for construction and operation. Congress finally granted a cash outlay of over 60 million dollars to six different roads for construction through the West to the Pacific, taking a lien upon the properties for the amount advanced.

After the Civil War. America was ripe for expansion westward after the Civil War, but this depended upon adequate transportation into the area. The hurried building of thousands of miles of railroad in the two decades after the Civil War is one of the most important events in our national history, as well as in financial history. In this rush to hurry construction, a promotion device known as the "construction" company came into wide use. Since it was chiefly a financial device, we must not ignore it, and since it left many problems in its wake, we must understand its use.

Since the corporation laws of most states prohibited the issuing of securities in greater amount than the property actually acquired, the construction company was invented as a device to avoid this prohibition. Beginning with its own initial capital, the construction company took contracts calling for securities of the railroad to be delivered for each mile of road constructed at the cost of the job. The construction company thereby received its securities for a job financed with its original cash capital, then sold the railroad securities and was in the position to repeat the cycle. But clearly profits could be enhanced if the costs of construction were swollen and the

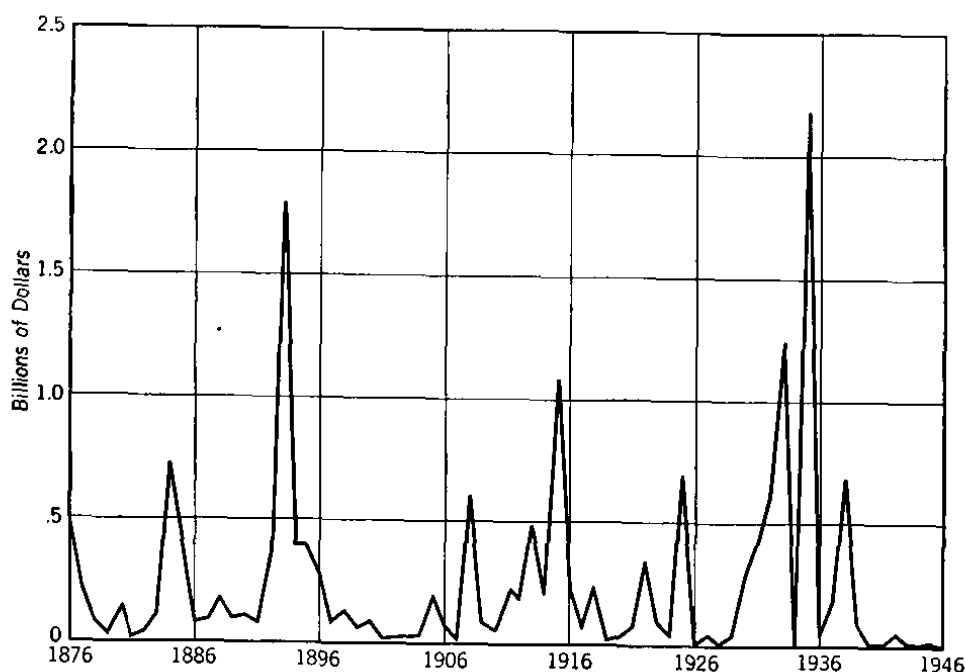


FIG. 25. Railway Bond and Stock Values Entering Receiverships, 1876-1946.

public would buy the securities. While the public psychology was favorable, the construction companies found all manner of ways to charge costs against their contracts for which payment was received in railroad securities.

Out of this overcapitalization arose the first reorganization problems of the far-flung new roads. Much of the overcapitalization was in bonds for this was the instrument which was expected to give a secured position to the general public as buyer. The 1870's produced a series of failures and reorganizations. The pattern of railroad receiverships appears in Figure 25. But even this experience did not long deter the renewal of construction; and in the 1880's, after a series of failures, the rush to build was repeated, though some added conservatism was noted. By 1890, the capitalization stood at about half bonds and half stocks.⁸

⁸ According to the *Statistics of the Railways of the United States* report, 1888, 38 billion dollars each had been raised by debt and by stocks.

It is usually regarded by students of railroad history as unfortunate that the extensive building fostered by the construction companies occurred. Out of this duplication came many difficulties, which first developed in the early reorganizations already mentioned and later, in this century, produced the problem of consolidation to save operating costs.

But more than the general financial effect was the general public reaction to the situation. The investor was surprised at the position in which he found himself. The shipper was prone to charge high traffic rates in an effort to make payments on the heavy overcapitalization. Then came the movement in the granger states for public control of rates. This move into public regulation was an expensive one for the roads in the long run; for although many things have been accomplished, it has also brought a rigid pattern within which the roads must operate.

The same period in the eastern area of the country was one of consolidation and merger into the trunk-line systems into Chicago and St. Louis. Here was the province of the Morgan, Vanderbilt, and Gould financial encounters. To the west, Harriman and Hill were dominant figures. In the financial maneuvers of those days, the collateral trust bond issue became a favorite instrument, coupled with the use of holding company control in the creation of the railroad systems. The Pennsylvania Company, specially chartered in 1870, became a pattern for future plans, and interestingly enough this corporation still functions in the setup of the Pennsylvania Railroad.

Many of the systems forced into bankruptcy in the 1890's were revamped and put upon a solid footing which they have never relinquished. Sound financial policies were installed and the attraction of extremely heavy bond issues was avoided. In the two succeeding eras of reorganization in the twentieth century, these systems operated without crisis while the other systems faced reorganization each time.

In the Twentieth Century. Prior to World War I, the pattern of development in the financial area of the railroads was that of additional mileage, particularly in the agricultural regions. There was a gradual growth in the bonded indebtedness of the systems, and the control of subsidiaries by small stock interests was widely employed. Public pressure for more regulation was increasing. Now the demand was for public control not only of rates but of the issuance of securities as well. The several states were active in creating control over the financial issues, but not until 1920 did the Interstate Commerce Commission receive authority to exercise such powers.

In the act of 1920 powers of control for the Interstate Commerce Commission were extended to some very important elements of the field. First, the commission was charged with setting rates so that the general level of returns on the fair value of property in use was set at $5\frac{3}{4}$ per cent and was accompanied with the recapture clause calling for the excess over 6 per cent to be turned into a pool for loans to the poorer roads. Second, the commission was given control over extensions, control by lease and stock owner-

ship. Third, it was charged with preparing consolidation plans of major regional systems. Fourth, it was granted control over issuance of new securities.

Perhaps of more interest than the enactment of the provisions are the results. These have been important to the field of finance. The general level of rates has never been set sufficiently high so that the basic rate of return has been consistently achieved. The recapture clause was not enforced and the 1930's made the provision a mockery. The systems of consolidation are still largely on paper, though the commission has tried to keep the proposals coming before it in line with these plans. Nothing has been done directly. The control of acquisitions and creation of new issues has been of much greater importance. It has been felt that not enough force was exercised in the 1920's to prevent the unwise issuance of securities.

The Decade of the Twenties. The railroads suffered heavily during World War I; but after the crisis of 1921 a revival was staged. A large number of property improvements were undertaken in this decade, financed by a combination of bonds, stock, and surplus. The bonds still represented more than 80 per cent of the capital used, as shown in Table 46; for the public

TABLE 46. CAPITAL FLOTATIONS OF RAILROADS, 1920-1930^a
(in millions)

Year	Long-Term Bonds	Short-Term Bonds and Notes	Per Cent Bonds Sold	Stocks	Per Cent Stock Sold
1920	\$356	\$21.5	100	none	....
1921	638	16.5	100	none	....
1922	589	35.3	95.9	\$ 26.9	4.1
1923	471	19.0	94.8	27.3	5.2
1924	809	75.2	94.2	55.9	5.8
1925	473	24.9	96.9	16.2	3.1
1926	351	30.0	91.4	40.8	9.6
1927	767	20.1	82.2	175.1	17.8
1928	505	29.5	73.6	192.5	26.4
1929	581	26.8	74.5	209.1	25.5
1930	945	14.5	93.6	66.0	6.4

confidence in the roads seemed to revive and sales were relatively easy. The institutional investors, as in the earlier days, bought heavily.

The reinvestment of earnings was very heavy in this period, and it gives a false impression of railroad stability. Prior to 1911, depreciation accounts had not been required, and even until 1940 no such accounts on the road-bed or facilities were required. In fact, much of the expenditure for property improvement in the 1920's was delayed depreciation financed by selling of new securities. When the depression came, charges had to be paid on bonds which in reality represented little real gain in efficiency or new capital. Here was the whirlwind which had been set up in the earlier years

^a Source: *Moody's Railroad Manual*, 1942, p. 235.

when small sums were retired to surplus, handsome dividends were paid, but little was charged to expenses in the way of property depreciation or obsolescence. The record of depreciation reserves is reported in Table 47, indicating the very small size of the reserves until after 1936. Today the

TABLE 47. DEPRECIATION RECORD, UNITED STATES RAILROADS¹⁰
(in billions)

Year	Property Investment	Depreciation Amount	Per Cent Accrued to Investment
1900	....	none	0
1911	\$11.8	\$.2	1
1920	20.9	1.0	5
1936	19.5	2.8	14
1940	19.7	3.1	16
1946	20.0	5.8	29

adequacy of the allowances will be made questionable by the rising price levels.

Depression in the 1930's. The depression fell with a heavy blow upon business enterprises like the railroads with large fixed charges and other costs not easily reduced in ratio to the falling gross revenues. The major systems, of conservative management, conserved cash by maintenance decreases, strict control of operations, and withholding of capital additions. They succeeded in dealing with their financial problems by refunding all maturities which appeared.

Other roads in the process of improvement had run their cash accounts to low levels; they had committed themselves to heavy capital outlays and did not succeed in reducing costs rapidly. These factors combined, after a few years of consistently retreating traffic, to exhaust the working capital resources; and defaults in interest payments had to be made.

Efforts to turn the tide of this slow attrition were made by the Reconstruction Finance Corporation, created in 1932 with power to loan particularly to railroads, banks, and insurance companies. Extensive loans were made to various railroads, but only in a few instances did they do more than delay the difficulties. The sums loaned to railroads in the next twelve years aggregated over 850 million dollars, which at the end of 1947 had been reduced by payments to less than 150 million dollars outstanding.¹¹

It was apparent soon after the opening of this decade that the R.F.C. could not save the railroads, and the famous Section 77 to the Bankruptcy Act was created. This was designed to facilitate reorganization of the railroads and to speed them to recovery. Perversely, the depression lasted and the bankruptcies increased as shown in Figure 25, until nearly one-third of

¹⁰ Source: *Statistics of Railways in the United States, 1905, 1925; Report of the Interstate Commerce Commission, 1946, p. 166.*

¹¹ *Statistical Abstract of the United States, 1947, p. 433; Federal Reserve Bulletin.*

the total mileage in the country was involved.¹² Without assessing blame, we may nevertheless state that this time the reorganizations as a group took longer to complete than at any other time. The Bankruptcy Act amendments, therefore, did not operate to achieve speed. Even the revival of earnings during the period of World War II operated to prolong the process, for the equity holders felt that values were gradually being restored and that they should not completely sacrifice their interests. The Interstate Commerce Commission was granted the right to pass upon the reorganization plans and a new provision was added which meant a great deal more work as compared with the earlier process.

AIRLINES

The airlines have not succeeded in taking any large volume of traffic from the established agencies, as was indicated in Table 35 earlier in the chapter. This is true despite the fact that the airlines have increased their miles flown more than twenty-five fold in the period 1926-1942, from 4 million to over 110 million. This infant industry is characterized by the usual evidences of the common financial problems. A record of the operating revenues and resulting net income (in millions) shows the erratic elements with which the financial plan must deal:

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Gross revenues	\$31	\$37	\$40	\$47	\$66	\$84	\$106	\$113	\$134	\$191	\$255	\$343
Operating expenses	32	37	41	46	59	81	92	82	107	148	240	368
	d\$ 1	\$ 0	d\$ 1	\$ 1	\$ 7	\$ 3	\$ 14	\$ 31	\$ 27	\$ 43	\$ 15	d\$ 25

d=deficit

While the period of the war increased the revenues by leaps and bounds, this is not the peacetime level at which the lines can expect to operate. The accidents which they have had since World War II have been a real deterrent to passenger traffic, but freight has mounted at a very fast pace.

The composite capital structure of the airlines shows an effort to finance at a very conservative level, though the amount of current debt is likely to be more dangerous than some funded debt, which has been so definitely avoided. In Table 48, the composite structure shows a reliance in amount of 69 per cent of the capital sources on the equity of stockholders, either by stock purchase or by retained surplus. It is interesting to note, in fact, that in this field the surplus is the largest single source of capital, something not found in any other field. Some of the individual railroads have equaled this record.

¹² The record of 1930-1940 shows the peak number of railways in receivership at 109 in 1938, with total mileage involved of over 77,000 miles; and in this decade, total capitalization concerned exceeded 6.4 billion dollars, about one-fourth of the entire capitalization for the national system.

The high rate of obsolescence in the equipment of these concerns is, of course, a major financing problem. The use of equipment obligations is not large according to the balance sheet reports, but it is known that the new planes are frequently sold on the installment purchase basis. The high cost

TABLE 48. COMPOSITE CAPITAL STRUCTURE OF AIRLINES, 1943
(in millions)

Account	Amount	Per Cent of Total
Current liabilities	\$ 53.90	30.8
Funded debt	.31	.2
Preferred stock	6.54	3.7
Common stock	44.37	25.4
Surplus	69.86	39.9
	\$174.98	100.0

of terminals has been pointed out by many of the operators as the most obvious place in their operational structure calling for immediate improvement. Heavy investments in terminals are not justified in ratio to the traffic unless there is a greater utilization by several lines.

TRUCKING

In the field of intercity freight movement the trucking industry has made the most rapid strides in the past twenty-five years of any transportation industry. Its early days were characterized by the dominance of small independent operators, who set their own rate schedules and kept their accounting records in their own fashion. Although many of the states entered the regulation of this field as to the granting of certificates of convenience, it was not until the Transportation Act of 1940, which granted jurisdiction to the Interstate Commerce Commission, that the field was closely supervised in all respects.

The income factor of the trucking industry, as a whole, is not capable of being ascertained accurately. It would appear, however, that there has been sufficient stabilization by this time so that trucking represents a generally profitable field. At least it does not appear to be so erratic in earnings as the airlines. The record for 1941-1946 is as follows (in millions):

	1941	1943	1945	1946
Gross revenues	\$560	\$645	\$740	\$871
Operating expense	532	636	738	839
Operating income	\$ 28	\$ 9	\$ 2	\$ 32

The composite balance sheet of the industry for 1076 carriers in 1941 showed a rather heavy portion of the capital raised from debt sources. The outlines of the industry balance sheet appear in Table 49, which indicates the common elements of asset distribution for the field. The fixed assets comprise about 65 per cent of the investment, and approximately 35 per

TABLE 49. COMPOSITE BALANCE SHEET, TRUCKING INDUSTRY (1076 CARRIERS), 1941¹³
(in millions)

ASSETS		
Current assets	\$ 63	34.6%
Property	112	65.4
Investments	7	
	\$182	100.0%
LIABILITIES		
Current liabilities	\$ 60	33.0%
Equipment and debt obligations	29	15.9
Capital stock	59	32.4
Surplus	34	18.7
	\$182	100.0%

cent of the assets are utilized in the current asset division. The debts as a source of capital show a total of 49 per cent of the capital structure, with two-thirds of this debt in current debt. It would appear to be a larger debt than conservative operations might require. The public is not involved as an investor in this field, however, for only one major trucking company has sold securities to the public. This is not true to the same degree of passenger bus lines.

With the field more stabilized and the equipment subjected to somewhat slower rates of obsolescence than that of the airlines, the record of profitable operation may be expected to continue. Since the rate structure is now under more rigorous control, however, the industry may face problems of proper adjustment of the prices charged to the shifts in costs of operations. Since the equipment must be purchased in large amounts in the current market at high replacement costs, the problem of adequate capital may become very acute.

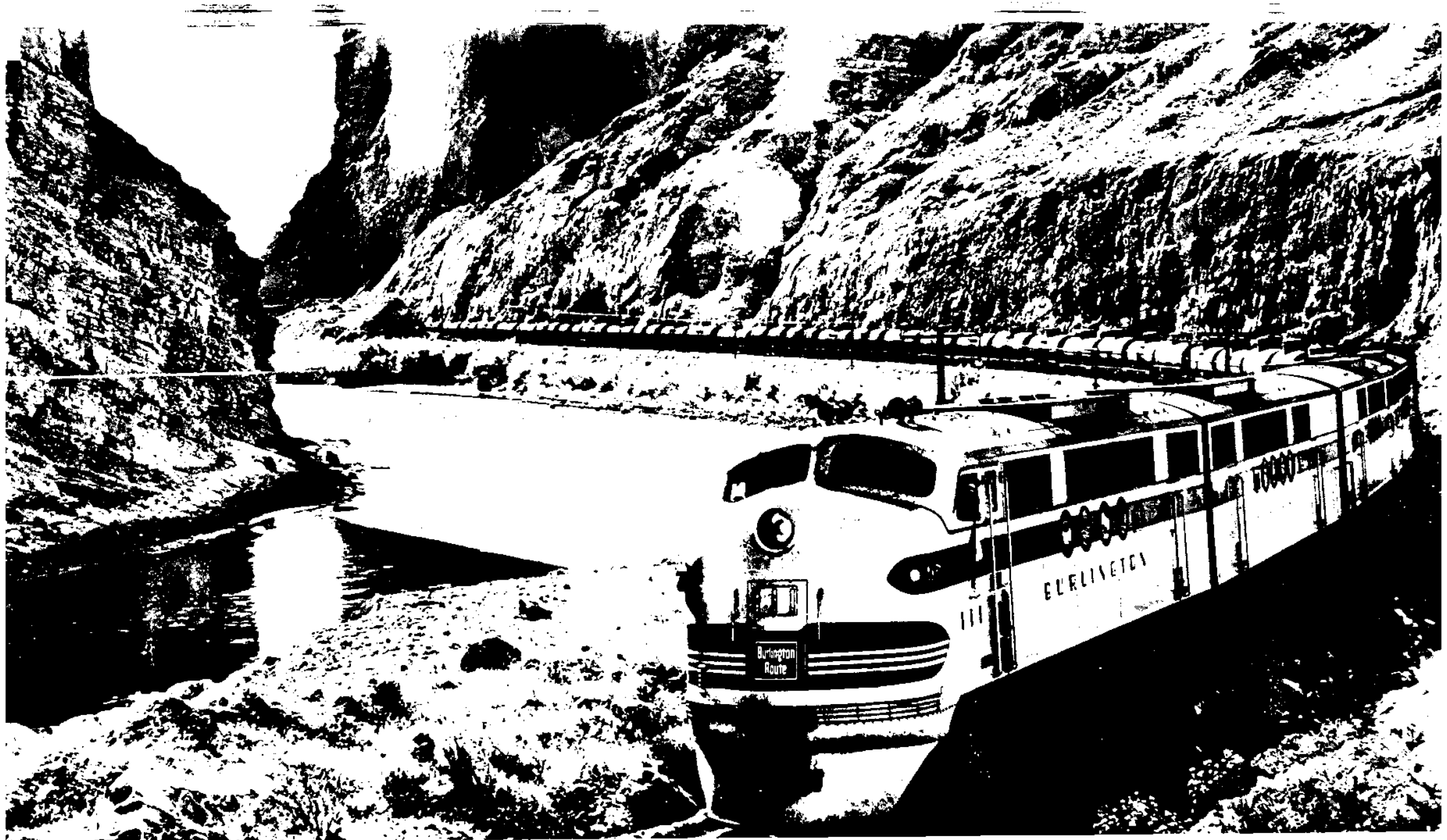
DOMESTIC WATERWAYS CARRIERS

The importance of the waterways in the transportation field is indicated by the comparison in Table 35. Transportation by water has a place in the movement of very bulky goods of relatively low unit value which do not require high-speed transportation. The composite balance sheet of the field for domestic operators appears in Table 50, and it reveals a conservative pattern for the most part. The showing of 38 per cent of the capital coming from the debt source is not too large, judged by the general standards of the large section in fixed assets. It should be noted, too, that if the government barge line is eliminated, the funded debt of all other lines represents but 7 per cent of their capital structures. The heavy reliance upon the equity, stock and surplus, in the amount of 62 per cent is seemingly well within the bounds of good operation.

¹³ Source: *Moody's Railroads*, 1943, p. 225.

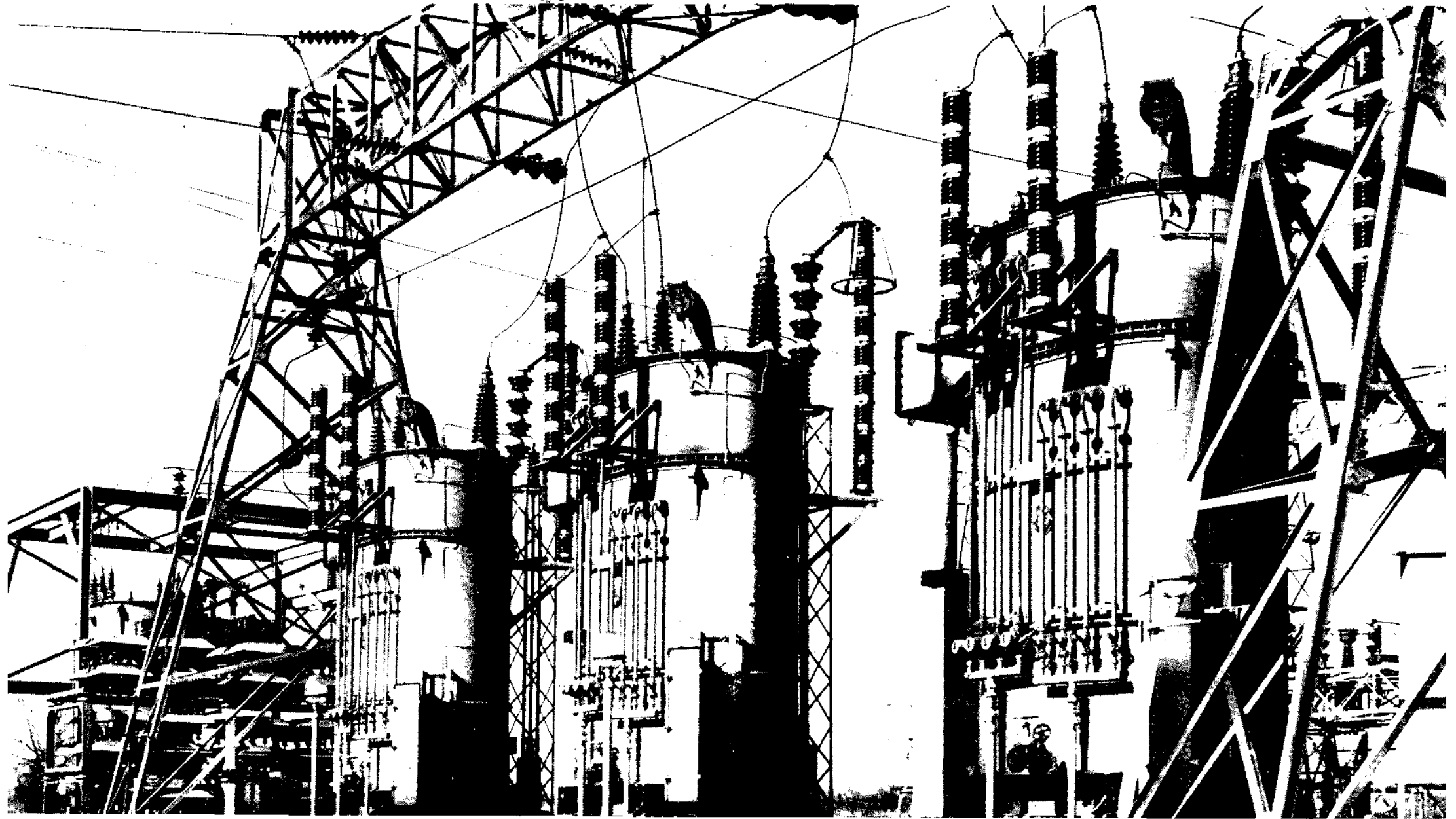


Electrification of the Railroads Is One of the Most Important Uses of Added Capital in Their Modernization Programs. (Courtesy of Pennsylvania Railroad.)



The Importance of Oil and the Capital for Its Development Is Visualized by the Diesel Engine and Its Long Train of Oil Cars Speeding Across Country. (Courtesy of the Burlington Route.)

The Importance of Oil and the Capital for Its Development Is Visualized by the Diesel Engine and Its Long Train of Oil Cars Speeding Across Country. (Courtesy of the Burlington Route.)



These Power Transformers Are Essential to the Electrical User but They Must Be Provided by an Investment of over \$20,000 Each. (Courtesy of Cincinnati Gas & Elec. Co.)



These Modern Assembly Plants Emphasize the Capital Requirements of the Automobile Industry, but Illustrate as well the Whole Technique of Our Large-Scale Production System. (Courtesy of General Motors Corp.)

FINANCING TRANSPORTATION

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TABLE 50. COMPOSITE BALANCE SHEET FOR DOMESTIC
WATERWAY CARRIERS
(in millions)

Fixed assets	\$65.0	71%
Current assets	26.8	29
Total	\$91.8	100%
Current liabilities	\$16.6	18.0%
Funded debt	17.5	20.0
Preferred stock	.3	.3
Common stock	31.0	32.7
Surplus	26.4	29.0
Total	\$91.8	100%

Perhaps the most revealing fact is the operating record of these companies. It is not good, being comparatively poorer than that of the railroads. The record may be reviewed as follows (figures are in millions):

	1940	1941	1942	1943	1944	1945
Gross revenues	\$28.36	\$35.80	\$41.26	\$86.40	\$118.68	\$41.93
Operating expenses	26.99	33.87	39.99	83.54	116.01	40.41
Net income	\$ 1.37	\$ 1.93	\$ 1.27	\$ 2.86	\$ 2.67	\$ 1.52
Per cent on total capital, 1943				3%		
Average net income	\$1.94					

Such an earnings record indicates strong reason for a limited use of debts as a source for capital. The quantity of securities outstanding in the hands of the public is small and thus offers little problem in the investment market. The firms which have entered this business, however, have found it very competitive, as the limited earnings attest, and efforts to raise additional capital through private sources will not be easy. As in the field of overseas commerce, great activity by government subsidy may be expected.

PIPELINES

The pipeline transportation system of the country is operated for the most part in conjunction with the local distribution of natural gas, or by the refining and marketing branches of the petroleum industry. The lines have been required to operate as public carriers in the oil fields, and their rates and acceptance of shipments for the account of other producers and marketers are subject to the Federal Power Commission.

The natural gas industry is now estimated to have better than 50,000 miles of pipeline devoted to the transmission of natural gas into the local communities.¹⁴ The cost of a 4-6 inch pipeline is estimated at about \$8000 per mile. The cost of installation is, therefore, the major expenditure of

¹⁴ See *Moody's Public Utilities Manual*, 1943, p. 245.

such a company. Small working capital funds will be needed for the usual operations of the pumping system. Like all transportation systems, then, the major phase of the investment of capital will be in the fixed assets required.

Capital structures for this field may be expected to be patterned after that of the service utilities. The revenues show a great degree of regularity, and the heavy plant investment makes it logical that funded debt be employed to a considerable extent. A composite capital structure of eight major natural gas companies operating over 15,000 miles of the interstate transmission lines are presented in Table 51. The results reported in the table reveal funded

TABLE 51. CAPITAL STRUCTURE, PIPELINE COMPANIES—
COMPOSITE OF EIGHT LEADING NATURAL GAS COMPANIES, 1943
(in millions)

Funded debt	\$137.8	34.0%
Preferred stock	9.1	2.4
Common stock	129.0	31.7
Surplus, including surplus reserves	129.4	31.9
Total	\$405.3	100.0%

debt to be 34 per cent of the structure, though this figure would rise to 53 per cent if one company without funded debt were omitted. The use of preferred stock is extremely limited, being less than 3 per cent. The equity of common stock and surplus provides 63 per cent of the capital structure. As a whole, this appears to be a very conservative structure, though it must be recognized that the usefulness of the systems depends upon the reserves of natural gas. The major lines will, of course, be useful for a long time though the gathering lines may need to be relaid or added to extensively in order to produce a volume sufficient for transportation into the major centers. Thus some unusual risk attends the industry at this point; but the large equity investment seems to allow adequately for such a shifting of factors.

The composite operating statement of the companies in all fields of operation as reported to the Federal Power Commission appears in Table 52.

TABLE 52. OPERATING STATEMENT, NATURAL GAS COMPANIES,
ALL OPERATIONS
(in millions)

	1944	
Gross revenues	\$548.6	100.0%
Operating expense	305.5	55.7
Depreciation	58.3	10.6
Taxes	82.8	15.1
Net operating revenue	\$102.0	18.6%
Interest	\$ 33.2	Ratio 3.1:1

The results indicate the experience of the pipelines and the utilities to be similar, with about a 55 per cent operating expense division, with depreciation at slightly over 10 per cent of the gross revenues, and with taxes at better than 10 per cent of the gross revenues.

QUESTIONS

1. Explain ways in which railroad operations are not completely comparable to those of the electric utilities, and show how the effect of these operations is borne out in the distribution of assets.
2. Why has the differential developed in interest rates for utilities in comparison with railroads?
3. Why has the average railroad capital structure, especially debt, tended to be complicated by numbers of issues and extensive terms?
4. How would you support the perpetual debt theory of the railroads? Do you consider that this idea or the large per cent of debt in the structures is more responsible for the defaults in the 1930's?
5. Explain why the mortgage bond is so extensively favored in the railroad field. Is there a trend of which you approve developing in this?
6. Indicate the significance of rental charges paid by the roads for right-of-way as a capital charge. Why might these charges be regarded as having priority over mortgage interest?
7. Discuss trends and policies regarding the position of stock and the relationship of the several classes in the structures of the railroads.
8. What practices of construction companies in the railroad field left difficult problems for the roads so created? How is the effort to create a few territorial systems related to this historical pattern?
9. How did the depreciation practices of the railroads contribute to some of their difficulties in meeting the depression of the 1930's?
10. Comment on the capital plans of the airlines in relation to their earnings record.
11. Contrast the general soundness of the trucking industry capital plan and that of the railroad industry, particularly in view of their earnings records.
12. Indicate the position you would take in developing a proper financial plan for natural gas pipeline concerns. Explain.

PROJECTS

1. For two railroads report the following in percentages: the amount of rent paid to total charges, the total depreciation account to assets, and the annual credit to depreciation to the cost of the asset.
2. Prepare an analysis of the liens of the Northern Pacific Railway Company as to asset coverage, interest coverage, and sinking fund operations.

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CHAPTER XIX

Extinction of Long-Term Indebtedness

TO ALL who borrow there comes a day of payment, and to all who lend there arrives a period for repayment. All debts imply a date of liquidation, and this chapter considers the plans of borrower corporations before and at maturity as to the disposition of the liability. The discussion is divided into three parts dealing with (1) extinction by conversion, (2) extinction by refunding, and (3) extinction by redemption.

In almost every corporation a portion of the capital is obtained by borrowing: currently by trade credit, from commercial banks, and in the open market; and over long periods by means of notes, mortgages, and bonds from persons willing to lend their money on long terms. Some of the factors which determine the extent and the nature of the contracts used in borrowing have been previously mentioned. So, too, it has been indicated that the owned capital operates as a buffer to protect the claims of creditors both as to principal and as to income. Payment in full becomes a matter of current capital, that is, available cash resources. Since the debts of funded type mature in large sums at a single date, this problem becomes an exceptional one. Some plan or arrangement must be considered prior to the date of maturity itself.

EXTINCTION BY CONVERSION

Elimination of indebtedness by conversion is an arrangement by which, in reality, a refunding occurs without the formal process of sale and payment. That is, there is the direct substitution of a new security for the old bond. In Chapter XI a discussion of the subject of conversion was begun. At this point only the specific aspects of conversion relating to the elimination of debt will be considered. The use of a conversion procedure may be either by virtue of a contract clause created in the original issue or by a plan proposed by the company as a means of meeting a maturing issue. In any case the conversion is at the option of the creditor.

Conditions Leading to Conversion

Since conversion almost invariably is from a senior to a junior security, it will follow that the exchange can be expected to be sought by the bond-

holder only when the present or prospective price of the junior issue is more in keeping with public favor than the present and prospective position of the senior issue with which the exchange is to occur. When a bull market for stocks is under way, or when the prospective future position of the stocks is better than that of the bonds, conversion operations will be easily achieved and securities carrying stock conversion privileges will sell readily. *These circumstances occur only during the periods of revival and prosperity.* The fact that such an exchange will probably occur at these times operates more or less automatically to adjust the financial structure of the corporation to the periods of the business cycle, increasing the bond ratio in periods of depression and low prices, and shifting to stock in prosperity.

The fact that the shift is directly related to the cycle eliminates to some extent the necessity of building large reserves in years of high profits to meet heavy fixed charges during the slow periods.¹ The process operates to eliminate the debt in speculative periods so that in subsequent eras of difficult financing the concern will be debt free and, accordingly, may issue bonds to advantage. The operation has the danger of continuously increasing the stock in the capital structure. The addition of a bond issue which is subsequently shifted to net worth by the exercise of conversion must necessarily increase the outstanding stock. The repetition of this process constantly adds to the total stock outstanding, thus diluting the per share equity.

Finally, conversion is a process which occurs at the option of the holder of the bond.² No shares will then be issued in exchange for the bonds unless the bondholder is of the opinion that the stock offers advantages to him. If the management were consciously trying to bring about conversion, there might arise undesirable practices of inflating profits to raise the apparent value of stock, speculating in the stocks, manipulation of the price of shares or of bonds, or payment of unusual dividends. The vagaries of the business cycle make predication of the financing plan solely upon conversion at the proper time an invitation to financial disaster.

¹A good many managements regard the straight convertible bond as a temporary debt and use it solely with the thought that as soon as the company's operations become profitable, conversion will occur and the debt be extinguished. If they desire only to sell bonds on good terms, they use stock purchase warrants instead of convertible features, thus leading to a commitment of perpetual debt, or retirement by redemption.

²Usually the conversion is as advertised in the *Wall Street Journal*, February 5, 1948. The Detroit Steel Corp. offered to the holders of its outstanding Twenty-Year 6 Per Cent Sinking Fund Debentures, due July 1, 1964, the right, exercisable between February 5 and June 5, 1948, to exchange said debentures for shares of the company's common stock, \$1 par value, on the basis of four shares of common for each \$100 principal amount of debentures.

But this is not always so. One of the greatest examples of forced conversion at the option of the corporation was that of the Associated Gas and Electric Co. obligations issued from 1928 to 1932. In 1932, at the time the company elected to force the conversion, there were no less than nineteen series of these convertible investment certificates, or interest-bearing allotment certificates.

Conversion vs. Refunding

The material aspects of the extinction of indebtedness by conversion resemble somewhat the financial operation known as refunding. Yet there are differences. In refunding, the usual operation is to sell new bonds and to use the proceeds to pay off old bonds. It is not refunding in the proper meaning of that term when stock is sold and the proceeds are used to retire bonds; in effect, this is conversion. Another difference between conversion and refunding lies in the fact that when refunding occurs, the expense of underwriting the new securities is a cost of structural alteration; in conversion the only expense involved is the cost of the cancellation of old securities and of the printing and issue of new ones into which the conversion occurs. If a bond issue is retired prior to its maturity date, it will usually be true that the bonds will be retired at a price in excess of par, known as the call price. The amount by which the call price exceeds par represents an expense to the refunding operations.

If refunding instead of conversion is resorted to, control of the capital structure rests more surely with the stockholders. The bonds with the conversion clause will offer conversion privileges into securities which will probably have a high prospective market value but little prospective control value. But when the conversion date arrives, it may happen that the particular security into which the conversion is to occur will be one with an important control value. The contract being already made, the shareholders, if they foresee the situation, may elect refunding in sufficient time to prevent the acquisition of these controlling shares by bondholders.

Another aspect of the problem of choosing between refunding and conversion is the fact that the conversion will occur only when advantageous to the bondholders; therefore it would be possible to refund under the same conditions. The test of the argument lies in whether or not the advantage in price necessary to induce the bondholder to make an exchange for stock is sufficient to offset the costs of refunding operations.

EXTINCTION BY REFUNDING

Refunding is the process of substituting one debt for another; it creates a new debt and uses the proceeds derived therefrom to discharge the old one. Because the new debt means a new contract with creditors, the characteristics of the new debt contract will probably prove advantageous to the corporation or to the creditors, depending upon the bargaining position of the two at the time of the refunding operations.³

³ The refunding operations by means of direct exchange (really conversion) and by means of security sale and redemption during 1932 show how strong the bargaining power of bondholders can become in periods of severe depression. The average rate of refunded issues would be from 1 to 2 per cent higher coupon, and sometimes as much as 3 per cent higher yield, than the old issue had carried at the outset. On the other hand, in 1925 and 1926 a good many issues were refunded at lower coupons and lower yields than the original issue. As a general rule, refunding before maturity will

Purpose of Refunding

Refunding may occur at any time but is more likely to take place under two basic conditions: (1) at the maturity of an outstanding issue or in anticipation thereof, or (2) when unusually favorable market conditions permit saving on the fixed expenses. Both conditions may be true if a maturity occurs in a very favorable money market.

Although the basic conditions may lead to refunding operations, one of several motives will usually dominate the decision to refund: (1) extension of debt, (2) avoidance of cash outlay, (3) reduction of fixed charges, and (4) change in the capital structure. Debts may mature at a time which makes payments impossible; unless they can be extended, the stockholders of the corporation may be forced out, or caused to lose a large proportion of their equity.⁴ On the other hand, although it may be possible to pay the maturing obligations, to do so would exhaust the cash resources, or deplete the working capital fund to a point that would cripple the operating position of the corporation. The remedy in both instances may lie in an extension of the debt, or a replacement of the old debt by a new one which will defer payment, at least for a time.

Both extension of debt and avoidance of cash outlay arise out of the undesirability or inexpediency of meeting a maturing debt; reduction in fixed charges and changes in capital structure usually are not so governed. A corporation which at one time was forced to borrow under onerous terms later finds itself in a strong position. Bonds which were marketed at a 6 per cent yield may now be replaced by bonds yielding only 5 per cent; the saving of 1 per cent per annum on the debt is actually a $1\frac{2}{3}$ per cent saving in interest. A refunding operation would appreciably affect the number of times bond interest could be earned.

Alteration of the capital structure, *per se*, is the result of many things. Corporations, like children, grow; and as they grow, their capitalization

usually be to the benefit of the company, while refunding at maturity will depend primarily upon conditions of speculative psychology and the general outlook in industrial affairs.

⁴The United Railways and Electric Co. of Baltimore sought an extension of the Consolidated First Mortgage 5's and the Extension and Improvement 5's, both issues of the Central Railway, on the grounds that the cost of refunding directly would be prohibitive and that cash was not available for the purpose. However, the indenture securing the company's consolidated mortgage bonds provided that not more than 4 per cent could be paid on the bonds of the Central Railway. To secure an assurance of extension, 2 per cent rider coupons were issued, constituted as supplemental and separate obligations secured by the general credit of the company and not included in the debt secured by the indenture.

In the current market (1948) with very low interest rates the general practice has been to exercise the call privilege and place the refunding issue in the general market. There has been little necessity to solicit the interest of the outstanding holders, for good investment issues are at such a premium that general investments are made in the refunding issues.

plans must be changed. A proper financial plan for a corporation capitalized for \$100,000 may be quite improper when the concern reaches \$10,000,000. Old bond issues with after-acquired property clauses may prevent proper financing—the solution lies in refunding. Or even though the present financing plan is satisfactory, it may become advisable to prepare for future financing when conditions may offer some difficulty. The proposition that all present financing is an alteration of the past, a strategy in the present, and an anticipation of the future may be repeated without fear of contradiction. Many times alteration is for other indirect ends, such as manipulation of security prices or to gain, regain, retain, or avoid control and its subsequent responsibilities.

To effectuate a refunding, corporations commonly borrow at the banks to meet these requirements, even where there is large certainty that the refunding will be accomplished. It is excellent financial strategy to arrange for a credit equal to a portion of the issue to be refunded. A purely nominal rate is paid on the whole and a normal rate on whatever is actually used. The banks, trust companies, and investment concerns are very useful in dispensing information on a refunding, actually influencing the holders' decisions to exchange for new bonds. Indeed, these institutions have a large influence upon the success of the refunding.

The Inducements Offered to Secure Refunding

Unless some sort of unusual contract permits the company to refund at its own option (which would actually be conversion), bondholders must be enticed to make the exchange if it is direct. It often happens that inducements will take all sorts of forms. Part payment, cash bonuses,⁵ and higher interest rates are the baits commonly used. If the bondholders prove wary, some additional tasty tidbits may be added, such as sinking funds, consolidation of small issues into larger ones to provide better marketability, or, perhaps, a little more security in the form of collateral. If matters are desperate with the company, such ideas as a guarantee by a subsidiary or a parent company, or an agreement to assume, may be included.

But one cannot conclude that all such inducements are of a positive nature. The company may be in a bad way, and everyone aware of it. The market for bonds and stocks may be such that any security would fail to sell on a decent basis irrespective of what contractual provisions were included. Then the bondholders may decide that securing the same interest, or even a lower rate, would be a wise move.⁶ Sinking fund requirements may be eliminated, as may serial maturities.

⁵Virginia Electric and Power Co. offers a premium, ranging from 4½ per cent of par for the year beginning March 1, 1945, to ½ per cent of par for the year beginning March 1, 1972, for redemption of its First and Refunding Mortgage Bonds, Series E, 2¼ per cent, due March 1, 1975. After February 28, 1973, no bonuses will be paid.

⁶When the 6 Per Cent Consolidated Mortgage Bonds of the Fremont, Elkhorn and Missouri Valley R.R. Co., due October 1, 1933, were being refinanced by a loan from

Refunding Before Maturity

If refunding operations occur before the maturity of the debt contracts, they will usually be by negotiation or by the exercise of some contractual option on the part of the corporation. Negotiation is almost always the result of the *poor planning of the financial scheme of the company*, or a condition of reorganization and financial reconstruction. Of course, a few corporations may find themselves in an unusually strong financial condition at a time when bond prices or stock prices are extraordinarily low. It is possible for a corporation to retire a relatively large bond debt by means of open market purchases at a minimum cost. In 1932 and 1944 a few corporations and their managements took advantage of such external conditions.

Refunding at Maturity

Refunding of debts at their maturity may be but repercussions of poor financial planning and management. If a bond issue has been properly managed, assuming the principle of perpetual debt does not apply, then sinking funds will have been built up to retire the debt. Clearly, if no sinking fund operations have been attempted, it would be a moot question whether in any particular year it would be possible to withdraw from the corporation sufficient funds to retire a substantial issue. If not, the answer will be refunding. Even though cash is available to retire the debt, it does not always follow that retirement is the best technical move. If money is earning and it appears that it will be able to earn more with the business than it costs, refunding would be the proper policy. Not to follow a refunding policy under such circumstances would be to deny the principle of trading on the equity, and would be destructive to financial success. Future conditions must be judged with care, especially if the rate of excess earnings is small and the debt is large. Refunding with an expected excess earnings of 1 per cent may be proper and justifiable when the equity has been traded on not more than 100 per cent, but it is definitely of great risk if the equity has been traded on more than 300 per cent.⁷

the Reconstruction Finance Corporation and new bonds, the new bonds offered only a 5 per cent interest rate. Bondholders not infrequently find it to their advantage to reduce the interest rate in order to lighten the fixed charges of the company to the point where it can struggle along without a forced liquidation which might mean loss of a portion of the principal.

The current Baltimore and Ohio R.R. Co. readjustment includes reductions in interest charges on its refunding bonds from 5 per cent fixed to 1 per cent fixed and 4 per cent contingent and from 6 per cent fixed to 1½ per cent fixed and 4½ per cent contingent.

⁷The feasibility of a general rule for trading on the equity has been considered. It would be stated thus: The number of times capital may be borrowed in relation to that owned is limited to the percentage of excess earnings over the cost of borrowed capital. It may be further modified in the light of the degree of stability of earnings.

Refunding as a Financial Policy

Whether a corporation should or should not engage in refunding operations is a matter of individual policy, although two general-rules-of-thumb are frequently quoted:

1. *Refunding as a policy is desirable when a corporation may expect to earn on the total of its capital a rate in excess of the rate which it will have to pay on borrowed capital.* The rule is roughly applicable to individual issues as well as to the total debt. Thus a company has outstanding three bond issues, A, B, and C, on which the cost to maturity is 6.35 per cent, 5.83 per cent, and 5.68 per cent, respectively. If the concern will on the average earn 6 per cent on its total capital, it is clear that issue A should not be refunded at its maturity; B and C could be refunded with advantage. In applying the rule, averages must be used so as to eliminate earnings ratios which are peculiarly large or small by reason of the business cycle changes.

2. *Refunding as a general policy is not justified when a corporation earns on the total of its capital a rate less than the rate it pays on its borrowed capital.* However, whether justified or not, the corporation may be forced to refund, even at still more adverse rates, should it not be in a position to pay out the cash at the time of maturity.⁸ Unexpected demands upon the liquid assets, or miscarriage of plans relative to the use or disposition of fixed assets, may result in forced refunding.

Public utilities, railroads, and other corporations which can safely assume the principle of perpetual debt issue long-term bonds. They are therefore less frequently called upon to meet maturities and on the whole, although refunding a larger proportion of their borrowing, do so less frequently than corporations using short-term obligations.

EXTINCTION BY REDEMPTION

Redemption is the exercise of the option granted the corporation in its original contract to recall or repurchase the debt at a stated price and within the dates named. Thus the exercise of redemption means payment. But in fact, it may be accompanied with a refunding operation, for the corporation may use this right to recall the issue in a favorable market so that a new issue may be offered.

⁸ It frequently will happen in periods of adverse money markets that elements other than these will govern a given situation. Thus in 1932 the United Light and Power Co. was faced with the maturity of \$10,896,500 in First and Refunding Gold 5's of its subsidiary, United Light and Railways Co. (Maine), at a time when new financing was practically impossible and the company's cash position such that the bonds could hardly be met therefrom. Accordingly, a compromise refunding device was used. Five million dollars of the 7½ Per Cent United Light and Power Co. First Lien and Consolidated Mortgage were offered in exchange, par for par. Despite this seemingly favorable offer, only a small fraction of the bondholders accepted the exchange. As a result of the collapse of the bond refunding exchange offer, the company had to borrow some \$4,000,000 at commercial banks. Further, the large bank borrowings forced a suspension of preferred dividends.

An equally important use of redemption in current practice is the exercise of the right in order to acquire bonds for sinking fund requirements. This has become an increasingly common practice.

The contract option is not always obtainable by a corporation, for in extremely poor markets a condition necessary to sale may be the forfeiture of the right to call.

Kinds of Redemption

Redemption of corporate obligations may be analyzed from four points of view. When the contract under which redemption occurs is studied, there will be found (1) *mandatory* redemption, under which the corporation is required to redeem its obligations; (2) *optional* redemption, under which the corporation is accorded the privilege but is not bound to redeem its obligations; (3) *conditional* redemption, under which the corporation (a) may redeem or (b) is obliged to redeem under certain circumstances; (4) *solicited* redemption, under which the corporation is under no necessity of redeeming, but negotiates the payment of its own volition; and (5) *elected* redemption, under which the corporation elects to acquire its obligations in the open market. Mandatory redemption occurs most frequently as a maturity, regular or accelerated under default and for a predetermined amount as in a serial issue, or a maturing issue. It may occur where the corporation does something which will cause maturity of a bond not otherwise maturing. Optional redemption arises in connection with call prices and retirement prior to maturity under the call privilege.

From the viewpoint of the extent of redemption, two kinds are recognized: (1) full or complete redemption, under which the entire issue is redeemed; (2) partial redemption, under which but a portion of the issue is redeemed. The date upon which redemption is to occur is normally an interest date, although it may be almost any time. Sometimes it is necessary to give public notice, and this is customary. If the bonds to be redeemed are all registered as to interest and principal, it may not be necessary to give public notice. Bonds not registered are entitled to a notice if a portion of the issue is redeemed other than by a predetermined plan, fixed and known to all bondholders.

At any given time a bond issue may be redeemed as a whole or in part, the latter being the most usual scheme. Serial redemption is common.

If all redemption occurs at a fixed price, it is usually a call price. Some call prices vary from time to time, approaching par as the date of redemption nears the final maturity date.

Reasons for Redemption

If a corporation maintains sinking funds against bond issues or interest thereon, those funds should be profitably but safely employed. If they were employed to purchase bonds of the same company, the effect upon the security of the issue would be greater than if they were invested in the

securities of other corporations. Any reduction in the debt of corporations normally makes refunding, other refinancing, and new extensions operations easier; hence some corporation managements look upon partial redemption as the first step in refinancing.

A corporation which has incurred heavy fixed charges to secure capital, perhaps at a time when operations were none too promising, and which later becomes much more prosperous should use the extraordinary profits under redemption rights as a means of reducing fixed charges. If a general accusation may be made of corporate fiscal policy from 1925 to 1930, it is that corporations did not make use of abnormally high profits during this period to reduce their fixed charges to the extent that they should have. A few did, but many used their large earnings as a justification for higher bond ratios and for stock dividends. There appears to have been a general feeling that business should always be expanded at a rate sufficient to meet any demands. Reduction in fixed charges should always be accomplished when unusual profits are being made. This is a lesson most managements have tried to profit by in the 1940's.

If debts are outstanding with conversion clauses in them which jeopardize control of the company, redemption may be forced even though unprofitable in dollars and cents.

A corporation's bank credit may be adversely affected by the existence of a large debt. Redemption of a portion of it may prove a general tonic to its credit. The investment of surplus cash also may at times cause difficulty.

In some instances a bargain bond market can be indicated as the real reason for the redemption and retirement of bonds, especially where the corporation happens to be in a strong cash position. It can easily happen that the expenditure of \$5,000,000 in cash to retire \$10,000,000 or even \$15,000,000 bonds at bargain prices will improve the credit of the company to such an extent that the \$5,000,000 can be reborrowed for much less than the cost of the bonds retired.

One of the most important cases for a refunding from the point of view of the corporation, however, will be the possibility of decreasing the burden of contract terms. Such burdens may go quite beyond the interest rate and involve the promises of future action in conformity with the contract rule. Thus the corporation would welcome the opportunity to relieve clause obligations of minimum current assets, or veto powers on borrowing beyond a fixed maximum. Perhaps a conversion clause could be terminated which might not be profitable at the moment but had every promise of becoming so under expansion plans.

Drawbacks to Redeemable Bonds

Bonds issued with redemption clauses have some decided disadvantages. To investors they present the chance of losses on uninvested funds, uncertainty of redemption and receipt of money, expenses of reinvestment, nuisance of watching for redemption notices, losses of interest on funds in-

vested in called bonds when not promptly presented, more or less loss of interest in the issues when not notified, etc. To the public there is frequently confusion because of price multiplicity, and there is difficulty in quoting satisfactory prices. To the corporation there is more or less of a problem of continuous cash provisioning to meet the successive redemptions where contractual redemption occurs. As in the case of sinking fund amortization, there is always a problem of which bonds are to be redeemed unless they are specifically stipulated.

SUMMARY

Methods of extinguishing debt may be accomplished by conversion, refunding, or redemption. Each method may have its advantages depending upon the situation at the time of the proposed change in the financial structure. Conversion leaves the greater discretion of action to the security holder, and refunding and redemption proposals are made in most cases by the corporation. The latter operations may be timed to permit the corporation to alter its structure to its advantage. The presence of a redemption clause in the contracts is most important for the concern, in order that it may take advantage of better markets as they develop.

QUESTIONS

1. How may conversion of an issue be regarded as a method of extinguishing the obligation?
2. Are refunding operations basically desirable, or are they contrary to good retirement policy?
3. Discuss the inducements which a company might offer to gain approval for a refunding proposal.
4. Explain why a concern considers refunding ahead of the normal maturity date. Indicate the connection between this and the markets in 1946-1948.
5. What is the relationship of a refunding policy to trading on the equity?
6. Does a concern ordinarily desire to have a redemption clause in its issues? Under what conditions might the right be excluded? Give reasons for your answers.
7. Why are premiums offered by a company in the redemption clause? Why are they often on a sliding scale?
8. Do you regard the use of the redemption clause as always indicating a reduction in the debt element of the structure? Explain.
9. Should a refunding operation be considered only when there is a shift in the interest rates for such issues? Explain.

PROJECTS

1. Examine the National Dairy Products Corporation debenture issue refunded in 1945 by $2\frac{3}{4}$ s, 1970. Report on the savings, if any, in charges and by way of terms in the issues.

2. Prepare a list of five non-callable issues. Give the respective dates of issue and see if such periods can be related to the lack of redemption rights.

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CHAPTER XX

Financial Management and the Business Cycle



POSSIBLY no phase of economic activity has received as much attention from both lay and professional students as the phenomenon known as the business cycle. And probably no problem has so persistently defied both control and solution.

Seemingly as eternal and inevitable as the tides of the sea, the ebb and flow of business hesitatingly follow an eccentric movement, more or less regular in sequence and chronology. No one has provided a complete and logical causal explanation of the cycle, for as yet only one generalization with respect to business cycles appears to have been proved. It is: Each cycle seems to have a *different set of causes* from every other cycle.¹ It may be, however, that the causes are more or less common in all cycles but manifest themselves in varying intensities.

All businessmen know cycles occur; each should prepare his enterprise for the strains which must inevitably fall upon its financial structure. It will be the purpose of this chapter to relate some of the financial problems of the cycle, as well as to give broad principles upon which financial policy may be predicated.

The Phenomena of the Business Cycle

Students of economic affairs are by no means agreed as to precisely what constitutes a business cycle. As a matter of fact, there are apparently two types, one tending to lag slightly behind the other: (1) the income or profits cycle, in which the profitableness of general economic activity is the standard; and (2) the volume cycle, in which the rate of movement of commodities is the paramount element. The theory is that the volume cycle lags behind the profits cycle; that is, the profitableness of doing business will increase before the commodity volume increases, and will decrease before the commodity volume decreases. The profits cycle, which is most frequently emphasized in financial analysis, should differentiate between earned and unearned business profits.

¹ But see Alfred R. Wallace, *Bad Times: An essay on the present depression of trade, tracing it to its sources in enormous foreign loans, excessive war expenditure, the increase of speculation and of millionaires, and the depopulation of the rural districts; with suggested remedies*. The reader should be reminded, however, that this book was published in 1885.

The concept of the intermutuality of the action and reaction exhibited by mass phenomena such as those of the business cycle can scarcely be interpreted in simple terms. Each expansion or contraction sets in motion a series of events, the ultimate reverberations of which eventually come back further to accentuate or to reverse the original action. Permeating the entire structure is the illogical and undependable element of human nature, sometimes abetting, often trying to counteract, and occasionally drifting aimlessly with the forces involved.

For purposes of discussion, the business cycle is here divided into five stages:

1. *Recovery*—a condition of wide and increasing profits margins, expanding operations, many new incorporations, rising prices, free money markets, increasing employment, decreasing debts, etc. The period normally runs from one to three years.
2. *Prosperity*—narrowing profits margins, stagnating price levels, virulent speculation, increasing tension in money markets, large volume of business, development of new businesses, expansion of credit volume, etc. A period of from one to four years may be expected here.
3. *Crisis*—a short period of perhaps not more than six months, in which security markets collapse, money becomes extremely tight, a panic tends to develop, and business suddenly stands still.
4. *Recession*—a period of activity to liquidate old stocks of goods; free money, no credit demands except refunding, increasing unemployment, increasing failures and bankruptcies, little or no profits, falling prices, etc. It may last anywhere from six months to two or three years.
5. *Depression*—business stagnation, very low volume of trade, prices somewhat more stable, continued high frequency of business failures, money and credit free, high unemployment, etc. This period may last from one to three years.²

The use of this relatively simple mechanical classification must be limited; it is not a secure basis for forecasting, owing to the very uncertain time intervals involved.

Financial Characteristics of the Business Cycle

To describe the financial aspects of the business cycle with any degree of completeness would extend much beyond the limits of a single volume and would carry the discussion far afield from corporation finance, directly and indirectly. To limit the discussion, several of the more important factors directly related to the financial organization, policy, and operation of business have been selected for comment.

Commodity Prices. Price movements depend on many things, and the manifest effects of such changes extend to the limits of the economic structure. Because finished goods prices tend to rise and fall ahead of raw material or cost prices, they amplify profits on the upswing of the cycle and losses

²Every student of business cycles should acquaint himself with the admirable work of Wesley Mitchell on the subject of business cycles.

on the downswing. Raw material costs may change in a fashion to bring about wide shifts in the operations of the enterprise. Although the lag of retail prices behind wholesale prices is of some *significance*, the rapid changes in distributive organization in the past decade have reduced the financial importance of this relationship to both manufacturers and distributors.³

Price changes are acute problems in a financial sense only if they are large in amount or rapid in rate of change, the latter, sustained or not, representing the more difficult problem. If a shift in prices amounts to 2 or 3 per cent per annum, it will be absorbed by profits, but if it is 10 to 20 per cent per annum, the losses because of price declines will materially reduce profits,⁴ or result in a final loss.

The sensitivity of business corporations to price changes is dependent upon the nature of the business assets and the size of the operating ratio. Two subclasses should be recognized in studying the effects of price changes upon assets: (1) those businesses whose assets may be reproduced quickly or cheaply and (2) those which require some time or much capital to reproduce their assets. The first type is much more sensitive to price changes as new, low-cost competition will quickly develop in a price decline. In the case of the capital assets of a blast furnace company, there is little likelihood of new units being built for the reason that they represent large fixed investments, the risks of which can scarcely be assumed because of temporary price changes. But a merchandising concern may be started or stopped quickly and relatively cheaply; therefore such business will be more sensitive to price changes from the point of view of added or new competition.

The normally larger debt ratio of corporations with large fixed assets will tend to magnify the effects of a permanent shift in prices. Because of their regulated prices, public utility enterprises are somewhat less sensitive to price changes than are highly competitive concerns. Companies with low operating ratios may be less sensitive to price changes than those with high operating ratios. But they often lose this advantage through too much trading on the equity or by too much current borrowing when the turnover of inventories is uncertain.

From the standpoint of security holders and the effects of price changes upon their respective equities, three types of corporations are to be observed, each merging into the other. First, some corporations have no debt other than current payables. Given any reasonable liquidity in the current assets, companies of this type will run only *slight hazard from price changes* in the cycle. Second, there is the great middle class of corporations which have some current liabilities, a small fixed debt, and some preferred shares.

³ Wholesale prices fluctuate with a greater amplitude than retail prices; the more removed from the consumer a business is, the greater is the effect of price changes.

⁴ For an unexplained reason, businessmen generally argue that rising prices are necessary for good business. The fallacy appears to rest upon the ease of making a satisfactory return when to the earned profits there is added a considerable quantity of unearned profits arising out of price changes.

If the decline in price levels becomes unusually large, the bonds and the preferred shares may suffer slightly, but as a general rule there will be no material increase in the risk in any ordinary cycle. In a cycle of more than ordinary severity, the common shares may find their position endangered. Third, there are the corporations in which the stockholders have extensively traded on their equity. These corporations find their financial status impaired both by the high fixed charges and by reason of the large ratio of borrowed to owned capital. Unless they can go through the period of depression without new financing or refunding, heavy penalties will probably be put upon them.⁵

Credits and Collections. Because the business cycle affects both the interest rate and the probability of receiving an income in the future, credit will vary much in the various periods of the business cycle. At one time the probability of future incomes appears large, hence credit is large; at another time the probability of future incomes appears small, and credit is small. The desire to make use of future incomes is not equally strong at all times.

Sometimes profitableness of business will be in part dependent upon price changes; and unless caution is exercised to keep that portion of the income segregated from the income from operations, future earnings will be overestimated. If no correction for these price increments has been made, the assumption is that price trends will continue in the same direction, a condition which leads to credit overstatement in good times and to credit understatement in price-declining eras.⁶

When incomes are large or increasing, credit is large, and the recurring and increasing incomes (partly based upon credit) flow easily from debtor to creditor. But as soon as a decrease in income is in prospect, pressure is brought to force the use of an unnaturally large proportion of present incomes to offset past expenditures existing in the form of debts. Such a process at once creates resistance to new buying; the effect is slowed collections and increase in the bad-debt loss ratio.

Variation in the Cost of New Capital. The variation in interest rates is a widely recognized characteristic of the business cycle and one which is of moment in relation to the cost of new or added capital.⁷ Added cost of new capital arises partly from increased cost of acquisition and partly from pay-

⁵ Typical of such corporations were the railroads of the country in 1932-1933, or the Associated Gas and Electric Co. when it was attempting refunding in 1933.

⁶ Commercial and investment banks are equally given to the error. How it may be overcome remains yet to be discovered. Certainly, so-called conservatism is not the solution, for this attitude contracts credit at both times. Neither will optimism or liberalism solve the problem, for it will overextend both times.

⁷ The three rates considered are bond yields, commercial paper rates, and call money rates. The theory is that when the last two rates fall below bond yields, the depressed state of business is nearing an end; and when both rise considerably above bond yields (1½ per cent is usually given), the period of prosperity is likewise nearly at its end. But if capital is redundant, it is doubtful whether these relationships can be depended upon. Cf. Lewis H. Haney, *Business Forecasting*, pp. 308-310.

ment of higher interest rates after acquisition. Both may be partly offset by careful financial planning.

It is an adage in corporation finance that capital secured at any price is too expensive if it is obtained by sale of the wrong type of security. The fact that the present cost is low does not indicate that the future cost of the capital will also be low. It may be very expensive should the capital structure be seriously weakened thereby, or should the structure become so rigid that future financing could be obtained only at exorbitant costs.

Variation in the Demand for New Capital. New capital is demanded in business for one of two purposes: to replace old capital or to extend the use of capital, whether on the same or on a broadened scale of operation.

Expansion of industry is necessarily a function of the volume of business as well as of the profitableness of that volume of operations. At one time it was argued that sound financial policy dictated that expansion should occur only in periods of depression and low prices. But such expansion was dangerous, for by no method known could one tell, for example, which of the ten greatest independent automobile producers would have cars that would strike public fancy at the next turn of the cycle. It appears now to be much better policy not to expand until there is an actual need for expansion, perhaps well along in the period of recovery or even near the approach of prosperity.

Near the peak of prosperity and through the period of the crisis added demand for working capital will be almost certain to materialize. High costs, free credits, and, later, poor or retarded collections may necessitate considerable quantities of temporary working capital. The ease of obtaining funds at this time may lead to an unusually lax policy both on new credit sales and on the collection of old credits existing in the form of receivables. Extremely free credit terms often lead to a let-down in selling efficiency, for even a poor sales manager can cheaply distribute immense quantities of goods on credit terms so liberal as to tempt purchase by those never expecting to pay. The experiences of 1946 and 1947 may be full proof of this situation.

Variation in Efficiency of Management. Management becomes lax in a prolonged period of prosperous operation; its energies are likely to be diverted into speculation and sports—in fact, anything removed from the tedium of making money for stockholders who are already receiving satisfactory dividends. Labor finds jobs easy to get; there is no pressure to do anything beyond the minimum required for the pay envelope.

The crisis of the business cycle operates like a dash of ice water upon a fainting person. But it is too late to disgorge the speculative bait swallowed by the public; the damage has been done. Everyone is more or less stunned economically. When people come to their senses, a pell-mell rush occurs to recover as much as possible from the ruins of the business structure with which their interest has been so little engaged. Management becomes zealously attentive to its duties or else it seeks a new job.

Variation in the Purchasing Power of Incomes. The ability of different

portions of the population to buy will be profoundly reflective of the changes in prices and changes in incomes. As wages rise and fall, the ability of the wage-earning population to buy increases or diminishes. A business dependent upon the purchasing power of the fixed-income groups finds a falling price level to its advantage, and a rising price level to its disadvantage. Generally speaking, prolonged periods of prosperous conditions bring about luxurious spending and encourage high living on the part of everyone.

Unequal Variation in Costs and Selling Prices. The cardinal element upon which the ultimate status of a business depends is the margin of profits. It is shown in the relation of costs to selling prices. As a general rule, this margin changes slightly ahead of the general curve. It advances from depression before the other elements, and it begins a recession long before the crisis at the end of the period of prosperity. Price movements obscure this particular factor, and, unless both costs and selling prices are based upon index numbers, the relations will not stand in clear relief.

Sequences of Financial Importance

Most of the sequences which appear to be dependably significant, however, are only characteristics of a succession of stages in the progress of goods from the natural resources of the land toward the ultimate satisfaction of human desires. Thus it is argued that production generally will tend to precede changes in wholesale prices.

Two interesting sequences to be watched are commercial paper rates, which are said to precede price movements in general, and bank clearings, which it is claimed tend to precede price changes. Since changes in bank clearings would indicate the development of a disequilibrium at present prices, they would precede adjustments in prices to bring about an equilibrium.

Chronologically, there is this difference between the upswing and the downswing in the business cycle: the rising period is much longer than the downward movement. In fact, it tends to be about two or three times as long. The significance of the time difference from a financial point of view is to be found in two facts: (1) The extended period of the upswing misleads those not astute in analyzing economic conditions into believing that a "new era" has arrived in which the higher level of operations will be permanent. This conclusion leads to the further error of adjusting financial structures and operations to the new level of operations. (2) The quick recession to low levels is too rapid to permit financial adjustments to be made.

Financial Problems Arising from the Business Cycle

Any attempt to cover all of the financial problems of the business cycle would occupy a substantial volume. A sketchy consideration of some of the more outstanding problems will be given.

Budgeting to the business cycle is adjusting income and expenditure so as

best to meet the conditions in the various stages of the cycle. On the upswing an additional or increasing volume of operations, coupled with good collections, makes it possible to do a large volume of business on a small amount of working capital; the reverse would be true of the down movement.

Stabilization of the individual business to the end that a concern will have a more uniform volume of business becomes a practical way of eradicating the business cycle. There are both internal and external effects to be attained.

Capital structures in the period of recovery and prosperity find the owners of a business desirous of having large amounts of bonds and low-rate preferred stocks; during liquidation and depression they want few or no fixed capital charges. These particular policies or their combination will be compromises of three fundamental points of view; (1) the stage of the cycle, (2) the long-time policy of the business, and (3) the generally accepted standards of financial practices in the line of endeavor under consideration.

Credit and prices are inseparably mingled in the various periods of the cycle. Strong corporations extend credit earlier than weak ones; they frequently attain their strength by contracting credit earlier; they find it less necessary to force payments in hard times and may therefore gain a measure of control over their customers. Although they feel less the pressure of forced liquidation, they are faced with another danger—that of carrying inventories too long and allowing them to become shopworn or obsolescent.

Financial Forecasting

Basically, the discussion of forecasting in corporation finance is confined to those practices and methods which have a bearing upon (1) working capital problems, (2) fixed capital problems, (3) earnings, (4) surplus and dividend policy, and (5) expansion. Each has its special techniques; each is singularly necessary to obtain a maximum efficiency of capital operations.

Working capital forecasting is primarily a problem of (a) the amount of business done, (b) the credit terms upon which it is done, (c) short-term borrowing, and (d) the money market conditions of the immediate future.⁸ The volume of business done tends to reflect general business conditions in the sense that it follows general purchasing power. Deviation of the individual business from the status of general business as a norm is a function of sales energy and relative prices; therefore, in forecasting working capital problems, it is necessary to consider price levels and trends.⁹

As far as the short-term money market is concerned, call money rates are

⁸Careful study of business failures may be of particular value in forecasting working capital conditions. It is an established fact that business failures have a remarkably high degree of correlation with the business cycle. There is some evidence that failures can be used in forecasting the turns of the cycle, especially from the depressed stages into recovery. Abnormally small numbers of failures accompany abnormally good business and may be regarded as a sign to reduce inventories and speed up collections so as to meet the oncoming reversal in the strongest condition possible in anticipation of difficulties in the near future.

⁹Wholesale and manufacturing prices are more given to fluctuations than retail prices.

the best index, since they will normally move ahead of and in greater amplitude than short-term or commercial paper rates. Federal Reserve rediscount rates and the condition of the Federal Reserve banks and the member banks are of considerable value in determining the limits of credit expansion.¹⁰

Forecasting structural trends is not difficult and will normally depend upon three basic elements: (a) the stability of the business, (b) money market trends, and (c) the trends of the investing public. Inherent stability permits a high bond and/or preferred stock ratio. Irrespective of how desirable bond financing might appear in a period of prosperity, the prospects of a business depression ahead may dictate that only stock financing be used so that a maximum proprietorship equity will be available upon which to base bond financing for expansion at the very bottom of the ensuing depression in order to gain the full advantages of profits in the succeeding period of recovery. Money market trends need be considered from the viewpoint of refunding costs, most advantageous bond ratios, and expansion. Free and easy money will normally mean high bond prices, hence easy refunding at maturity if not economical refunding before maturity. As interest rates fall, the possible bond and preferred share ratios may be increased with profit. Moreover, easy money means easy financing; consequently less exactitude need be achieved in the financial structure to be reasonably assured of funds for expansion.

Forecasting earnings requires attention to relative competitive efficiency in prices, and to volume. Capital turnover ratios, labor and machine efficiency, and technological processes are most likely to form the determinants of relative efficiency. Obviously, general price trends are basic; their decline means a margin of profits decline, a money volume decline, and a physical units volume decline. Volume is clearly a function of the intensity of competition and the existence of substitute goods at prices which are near or approaching the present prices of the commodity under consideration. The existence of a good cost accounting system is one of the most valuable assets to a business in making forecasts of earnings, for it will permit analysis of conditions and trends as they affect individual products.

Expansion and its train of problems may best be discussed in the chapter on expansion.

Financial Failures and the Business Cycle

A number of periods of prosperity have ended abruptly by the failure of a large and influential concern, the effect of which was to drag other firms with it and to set up a rapidly growing list of failures. Failures show an upward trend all the way through a period of liquidation or recession,

¹⁰ Many of these factors may not be reliable at present in the minds of many students of money, credit, and prices. The federal government, through the many credit-giving agencies set up since 1933, provides a huge reservoir of credit which did not exist in the past; accordingly, past forecasting and analyzing procedure may be in error.

and sometimes to the end of the period of depression or well into the period of recovery. The causes of the failures vary in the different periods. Following a crisis, stocks of merchandise fall rapidly both in market value and in salability; receivables are likely to become frozen almost without notice. Both are dangerous to a business with a large floating debt. Later, the period of depression will show high fixed charges and large debt ratios to be dominant. The "shaking out" of the weak and inefficient in business during the course of the depressed conditions leaves a healthy, though not strong, business structure.

SUMMARY

Much of the business thinking of the corporation executive must be in terms of the cycle movement of all business. Each cycle will affect all business but in varying degrees, and some concerns may discover that the cycle of the particular firm is not timed with the general business cycle. The interactions of business forces must be studied since they will need to be reflected in any forecasting which the executive makes for his own enterprise. Efforts to make such plans are advisable in order to take advantage of the movements in business since interest rates, buying psychology, and resistance to or acceptance of prices will each be variants affected by the general business cycle.

QUESTIONS

1. Why does financial management need to study business cycle movements?
2. Discuss the phases into which the cycle is ordinarily divided. How do you connect them causally?
3. At what point in the cycle do you place our business economy at the present time? Cite the evidence on which you base your conclusion.
4. Since the business cycle is an aggravating problem, would it not be better to overcome such cycles by maintaining a system of fixed prices?
5. Explain the investors' security problems which arise from the business cycle. Is this true of either debt or stock contracts?
6. What special relation do theorists ascribe to the change in interest rates as part of the cycle theory?
7. Explain what is meant by the term "break-even point." Discuss its relation to cycle movements as a significant factor in studying a concern's financial policies.
8. Explain whether the business cycle movement represents a parallel and common movement in all costs and prices in the same direction at the same time. If not, what problem results from the situation?
9. Relate a concern's credit policies and budgeting practices to business cycle movements.
10. How do you believe that forecasting can be of any importance in financial policy?

11. What is your position on the idea that forecasting is too dubious to be of practical use for a business? Do any prominent firms make general forecasts?

PROJECTS

1. Prepare a report on the probable pattern of earnings for the United States Steel Corporation operating with an 80 per cent "break-even" point, if in the next four years the business cycle repeats its movements of 1936-1940.
2. Contrast the index rise in wage rates, general cost of living, and interest rates since 1939 to the present. Have they a related pattern? If not, would you base a forecast on the divergence or on the similarity in pattern?

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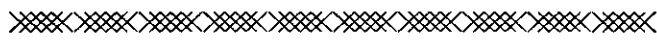
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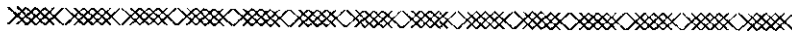
PART FOUR



Sale of Securities

CHAPTER XXI

Investment Banking System



THE CAPITAL MARKET

FUNDS for a business are required for acquisition and building of plants, financing the processes of production, and granting credit to customers on sales. Such funds are for fixed capital—the buildings and equipment—and for working capital—the revolving funds of current operations. Working capital is obtained in large part from the credit transactions of the business, credit granted by suppliers and by the commercial bank and its auxiliary institutions. The fixed capital must be obtained from the community's savings, those funds which can be permanently committed to the productive units of the business enterprise. After a business has become established, an important source of capital, fixed and working, will be the retained earnings. See Tables 19 and 20 in Chapter XVI.

Money Rates

Because of the nature of the working capital as a fluctuating and changing type of capital, much of it is supplied by mere credit. This allows an ebb and flow in the working capital sums as the rise and fall of business volume and prices demand. The chief institutional source is the commercial banking system, which accepts deposits, creates credit, and meets withdrawals on demand. Rates of interest for such credit are a reflection of the elements of demand and possible sources for supply. The supply is basically dependent upon the deposits, reserve requirements, and loan policies of the commercial banks. These factors may shift quickly and in substantial amount in short periods of time. Interest rates in the money market are swift moving, as a result. Where the trend is continued in considerable degree, a change is regarded as a basic indication of deep and far-reaching adjustment in economic factors. In Table 73 (p. 514) is a presentation of the interest divisions of the money market for the period 1942-1947. Here we can see the development of rising rates as they gradually take their course in 1947, measuring a change of 61 per cent in the rates on United States bills and 27 per cent in four months' loan. After a period of years in which these rates had stood practically still, this movement was regarded as significant, portending changes to follow. Changes did follow. Loans continued to mount

in 1947, and rates continued to rise. The capital market for investment issues showed a developing "stickiness," and a response to all these factors came directly in November of 1947, when the bankers found they could not sell an issue of Pacific Gas and Electric bonds at the prices named.

Capital Rates

But the funds which are to flow into fixed capital for business from external sources must come from savers. The banks which handle such funds do not receive deposits but rather act as merchandisers of the corporate securities. The rates of interest on the bonds and prices on stock issues of

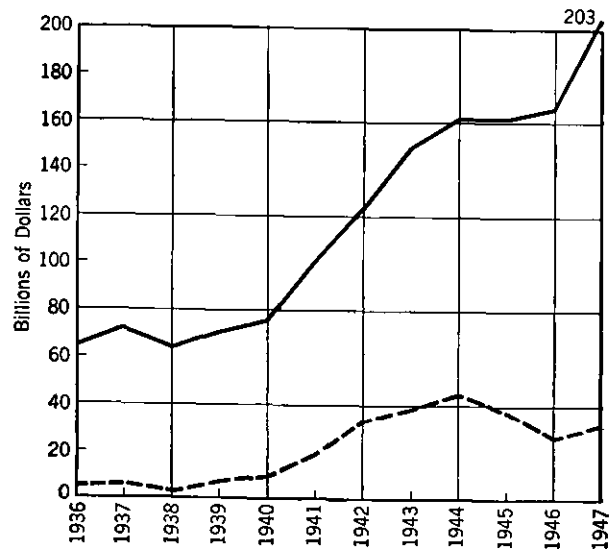


FIG. 26. National Income and Savings, 1936-1947.¹

the corporations are the result of fundamental relations of the savings available from the community and the quantity of demand from business for permanent funds. Since neither of these factors moves with the speed and variability of the factors for working capital, the interest rates which reflect the situation are slower moving. This movement in the capital rates will tend, however, to follow the money market shifts. Usually it is some time behind and not in the same degree, for the factors making credit plentiful or scarce are not identical in all respects with those influencing the capacity to place fixed capital in the hands of business.

The prime factors which bear upon the amount and availability of capital from savers may be briefly summarized as follows:

1. Sound currency, with stable and equitable social order.
2. High productivity of the industry and workers.

¹ Source: *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, May, 1947, and previous issues.

3. Nature of the distribution of the national income.
4. Nature and stability of price level.
5. Nature of the taxation system.
6. Maintenance of the standard of living.

In Fig. 26 can be traced the pattern of the national income as related to the volume of savings in every form made in the United States, 1936-1946. The general reflection of a direct correlation is not unexpected. The unusually large amount shown in the war period is due to the postponed purchasing by consumers and the treasury drives for bond sales. The substantial downturn in total savings which has continued into 1948 should be carefully related to the significant change in capital rates which appears in

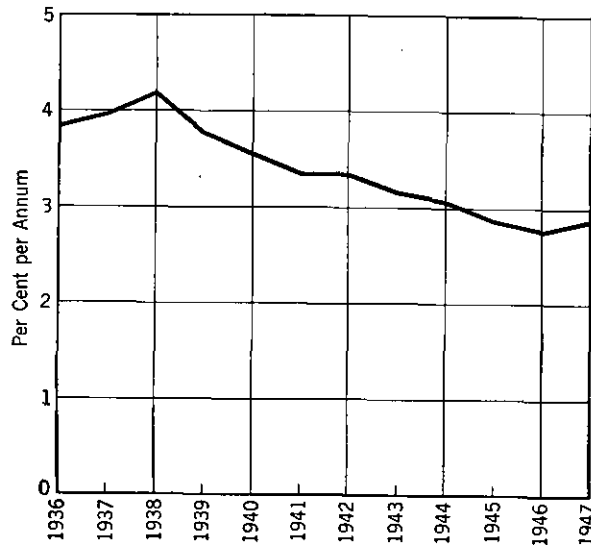


FIG. 27. Yearly Averages of General Interest Yields, 1936-1947.²

Figure 27. Likewise the consistent fall in capital rates at substantially an increasing rate of change, especially after 1940, should be correlated to the volume of savings shown on Figure 26.

On the other side of the capital market is the demand by business for such funds. During the war these needs were held in abeyance, as is indicated in Figure 28. But upon the cessation of war the demand has shown an almost explosive increase; thus the very large volume of "new" capital securities offered in the markets in 1946 and 1947 have coincided with the falling volume of savings. At this point, too, the change in money rates for credit began to give signs of these important economic factors. As a result the capital market finally showed this change in its sudden halt and reversal of trend in November of 1947.

² Source: *ibid.*

CORPORATION FINANCE

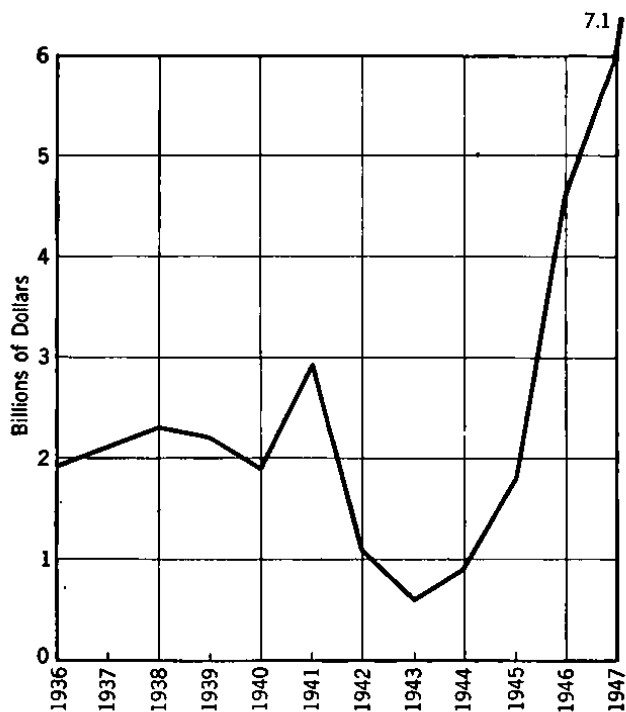


FIG. 28. Volume of New Financing, Public and Corporate, 1936-1947.³

It may be said, therefore, that from these large social and economic forces the capital market reflects certain economic facts in the price of capital for business enterprise. The movements of capital rates, like other market prices, have a bearing upon the decisions of business to proceed in the requests for

TABLE 53. NEW SECURITIES OFFERED FOR CASH SALE
(in millions of dollars)

	All Types of Securities			Bonds, Debentures, and Notes			Stocks	
	All Issuers	Non-Corp.	Corp.	All Issuers	Non-Corp.	Corp.	Pfd. Stk.	Com. Stk.
July, 1935-June, 1936	11,061	6,853	4,208	10,766	6,853	3,913	189	107
" 1936- " 1937	7,602	3,896	3,705	6,772	3,896	2,876	410	419
" 1937- " 1938	3,454	2,165	1,289	3,207	2,165	1,042	186	61
" 1938- " 1939	6,817	4,372	2,446	6,637	4,372	2,265	107	74
" 1939- " 1940	5,512	3,190	2,322	5,280	3,190	2,091	136	95
" 1940- " 1941	9,842	6,812	3,031	9,604	6,811	2,793	172	66
" 1941- " 1942	19,921	17,933	1,987	19,620	17,933	1,687	184	116
" 1942- " 1943	47,490	46,747	742	47,427	46,747	680	33	29
" 1943- " 1944	52,400	50,666	1,734	51,990	50,666	1,325	326	84
" 1944- " 1945	54,005	49,767	4,237	53,419	49,767	3,662	370	215
" 1945- " 1946	35,948	28,825	7,124	33,997	28,825	5,172	1,174	778

³ Source: *ibid.*

added capital and in some degree may bear upon the willingness of savers to increase the amount of their savings. While these matters do not balance each other perfectly, their interplay is important in the capital market.

The mechanism making it possible for the funds of savers to flow into the hands of operating corporations is known as the investment banking system. It is made up of the investment bank and a series of facilitating institutions which gather the funds of individuals together and then place such cumulated funds in the capital of business enterprises. A survey of the investment bank as the center of this process is worthy of careful outline. A picture of the total operations in the capital market may be seen in Table 53, covering all securities sold for the period 1935-1946.

INVESTMENT BANKS

Early History in the United States

The investment bank in its earliest form in this country was the mortgage bank of colonial days. Long-term credits in the formative years of the country were almost exclusively land mortgages, and these were placed with the banks or through the agency of the banks with individuals. As business developed in the United States, much of the capital was sent from abroad, and the banking process was conducted for such investments very largely by fiscal agents resident here but acting for banking firms of foreign lands.

Conditions causing this to be true were basically the lack of capital to be invested by the people of America and the small amount of business of such size as to require large sums except in the shipping and export trades. These latter industries were dominated by the companies of the leading trading nations of the time, or in the case of local companies shares were sold directly to local investors.

Present-day procedures of the investment banking system are often traced to the efforts of Jay Cooke in the days of the Civil War. The characteristics developed at that time and deemed typical of the modern American system were (1) the sale of securities in small denominations and (2) the widespread sales campaign to sell the securities to small investors. Cooke adopted these plans because he realized that the loans to the federal government would not be received in the chief financial centers. He determined thereupon to make the sale of the securities to the loyal individuals; and to reach such buyers, he conducted a most extensive sales campaign, employing, it is said, more than five thousand salesmen who solicited from door to door.

This procedure has ultimately left its impression on the American system, for elsewhere in the world the investment banks have chosen to deal with the wealthy individual and to conduct no extensive "sales" campaigns. Abroad, only the rich are likely to deal with the investment bank; the average person will take his money to the local bank for deposit in a savings account. The banks will make many investments on their own account and will purchase other business securities from the investment bank of the central cities. Since these foreign banks may operate under the branch

system of organization, the European countries have come to rely upon a few major banks to conduct financial operations for the country.

American investment banks, by following the pattern set in the early days by Cooke, have become one of the most important merchandising systems of the United States. Their items of inventory consist of the securities of American business enterprises. Marketing the securities is their business. For these merchants the chief source of profit is the margin or markup, as is the case with all dealers in marketing.

The 1920's saw many of the small real estate mortgage banks of the country blossom, almost overnight, into so-called investment banks offering securities in a wide range—bonds, preferred stocks, and common stocks. As was the case in many other business fields, investment banking in this era became involved in a wild, competitive race ending in a serious collapse. Severity of the collapse was traceable in part to the flood of inexperienced bankers into the field. These newcomers, with their "get-rich-quick" plans, introduced many untried practices and patterns. The older firms, though they probably knew better, soon followed suit in adopting many of the procedures. These practices, coupled with others in the whole financial structure, brought a disastrous day of reckoning in 1929 and following years.

Owing to the depression, the mortality rate of investment banking firms was high but perhaps no higher proportionately than the rate of failures in other fields. The 1930's were a struggle for the most respectable and experienced firms to live, and those surviving found mergers in great numbers to be the only way the overhead could be reduced to conform to the volume of business. As the business revival of the thirties got under way, a new factor appeared in the picture. This was the entrance of government corporations, particularly the Reconstruction Finance Corporation, into the fiscal operations of private finance. Requirements of the Securities Act caused serious changes in the usual procedures of doing business and produced hindrances to the processes of recovery. But through all the adversity, the banks struggled only to meet new competition from life insurance companies, which were following the policy of making loans directly to business establishments. Such direct marketing left the middleman out, and at first the investment banks wondered how they could keep on their feet. Firms possessing the ability to survive until 1943 have enjoyed larger market volume and have prospered. Today there is less gloom but a smarter set of bankers. Many of the firms have determined to cultivate more than ever before the selling of securities to the average American investor—once again demonstrating a practice unique to American investment banking.

Divisions Used for Capital Placement

Individuals who have saved funds may put these funds to work, so far as they are concerned, by two broadly different routes. If the individual places his investments through an *intermediary institution*, he may not always directly make the choice of the route to be used; nevertheless, the

functional difference is present. The funds can go to a business concern which seeks new capital, thereby passing into what may be denominated the primary channel. Such terminology expresses the idea that the transference of the savings is direct from the saver to the business. This is the field of the investment bank as a merchant of securities.

On the other hand, the funds of the saver may be put to work by the purchase of securities through markets, such as in the stock exchanges or over the counter; but this is really not a placement of new funds with business. The securities sold on these markets are already owned in most cases; thus the saver who has made such a market purchase is only participating in a *shifting of funds*. The seller now has the funds. If he uses them for consumption purchases, then clearly no added capital has been supplied business; and if he merely holds them as a bank deposit, the same thing is true. These markets are called *secondary*. This is the service of the broker and agent.

Both phases of the capital process, primary and secondary markets, are essential. While the primary market brings new capital to the business, the secondary market makes this commitment a highly marketable property for the individual. The attribute of easy and quick marketability of the security is one of the most vital reasons why corporate instruments are so acceptable.

Functions of the Investment Bank

The investment bank as a merchandiser is a valuable operator in the market for both the corporation and the investor. Neither of the parties is able essentially to perform the transaction. The corporation will generally not know where the investor is to be found with *funds of sufficient amount*; neither will the average investor have this information about the business. Moreover, the documentary mechanics of an issue as described in Chapter VII need the advice and attention of someone experienced in the practices beyond the parties who might immediately enter the bargain. For example, terms of future performance, such as maintenance of current ratios by the corporation, may seem unnecessary at the moment; but it is only out of the experience of the investment banker that such protection to the investor is likely to be provided. Or to reverse the situation, the corporation might be over-zealous in promising conversion rights until the banker points out that future conditions may so increase the value of such rights that the privilege should be carefully priced and terminated before the corporation has given too large a portion of its rising prosperity to these security holders.

Advantages to the Corporation

The general need for the investment banker to aid the corporation in arranging its financing program has been explained. The several aspects of this important relationship should be more completely explored.

The Banking Function. Between the demand for capital by corporations

and the supply of investment funds, there is always a state of disequilibrium. Any one corporation needs additional capital intermittently when expansion or extensive capital improvements are made. All corporations when combined may tend to produce an irregular demand for funds. At the various stages of the business cycle, corporations will exhibit something of a common tendency to expand, to contract, or to remain static. Accordingly, while there is a fluctuating demand all the time, there exists a distinct ebb and flow at the various stages of the business cycle. Whatever the degree of failure, for perfect balance a buffer of some sort is necessary. If the intermediary did not give some degree of elasticity, the interest rate might fluctuate violently. The investment banks act as shock-absorbing institutions for the capital market. Thus when a public utility, railroad, or industrial desires to sell an issue of more than 100 million dollars, it may easily happen that such a sum is not immediately available or certain. The investment banks absorb the total by use of their capital and credit and take the risk of finding the buyers, a process which may extend over several weeks or months. In Table 54 is presented the total security sale in

TABLE 54. BREAKDOWN BY METHOD OF DISTRIBUTION AND TYPE OF SECURITY OF THE VOLUME PROPOSED FOR CASH SALE FOR ACCOUNT OF THE ISSUERS

Fiscal year ended June 30, 1946
(in millions of dollars)

Method of Distribution and Group to Whom Offered	All Types	Secured Bonds	Unsecured Bonds	Preferred Stock	Common Stock	Other Types
All methods of distribution	5424	1432	1478	991	1028	495
To general public	4767	1430	1471	777	619	469
To security holders	622	—	6	212	387	17
To other special groups	34	2	—	1	22	9
Through investment bankers	5196	1428	1477	982	826	483
By purchase and resale	4446	1428	1476	968	557	17
On best effort basis	750	—	—	14	269	466
By issuers	228	4	1	9	202	11

1946, grouped by classes of issues and by method of sale. The banks acted as merchants for 82 per cent of all issues. In the case of stock they frequently agreed to act only as agents, on a "best effort" basis.

The risk and uncertainty of a complete sale is thereby removed to the investment bank. The corporation is assured of the funds which it seeks, and its program of development can go forward unhampered by doubts as to whether all the money can be raised. Likewise, part of the job of selling by the bank is cultivating the future market for the firm; for if the firm's performance on obligations is good, the purchaser may later become a buyer for other types of securities issued by the corporation. It is true, also, that the task of marketing has been done more cheaply than the corporation could do it for itself. The direct costs in commissions are in themselves probably lower through the bank; but even if they were not, the indirect

costs of hiring new and inexperienced personnel in the corporation for this single task is high. If the existing personnel is used, then it is probable that other work has been slighted.

The Advisory Function. Apart from shifting the actual risk of sale on the issue, the corporation needs a great deal of advice on the nature of the offering. The market is a restless thing in which psychology plays a great part so that fads similar to those in clothing, come to be things to be reckoned with when making an issue readily salable. The gauge of this situation is the investment banker; he is participating at the time, or has very recently, in other issues of like character; and his reports show the terms which bring good responses. In addition to the likes and dislikes for particular provisions, there is the general "feel" of the market for the various groups of instruments—bonds, preferred stocks, or common stocks. It is often true that the market for common stocks may be almost non-existent while the other types are capable of sale though not with ready acceptance. Then, too, particular fields of business incur investor reaction at different times which may be against the instruments proposed by a particular concern unless someone close to the current market ideas can advise the company.

The very timing of an offering may be of extreme importance which only the bank, constantly involved in the marketing process, can readily weigh. If large blocks of other securities have just reached the market, though very successfully, this may be the time to proceed with a new offering. Or it may be that the apparent success is really a job poorly done: the issues may not have been well placed—that is, they may have gone in large amounts to speculative-type purchasers—and so there is the threat that they may reappear shortly in the market. This would disrupt any sale of new issues, which would again have to compete with the "churning" produced by recently offered issues trading in large quantities. Such actions are likely to disturb prices considerably, for the injection of \$100,000,000 to perhaps \$500,000,000 of issues within a week cannot help but be disruptive of the normal so-called demand and supply relations. Demands which appear in such amounts ordinarily drive all prices lower, yet this may be actually but a momentary effect. Proper timing of offerings will help avoid some of these difficulties.

Because of this very heavy injection of issues into a market against the risk of a supply factor equally great, the bankers frequently must engage in "stabilization" of the market.⁴ As will be more definitely described in reference to syndicate operations, the bank must engage through brokers to buy at certain prices the outstanding issues of the same company or the new issues. This is done to keep the offering price of the new issues and the market price of the outstanding issues in line with each other. The effort is not necessarily successful; for if the issue is badly priced, the offerings in

⁴The Securities and Exchange Commission requires a full report of these transactions so that manipulation, prohibited under the Securities Exchange Act, will not become involved.

the market may force the bank to withdraw its peg.⁵ Pending the complete determination of the public reception, such market support is needed so that a few sales will not become the yardstick of a major offering.⁶

The exact terms of an issue are not easy questions to decide, for they are numerous and have possible interacting effects. Such matters as the maturity date, sinking funds, redemption features, interest rate or dividend rate, or contract stipulations on future corporate policies are all important features of a security issue. But there is also to be considered a nice balance between what the market apparently will respond to and the needs of the corporation. Perhaps unusually low interest rates can be obtained momentarily on a five-year maturity, but this factor must be weighted against the need of the capital for at least twenty years. Would the slightly increased interest rate and other terms be an offset to the permanency of the long-term issue?

Pricing the issue for the proper yield factor to make the issue market competitively is a task for the banker, too. Until recent years, the coupon rates of an issue varied by $\frac{1}{4}$ per cent steps, and the price was set at such a figure as to result in the correct yield. This yield as a general rule must be in line with the yield now obtainable on old but comparable issues of the corporation and those securities of the same group which may have been recently offered. Thus the bank has a choice on a twenty-year maturing bond to reach the desired yield of 3.05 per cent from the several possibilities listed as follows:

Coupon Rate	Price	Yield
$2\frac{3}{4}\%$	\$ 95.53	3.05%
3	99.26	3.05
$3\frac{1}{4}$	102.98	3.05

In former days the tendency was to offer at prices stated at slight discounts under par because the buyer seemed to have a partiality for this practice, and often he probably thought he had bought something as a bargain. The present practice is to price the public cost at par or above, with more of a tendency toward the latter in the case of bonds. The preferred stocks have shown the same tendency. Where dealings are with the investment institutions, the discounts are no particular attraction, so the practice has lessened in the years after 1936.

A final consideration for the new security issue is the relation of the proposed offering to the general capital structure of the company. Every opportunity which the markets afford should be used to strengthen the structure. Advice on this point may be timely for a firm immediately concerned with an expansion which it can obtain at low interest rates. The comment that another bond issue would be overbalancing the structure and alternative

⁵ See the Kaiser-Frazer experience as reported in *Newsweek*, April 26, 1948, p. 64, where the bankers had shifted the operation to the corporation itself.

⁶ See W. E. Atkins, G. W. Edwards, and H. G. Moulton, *The Regulation of the Security Markets*, 1946, pp. 102-105.

suggestions may be the sort of thing the corporate officers need to have called to their attention. For example, it might be that the preferred stock, which requires a higher rate, would not require regular sinking fund payments and fixed maintenance expenditure provisions as would the bond issue. When these factors are set in balance against the cheap interest rate, it may well be the burden is greater under the debt, as it affects the general managerial and financial freedom of future operations.

The Information Function. Beyond the advice of the immediate issue a corporation may easily find the investment banker a friend in many other ways. Since he is in the midst of the currents of the capital and money markets, he is given a vast amount of general business information covering a very wide range. These channels of information and general consultation on total business patterns can be made available to the customers of a bank. Ordinarily the benefit of such consultation will not go to the non-customer. Because the investment bank has a strong interest in the success of the corporation as the possible future source of further capital issues, it will be deeply concerned that sound management be shown. By these contacts, too, the corporation may gain commercial banking connections or even marketing suggestions of value.

In situations in which the investment bank has been a party to a reorganization, it will have a special interest in current financial contacts. Often the bank has been granted a member or two on the board of directors for the purpose of observing the performance and compliance with the general policies necessary to perfect the reorganization. In instances of underwriting the reorganization securities, such representation would be a very reasonable relation. In other situations the bank directorship might not be warranted.

Long-continued association which has been suggested here has also earned a great deal of condemnation as "banker control." Where this association leads to monopoly, a restraint upon technical improvements, or poor financial policies, it deserves to be condemned. Consultation can hardly be criticized, for it is certainly a fact that any business management cannot well operate its own plant and be expected to know and evaluate the financial movements of the capital market at the same time. So far as "bankers'" interests may become opposed to those of another group of stockholders, this association is unwise. The requirements of the Securities Act as to information about the connections and interest in major holdings or other contracts with bankers made by the concern do much to warn against these situations. The regulations under the Holding Company Act, which require public offerings of securities being made by competitive bid, are another move to release the strong ties of banker connection in the public utilities.

The Aid and Support Function. There is no legal requirement that an investment bank which has successfully sold the securities of a concern should interest itself in the future of the securities or the concern. But this is not the true interest, as we have already pointed out; for business does utilize a vast series of mutual relationships to build sound and reliable enterprises.

In the field of merchandising this is often illustrated by the effort of the manufacturer to meet the orders of old and reliable customers. These customers may return the favor by good orders when they know the manufacturer needs this actual support.

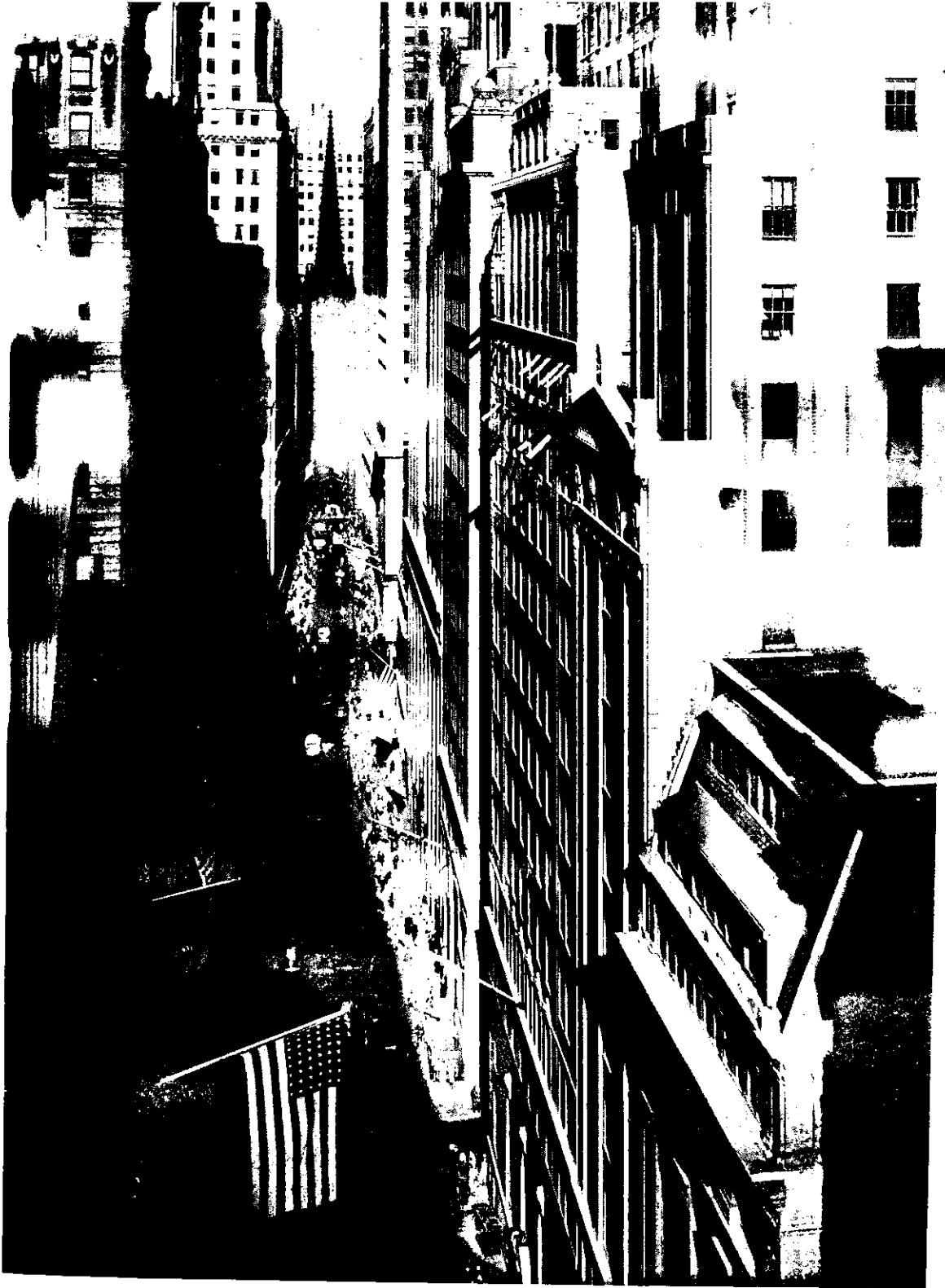
Such a relationship is equally true in the investment banking field. Wide open breaks in the securities of a concern, when the results of the concern are known to be good and sound, may enlist the action of the banking firm which has been associated with the corporation. Provision of some type of actual market in these circumstances is a service to the buyers of the securities as well. Quite as important may be the problem of meeting a maturity of an issue for a corporation in a poor and difficult market. The bank regularly associated with the corporation is much more likely to give a firm bid on an issue to meet the problem than any other bank. This is one point at which competitive bidding may be expected to be a real disappointment. Since 1936 we have not experienced the trying market of a serious depression, so what will happen at that time of trial we cannot say. Whether a bank will risk its capital at that time for a business in which it is a stranger like all other banks or people is the question. Why it should is not clear—though competition might be keen enough to bring some proposal from a bank.

Advantages to the Security Holder

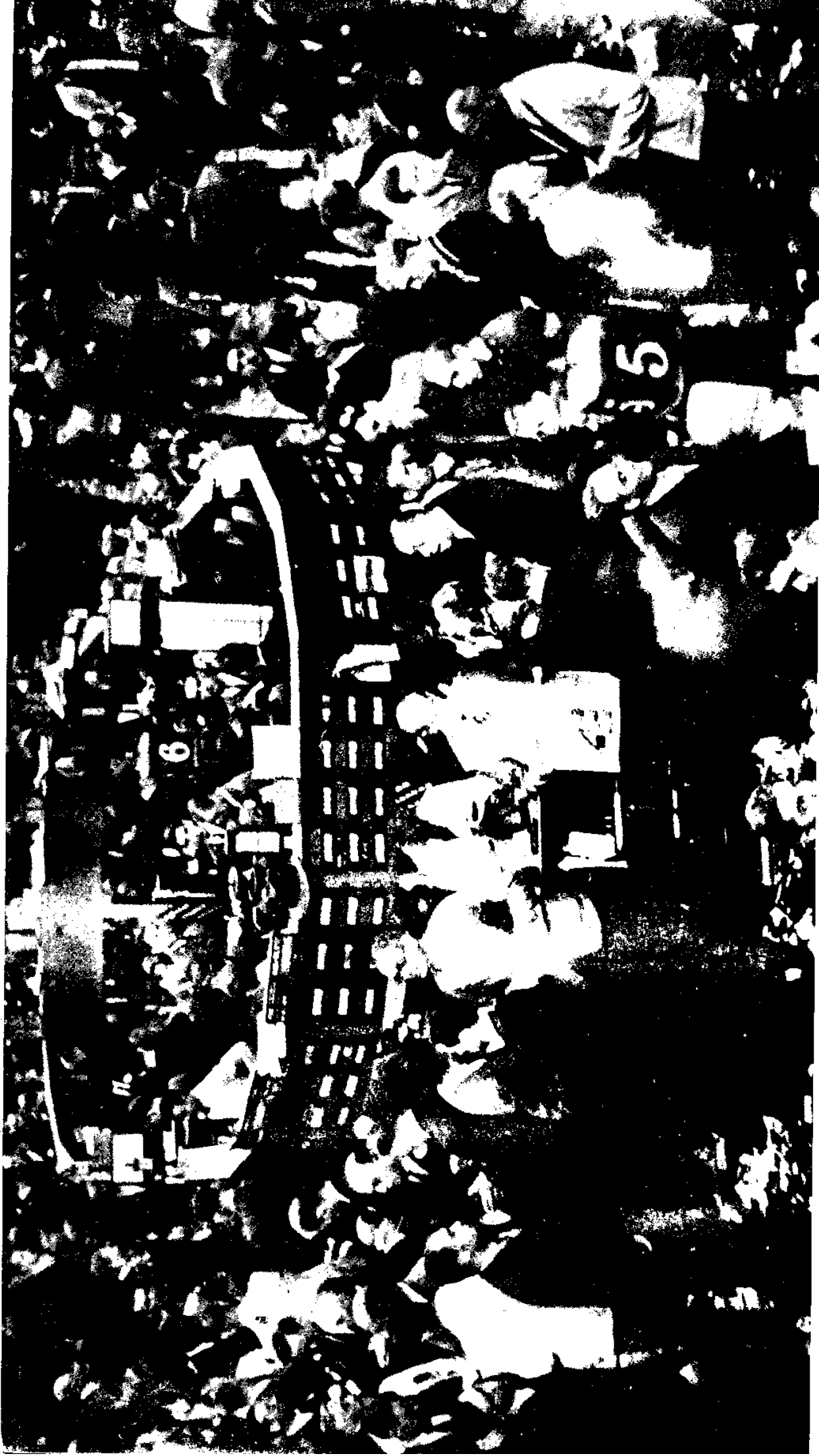
The work of the investment bank has a dual relation—with the corporation and with the security holders. The security purchasers are the clientele of the bank as well. The quality of the bank's services will be important in establishing permanent relations with investors and other investment institutions. Some of these services are important to the purchaser on two counts: first, that they be available, and second, that they be supplied by someone trained in the material involved.

Inspection of Financial Policies. A thorough check of the concern's financial practices will be one of the most important matters conducted by the investment bank. Registration requirements under the Securities Act will supply some of this information, which was originally obtained only by the investment bank's inspection. But in addition to the recorded information the bank will have engineers check the physical condition of the plants and appraise their values. Lawyers will be employed to check the legal titles and corporate status. All of this is done by the bank as part of the general investigation it makes before it is ready to commit itself to a firm bid for an issue. The very precautions which it takes to protect its interest are also operating to protect the investor. In the long run, the reliable investment bank will not want any of the issues to become failures on account of any of the factors it examined. Even the general management will be checked for reputation in the trade, and the usual financial tests to be read from the general record of sales and earnings will be scanned.

Creating the Security Terms. Actual provisions of the security as to the



Wall Street—The Money Center of the United States. (By *Life* Photographer Herbert Gehr. © *Time* Inc.)



The Floor of the Stock Exchange—Many Posts Serve as the Centers for Trading of Particular Issues. (Courtesy of Newsphoto.)

Brokers Sorting Their Orders and Checking Their Records at the Trading Post. (Courtesy of Newsphoto.)

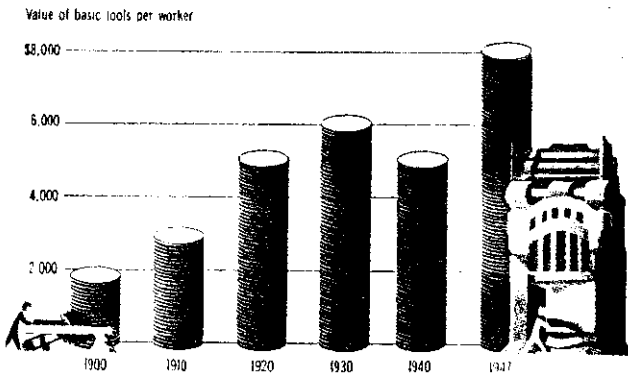


After a Trade the Ticket Reporting the Amount and Price of the Sale Goes to the Teletype Operator at the Post for the Wire Services Which Spread Countrywide. (Courtesy of Newsphoto.)



A Customers' Room. (Courtesy of Cruttenden & Co.)

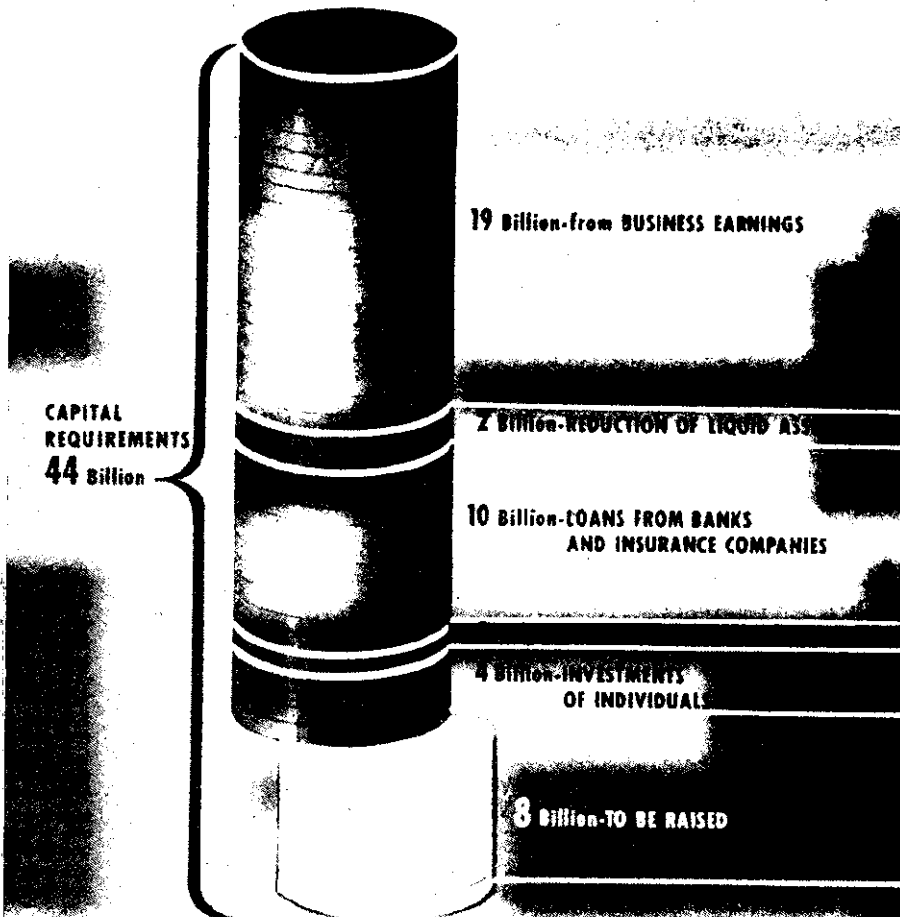




Where it used to take about \$1,800 worth of plant, tools and material to provide a job, nearly \$8,000 is now required for each worker. Money to maintain this employment must come, as it has in the past, from investments.

Our Capital Needs Are Made Greater with the Basic Costs of Tools Increasing. (Courtesy of Steelways.)

HOW MUCH CAPITAL IS NEEDED HOW MUCH CAPITAL IS AVAILABLE



This \$8 billion deficiency, enough to supply a million jobs, almost equals the drop in capital formation during the depression years.

ultimate position of the security holder must be set in the contract made at the time of offering. Only the experience of a trained operator in the field can provide the evaluation of provisions which will help protect the investor. The banker must at this point balance the interests of the investor and the corporation. It will be unwise to leave a corporation completely free to practice any action its later management may think is appropriate, but on the other hand it will not be wise even for the investor to so fetter the management with conditions that it can hardly operate. Just how provisions have worked and do work for both parties should be observed by the banker, and out of his experience the wisest selection of security terms should be made. Often the provisions need legal testing, and counsel upon this point will be provided by the legal advisers of the investment bank. These are the services supplied by the banker out of his general overhead charges and for which the investor is never consciously making payment. The banks have not always performed these tasks correctly; but most of the instances of failure would be traceable to bad judgment, not to any intent to destroy or neglect the ultimate interest of the security holder.

Maintaining a Market in the Security. If the issue offered is subsequently registered on a regular exchange, the problem of ready marketability is largely discharged. Many issues, however, may not be of such a size; and they will be dealt in over the counter. This market is handicapped as a continuous and certain market. To give it some continuity and the purchaser some reasonable assurance that his security will have convertibility, the investment bank often will operate a trading department for its customers. Here the bank may act as agent for others or as a dealer on its own account, giving bid and asked prices at which it will confirm transactions in the securities with which it is familiar or for which it may have been an underwriter or dealer. This service becomes a very great asset to the cultivation of customer relations. Since the factors concerning a company not on the exchange are given less publicity than those dealt in upon the public exchanges, the security customers will come to rely upon their bankers for examination of current reports.

Information and Representation for the Investor. The security holder is not often an adept student of financial affairs unless he is connected with one of the financial institutions which have experts employed for security analysis. Because of this condition, the basic information for the use of the bank's customers must be sifted out of the maze of current facts, both about general investment policies and about particular investments. The reliability of this information will often be the convincing factor for a customer. By reason of the loyalty of its clients, the bank can enter originations or subscribe to offerings with assurance that it can find buyers. Thus the expenditure of effort by the bank to really service its customers ultimately returns in the form of steadying the market which the bank may expect to find for its new offerings. Like any good merchant, the bank finds a quick turnover on its commitment important to its profits on its security participations.

In the chapters on failed business institutions and the processes of dealing with these cases, it is pointed out that the committees to represent security holders are made up of volunteers. The most likely source of a volunteer to help organize the security holders in order to present their interests is the investment bank formerly associated with the issues sold. The first step—calling for a mutual representation of interests—can be made best by the investment bank, perhaps because it knows the procedure to be followed. Out of its experience, too, may come good suggestions for those who might serve on the committee with real understanding of the many problems involved. The vigor with which the investment bank obtains a proper and equitable representation of the security holders' interests should clearly be reflected finally in the customers' regard for the bank's fairness and faithfulness. The security holder is prone, of course, to blame the bank for what happens after the security is sold. Actually this may or may not be in line of truth. Where the bank has accepted a directorship in the company, however, this attitude of the investor, appears to have greater justification. Such instances clearly produce an unusual fiduciary relationship, not technically perhaps, but certainly within good business ethics.

The service which the bank may render by reason of its experience in other reorganizations should be valuable in any committee representing the security holders. Such accumulated experience should be made available, both as a service and as an aid to quickening the procedure. By such association with the reorganization, the bank may ultimately become an underwriter of securities involved in the new plan. This connection can be valuable in a mutual sense; for while the bank gets the added business, the willingness on its part to underwrite may be the determining fact in the court's acceptance of the proposal.

Association of the investment bank in the reorganization procedure is often criticized as being unduly advantageous to the bank. Claims are made that the bank is able to obtain the underwriting by reason of the association, and perhaps may shape the securities in the plan to meet its ambitions for future control. All of this has been possible and has been practiced. Reliable firms have a real problem in establishing their ethical standards at this point. Supervision by the court, and the advisory opinions of the regulatory commissions now available or required under the new legislation dealing with reorganization procedure, does something to control this situation. It is another point at which the unusually significant social character of the investment bank deserves to be emphasized, not only in textbooks but in practice.

Types of Banks

While the investment banking system as a whole supplies a security marketing system, each individual bank tends to operate in a restricted portion of the market. In the 1920's, this specialization of function went to an extreme degree, which was practical so long as the volume was at the high-

est levels. The trend was reversed in the 1930's, and it is *not likely to recur* if present experience is an accurate guide. Some firms have specialized in municipals as opposed to business issues; others have made their principal contacts in one field such as the railroads and the public utilities. The severe competition following the 1930's, after which costs began to rise sharply, has argued strongly for less specialization.

For a number of years some firms devoted their attention exclusively to origination and acting as underwriters for the initial offering. In other words, they did not cultivate the ultimate purchaser; this task was left to small institutions and those more local in character. These operations were exemplified by the original J. P. Morgan and Company and Kuhn, Loeb and Company. Such specialization is no longer maintained by these banks. The big wholesale houses, which purchase large blocks of securities from the originating houses and then sell the securities to a widely scattered retail group, are but a step away from original underwriting. They often cultivate carefully buyers in certain geographic areas and thus have become known as competent channels through which issues can be located in particular portions of the country.

The largest group of investment banks should be considered as dealers, firms which depend primarily on their local clientele to whom they sell in small lots at irregular times. These firms are found in almost every population center of 50,000. In most cases, the smaller retailers do a business in several other affiliated branches such as insurance selling and real estate mortgages and sales, or they act as agents or brokers in general security transactions.

The nice division of these functions may not be maintained in fact, for the firms may operate both a wholesale and a retail phase in their security business. On occasion, also, these firms, while never asked to join a national origination, may find it feasible to create a local security issue, or to join with nearby firms in an underwriting. The originating firms, in most instances, no longer find it possible to remain strictly specialists in such a restricted activity and many have become wholesalers too. The banks in such cases become active either as participants in underwritings proposed by others or as wholesalers for issues brought to market by other underwriters. Like any marketing outlet these banks have found it wise to move a substantial volume of business through their institution, thus utilizing the volume to absorb their rising costs of operation. Some of the investment banking firms today run the full gamut of security operations, acting as underwriters, originators, wholesalers, and retailers, and operating trading departments as dealers.

Costs of Investment Banking

The cost of floating an issue through the investment banking system has never been low. The performance of the functions of investigation, preparation of the agreements, and clearing the regulations, and the banking over-

head and profit, all add up to a sizable charge. It has come to be accepted that an issue of less than a million dollars cannot be handled by the banks, geared as they are to step up into the millions per issue for some of the major business firms.

Trends in the margins, however, seem to be definitely downward as a result of the serious competition which was injected into the field after the depression in the 1930's. In Table 55 appears the contrast between 1940 and 1945 for margins on bonds, preferred stocks, and common stocks. In each case the trend has been carried downward substantially, leaving the average showing for bonds at 1.2 per cent for issues over 5 million dollars. The

TABLE 55. COMPENSATION TO DISTRIBUTORS AS PER CENT OF VALUE

Fiscal Year	Size of Issue (000,000)	Generic Grade					Below 5th	Un- rated	All Bonds	Pfd. Stk.	Com. Stk.
		1st	2nd	3rd	4th	5th					
1940	\$50 and over	..	1.5	1.6	..	..	..	..	1.6	..	..
	20 — \$50	..	1.8	2.0	1.9	..	..	..	1.9	..	..
	5 — 20	..	2.0	2.0	2.1	1.7	..	..	2.0	3.3	10.5
	1 — 5	..	1.9	2.2	2.7	4.0	..	..	2.8	7.5	14.0
	Under \$1	..	..	3.2	6.0	5.3	9.4	17.5	7.0	11.1	20.7
	All sizes	..	1.8	1.9	2.0	2.3	9.4	17.5	1.9	7.2	16.4
1945	\$50 and over	1.1	0.8	1.6	1.8	..	..	..	1.1	..	..
	20 — \$50	..	0.9	1.1	1.9	1.7	2.5	..	1.2	1.8	..
	5 — 20	1.8	1.3	1.0	1.2	2.4	..	1.0	1.3	2.4	7.2
	1 — 5	..	..	0.9	1.6	2.9	5.1	3.4	2.6	4.5	9.2
	Under \$1	..	..	..	..	..	..	7.9	7.9	8.3	11.8
	All sizes	1.1	0.9	1.2	1.5	2.1	3.1	2.1	1.3	3.1	9.3

Note: The compensation figures are based on the figures reported in the registration statements as of their effective dates. They do not, therefore, include additional compensation which may have been realized later from the exercise of options which had no realizable value on the effective dates.

differences of margins ranging between the bonds at 1.3 per cent, the preferred stocks at 3.1 per cent, and the common stocks at 9.3 per cent is a real reduction from the rates existing in the 1920's.

Apart from the commissions paid the banker, there are a series of much more numerous costs involving registration, various report fees, listing expenses, and taxes. In Table 56 these costs are presented, representing the study of costs on equity issues from January, 1938, through June, 1944, as prepared by the Securities and Exchange Commission. These costs show remarkably little difference in range as between sizes of issues or as between types of securities. Thus the unit costs of registration and qualification of an issue appear to run at about a common unit level.

Recent Changes in Investment Banking

Competitive Bidding. The most important change for the investment bank as a marketing institution is the emphasis given by government agencies

to the use of competitive bidding. Under this practice the private association of bankers and business firms is broken up, and the issue announced for sale by the corporation must go to the highest bidder. This is not a requirement by law in the case of industrial securities, but under the Public Utility Holding Company Act all issues in this field must be sold by this procedure where required by the S.E.C. More recently the Interstate Commerce Commission has been requiring such sales, as it has the power to do in its control of railroad finance.⁷

The advocates of this practice contend that much better prices will be obtained by the corporation for their offerings. In the experience to date, this has been verified in most instances. On occasion, however, no bids under the conditions suggested have been forthcoming. In these cases, the S.E.C. has modified its orders and allowed privately negotiated sales to be concluded. Sometimes, too, after slight delay and some alteration of terms, the bids have been called for again and a successful sale has been made.

Ultimate results, as a major change in the investment banking process, cannot be foretold until the method has been tested in a depression. If at that time the values of private association and negotiation are to prove themselves, it should be found that competitive bids will not be forthcoming, or that the bids will not be very favorable. In a crisis, this may provoke serious consequences for the corporation.

Many have felt that the competitive bidding practices have cut the margins to such a degree that competition will really become limited to only a very few banking houses in any case. Thus may be created a greater trend toward the larger houses' getting the business. It is doubtful if this is a trend which may be viewed as good for the social relations of investment banking to the economy.

Direct Sales. In the revival of the securities market after 1934, a development of great importance is to be noticed. The life insurance companies, now grown to such size that a half or so of a business firm's security issue would be a reasonable sum for a single insurance purchase, began to negotiate directly with the business corporations. Where the issues were too large for a single company, the concerns joined hands in groups of three or four, creating what amounted to an underwriting syndicate. In Table 57 is a summary of the direct sales of issues made since 1936, which indicates about one-third of the total issues as being sold by this method. This change, which has deprived the investment banks of important business, may be significant for more than the profits involved. The general consultative and advisory function of the banking system is lost in the process, though the insurance company will be ready to offer its consultation. Since the transactions are not subject to registration under the federal law, the question has been raised as to allowing the continuance of the practice. The insurance companies contend that since the instruments are not to come upon the public markets no real objection can exist. The procedure does provide, however,

⁷ See *ibid.*, pp. 99-102.

an avenue by which the general regulation of accounting and business practices subject to usual registration may be avoided. Since the insurance company is making an investment of public funds in the broadest sense, the question remains as to the wisdom of the procedure. One of the chief attractions, of course, has been the avoidance of the selling and registration costs. If the tendency grows, as it may very well, another factor will have

TABLE 57. PRIVATELY PLACED SECURITIES, 1937-1946⁸
(in millions)

Year	Amount	Year	Amount
1937	\$ 335	1942	\$ 422
1938	692	1943	372
1939	790	1944	743
1940	774	1945	991
1941	824	1946	1523

been added toward the pressure of shrinking the field of operations for the private investment banker. In a capitalistic economy, this is a matter beyond private interests of the banker alone.

Government Operations. Government operations in the credit and capital field are discussed in greater detail in Chapter XXXIX. It has been stated by writers that today the federal government is engaged in one-third of the banking of the country. Most of these operations are in the capital market and constitute in some degree a replacement of the private investment banking system. It is admitted that some of the operations are beyond the safety required by private banks and investors; thus the point is not so well taken on such needs.

Substantial government competition may be regarded as important for two reasons. First, the question may be raised whether the necessary safety factors are required by government institutions. The net results of the R.F.C. and Home Owners' Loan Corporation seem to have been good, however, which offers some evidence contrary to the point. Second, the shrinking share of the market for private bankers may force the field to be seriously limited and thus to support only a few firms. Concentration in the investment banking field may, as a consequence, be forced by governmental policies while at the same time the government cries out against the domination of a few firms.

Since the investment banking system operates a sifting and selective device for the direction of capital flow in our economy, more than ordinary burdens of care and wisdom rest upon the bankers. Any forces which cause such private bankers to disappear make more likely socialization of the capital market. The extent to which government direction of the entire capital market may operate is well illustrated by current practices in England. The capitalistic system is not likely to long survive a government-directed capital market.

⁸Source: *Securities and Exchange Commission Annual Report and Statistical Bulletin.*

ORGANIZED SECURITY EXCHANGES

Nature and Importance

The center of the secondary phase of the capital market is the organized security exchange. The importance of market ability to the investor has been mentioned, but this attribute is, of course, just as important to business and to all society. The free transferability in a public market of the outstanding securities gives the investor not only convertibility but confidence, a yardstick for comparison by market actions, and ready appraisal for collateral value. All of these things make the securities of American business corporations widely acceptable and attractive for ownership, as is evidenced by the extensive holdings of such securities.

The volume of trading in securities on the New York Stock Exchange is illustrated in Table 58, which gives some picture of the importance of this market for the relocation of capital ownership and as a gauge of economic conditions. In terms of total wealth in the country, the transactions

TABLE 58. SALES OF STOCKS AND BONDS ON THE NEW YORK STOCK EXCHANGE⁹
(All money figures in millions of dollars; number of shares of stock in millions)

Year	Market Value of All Sales	Stocks		Bonds	
		Shares	Market Value	Par Value	Market Value
1938	12,306	424	11,016	1,932	1,290
1939	11,488	366	9,970	2,121	1,518
1940	8,223	285	7,171	1,760	1,053
1941	6,408	230	5,257	2,269	1,151
1942	4,796	169	3,674	2,478	1,122
1943	9,457	362	7,672	3,593	1,785
1944	10,089	342	8,255	2,925	1,834
1945	15,190	507	13,474	2,509	1,716
1946	16,675	531	15,562	1,489	1,113

for 1946 on the exchange represented about 5 per cent, 10 billion dollars in trading values as compared to more than 200 billion dollars in business assets. Despite the dollar size of the trading figures, therefore, this seems no unusual portion for the process of relocation of securities in the hands of new owners and releasing old commitments of former investors.

There are twenty-three registered exchanges in addition to the New York Stock Exchange, but they handle a very small portion of total trading. This does not mean, however, that they are not useful, for very often a small firm locally known will be better served by a registration on the small exchange than on the larger ones.

The over-the-counter market is likewise an integral part of the secondary

⁹ Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1947, p. 453.

market operations and statistically amounts to a very substantial part. In this market are traded most government issues, real estate issues, bank and insurance company stocks, and the securities of great numbers of small corporations.

Membership. The exchanges are private associations of brokers which operate the trading facilities for the members. These facilities include the "exchange rooms," the necessary reporting service installations, and the operating personnel. The New York Stock Exchange has 1375 members, and a "seat" in the exchange is sold by a previous holder to one now wishing to be a member. The ownership of a "seat" does not insure membership, however; for the exchange has a series of requirements administered by the membership committee, which must approve the applicant. The members who actively participate in trading may be classified into various groups by the functions they perform, namely; (1) commission brokers, (2) specialists, (3) floor traders, (4) odd-lot dealers, and (5) two-dollar brokers.

Listing Securities. A corporation's right to have its securities traded upon the exchange depends on whether or not the securities are listed on the exchange—that is, accepted by the exchange committee on listing. Only registered issues can be dealt in by the brokers; but the listing committee will determine whether the general characteristics of the issue are likely to require a market, whether the ownership is sufficiently broad as to make trading likely, and whether the company is apparently sound. The exchange does not care to try to serve issues which are either unsound or unlikely to trade. The corporation pays an original listing fee when it makes application to have its securities admitted to trading. The exchange committee reserves the right to control the listing so that it can remove the security from trading if any reason develops which warrants this action, such as non-activity or actions by the management not deemed to be in the public interest.

Administration. All work of the New York Stock Exchange is supervised by various committees drawn from the membership and placed under the general leadership of a paid president. The committees cover such areas as business conduct, odd-lot and specialist traders, admissions, commissions, and listing. The work of each group is vital to keeping the exchange an alert and faithful market center. The business conduct committee receives reports on the status of members and holds hearings for reported infringements of rules governing general reliability and financial accountability. Examiners from the exchange audit the books of members. All advertising is subject to scrutiny, and each firm must adhere strictly to the commission schedule adopted for trading. The work of the committees goes beyond in many places, while overlapping in others, the jurisdiction of the Securities and Exchange Commission. Nevertheless, the exchange, which inaugurated the rules and practices of supervising its members and their conduct long before any legislation was in effect, prefers to keep its membership accountability as one primarily to the exchange itself.

Types of Brokers and Functions Performed. Commission brokers deal with the public directly and execute the orders on an exchange for their account. These firms maintain city offices, often a series of them as branches in several cities, where the customer may stop in for any information or placement of orders. One of the principal services of such brokers is the wire system of reporting direct from the exchange floor all transactions and their prices on the so-called "ticker tape." Having acted as agents for the customers in the execution of the trade, these firms collect the regular brokerage commissions.

The two-dollar broker is an exchange member who does not maintain an office for the public, but services other brokers in effectuating transactions at the exchange. A brokerage firm cannot ordinarily conduct all trades through its members, and may employ other brokers to execute orders for it. Out of the commissions prescribed by the exchange for the customer to pay, the broker actually holding the transaction order pays, say, two dollars to the broker who has assisted. Today the fees are actually on a sliding scale and run slightly higher than two dollars, but the appellation has remained. These two-dollar brokers are exceedingly important to the market operations when a high volume is reached, for they may trade in any security as agent. Such brokers do not trade for their own account and limit most of their trading to "market" priced orders.

Specialists do two things which distinguish their operation. First, they do trade for themselves; second, they operate at one "post"—trading center—continuously dealing in orders for a select number of stocks traded at that particular "post." The position of greatest importance in this operation is that which the specialist conducts for himself. These private transactions tend very often to become the stabilizing factor in a market while serving as a continuous source of demand or supply.

Odd-lot brokers form a group which fills or executes orders for the customer who has an order of less than 100 shares or other round-lot trading limits. At a differential of one-eighth of a point the odd-lot broker agrees to deal for the customers, charging this amount on a sale above the last round-lot price and deducting the differential from the last round-lot price on a purchase. The broker is operating as a dealer bound to fill the orders within the range of his differential if the last market price conforms to the customer's bid. Before the next round-lot trade takes place the price may have changed a point or several points, so that this broker assumes a special risk. To cover his potential obligations he must have an inventory, added to or reduced as the market appears profitable to him.

Operating Practices

Sales on Margins. Among the important practices of the brokerage field is the sale of securities on margin, that is, on credit. The use of credit for the purchase of securities has not been pursued generally by the primary market, but it is a regularly constituted practice of the secondary markets.

Even the investment banks tried it in the 1920's, when the bankers received small down payments and carried the securities as pledges until payments were complete.

Use of margin trading allows the customer to expand his market transactions in ratio to the amount he must pay in as the down payment. If the customer has \$1000 at this time, then under various margin requirements he can trade as follows:

Margin	25%	50%	75%
Capital owned	\$1000	\$1000	\$1000
Possible purchase	4000	2000	1333
Net gain or loss by 1% price change	4%	2%	1.3%

For the customer who desires to trade on price changes, therefore, this has some real advantages. The purchaser for income will ordinarily not use the credit device. It is to be noted that losses may follow quite as easily as gains. In such cases the customer may be called upon to furnish additional investment in order that the full value of the loan made by the broker will be secured. If the customer cannot meet the margin requirements, the broker is authorized to sell the securities and close the account so that the original deposit will be sufficient to protect the broker.

QUESTIONS

1. Why is there a need to distinguish between the money market and the capital market?
2. Indicate the major factors which react on the interest rates for capital to be raised in the market.
3. Explain how investment banks have assumed such importance in the United States for obtaining capital for business concerns.
4. Outline the functions of an investment bank in the capital process.
5. Evaluate the advantages of a corporation's use of an investment bank in contrast to a direct sale of the issue.
6. How may the price of an issue be shifted in relation to its coupon to give the proper relation to general market values at the time of offering?
7. Since the management of a sound corporation may be expected to show good judgment, how can it be claimed that an investment bank can give advice which is of value to the corporation's financial officers?
8. Explain why the maintenance of a market may be necessary at the time of a new issue and how this is done.
9. Why does the cost of investment banking services vary as between the types of issues offered?
10. Discuss the trends in the cost of security flotations. What has competitive bidding to do with this?
11. What is meant by direct sales of issues? Discuss the trend over the past decade.
12. Why may the organized security exchange be regarded as an important part of the investment banking system?

13. In what way may the listing of an issue, announced for sale in the current market, affect the possibilities of its placement?
14. Explain why the communication system of an organized exchange is so important to its position as a market center.

PROJECTS

1. Compare in chart form the volume of securities sold since 1938 to date, with the margins reported by the SEC. Comment on the correlation, if any.
2. Prepare a report on the number of shareholders in American corporations, including totals, range in size of holdings, and total holdings of officers.

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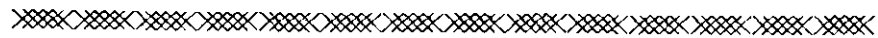
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CHAPTER XXII

Syndicates and Underwriting



IN THE work of distributing securities, or, to put it another way, in the process of "buying" capital for the use of the corporation, a special institution, the underwriting syndicate, has been developed. This chapter will set forth some of the more pertinent facts relative to its nature, functions, organization, and services.

Historical Development of Underwriting

The practice of guaranteeing the sale of corporation securities did not arise until near the end of the nineteenth century (1889) in England. In its earlier form the functions of underwriting seem to have been: (1) distribution of the losses, and (2) limitation of the losses, which might fall upon a single participant in a trading venture.

Underwriting as a method of raising capital for corporations is a relatively modern scheme. Corporations must be large in size, for a syndicate seldom can or need be formed for an issue of less than half a million dollars. Indeed, there are investment banking houses in the United States which will not consider issues of less than a million dollars. There must exist excellent communication so people will have knowledge of the corporation's past record and will be able in the future to obtain information concerning the firm and its operations. The general level of business intelligence, in other words, must be high.

The Nature of Syndicates

A syndicate is a temporary partnership formed for the purpose of performing some or all of the work of obtaining capital for a corporation. Raising capital for a corporation is carried on by exchanging the securities of the corporation for the capital; the syndicate literally buys capital for the corporation, using as media of exchange the stocks, bonds, notes, etc., of the corporation. The entire work of raising capital may be carried out by a single syndicate, though it was common to find more than one syndicate involved in the operations.

The dearth of issues in the 1930's and competitive pressure operated to force a simplification of the syndicate procedure. Thus where there was a series of syndicate operations for a single issue, the complete process is now

the operation of the single syndicate, or possibly an underwriting and selling syndicate. The latter more commonly today is a selling group, which leaves the basic liability with the purchase syndicate, or underwriting syndicate.

Kinds of Groups

Probably but few syndicate organizations are exactly alike; they vary in size, degree of elaborateness, internal structure, time of operation, methods of profit distribution, etc. To distribute an issue of \$200,000,000 requires an elaborate nation-wide organization; to sell a portion of a \$100,000 issue for a local concern requires the work of only a single house for a few days. If an elaborate organization is used, the various functions may be carried out by different groups, sometimes known as "groups" or "syndicates."

The *underwriting syndicate* is a group of investment bankers who buy an issue of securities from a corporation and sell them again to the public or to small retailers.¹

Fundamentally the purchasing and underwriting syndicate is the center of merchandising operations. In the practices developed prior to 1930, these operations were divided but they are now assumed by the one group. The *purchasing syndicate* buys from the corporation an entire issue, and is most frequently used in connection with the issue of new securities. The *subscription syndicate* operates in a limited way and agrees to take such portions of the securities offered by privileged subscription as are not taken by the old holders who are entitled to subscribe.²

An agreement usually exists between the underwriting organization and a group of bankers under which the bankers agree, if necessary, to loan money to the underwriters to such extent as will enable them to pay for the securities as per their contract with the corporation or issuing group.³

The *distributing syndicate*, formerly used extensively, is composed of that group of investment bankers who may be called "wholesalers." The group "wholesales" the issue to the smaller dealers; it exists only in elaborate organizations set up to distribute large issues. There is usually one member of this group located in each major distributing center in the country. In the larger cities there may be several members of the group. Nowadays this function and that of purchasing are assumed by the same group.

Finally, the *selling syndicate*, which actually distributes the securities to the public, may be formed. It is known more often as a "selling group" and takes no risk of final distribution. In earlier practice, the selling syndicate took the issue over from the purchasing syndicate. Local small investment

¹ Technically, an underwriting syndicate is a group of investment bankers who agree to buy such portion of an issue of securities as cannot be sold to the public at the agreed-upon price and within the time limits specified. It will acquire title only to the securities purchased which the public will not buy.

² As a technical underwriting, the financial risk is undertaken but no selling is done.

³ This operation can be separated into a distinct banking syndicate for very large issues.

houses are more or less pushed by the larger organizations which control the purchasing and distributing groups to become retail outlets.

The Membership of Syndicates

As a rule only investment banking houses participate and become members of underwriting groups. Actually stock and bond houses, investment trusts, individuals, and property insurance companies are all members of syndicates on occasion. Those investment banking firms which arrange for the purchase of the securities from the corporation are not infrequently referred to as "originating houses" or "houses of origination."

The prime consideration upon which a house is invited to or omitted from participation is its ability to distribute securities or to place them in permanent investment. Some houses have a clientele which will be to their advantage; others will be able to distribute to trust companies, banks, etc.; many sell only to the customers of banks, etc.; and a few may control private trust funds. Most originating syndicates retain records of the past performance of participants, and these are available for all future operations.

The complete operation involves a series of important steps. First is the origination. This involves investigation and negotiation for the terms of the issue. Second is the formation of the underwriting syndicate. This creates the obligation of risk for purchase at the price named. Third, the issue must be allotted by the manager. Fourth, market operation to support the price may be undertaken by the manager. Fifth, all records must be kept, shipments made, and proper legal regulations followed. This task is left to the manager.

The firm which originates the issue customarily becomes the syndicate manager. The position is one of special responsibility, and special commission allowances will be made for the work.

General Types of Underwriting Agreements

Underwriting agreements are divided into two mutually exclusive classes. One type of agreement exists between the corporation and the group acting as purchasers from the corporation; the other exists between the several underwriting members and/or syndicates, depending upon the method used in the particular case. An agreement of the first class is a relatively long and detailed document; one of the second type is a brief statement, largely dependent upon usage and custom and enforceable by pressure rather than by legal means.⁴

1. *Agreements Between the Corporation and the Syndicate.* Strictly speaking, the agreement between the corporation and the syndicate is the underwriting agreement as far as the corporation is concerned. It begins

⁴ Examples of these contracts may be found in 13 *U.S. Ind. Com. Rep.*; *Prostype Corporation of America v. Flowers*, 36 Fed. (2nd) 617 (1929); *International Products Corp. v. Vail's Estate*, 97 Vt. 318 (1923), 123 Atl. 194 (1924); *Electric Welding Co. v. Prince*, 195 Mass. 242 (1907).

with a preliminary clause which sets forth that the purpose of the agreement is to underwrite the issue in question. Next there are the recitals or *statements of the facts*, in which are included sworn statements of balance sheets and income over a period of years, the amount of the security about to be issued, copies of the resolution authorizing the issue, and the terms of sale by the corporation to the syndicate.⁵ Then there is a minute description of the securities to be sold, including specimen certificates in some instances. The underwriting agreement also contains provisions as to the manner, place, and date of payment to the corporation. If there are any unusual circumstances surrounding the issue about to be offered, these, too, may be covered. The corporation will usually agree to furnish such data with respect to its financial condition and operations as the syndicate may require to prepare the prospectuses, etc., used in selling the securities.

On occasion, permission is given to examine and even audit the books of the concern. It is customary to allow the engineers of the syndicate to make any examination of the properties desired. In England it is not uncommon to have all or a portion of the expenses involved in the accounting and engineering inspection of the company paid by the corporation whose securities are being sold. The practice is rare in the United States. Should the issue be of a nationally known corporation, or if the underwriting syndicate thinks the listing of the securities about to be sold will be an aid in distributing them, a provision is included in the underwriting agreement to that effect, obliging the corporation to make application for listing the securities within a specified time. Since there is invariably a considerable turnover in a new security until it has become seasoned and has gotten into the hands of permanent holders, it is paramount to the distribution that proper transfer facilities, registrars, etc., be available. The underwriting agreement requires the corporation to provide these facilities. There is necessarily a clause to exonerate the syndicate of all liability should the securities prove to have been illegally issued.⁶

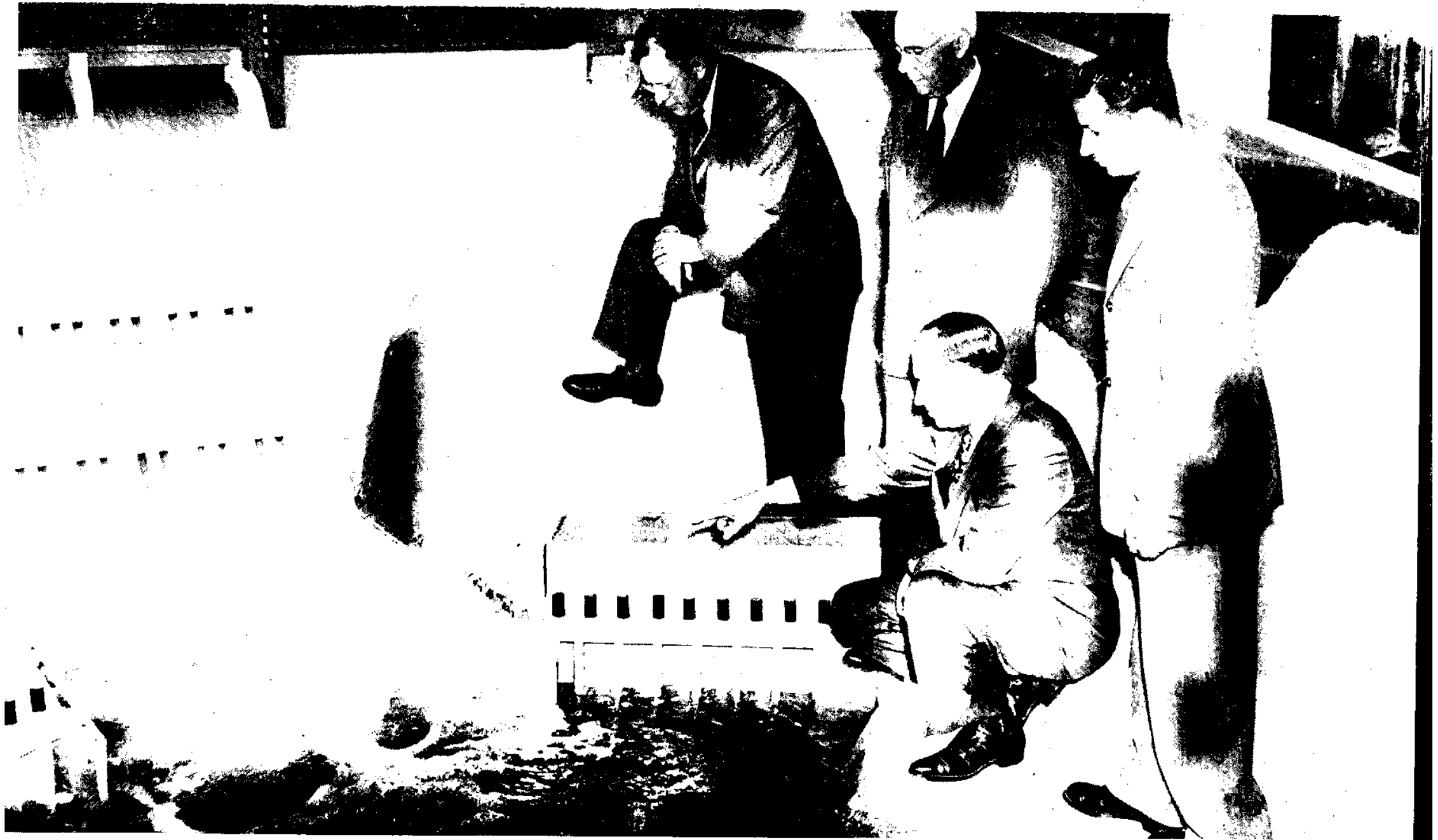
2. *Agreements Between the Manager and the Participants.* In contrast to the underwriting agreement between the corporation and the buying group, which devotes much detail to the conditions of the company, the securities themselves, etc., the agreement between the manager and the participants of the syndicate is devoted to relationships between the several participants, to the complete disregard of the corporation. The latter form of agreement begins with a recital of the general purpose of the agreement and, usually, a summary in general terms of the agreement itself. There is a statement of the particulars of the issue, always including the amount of the present underwriting and sometimes a summary of the provisions of the issue itself. The conditions under which the issue will be placed upon the market are next included. Some underwriting agreements will specify the

⁵ In earlier practice the "originating" house executed the contract and then resold to the syndicate. Today the contract is with the full syndicate for the purchase.

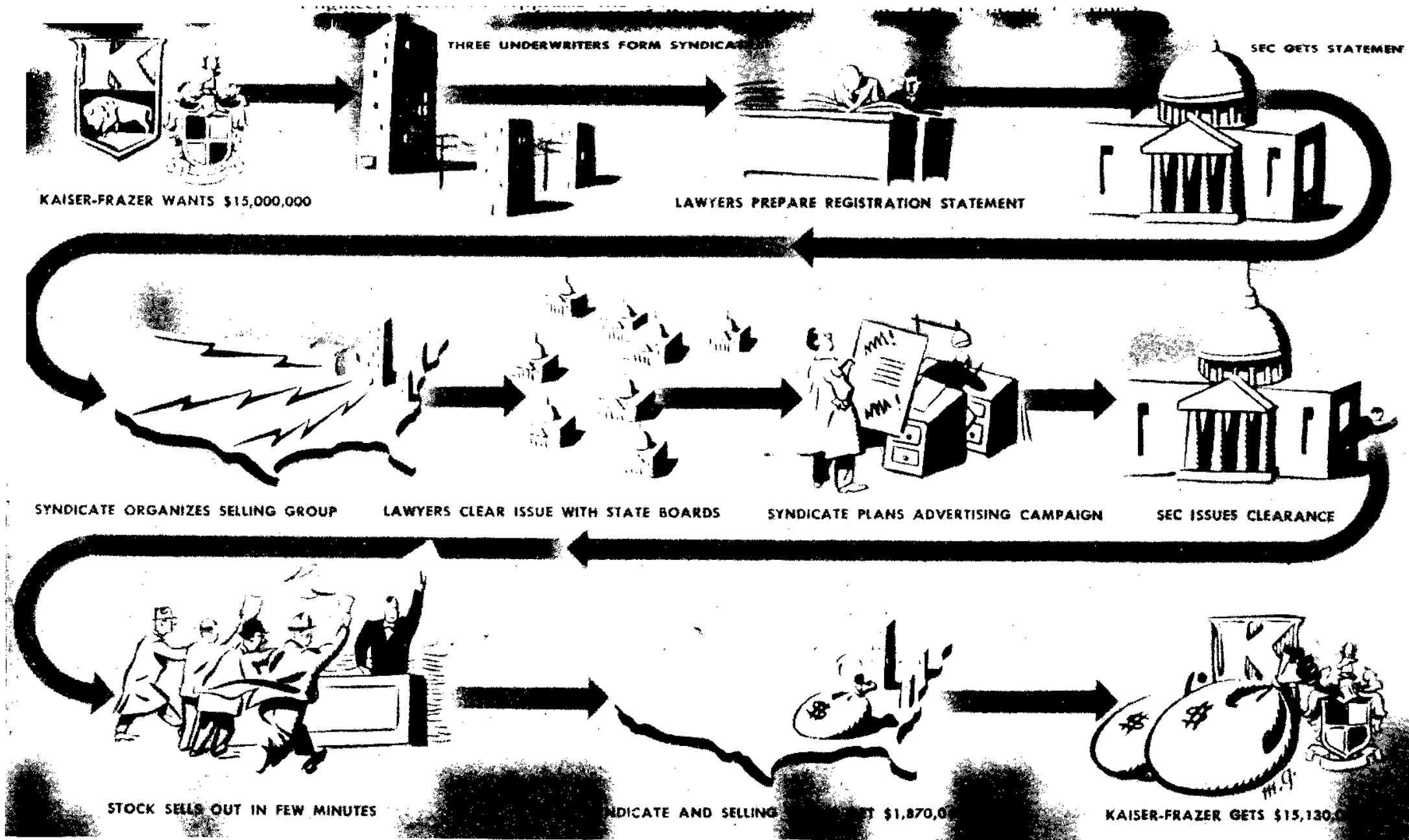
⁶ See Percy Stewart, "Syndicating," in *Fundamentals of Investment Banking*, 1946.



Lawyers Must Check the Law for the Underwriters at Each Step of the Preparation of a New Security Issue.



Engineers Need to Appraise the Technical Operation and Value of Assets Offered



The Route of an Issue for a Syndicate Sale. (Courtesy *Life*; © *Time* Inc.)



The Closing of a Syndicate. (Courtesy of First Trust Co.)

amount of participation, others will not. It is probably more common to find the amount of participation definitely stated, because at a later date this amount may become the basis upon which the profits and losses will be distributed.

The syndicate can and must expect to complete its work within a reasonable length of time. No profits or losses are allocated until the termination of the syndicate, which is usually in existence for one to three months. The manager will have the power to terminate the syndicate sooner than the nominal date of expiration and may also extend the time of the syndicate at his pleasure. If the syndicate is terminated prior to the nominal date mentioned in the agreement, the terms of its termination are usually described in some detail.

The prices at which the securities are to be offered for sale are stated in the agreement. They are applicable to "public offering" only; the participants may sell to dealers at a lower price (within certain limits) but must carry the responsibility of enforcing the ultimate public sale at the agreed price.

Certain miscellaneous provisions are usually found. They will cover such matters as the preparation and printing of advertising literature, the formation of sub-syndicates in foreign countries, sources of data concerning the corporation, etc.

Adjustments of Allotments by the Manager

When investment bankers or others are invited by the manager of a syndicate to participate therein, they may do so on one of two bases. They may simply agree to participate and to subscribe to the extent of the amount given in the invitation, or they may participate and agree to subscribe on a "firm" basis. If subscriptions are received on the first basis, they not infrequently greatly exceed the total amount of the issue. Thus a syndicate manager acquires a \$5,000,000 issue and when he totals his subscriptions finds they amount to \$7,500,000. Under the agreement, he now allocates or pro-rates the issue, giving to each subscriber only two-thirds of what he desired to subscribe for in the syndicate.

The second basis upon which a participant accepts the offer to subscribe as a member of a syndicate is a "firm" basis. Whether "firm" subscription will be allowed in a particular issue depends upon the syndicate manager.⁷ The object of the "firm" subscription is to allow the retailer immediately to guarantee to his customers that the securities made before the final allotment by the syndicate manager must always be "subject to allocation," which is only another way of saying that the customer will get the security provided the retailer gets it from the syndicate.

⁷ Some evidence of the size of the task in a major distribution is found in the list of syndicate members in the prospectus for such issues as Cincinnati Gas and Electric, common stock, with 228 underwriters; the issue of Reading Co. (railroad) for 84 million dollars, 3½ per cent, 1995, shows a list of 121 underwriters.

If a certain house desires to obtain more securities in a syndicate which is distributing a popular issue, it merely increases its subscriptions. If the house buyer estimates that the issue will be 100 per cent oversubscribed and he is desirous of obtaining \$100,000 par value amount of the issue, he will enter a subscription for \$200,000. Such is indicated by common announcements as "oversubscribed by 50 per cent." Such practice is usually frowned upon by all practical men who are distributing securities. Its only possible excuse appears to be in the fact that the time for making decisions is extremely short and the buyer is merely playing safe.

In discussing allotments, the difference between "participation" and "subscription" must be kept clear. Participation is the amount to which the participant was invited to take part in the underwriting, and measures the extent to which he agrees to buy the securities in the event that they cannot be sold to the public. Subscription is the amount of the issue which the participant agrees to purchase at once and which, naturally, he expects to dispose of to his own customers. If the amount of the subscription is less than the total issue, the manager has the power of allocating the issue to the participants, whether they subscribed or not.

Relations Between the Manager and the Members of the Syndicate

The matter of allotment is but the beginning of the relations between the manager and the members of the syndicate. Upon the judgment of the manager rest other important decisions, and upon his stewardship largely depends the success of the syndicate. The most important of the relationships between the manager and the participants will pertain to (1) support of the market for the security; (2) termination of the agreement; (3) apportionment of the profits, expenses, and losses; and (4) allocation of responsibility and liability in the event of bad faith or gross negligence. The problem of supporting the market is customarily left to the judgment of the manager, although on occasion some or even all of the participants may be consulted or asked to aid. Since the object of such support is to maintain the market price of the security, the cooperation of the participants in the syndicate is of paramount importance. It is more or less of an unwritten law in the investment banking world that securities, while in syndicate, shall be distributed as far as possible in such a manner as will (a) prevent competitors from returning the securities to the open market, and (b) make for permanent placement. Upon the manager must rest the decision as to the manner of supporting the market, as well as to the date at which such support shall be terminated.

Apportionment of the profits, losses, and expenses is a study in itself and but the barest outline can be given here. The profits, if any, are distributed on one of three systems or some combination of them. They may be distributed to the participants in proportion of (a) the participation, (b) the subscription, or (c) the actual net sales. Generally speaking, the first is used though the latter two are desirable since both allow the participants to

obtain an extra amount of profit if they dispose of securities, and place a penalty on non-subscription. To give full credit toward the participation agreement for securities sold is to allow credit to those who do not sell the securities and to place the full quota of liability upon those participants who subscribe and sell.

The Work of the Manager in the Syndicate

The manager is the key to the success or failure of the syndicate; as his judgment is correct or in error, so the group distribution will move smoothly or will encounter difficulties. Since his work begins with the corporation and will end only with the distribution of the securities, the story of the work of the manager is, in a sense, the story of the syndicate. And at all times it should be remembered that the success of a syndicate rests upon a *rapid, permanent* distribution of securities at a *profit*.

Upon being advised that a certain corporation may be seeking added capital or upon being approached by a corporation desirous of obtaining capital, investment bankers begin an investigation into the proposed issue.⁸ This investigation will usually be surprisingly wide in its scope and thorough in its detail. Besides the analysis of the market for the product, problems of costs, sources of raw materials, equipment, plant, labor supply, etc., factors pertaining to the technological aspects of the business must be examined. The nature of the financial structure of the company, its relative strength as compared to similar businesses, the effects of price changes, etc., are evaluated. Finally, the management and numerous intangible factors are scrutinized to discover possible difficulties to the successful distribution of security issues.

The completion of this investigation, together with the unusual knowledge of the money and investment markets possessed by the investment banking house, enables it to perform valuable services for the corporation by way of counsel as to the best form of security to be used as well as the general financial plan to be followed. Often the security which will sell best may not be the type which the corporation is most desirous of issuing.

After a decision has been reached with respect to the type of security to be used, the next step is that of drafting and executing the underwriting agreement. This may be a long, detailed document, though many such agreements are embodied in an interchange of letters between the manager of the syndicate and the corporation.

Once the agreement to underwrite is drawn up and ready to be signed, the manager may turn his attention to the selection of the membership of the syndicate. He will necessarily consider the ethics of participants, their past records, and the types of customers which the various possible members will have. Houses which in the past have violated any or all of the ethics

⁸ Owing to the extreme competition which has developed in the investment banking field, it is not at all uncommon to find investment bankers assuming the initiative and seeking out corporations, instead of the other way around.

of the profession may be excluded from participation in a particularly desirable issue. Should the past record of some concerns show inability to distribute certain types of securities or a lack of desire to participate in certain types of syndicates, the manager may omit them.

As soon as the list of members of a syndicate is completed,⁹ the manager prepares the syndicate agreement. This is a short, formal contract, usually limited to one or two closely printed pages but embodying by implication, all of the vast network of practices which has grown up about the work of underwriting security issues. The document is drawn up by the manager of the syndicate and his legal counsel. It is signed by the manager, but mere acceptance by the participant (usually via telegram) makes it binding upon him.

From the beginning of the actual operation of the syndicate until its ultimate end, the manager has various duties to perform. In fact, he does anything and everything which the manager of any enterprise, although temporary in nature, would be expected to do.

Supporting the Market

One of the events very commonly following in the wake of the distribution of a new security issue is a decline in its market value unless some support is supplied to the issue. It is probably true that, in the sale of most issues by a nation-wide investment banking organization, some of the stocks or bonds will be sold under pressure and accordingly will come back into the market. Owing to the immediately preceding sales campaign, the demand is satisfied, and any appreciable quantity of securities will cause the price to sag, at least temporarily. In a very strong market the issue may rise to a premium over the offering price and make support unnecessary.

Compensation of the Manager

In the usual syndicate the manager receives his compensation from three sources: (1) the difference between the price at which he purchases the securities from the corporation and the price at which he sells them to the syndicate participants, (2) the brokerage commission on all securities sold by him, and (3) the syndicate profits which accrue to him as a member of the syndicate, the same as would accrue to any of the other participants. The amount of profit which the manager may expect from purchase of the issue at less than the price at which it is turned over to the syndicate will vary slightly in the various issues but will usually not exceed one point or one dollar on the share, or thousand of bonds. Brokerage commissions fre-

⁹The influence wielded by syndicate managers is large. In fact, an invitation from a large house in New York to participate in a syndicate is in effect a command to do so under the penalty of being omitted from all future syndicates formed by this particular manager. Knowledge of this influence explains in part why many investment banking houses of small size, although actuated by the highest principles in their everyday business, will occasionally offer issues of questionable worth.

quently amount to considerable sums where the manager does all the work of supporting the market.

Obligations of the Participants

Acceptance of participation in a syndicate places four definite obligations upon a participant in all instances, and sometimes involves several other obligations. In all instances a participant must pay a portion of the general expenses of the syndicate, as well as the particular expense allotments to the member.

The member is required to respond to calls; that is, the participant may be called upon for money to pay for securities agreed to be taken under the participation agreement.

The fundamental purpose of the entire syndicate arrangement is that of marketing an issue of securities; and not only are members under obligation to perform such positive acts as will abet the distribution, but they are, at least ethically, restrained from doing anything to negate or to obstruct the underwriting success. Mere disposal of the amount of the participation is not sufficient when more securities could be sold at a slight profit or with additional sales efforts on the part of the officials of the participating member. It appears that, in the final analysis, the nicety of judgment acquired by managers only through long and intimate acquaintance with the field is the most precise and reliable basis yet devised.

If the distribution is not successful, every member must take such securities as he has agreed to take in the participation agreement.¹⁰ It is customary to allow the member a credit for such securities as have been sold, so that in effect the member becomes obligated to take an amount of securities equal to the difference between his agreed participation and the quantity he is able to dispose of prior to the termination of the underwriting syndicate.

Syndicate and Underwriting Profits

The profits of underwriters and syndicates show a wide variation, depending upon the nature of the corporation, the type of security, the state of the investment market, fortuitous events, and many other elements. Generally speaking, what are known as promotion syndicates will show a wide margin of profit, while non-promotional syndicates will show smaller margins. Corporations whose securities are essentially speculative in nature will have a wider margin than those whose securities are less speculative.

¹⁰ Some unusual losses were encountered in 1937 for the syndicate on the Bethlehem Steel Corp. offering of 48 million dollars convertible debentures to its stockholders. Only 4 per cent was subscribed, and the balance at 95½ had to be taken over, with the price sinking to 85 that year but getting back to par in 1938; in the same period of 1937 over 44 million dollars convertible preferred stock for Pure Oil Co. was offered at par. About 8000 shares were taken and the syndicate had the balance, which showed a market price in 1938, when the syndicate was dissolved, of 72.

Bonds will show a smaller difference between purchase and sale price than preferred stocks; the same relationship will usually be found between preferred stocks and common stocks. A period of prosperity and buoyant security markets will usually mark a time of narrowed margins of profits, while periods of depression will show a larger profit margin. Fortuitous events not infrequently destroy the best-laid plans of underwriters. The stock market crash in 1929 is reported to have left millions of dollars' worth of securities in the hands of distributing syndicates.

The distribution of the profits as among the various types of syndicates and the members thereof is a complicated process subject to little opportunity for generalization. The following table would be typical of the distribution among the various types of syndicates if they were involved in a single security distribution:

	Points	Per Cent of Total Profit
Underwriting	$\frac{3}{8}$	26
Managing	$\frac{1}{4}$	8
Distributing	$\frac{1}{4}$	16
Selling	$\frac{1}{4}$	50
	<hr/>	<hr/>
	1½	100

As the work of these individual operations is combined into simpler structures, the amount of profit to the groups has decreased. As appears in Table 55, the margins run at 1-2 points on bonds, at 2-4 points on preferred stocks, and at 7-9 points on common stock for issues over 5 million dollars.

Advantages of the Distribution of Securities Through Syndicates

Evaluation of the services of the syndicate in the problem of aiding the corporation to raise capital requires consideration from several points of view. In particular, there must be considered the corporation, the members of the syndicate, the public in general, and investors in particular.

1. *The Corporation.* It is but to be expected that the corporation, being directly concerned, would possibly reap the most direct benefits. By using the syndicate, it gains no small aid from the expert advice which may be obtained from the members of the syndicate. The best type of security is selected; the amount to be issued and sold is controlled to the end that no unfavorable reactions may be developed by the buyers of the securities, by old security holders, or by the public in general. The selection of a propitious date at which to offer the issue frequently marks the difference between success and failure in new financing as well as the difference between high and low costs of financing. Improper plans of financing are avoided, and old plans are adapted to new standards of judgment.

Should the corporation undertake to carry out its own financing, there might be considerable uncertainty as to whether the money would be re-

ceived at all.¹¹ The corporation, having been guaranteed by the syndicate, may proceed with its plans and may even enter into contracts for construction with no fear of lack of funds. The distribution of securities by a syndicate means a more orderly sale of securities. Syndicates extending over the entire nation will tend to fix the distribution to a certain extent through allotments and through direction of the distributing sales efforts. A wide geographical dispersion of stock and bond ownership, which can be obtained only through syndicate operations, has a certain advertising value, makes for greater stability of price of the corporation's securities, increases the ease of future financing, and generally contributes to the welfare of the corporation.

Long after the distribution of the issue has been completed, the corporation may obtain valuable counsel from underwriting groups, for the latter, if they are to remain in business long, must see to it that at least most of the issues underwritten are permanently successful investments. Should the corporation enter into a long-term contract with an underwriting group, the syndicate actually becomes the financial counsel of the corporation. As such, it must assume joint responsibility with the corporation for errors in the financing of the company. Experience has indicated, however, that syndicates (and even their members) are loath to assume this responsibility.

2. *The Syndicate.* If syndicates carry on all underwriting and distributing of securities, they are able to exercise considerable control over the type and nature of securities offered for sale to the public. This means increased economy in raising capital and decreased losses to the public through poor or fraudulent securities.

Finally, it should be noted that the syndicate, because it is a means of distributing risk, makes possible to many corporations financing which would be difficult, if not utterly impossible, without it. Very few invest-

¹¹ An excellent example of the risks which are assumed by the underwriting syndicate and which sometimes prove to be very adverse to it is the case of the Grigsby-Grunow Co. In 1929, this radio manufacturing company decided to expand its business. It was making large profits, and its shares (no par) were selling actively at \$70 a share. Moreover, its shares were rising from week to week. In order to raise 9 million dollars additional capital it was decided to offer the old stockholders "rights" to buy stock at \$40 a share. To protect this subscription, the corporation arranged with a group of underwriters to have the issue underwritten at \$36 per share. That is, any shares which the old shareholders did not subscribe for, the underwriters would buy at \$36—just slightly more than one-half the current market price. The bankers were to receive as their fee the difference (total) in the cash receipts from the sale to old stockholders at \$40 per share and \$36 to be paid by the bankers.

This would appear to be an absolutely safe proposition to the average underwriter. But in the midst of the offering period occurred the great stock market panic of 1929. The underwriters desperately strove to support the market; they bought thousands of shares only to have the stock finally drop to less than \$15 per share in the open market. The rights became worthless and no stockholder in his right mind would subscribe for any of the shares. The underwriters were compelled to take the whole issue of 250,000 shares at \$36 per share. Of course, the corporation received its 9 million dollars to continue its expansion operations.

ment banking houses can individually distribute 100 million dollars. To undertake to make such a distribution would be folly. But if, perhaps, several houses, which may collectively possess two or three thousand branch offices, are temporarily brought together, distribution of a 100-million-dollar issue is easily and almost certainly accomplished.

3. *The Public.* The selling groups will, because of the relatively small participation of an individual house in any one issue, present to their average client a larger variety of securities over a period of time. This increased variety of offerings is likely to lead to more satisfactory diversification of investment portfolios, as well as to an increased feeling on the part of the selling organization that it can foster the spirit of true investment policy.

Since underwriting syndicates make rather careful examinations and extensive investigations into the affairs of corporations before agreeing to distribute an issue, a certain degree of protection against fraudulent and illegally issued securities is afforded the public.¹²

In general, it is believed that the syndicate method of security distribution lowers the cost of distribution of securities, possibly improves the average quality, makes for less interruption of the productive operations of industry, and possibly makes it easier to control the distribution of securities to the end that the unwary investor may not lose.

4. *Investors Specifically.* Beyond the general benefits, the investor gains the assurance that the corporation will dispose of the entire issue, hence will actually be able to accomplish the purposes set forth in the prospectuses of the issue. The investor is protected from misappropriation of the funds for purposes outside of those for which, in part, the investment is made. Moreover, the investor has some assurance that the corporation is following a satisfactory plan of finance, and that new security issues of old corporations represent the best judgment of experienced men as to the nature, type, and amount of securities to be sold.

Underwriting Syndicates and Later Financial Conditions in the Corporation

While legally the obligations of syndicates and the investment banking membership thereof cease upon completion of the underwriting contract, frequently moral obligations are assumed for many years afterward. Bond and stock houses, banks, trust and finance companies, in periods of financial embarrassment, will come to the aid of corporations whose securities they have underwritten. The extent of such aid may vary greatly. In some cases it is restricted to arranging the formalities involved in bank borrowing, protective committee organizations, counsel, etc.; but if the investment house has been closely allied with the corporation, it may actually assume the chairmanship and direction of reorganization committees. In isolated instances of

¹² The liability levied by the Securities Act of 1933 upon all who execute the registration statement for misstatements of fact is a strong reminder of the effort which must be made to present the facts.

bankruptcy and receivership the members of former syndicates have volunteered aid in expediting settlement of the affairs of the corporation.

Entirely aside from whether investment bankers have a responsibility, there is the argument of their aid in times of financial stress. They ordinarily will possess an accurate knowledge of the status of the investment market, hence will be qualified to pass judgment on reorganization and refinancing plans. In view of the proportion of the security-distributing machinery which is controlled by a nation-wide syndicate, the employment of such facilities is partially a matter of business wisdom. And finally, because of the syndicates' influence with investors, their persuasive power may frequently prove to be of paramount importance in facilitating the arrangements of the financial affairs of an embarrassed corporation.

QUESTIONS

1. Why does a syndicate operation become necessary in the course of security sales by a corporation?
2. Explain how the syndicate operations may be divided as to the nature of the risk undertaken by the members.
3. Why do the syndicate members, knowing they will hold the issue only a short time, insist on such thorough investigation of a company and its situation?
4. Why is the syndicate manager given such broad powers of allotment?
5. Discuss the duties of a syndicate manager apart from investigation and allotment. How is he paid?
6. Explain the difference in approach according to whether the syndicate is to acquire the issue by negotiation or by competitive bid.
7. Describe the operation of a "selling group." How may this procedure be said to be in the investor's interest?
8. Why is the continued relation of syndicate members to a completely sold issue of any importance to an investor?

PROJECTS

1. Prepare a report on five recent major issues as to number and distribution of underwriters.
2. Chart the market prices of three issues during the past year for one year after issue, the deviation from the issue price, and the comparative price movement in the group average.

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CHAPTER XXIII

Distribution of Securities

THE medium of exchange given by a concern to pay for the capital received consists of bonds, stocks, notes, and other like financial instruments. The place where the transaction is effected is the world-wide investment market, for everywhere people save; everywhere people invest; everywhere corporations seek capital.

Classification of securities by qualitative standards cannot be easily made. The greatest extent to which an arbitrary classification can and may be used is designated by the terms "high" and "low" grade securities. These classes merge imperceptibly one into the other, but since the distinction between the institutions and methods involved in selling them is obvious it will serve to point the contrasts. The methods of distributing the two types are different; different channels of distribution are utilized; and an appeal is made to different sorts of persons.

The Rating of Securities

There are no accurate measurements of the worth of a security. No one can apply a mechanical formula and thereby arrive at how much a security ought to sell for or its worth. In fact, some types of investors can afford to pay more for some securities than other investors. The entire field of investment intelligence and practice is devoted to the principles and problems of investors relative to the worth of securities; and a profession of investment counseling appears to be well on its way to permanent establishment. Great companies have been formed for the specific work of applying a multiplicity of measuring sticks to securities of corporations and, after due investigation, stating what is known as a "rating" for the various securities.¹

¹ See the following excerpts of Moody's bond ratings from the 1947 *Manual*:

Aaa . . . judged to be of the best quality . . . carry the smallest degree of investment risk and are generally referred to as "gilt edge." Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. . . .

Aa . . . judged to be of high quality by all standards . . . generally known as high grade bonds . . . rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude. . . .

The rating of a security is not a statement of its exact worth, but of its relative worth. To be sure, a security which is rated "triple A" by Moody will be an excellent investment; but there is no indication that because it is so rated, it is therefore worth \$25, or \$250 per share, or \$90 per \$100 of par value. All securities within a given class rating are by no means of equal worth. Any particular Baa security may actually be worth much less or much more than another, both absolutely and relatively. From time to time the rating of a given security may be changed. There are several agencies in the United States which apply ratings to corporation securities. The more commonly cited are *Moody's*, *Standard and Poor's Corporation Records*, and *Fitch*.

For purposes of discussion in this chapter, securities which would be grouped in the upper brackets in these rating systems would qualify as high-grade securities; those falling in the lower brackets would be designated as low-grade securities.

Sources of Distribution

As a general proposition, the highest-grade securities emanate from conservatively capitalized companies, namely, those in which the principle of trading on the equity has not been extensively employed. Such concerns will have a large common stock equity and only medium amounts of preferred stock. There will be few if any bonds; even these will be of long terms, etc. Corporations whose securities are rated as high grade will have either a stable revenue experience or a large surplus account to guarantee stability of interest and dividends. Perhaps they will have both.

The market for these high-grade securities would generally rank in the following order as to buyers: (1) insurance companies; (2) trusts, public and private; (3) savings banks; and (4) individuals.

The Distribution Machinery

The permanent placement of securities should be distinguished from the handling by intervening agencies who act only as carriers and who temporarily hold securities for resale to others, or who act as intermediaries between the purchaser of the security and the corporation. As discussed in Chapter XXI, the general organization and the operation of the investment banking system are that of a merchandising structure. As a general rule,

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- A . . . possess many favorable investment attributes and are to be considered as higher medium grade obligations. . . .
 - Baa . . . considered as lower medium grade obligations, i.e., they are neither highly protected nor poorly secured. . . .
 - Ba . . . judged to have speculative elements; their future cannot be considered as well assured . . . protection of interest and principal payments may be very moderate. . . .
 - B . . . generally lack characteristics of the desirable investment. . . .
 - Caa . . . of poor standing. . . .
 - C . . . the lowest rated class of bonds and issues so rated. . . .

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TABLE 59. CHANNELS FOR DISTRIBUTION OF SECURITIES, 1940-1946,
BY PUBLIC SALE
(in millions)

		Through Investment Bankers	By Issuers
1940	Amount	\$1379	\$ 54
	Per cent	96.3%	3.7%
1941	Amount	\$1863	\$218
	Per cent	89.6%	10.4%
1942	Amount	\$ 970	\$496
	Per cent	67%	33%
1943	Amount	\$ 471	\$ 15
	Per cent	96.9%	3.1%
1944	Amount	\$1327	\$ 20
	Per cent	98.6%	1.4%
1945	Amount	\$2662	\$ 52
	Per cent	98.1%	1.9%
1946	Amount	\$5196	\$228
	Per cent	95.8%	4.2%

high-grade corporation securities are distributed solely through investment banks. In Table 59 appears the summary of corporate offerings, 1940-1946, which indicates that 91 per cent of the total was handled by the investment banks.

Advantages of Sale Through Investment Banks

The sale of securities through bankers brings benefits to both the corporation and the investment bankers. The corporation is assured of a successful sale of its securities; there is no higgling of the market by the corporation, its employees or management. The corporation is free to proceed about its own affairs with no worries or misgivings as to the outcome of the financing. The burden of the formulation and execution of a selling plan is shifted from the corporation, which is relatively inexperienced in such matters, to the bankers, who are expertly professional in the distribution of securities. Since investment bankers are continuously engaged in the business of buying and selling securities, they may be of considerable aid to the corporation (1) in determining the type of security to be issued, (2) in knowing and utilizing to the greatest advantage the existing institutions in the investment banking field, and (3) in selecting the transfer agents, registrars, trustees, etc., all of which may have a bearing on how well the securities will sell in the future. These details were examined in an earlier chapter.

Direct Sales

Issues of corporate securities may be sold by the corporation either to financial institutions or to its own security holders. The practice of selling

privileged subscription rights to the old stockholders of a concern has been of long standing. The direct sale of securities in complete issues to a financial institution has not been a customary practice for corporate securities, though complete mortgage issues on established operating properties, such as an office building, have been purchased frequently. A combination of circumstances since 1933 has caused corporations to seek direct loans. First, there is the avoidance of registration expense under the requirements of the Securities Act. Second, the great excess of investment funds in the hands of the life insurance companies after 1935 has made them interested purchasers of direct loans.

Sales to Life Insurance Companies

The life insurance companies form one of the largest single channels of investment funds in the United States. Over the period since 1935 these concerns have placed added capital in the amount of 24 billion dollars in American enterprise and government issues. In Table 60 is presented a brief sum-

TABLE 60. LIFE INSURANCE ASSETS, 1935-1946²
(in millions)

	1935	1940	1943	1946
Total assets	\$23,216	\$30,802	\$37,766	\$48,190
R.E. mortgages	\$ 5,339	\$ 5,957	\$ 6,674	\$ 7,154
Stocks owned	531	554	597	1,186
Bonds owned	9,964	16,982	24,694	35,110
Policy loans	3,539	3,090	2,373	1,826
U.S. Government bonds	\$ 2,502	\$ 5,493	\$12,416	\$21,452
Municipal and state bonds	1,600	2,346	2,300	1,800
Railroad ^a	2,930	2,993	2,780	2,914
Utilities ^a	2,212	4,197	5,211	5,561
Industrial ^a	793	1,772	1,890	3,303

^a Bonds and stocks.

mary of these investments by the life insurance companies of the country, in order to emphasize the very important part which they play as suppliers of capital to the enterprises of the nation.

In the field of railroad, utilities, and industrial corporate issues the total of 5.8 billion dollars held in 1935 had been doubled by 1946, with 2 billion dollars of this investment coming in the three years 1943 to 1946. Over the decade, the public utilities have received by investment in their bonds nearly 3.3 billion dollars, and the railroads have been allotted about the same level throughout the decade—evidence of the relative lack of status of their obligations in the investment field.

Private placement of funds chiefly with the insurance companies is indicated by Table 61, taken from the reports of the Securities and Ex-

² Source: *Proceedings of the Association of Life Insurance Presidents*, 1935, p. 43; 1943, p. 91; *Spectator*, 1944, p. 172a; 1947, p. 204a.

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TABLE 61. PRIVATE PLACEMENT IN CORPORATE ISSUES, 1942-1947³
(in millions)

Year	Total Securities		Per Cent to All Issues
	Registered	Unregistered	
1942	\$ 9	\$ 512	46
1943	14	751	44
1944	19	743	20
1945	34	991	12
1946	47	1476	34
1947	43	1899	128

change Commission. The importance of this channel is indicated by the percentage figures for the series of years examined. The very substantial amount of more than 40 per cent in 1942 and 1943 indicates the extreme importance of this channel. As the markets of 1944 and 1945 developed into greater public participation with increased offerings of stock, the relative importance of the direct sale to insurance concerns decreased, since they must confine their purchases chiefly to bonds.

This feature of private placement has assumed considerable status in the entire capital market. These issues need not be registered, so costs of registration are avoided; likewise they have often been negotiated with the purchaser at rates fully as low and possibly lower than the general market might have offered. The insurance companies have had to make this effort to get *proper investment securities* and keep from being outbid for public sale. Thus the corporate management has been obtaining funds in this period at very low rates. Many of the bonds taken in these private sales have been upon a serial payment basis, a condition that is deemed a factor of safety by the insurance company. But it can be pointed out that the condition is also a factor of cost to the borrower which may not have been calculated and cannot be until the full market experience has been completed, by reason of the pressure put on working capital in periods when it requires all cash resources.

SALE OF LOW-GRADE SECURITIES

Sources of Securities

Nothing could be further from the truth than a supposition that all low-grade securities are worthless, are the product of fraud, or should not be permitted to be issued. It is true that low-grade securities tend to be low priced, to fluctuate violently in their worth and market price from time to time, and to be possessed of much more risk than high-grade securities. But this is far from being without value.

New and Untested Corporations

A new business is like a new machine. One can never be certain of the performance until some trials and tests have been made. In the business cycle

³ Source: *Annual Reports*, Securities and Exchange Commission, 1943-1947 inclusive.

periods of recovery and prosperity, many new corporations are founded and apparently prosper despite the questionable condition of their management. Anyone with ability to count money, goods, and employees may make profits and apparently succeed as long as price levels are rising and demand is running ahead of supply; only a well-qualified, trained, and conservative management will be able to weather successfully a period of adversity. Once a business has survived the trials of the business cycle, it will be less likely to have an unusual financial policy.

Not all industries are of equal risk; some have a relatively high degree of stability in their operations and a rather certain profit; others are unstable in operation and decidedly uncertain as to demand, cost of operation, and gross and net revenues. The securities of a public utility corporation would, *prima facie*, be considered of higher rank than those issued by a corporation engaged in gold mining, oil exploration, or the production of a novelty. A measure of the difference in the amount of risk involved in various types of industries may be obtained from a study of the prices of their securities.

Channels of Distribution

The capital market is subject to the offering of low-grade securities along many avenues. In point of fact, though the mechanism may operate somewhat differently, the channels for distributing such securities are not basically different from those employed in the distribution of high-grade securities. Low-grade securities may be offered directly by the issuing corporation to the public in general, to customers, or to employees.

A second general approach to the distribution of low-grade securities is the offer through a "blind" of some sort. A subsidiary may be used; parent companies have been formed for this purpose; "assumption" companies and financing companies are often to be considered as mere "blinds" behind which lies the motive of distributing low-grade securities, directly or indirectly. The investment trust device was used particularly in 1928 and 1929 when this institution first came into prominence in the United States. The method, in such a case, was to form an "investment trust," the securities of which could be distributed with the utmost ease, and then to sell worthless securities or greatly overvalued securities to the fund.

The third general avenue by which low-grade securities reach the public is the investment banker who operates chiefly on the principle of expediency. Sometimes even the most careful investment banker makes mistakes, and it is unfair to condemn as intentional every misstatement or misrepresentation made. Nor are investment bankers to be condemned for offering low-grade securities to their clients; they are to be adjudged guilty of conducting a public nuisance only when they willfully mislead and misrepresent their wares.

Methods of Selling

There are an infinite number of schemes used to sell low-grade securities. Newspaper advertising is a medium of no great importance, since the better

newspapers of the country have taken a greater interest in the responsibility of their advertisers.

Direct-mail letters and circulars, describing in glowing terms the possibilities of the securities under discussion, are used with success, especially in dealing with persons who think they are clever investment analysts and who like to believe in the infallibility of their own judgment. The postal authorities are always on the watch for misuse of the mails, but despite their vigilance, millions of dollars are paid out of hard-earned savings every year for securities which are all but worthless.

Personal canvassing is done by telephone, with the aid of third parties, or even directly at the home or office of the intended victim. Sometimes elaborate offices are fitted out, only to serve as a disarming environment in which to carry on these operations.

Control of the Distributors

Clearly the faults of low-grade securities are not inherent, but are the result of the practices which tend to prevail in their distribution. Three lines of attack on the problem have been made: (1) The investment banking institutions through the Investment Bankers' Association of America have accomplished some forward steps. The stock exchanges have regulated the conduct of their members, and now are subject to the Stock Exchange Act of 1934. (2) Control of "unlisted dealers" has become more effective than before through the work of the National Association of Security Dealers, Inc., which was sponsored by the Securities and Exchange Commission; but the association is the work of the responsible dealers in the over-the-counter market. Membership is valued because only members are entitled to the dealer discounts prescribed for sale of registered issues. The group attempts to supervise its membership in conformity with its charter and by-laws, which have the approval of the Securities and Exchange Commission. (3) Also, Better Business Bureaus and kindred associations do much to force an improvement, and at the same time are a positive factor in educating the public to the end that poor securities cannot be distributed as good ones.

PRIVILEGED SUBSCRIPTIONS

A corporation may obtain new capital by selling additional stock to (1) the public or (2) special groups such as old stockholders, customers, or employees. Sales of stock to old stockholders are usually made on an advantageous basis and are known as privileged subscriptions.⁴ That is to say, the corporation offers stock to the old stockholders at a price less than it could sell it for in the open market. The stockholders are said to be given "rights."

⁴A distinction is to be maintained between sales which are actually upon a privileged basis at the time of the offer and those which are expected to be made under contracts which it is hoped will be advantageous at some future time.

The Legal Status of the Old Shareholders

Stock must be offered to the old stockholders before it is offered to non-holders at the same price.⁵ Stockholders owning stocks with no expectancy in the surplus account have no rights as regards new stock issues, but may have rights with respect to unissued portions of already authorized shares of which they own counterparts.⁶ Treasury stock may usually be offered without regard to old shareholders.⁷ If there is an increase in capital stock, the old shareholders, under the common law, must be given the opportunity of prior subscriptions.⁸ The holder of a voting stock may insist upon the privilege of protecting his voting control, even though he is not allowed to buy new stock.⁹

A shareholder may not have any rights because of their surrender or waiver by statute, by provisions in the charter, by by-laws, or by contract in the share of stock. If a shareholder fails to exercise his subscription rights, the shares involved may be offered to the public at any fair price. The management of the corporation must exercise good faith and fairness, must obtain for the stock the maximum (in its judgment) price possible, and must not use its power for personal aggrandizement.¹⁰ Once there has been a declaration of "rights" by the management, it is uncertain whether they

⁵ The corporation is bound to observe this relation as a right and not as a privilege. The position is well settled in American law: *Miles v. Safe Deposit and Trust Co.*, 259 U.S. 247 (1922), and cases cited. The fundamental basis of such a rule is the preservation of the old stockholders' relative voting strength and proprietary interest in the affairs of the corporation.

⁶ This rule includes such stocks as are non-participating and non-cumulative and which have no statements in their contracts governing the distribution of accumulated surplus. *General Investment Co. v. Bethlehem Steel Corp.*, 88 N.J. Eq. 237 (1917). Non-participating, non-voting stock has rights only if the voting power is about to accrue. *Van Slyke v. Norris*, 159 Minn. 63 (1924). Stock may be exchanged for property without first offering it to the old shareholders, but at not less than its book value.

⁷ *Borg v. International Silver Co.*, 11 Fed. (2nd) 147 (1925); *Maynard v. Doe Run Lead Co.*, 305 Mo. 356 (1924), 265 S.W. 94 (1924). But if shares are merely held in reserve to meet the future requirements of financing, preemptory subscription rights will be existent. *Dunlay v. Avenue M Garage, etc.*, 170 N.E. 917 (1930). Under such a rule, stock would be considered as "held in trust" and would have to be disposed of to the advantage and equal benefit of all existing shareholders. *Reese v. Bank of Montgomery*, 31 Pa. St. 78 (1855); *Arkansas Valley, etc. v. Eichholtz*, 45 Kan. 164 (1891).

⁸ *Stokes v. Cont. Tr. Co.*, 186 N.Y. 285 (1906). This is one of the leading cases on the subject.

⁹ *Russell v. Am. Gas & Elec. Co.* (152 N.Y. App. Div. 136 (1912)). A holder of voting preferred stocks ought to restrain the creation of additional voting common stock. The preferred shareholders, while not permitted the right to subscribe to common stock, were given the right to deny the issuance of common unless they were permitted to subscribe proportionately for additional voting preferred stock. This decision* is paralleled in 139 Va. 291 (1924), *Branch & Co. v. Riverside Mills*.

¹⁰ *First Mtge. Bond Homestead Assoc. v. Baker*, 145 Atl. 876, 881 (1929). Neither may shares be issued to a favored shareholder. *Witherbee v. Bowles*, 201 N.Y. 427 (1911); *Jones v. Morrison*, 31 Minn. 140 (1883).

may be revoked, the weight of argument being that they should be irrevocable.¹¹

Of recent years there has appeared some *judicial opinion to the effect* that these strict legal dogmas may be interpreted more broadly in the future. It is argued that the so-called preemptory right is not, except within narrow and well-defined limits, an absolute rule of law.

The Reasons for Using Privileged Subscriptions

Quite aside from the legal aspects of preemptory subscription rights of old shareholders, there are reasons which lead the management of a corporation to make use of the privileged subscription. When properly used, the privileged subscription of "stock right" turns out to be a form of stock dividend. Thus a corporation having 100,000 shares of stock outstanding accomplishes the same effect by issuing rights to buy 10,000 shares at par (\$100) when the stock is selling at \$120, as if it sold 9166 $\frac{2}{3}$ shares at \$120 per share and then declared a stock dividend of approximately 7.63 per cent to the holders of the old and the new stock. In another sense, rights are a useful method of financing because uninformed stockholders will figure the market value of the right as a form of income. Because of this fallacious reasoning on the part of investors, the price of the stock seldom falls to the precise point to which it should theoretically decline. A stock with a book value of \$124 may give a right to subscribe to one new share at \$110 for each share held, in which case the price of the stock should decline to \$117. Instead it may be \$117.50, the difference being due to optimism. It follows that if the old shareholder had a share of stock worth \$124 and sold a right worth \$7 his stock should net \$117. He actually gets a fractional dividend.

A third reason for the use of rights is that the corporation finds it quite unnecessary to pay the costs of distributing through an underwriting agreement. Frequently an underwriting agreement is entered into, but the margin of profit given to the syndicate is much less than would ordinarily be the case with a stock issue.

The stock right influences the voting control in the corporation. Thus an individual or a group of individuals who exercised their rights would obtain the same percentage of the new stock as they held of the old stock; hence their relative voting power would be the same as before. If the control has been held by proxies, there is introduced a degree of uncertainty, for it does not follow that those who have previously given proxies on their old stock will give proxies on their new stock to the same parties or groups.

Conditions Precedent to the Successful Use of Privileged Subscriptions

A corporation cannot use privileged subscriptions successfully under any and all conditions. As a matter of fact, this device for raising capital is

¹¹ The two leading decisions on the subject are *Dock v. Schlichter Jute Cordage Co.*, 167 Pa. 370 (1895); and *Hugo Colin v. Cities Service Company*, U.S. Dist. Ct. S.D.N.Y., January 23, 1930.

limited by several conditions. The price of the old stock must be higher than the price at which the new stock is offered. Thus the success of a corporation offering a right whose value amounted to but \$1 would be questionable if the decline in the value of the old stock were more than enough to reduce the value of the right to zero. Generally speaking, the date and the price differential should be such as will be conducive to a speedy and sure action on the part of the old shareholders.

The second general condition necessary to insure success in the utilization of privileged subscriptions is a proper distribution of ownership of the old stock. The distribution should be wide, and it should be among those having additional funds to invest. In the case of widely distributed holdings, the inability or unwillingness of a few stockholders to purchase the new stock ratably will find a portion of the public willing to accept the shares.

A third condition necessary to the successful use of the privileged subscription method of stock distribution is the probable profitability of the employment of the added capital. It follows that successful rights can be used only when there is full justification for additional investment.

Lastly, to use rights, the stock must offer speculative advantages in the form of an earnings rate in excess of the normal rate on securities of like kind, type, and risk in similar enterprises. The aviation industry of late years serves as an example wherein rights could be and were successfully used.¹² Certain periods of railroad history will supply added examples. Of course, in periods of violent stock speculation the privileged subscription is a very effective device for raising needed as well as unneeded capital.

Mechanics of Privileged Subscriptions

A "right" is the subscription privilege which attaches to each share of outstanding stock when a new stock issue is offered to existing shareholders, allowing each shareholder to subscribe for, i.e., to purchase, new shares ratably in proportion to old shares owned. A warrant, when used in connection with rights, is the certificate which evidences the stockholder's right to subscribe to the new stock. A warrant may be either a "full share warrant," which entitles the holder to purchase one or more integral shares, or a "fractional share warrant," which entitles the holder to purchase some

¹² Eastern Air Lines on May 10, 1940, offered $\frac{1}{4}$ share for each share at \$32 with the rights expiring May 20; Braniff Airways, Inc., on August 21, 1943, offered $\frac{2}{3}$ share for each share at \$12.75 with the rights expiring September 4; Western Air Lines, Inc., on May 20, 1929, and again on April 20, 1938, offered 1 share for each 2 shares held at \$2 with the rights expiring May 25; Northeast Airlines, Inc., offered rights on August 26, 1942, of 2 shares for each 3 shares held at \$7; Pan-American Airways Corp. on October 15, 1930, offered 1 share for each 3 shares held at \$91.87 with the rights expiring June 1, 1934; Transcontinental and Western Air, Inc., on December 17, 1936, offered 1 share for each 3 shares at \$12 with the rights expiring January, 1937, and on December 29, 1943, offered 7 shares of $4\frac{1}{2}$ per cent preferred for each 100 shares with the rights expiring January 10, 1944.

fraction of a share. On the reverse side of the warrant, or on an accompanying form, is an assignment form which enables the receiver of the warrant to endorse it specifically or in blank and consequently to transfer his right of subscription to another person. To actually subscribe to the new stock the holder of the "right" usually fills in the subscription blank on the warrant and forwards it with the proper remittance to the agency acting as registrar or keeping the stock books of the corporation. Ofttimes a syndicate or other agency will undertake to make a market for fractional share warrants and for fractional shares of stock so that a better market will be found for those having small lots of stock.

The mechanics of privileged subscriptions also involves consideration of the various periods during the process of selling stock by privileged subscriptions. Ordinarily three dates are important:

1. The date of official approval of the rights.
2. The date on which the stock books of the corporation are closed to determine who is a shareholder on that date, hence entitled to subscribe.
3. The date at which the subscriptions must be received by the corporation.

Before date (1), rights may be traded in on the various security markets, "when, as and if" issued. From (1) to (2) rights are traded in on what is known as the "rights-on" basis; that is, the share and the right are bought and sold as a unit. After date (2) the rights are traded in on an "ex-rights" basis; that is, the subscription warrants (rights) will be bought and sold independent of stock ownership. After date (3) there will ordinarily be no rights for they will have become subscriptions to the new stock.

The Theoretical Value of a Right

The theoretical value of a privileged subscription is a function of (1) the spread between the offering price and the market price, (2) the relation between the number of shares now offered and the number of shares already outstanding, and (3) the period at which the privilege is bought or sold.

Setting the Price of the New Subscriptions

To offer new stock to the old shareholders at a figure equal to or above the current market price would not be offering a privilege to them. Generally speaking, the subscription price of the new stock must be less than the current price by at least such an amount as will cover the expenses of the subscribing stockholder.

The price should probably be set so as to bear the same relation to the book value as previously. If the book value of a stock is \$105 per share and new stock is sold for less than this amount, the new subscribers are allowed to acquire stock for less than the equivalent asset value. To be precise, the new stockholder should pay as much as the old shareholder to

obtain a proportionate equity. Assuming that only book value is the criterion, the subscription price should be between the market value and the book value so that the difference between the subscription price and the book value will be equal to the value of the right. The logical conclusion is that privileged subscriptions can best be used where the rate of earnings is in excess of normal for that industry at that time.

The Market Value of Rights

The theoretical value of the right usually differs from the market value; it fluctuates up and down with the changes in the market value, each dollar of fluctuation in the value of the stock resulting in a definite fluctuation in the value of the right, the exact amount of fluctuation in the latter being dependent upon whether the stock is selling rights-on or ex-rights and upon the ratio of the new stock offered to the old stock.

Some Investment Aspects of Stock Rights

From an investment point of view, the stock right is a forced choice between (1) investment of more money by the stockholder to retain his proportionate equities in the management control, earnings, and assets, and (2) disposal of a portion of the equity already owned in the management, earnings, and assets. A shareholder, let us suppose, owns shares in a corporation having 1000 shares outstanding, each of which is selling currently for \$150. The \$150 represents the market value of the equity represented by one share. Should the corporation give rights to subscribe to one additional share for each share held at a price of \$100, the value of the right would be \$25, and the stock would sink to the price of \$125 per share after the new stock was issued on the basis described. Mr. A, a shareholder, now finds that if he would retain 1/1000 of the shares in the corporation he must invest for every share he holds an additional \$100 by way of purchase of the new share of stock, or else dispose of a portion of his former equity through the sale of a right for \$25. Financially speaking, Mr. A is no better or worse off after either operation than he was before the rights were given. Nor is the new shareholder any better off than if he had purchased the old stock.

Underwriting of Stock Rights

To forestall any possible failure of the old shareholders to subscribe to the proposed new issue of stock, it has become more or less customary for corporations using the device of the privileged subscription as a means of raising capital to arrange for the underwriting of such stock. That is, the corporation eliminates the risk of failure by payment of a relatively small sum to an investment banking house which agrees to buy the new stock in the event that the old shareholders fail to do so.¹³ The discussion of some of

¹³ What is known as the subscription guarantee plan is sometimes used. The scheme is merely to obtain an agreement from large and influential shareholders to the effect that

the problems of underwriting such privileged subscriptions is involved, and only a few leading principles will be mentioned.

The fees charged by the underwriting syndicate will depend upon the three primary elements: (1) the spread between the offering price of the new stock and the current price of the old stock, (2) the conditions of the security markets in general, and (3) the length of time during which the subscription may be made. In any instance when the spread between the offering and current price is narrow, even a small decline in the market for the old stock may force the purchase of the new issue by the syndicate group. A wide spread greatly reduces this possibility, but does not entirely remove it.

It should be remembered that when underwriting a privileged subscription, the position occupied by the underwriter is essentially different from that when underwriting a new issue. When underwriting privileged subscriptions, the action desired—subscribing to the new stock—will occur only when the privileges or rights have a positive value. And these contracts will have a positive value only when the price of the old stock is in excess of the price of the new stock. It follows that the work of the syndicate underwriting the issue is a dual matter of (1) supporting the old stock at such a level as will make relatively certain the exercise of the rights, and (2) purchasing the new stock at the agreed price.

The Use of "Rights" in the Segregation of Corporations

When two or more corporations are decreed by judicial procedures or otherwise to be segregated, there arises a problem as to how the segregation should occur, especially when surpluses exist and there are several types of stocks outstanding which may participate in the surpluses. To achieve what appears to be an equitable distribution and segregation of interest, "rights" are often given to various classes of security holders. The dissolution of the American Power and Light Company is an excellent example.

SALE OF SECURITIES TO CUSTOMERS

It has been pointed out that securities are sold frequently through or to the customers of a business. The sale of securities to customers is almost invariably accomplished by the corporation's own employees who have themselves previously purchased the company's securities.

Effect upon the Financial Policy of the Corporation

The financial policy of a corporation may be greatly affected if a policy of selling securities to customers is maintained. There will normally be an increase in the ratio of junior securities since stock will be sold more often than bonds. A tendency to increase the conservativeness in surplus

they will subscribe for and, perhaps, retain in their possession for a specified time, the new shares to which they are entitled. This assures success and at the same time protects the market of the securities.

and dividend policies may develop. The effect of customer ownership might become one of diffusion. As among customers as a whole, the diffusion will be likely to make it easier for a small proportion of the voting stock to control the company, while also bringing about greater ease of future financing, owing to the lists of persons already acquainted with the company.

Motives Leading to Sale of Securities to Customers

Corporations engage in the sale of securities to customers through a variety of motives. One of the most common motives is the desire to secure diffusion of ownership. In some cases the desire to obtain a market for products is important. To secure capital from a variety of sources is to reduce the control exercised by investment banking groups, and this may be most desirable on occasion. Increased ease of future financing is important. Sometimes the device of selling securities to customers may be a means of removing undesirable local opposition and of reducing labor agitation. The extension of corporate participation in a community may mean the difference between unnecessary and constant intervention by meddling, small-caliber politicians and a condition of amiable cooperation to secure fairness all around.¹⁴

Types of Corporations Using This System of Financing

To use customer financing with any degree of success, it appears that certain elemental characteristics must be present. Corporations can be divided into two groups: (1) those which permanently make use of the method, and (2) those which temporarily use it. If a corporation is to fall into the former group, it should be engaged in the production of a necessity or semi-necessity, have a partial or full monopoly, be subject to a certain amount of public regulation and periodic examination, have an element of local pride, and be of good community standing. Such a business will have a more or less stable revenue and be capable of following stable dividend and surplus policies. It will more than likely be old and well established; its management will exhibit a certain degree of conservatism and will not change the policy suddenly or violently.

If the corporation is of the second type, it will probably be a new concern. It is likely to have a peculiar dividend record composed largely of stock dividends and frequent issuance of rights. Usually it is expanding at an explosive rate; and always the story of dividends which could have

¹⁴ Motives which appear definitely to be undesirable include: (1) the sale of stock to customers at a price higher than the price of the same stock in public markets; (2) the sale of stock, by means of non-listed stocks, at a price distinctly above its true worth; (3) the practice of taking advantage of the ignorance of many customers with respect to accounting procedure, book values, etc.; (4) the sale of stock to customers which could not be sold to anyone through investment bankers because of "catches" of one sort or another in the stock or bond contract, or because of the questionable legal status of the security; and (5) the "pyramiding" practices of some promoters.

been or which will probably be provides the power of attraction to bring in new and additional capital.

Methods of Selling Securities to Customers

There are numerous methods of distributing securities of a corporation to its customers, each with its respective merits and demerits. The method usable at one time and place by one corporation cannot be used under varying circumstances by another concern.

1. *Through Employees.* Employees, either while performing their regular duties or outside of their regular course of employment, provide at once a ready mechanism for distributing securities to customers. Indeed, the natural enthusiasm of the employee may sometimes lead to overstatements or to actual misinformation. There is no organized effort to sell the securities; the results are sporadic and cannot be relied upon as a source of capital funds.

2. *Through Paid Salesmen.* The fundamental objections to the indiscriminate use of employees to distribute securities to customers are partly overcome by the use of special employees, paid salesmen. Competent departmental sub-executives select and educate the men for this more specialized work, but it is doubtful whether their efficiency ever approaches that of the highly trained professional salesmen of the investment banker.

3. *Through Direct-Mail Methods.* Possibly one of the least efficient methods of selling securities to customers, from the standpoint of quantity, is that of direct mail. In fact, it is so expensive that it cannot usually be used except where monthly statements are to be mailed anyhow. This method is used extensively by public utilities, where the literature may simply be inserted within the monthly statements.

4. *Through Lists of Customers Supplied to Investment Bankers.* The bankers are employed on a commission basis as sales agents, thus there is the assurance of a highly trained personnel directed toward the achievement of a definite end. The management of the company is not sidetracked from its regular duties into the work of selling securities.

The Cost of Distributing Securities to Customers

It appears that the reported cost of distributing securities to customers is, on the average, no less than that of raising capital through the regular investment banking organizations. A portion of this cost arises from the practice of raising capital through an inexperienced and slightly organized personnel, and it is doubtful if the reported expenses include all proper charges. The distribution of securities in small lots is much more expensive than distribution in large lots; customers will usually make small purchases, at least at one time, hence there is an increase in the cost of distribution because of this factor. It is usually necessary, where the corporation sells its own securities to its customers, to have what is known as a "take-back" department, to which dissatisfied customers may bring their securities and

exchange them for cash. The operations of such a department involve expenses for space, equipment, personnel, and capital for financing. There are complications of the corporation's regular affairs which add to the ultimate cost of the capital obtained.

Underlying Conditions Which Lead to Customer Financing

Probably one of the most potent causes which led to customer ownership in certain types of corporations was the withdrawal of the large capitalists because of the advantages of tax-exempt securities immediately following World War I. Desertion from the ranks of buyers of securities by this type of investor brought about the necessity of seeking new capital sources. The unusual results obtained from appeals to small capital owners in the distribution of Liberty Bonds, together with the machinery which had been built up to meet this situation, provided the technical conditions necessary to customer financing.

Local pride on some occasions provides an absolute barrier to junior financing except locally. And local financing may prove to be largely customer financing, especially in the case of public utilities.

Of a very different nature is that group of motives which arises from the problems of marketing the products of a company. In 1929 the Diamond Match Company offered 9000 shares of its stock to its large customers, which included tobacco companies and match purchasing and distributing companies. The purpose was apparently to create a community of interest between the customers and the match company. In the general industrial field a customer is under no compulsion to continue using a service, nor the company to render a service; in the field of public utilities neither the company nor the customer has an opportunity to terminate the service relation. In the one case customer ownership acts as a tying relation, tending to keep the customer and the corporation from parting. In the other case, the customer is sold stock to keep the compulsory relationship on an amiable basis.

Customer Financing and Future Financial Policy

If a successful system of distributing securities to customers has been in operation for some time, two pronounced effects are found in future financing: (1) A wider market for future offerings is created, and (2) diversified ownership of the company's securities is more easily obtained. The market for future offerings will be increased because there will almost certainly be some persons buying securities as customers who would not be reached by the usual security-distributing machinery; moreover, successful customer financing has an effect in extending and stabilizing good will.

Customer Financing in Public Utilities

The public utilities represent the class of business in which the most frequent, successful, and extended use has been made of customer financing.

The origin of the concept of customer financing is relatively recent; it arose out of a series of more or less fortuitous circumstances which made it successful when tried, and it was *first tried extensively* as a *matter of necessity* during and immediately following World War I. During the war period, a large income tax had been imposed upon the higher incomes in the country. At the same time certain investments had been made tax free for the primary purpose of encouraging the purchase of government war obligations and facilitating state and municipal financing. The imposition of a heavy income tax resulted in a flight of capital into tax-exempt securities, which operated to make more tense an already strained money situation. At the time, public utilities were not in as strong an investment position as they at present enjoy. They were finding capital difficult to obtain at any cost at a time when expansion was sorely needed to meet the increasing demand for their services. Appeal to their customers was largely a case of necessity and expediency, not of choice or premeditated study and reason.

The public utility field is one in which customer financing may be used with reasonably certain success. It is a field that possesses permanency of demand for the services it renders and a steadily growing demand for additional capital funds.

Another characteristic of public utilities which peculiarly adapts them to customer financing is the stability of revenues. Customer financing reaches primarily the small saver, the individual with one or two hundred dollars to invest who, accordingly, will in all probability be dependent upon earnings from his funds and who can scarcely assume any degree of risk.

Only in relatively few instances have utilities been able to accomplish a major portion of their financing by this method. But the tests upon which the final judgment must depend will give consideration to other factors—in particular, the improvement in public opinion and in public attitude toward the utility. It is true that the number of shareholders has been enormously increased through this system of financing, although the distribution of control has probably been little affected. In appealing to customers and small savers, the utilities have assumed a responsibility which previously they did not carry.

EMPLOYEE STOCK OWNERSHIP

Employee stock ownership plans, which had their origin near the close of the nineteenth century in the United States, were characterized by a remarkable extension in the decade from 1920 to 1930. On all sides, in every type of corporation, plans through which ownership in the corporation could be easily acquired were offered to employees, from the most lowly paid, unskilled worker to the elite of the managerial offices. Employers opposed to unionized workers used the stock ownership scheme to reduce organization effort. Those favorably inclined to unionized labor pointed out that such plans aided in the worker's education. The arguments that these plans encouraged thrift, made for better investment of funds,

provided a planned savings scheme, and prevented the loss of hard-earned dollars in a wildcat oil promotion or non-existent gold mine were also used by employers.

The actual impetus must be traced to the dearth of capital in the field of public utilities, where the customer ownership plan, as well as employee financing, was utilized as a makeshift device to secure capital. The customer ownership plan has been eminently more productive of capital for the use of the corporation than has the sale of securities to employees.

Reasons for Growth of the Practice

Without a doubt, one of the prime factors which brought about an extension of employee stock ownership was the rather widely held opinion that it offered a possible solution to problems of industrial conflict.

From the employer's personal point of view, employee stock ownership operates to reduce turnover.

Employees who become part owners in a business soon acquire educational benefits with respect to the problems, practices, and principles of business. They become schooled in the knowledge that, after all, no one of the factors of production can be or may be said to be wholly responsible for the product. They learn that the employer's side of the business is one usually involving risks of no mean proportions.

Prices at Which Employees Buy

Three systems of prices are used in selling employees stock: (1) at par only, (2) at or near market price, and (3) at nominal prices. As a general proposition, the motive which actuates the plan will furnish the key to the price at which employees will be allowed to buy stock. If the prime motive is an antidote for labor problems, the price is likely to be low. The same is commonly true when a philanthropic motive is uppermost in the mind of the company. But the sale of stock for purposes of acquiring additional fixed capital will occur at prices near or equal to those at which the public purchases stock.

As a general proposition, to give stock to employees or to allow them to purchase it at a purely nominal figure is undesirable, for it will be interpreted by the laboring groups as paternalism on the part of the corporation.

Payment for the Stock

Stock sold to employees may be paid for as a whole or in part by the employee. The payments may be made at once or on a deferred basis. Deferred payments are made sometimes on a regular schedule¹⁵ and sometimes irregularly at the option of the employee. Under no circumstances should

¹⁵ Employees' stock purchase plan of Transcontinental and Western Air, Inc., set up April 1, 1937, gave certain officers and employees the right to purchase up to 50,000 common shares at \$12, and each year at 65 per cent of average closing prices, payable by installments over five years. Under this plan none were optioned after 1940, but in 1942 it was shown that more than 35,000 shares were under purchase at \$3.75-\$7.06 per share.

the manner of payment be at the option of the corporation. Actual payment may be made by the employee to the corporation, or the payment may be deducted from the employee's pay check by the company.

Eligibility to Stock Purchase Plans

Almost all employee stock purchase plans have some conditions of eligibility. Although a few operate with practically no restrictions, the vast majority of plans contain various limiting and restricting elements which grow out of the paternalism of corporations and the fact that they are not using the employee security purchase device for financing only. A plan motivated solely by the need of the company to obtain capital would contain no restrictions.

The rate at which an employee should be allowed to purchase securities under an employees' stock plan is one thing, and the total amount which he shall be allowed to buy is quite another. Analysis and appraisal of the worth of employee security ownership differentiates between restrictions on the amount (total) distributed to all employees and the limits set as to the amount purchased by an individual employee.

Possibly the most common method of restricting the total amount purchasable under a participation plan is that by salary classification. That is, those earning between \$1500 and \$2500 will be allowed so many shares; those between \$2500 and \$4000 so many; etc. Another common method of placing the limit on the amount of stock is according to length of service, this plan having the advantage of creating a rough approximation of the degree to which the employee has contributed to the value of the stock.

Under any circumstances, the limits should be set at a point which will tend to prevent too large an investment by the employee in a single security.

Redemption, Cancellation, and Resale Problems

Securities sold to employees may be sold (1) upon a subscription basis with deferred subscription payments or (2) upon a financial margin basis. Under the first scheme the employee individually subscribes for stock exactly the same as anyone would, and under the second method a subsidiary or affiliated company buys the stock outright from the company or from the public and resells it on a deferred basis to the employees.

Conditions under which resale of stock purchased by employees is permitted constitute one of the most difficult problems in connection with all employee ownership plans. To permit it without any restriction will give to the employee all the advantages of rising prices and encourage him to engage in speculation, if not outright gambling, upon what amounts to a margin operation. To deny the employee the privilege of resale except under such stringent conditions as will distinctly handicap him is to deny him the privilege accorded other holders who buy or sell at will. The usual

rule is that the stock may not be sold until after payment has been completed and/or until the expiration of some specified time after the purchase.

General Conclusions Regarding Employee Stock Ownership

American practice has not indicated generally good results. The violent shift in values after 1929 was a *disillusioning* experience for some of the employee stock owners. Today the practice is more likely to be confined to the management group though a few firms still retain it as a general plan.

The corporation exposes itself to extraordinary responsibilities when it disposes of securities to its employees. It places itself under the moral obligation to maintain regularity of dividends which it does not assume under its usual financing. Only relatively stable and conservatively capitalized businesses can or should distribute common stock to their employees, especially those in the lower wage classes. The more prominent firms still pursuing a policy of employee stockholdings are American Telephone and Telegraph Company, Swift and Company, and United States Steel Corporation. Endicott-Johnson Company sells notes to its employees as part of a savings plan.

QUESTIONS

1. Explain the risks which a concern assumes when it places its issues directly. May this hold true even though the offering is made to its own stockholders?
2. Why has the growth of direct sales to insurance companies developed so extensively since 1936?
3. What problems may arise from the resale of issues purchased by insurance companies under direct placement?
4. Explain what the grading scale system of a security manual such as *Moody's* seeks to do.
5. Discuss the use of privileged subscriptions for placing a new issue.
6. Why is a syndicate employed to underwrite a privileged issue? Explain how this transaction is carried out.
7. Why do concerns believe it a wise policy to sell their securities to customers?
8. Evaluate the sale of securities to customers as a public relations policy. Is there any distinction between fields in which the concerns operate?
9. Explain the problems involved in the organization's selling securities to customers without banker assistance.
10. Why is employee security ownership not developed on a greater scale today, considering the original impetus given it after World War I?
11. Make a résumé of the principal classes of holders of securities.

PROJECTS

1. Report on six security issues in as many security "rating" groups of one of the financial services, and the factors of each issue. State your conclusions as to proper classification.

2. Inspect the recent reports of twelve companies with 100 million dollars or over in total assets for evidence of employee stock ownership plans, and write a report.

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CHAPTER XXIV

Regulation of Securities and Banks



ISSUANCE OF SECURITIES

The Efforts of States

Efforts to control the issuance of securities were first made by some of the states. The "fraud" laws of New York, New Jersey, Maryland, and Delaware were among the first efforts to put a special burden upon the sale of securities. These early laws were declarations of specific practices which would be held to constitute fraud, and were in fact only a further statement of actions which might have already existed under the law as between the individuals involved in the transaction. That these attempts were not sufficient seems attested by the failure of the other states to follow the procedure. The basic defect in the eyes of many persons was the idea that it was "locking the barn after the horse was stolen," that it did not prepare the investor with any information or subject the issue of securities to any examination.

"Blue-Sky Laws"

An opposite approach in philosophy was evidenced in the first law, as enacted in Kansas in 1911, which operated upon the theory that the issuer of securities should disclose certain statements of condition and purpose to a state authority and gain a grant for sale within the state. The theory was clearly one of disclosure and information, though it was limited to only the state administrator. The operation of laws like this was held up until 1917, when their constitutional aspects were approved as a proper exercise of the state police power.

Not all laws required the filing of information on the securities; some required instead the licensing of the seller. The laws which did not do both were soon proved to be very weak, and the ultimate end was a combination of both provisions. The laws also gave the administrator the specific task of ruling upon the nature of the securities. Such a decision was not likely to be unfavorable if any evidence supported approval. Thus one section of the Nebraska law read in part: "If it appears to the department that the applicant has complied with all the requirements of law and that the proposed plan of business of the person issuing the securities is not unlaw-

ful, unfair, unjust, inequitable or against public policy; and if the department shall be satisfied of the good business reputation of the issuing person and of its officers, directors or members, . . ." The criterion being so general, a vigorous administration was hardly to be expected.

Exemptions Under the Laws. The blue-sky laws are generous with exemptions, thereby defeating any continuously strong supervision of all securities. In addition to the usual exemptions of governmental issues, the laws commonly exempt issues of concerns which have been in business a stated period of time, such as five years, or offer as security for the issue a first real estate mortgage, or propose the security in exchange for existing issues. The very extent of the exemptions means freedom from examination for the most securities; as a consequence, information for the vast bulk of business operations has not been obtained. To the extent that certain classes of business, such as public utilities or the railroads, were subject to state regulation by commissions, information and supervision of securities was in some sense being given. The area of industrial concerns was left free from even this type of control.

Other Defects of Blue-Sky Laws. Apart from the number of situations controlled and the limited use of the information by the state administrator, there were other defects in the workings of the laws. Principal among these was the inability of the state, which had denied a license for the sale of one security, to prohibit or control transactions conducted by mail, telegraph, or phone. These might have been controlled to some degree by closer cooperation of the administrators but it was slow in coming and not on a sufficiently aggressive basis. In addition, some laws did not give the commissioner strong power of original investigation, or if the power was granted the appropriations would not support field staff inspectors. As a result, situations which made *prima facie* showings were approved which subsequent events proved to be fraudulent but which probably would have required field investigation to discover.

Present Application of the Laws. Most states still continue the operations of the state laws,¹ in addition to the recent federal regulations. Thus certain issues even though approved by the Securities and Exchange Commission have also to comply with the various state requirements. Likewise the security dealers within a state must have the proper state license in addition to any licensing under the federal law. Not infrequently we find the state commissions refusing approval of transactions which at the federal level have been held to comply with the requirements.² The underwriting agreements of the bankers often contain clauses making their agreement contingent on the approval of the several administrations controlling the sale of the securities.

¹ Only Nevada has no law for such regulation.

² See the controversy about the sale of stock of Tucker Corp. in Ohio and California, properly registered under federal law in August, 1947.

The Background for the Federal Act

Some recognition of the difficulties encountered in controlling the sales in a state by the use of the mails was accorded by the Mail Fraud Law of the federal government. But this was as far as any general action went until after the debacle of 1929-1930. The practices existing prior to 1929 seemed to raise three important points. First, the information was not truly made public; no avenues for circulation were established. An individual could not, when inclined, obtain accurate and positive information of the financial status of the issuer. Second, the practices about financial statements of the issuer were not in any way required to conform to a common pattern which the purchaser might rely upon. Available information was, therefore, not assured of a high degree of faithfulness in its reporting. Third, there were no continuing avenues of information by which the results of changes in the concern's fortunes might be followed.

These points the new federal legislation attempts to meet with the basic philosophy of obtaining extensive information and making this information available to the public. The federal legislation is not an effort to approve or disapprove the proposal as sound, adequate, or advisable. If there is no fraud discoverable in the proposals, the task of the federal laws is to bring before the public every item of information by which the issue may be evaluated. To make clear to the public that the commission does not evaluate, the front page of every prospectus must certify that "The Commission has not passed on the merits of any securities registered with it. It is a criminal offense to represent that the Commission has approved these securities. . . ."

Federal Securities Act

General Provisions. In a brief summary it may be stated that the Securities Act of 1933, and its amendments, (1) defines issues and dealers subjected to the law, (2) gives general registration requirements, (3) states requirements for the prospectus, and (4) lists the penalties attached, both civil and criminal, for violations. The exempt issues are primarily³ the governmental group, those regulated by the Interstate Commerce Commission, those not exceeding \$300,000, and banking and insurance company issues.

Transactions after the initial distribution, those of a dealer one year or more after original offering, and those not made to the public are excluded from the registration. Ordinary brokerage orders after the initial sale are not subject to the procedure though the orders may come under the provisions of the Securities Exchange Act. Possibly the most important exemption in this operation is that of the transactions not for public offering, which include the many issues created by the business firms and placed directly with institutions such as the life insurance companies.⁴

Registration. The quantity of information required is considerable as

³ Commercial notes of less than nine months are not included nor are issues resulting from reorganization proceedings.

⁴ See pages 390, 391.

evidenced in part by the 32 paragraphs of the law prescribing the character of the information. It may be summarized as follows:

1. Detailed financial statements to a date within 90 days previous to registration. Full analysis of all accounts by schedules.
2. Full statement of terms of the capitalization, existing and proposed.
3. Description of purposes of the issue.
4. Information concerning underwriters, including expense and commission.
5. List of all stockholders owning 10 per cent or more and interest of such holders, officers, and directors in company's operations.
6. Report on all salaries of persons receiving more than \$25,000 per year.
7. Copies of all agreements on the issue, any special contracts for bonus, profit-sharing, or other long-term undertakings.

Procedure. After the filing of the necessary material the commission has twenty days in which to determine whether the issue shall be allowed registration or shall have a "stop order" issued against the sale. For a time it was not clear whether the company could have full privilege to withdraw if any questions were raised as to whether or not the issue would be allowed. Recent holdings of the courts indicate that withdrawal cannot be at will, thus depriving the commission of the right to proceed with an investigation which may lead to the discovery of improper acts.⁵

The Prospectus. Upon the procedure of summarizing the major elements of facts recorded in the registration statements in the form known as the "prospectus" rests the most important change in the federal process of regulation. By this avenue the information on all the new issues is given public circulation. The law requires that each purchaser of a new issue must be given a copy of the prospectus. Adequacy of the summaries included in the prospectus is subject to review by the commission, and omission can be made only with its approval. As a further phase in the effort to give sufficient publicity, the commission operates public reference rooms at its offices for the examination of filing. For a nominal fee, photostatic copies may be secured by those who desire them.

Penalties. Penalties for false registration statements are both civil and criminal. The persons liable as specified by the law are: "every person who was a director of or partner in, the issuer at the time of filing, . . . every person who, with his consent, is named in the registration statement as being or about to become a director, every accountant, engineer or appraiser, or any person whose profession gives him authority to a statement made by him, who has with his consent been named as having prepared or certified any part of the registration statement, . . . every underwriter with respect to such security." For violation, the criminal penalty may be a \$5000 fine and/or a prison sentence up to five years. The civil liability to be enforced by the purchaser of the securities is the amount in damages representing the value of the securities, or other adjustments of that value.

⁵ *Resources Corporation International v. Securities and Exchange Commission*, 24 F. Supp. 580 (1938).

Some have criticized the provision as quite ineffective because recovery up to 1940 had been successful in but three cases. The deterrent of such a penalty is probably not so much the actual number of cases prosecuted as the consideration given to the possible damages incurred by the issuers before indulging in any violations.

Evaluation. Such an extensive and radically different procedure of regulation was bound to incur considerable criticism. The burdensome requirements, together with the concurrent expense, have been points of lasting censure. The commission has moved to eliminate and modify some requirements, but the changes are not so substantial as to reach the matter of costs in any large amount.

The detail of the prospectus appears unusually great, particularly for those who are untrained. Moreover, the prospectus is made available only at the time of issue, thus the purchaser is often afforded no time in which to study the facts of the issue. His decision to buy must be made quickly or the allotments will have been made, and the only way to purchase subsequently will be in the open market.

Perhaps as important a criticism as any has been leveled at the commission's effort through its general operation to inject opinion into the situations as to whether the issues are sound or make a well-balanced structure for the firm. This is not a power granted in the law but is a result of the issuance of "stop orders" which require discussion. In the course of such discussion, it may be possible to point out amendments which the issuer may find it wise to include though this counsel goes beyond the point of supplying information. Compliance with suggestion may actually lead to approval. A power of this character is vested in the commission under the *Holding Company Act*, but it was not the intent to require more than information in the general field.⁶

THE INVESTMENT BANK

The firm which engages in the originating and distributing of securities in the primary market is not dealt with by any direct act of the federal legislation. Rather the effects upon the practices of the bank come from the many and varied regulations in various laws affecting the performance of the functions of the bank.

Securities Act

The provisions of the Securities Act require that the bank, as a dealer, underwriter, or broker, shall not offer for public sale any issue not properly registered. Beyond that fact there is no prescription of the requirements relating to the organization of the investment bank itself. The law does contain, however, the requirement that the commissions of the underwriters be stated in the prospectus.

⁶See W. C. Atkins, G. W. Edwards, and H. G. Moulton, *The Regulation of the Security Markets*, 1946, pp. 93-99.

Securities Exchange Act

All who seek to act as brokers or dealers in securities on a public exchange must be properly licensed, but this provision does not apply to the performance of underwriting in the primary market.

Trust Indenture Act

Control of the agreements of a bond indenture for an issue sold in interstate commerce is, of course, of some concern to the investment bank which is to engage in the underwriting and distribution. The Trust Indenture Act prescribes the minimum provisions of such agreements. Brokers, as well as investment bankers, are prohibited from dealing in issues which do not properly conform.

Banking Act

Terms of the banking law required the severance of all affiliation between investment and commercial banks. This broke the long-standing tie of these two institutions, a relationship extensively exploited in the 1920's. Furthermore, the law sets out requirements as to the regulations which may be created for the carrying of securities and which are applicable not only to brokers but also to underwriters and originators. By this regulation the Federal Reserve System may maintain close supervision of any credit being used by the investment banks to carry large quantities of "undigested" securities. This situation was one of the major factors, of course, in the serious losses of the banks involved in the market turmoil of 1929 and after.

We may conclude that although there are few direct stipulations concerning the formation, capital, and structure of a firm which qualifies as an underwriter or originator in the primary market, there are many points at which the incidental effects of other laws operate. As no great amount of public criticism appears to be leveled at any of these operations, the existing provisions would seem to be reasonably adequate.

SECURITY EXCHANGES

The points of possible regulation in the field of the public securities exchange are two. First is the exchange itself as an organization, and second are the persons who act as brokers and are members of the exchange. The Securities Exchange Act is directed at both of these phases. The regulations of the act are directed toward those transactions arising after the original issuance of the securities. Formal statement of policy as declared by the law reads as follows: "In order to protect interstate commerce, the national credit, the federal taxing power, to protect and make more effective the national banking system and the Federal Reserve System, and to insure the maintenance of fair and honest markets in such transactions . . .," which clearly reflects something of the widespread importance of these security markets.

The Organized Exchanges

The organized group or association operating as an exchange is made directly subject to the law and is required to register with the commission. Registration includes the giving of information concerning its rules, members, and procedures. To obtain a license to operate, the exchange must agree to comply with the acts and regulations issued thereunder, as well as to enforce the regulations against its members.

All securities dealt in on an exchange must have been licensed for trading. The issues being dealt in when the act was passed were deemed entitled to trading unless the commission acted otherwise, but all subsequent issues admitted to trading must have been properly registered. The issuer of such securities is also required to periodically supplement all information about the company and its issues so as to currently represent the condition of the concern. Unlisted issues may be allowed as subjects of trading if there is a proper registration statement for them.

In general, the procedure has been to make the exchange a policeman for the operations of its members as conducted in connection with the facilities supplied by it. Since the elaborate rules of trading conduct and accounting by broker members is involved and swift-changing, this policy seems to have taken full advantage of the natural tendency of the exchange to maintain the best of public relations by keeping its business practices at a high level.

The regulations are directed especially toward a series of so-called manipulative practices, covering induced trading to give an appearance of active trading by use of pools, wash sales, puts, calls, options, or privileges. The law goes beyond the exchange itself at this point and prohibits such actions to any person operating through the facilities of the exchange or employing any means of interstate commerce.

Brokers and Dealers

The broker members of the exchanges are subjected as individuals to the requirements of the Securities Exchange Act. In addition, brokers who might not be members are required to conduct over-the-counter transactions in conformity with the regulations prescribed by the commission. The controls of the brokers are extensive indeed.

Separate functions of the brokers have been segregated and registered. Floor traders, specialists, and odd-lot brokers must all register and submit certain special reports on their trading transactions. All of these requirements are directed at maintaining a free and open market in which the broker cannot become a manipulative partner. Regulations cover the making of short sales and require the regular reporting of such trades.

The fiscal side of the broker's operation is fully as well controlled. Prior to the passing of the law the broker made no public statement of his financial condition and could borrow without restriction if his credit was

deemed sound. Under the current regulations he cannot incur liabilities in excess of twenty times his own capital; he must prepare and make available regular financial statements for the public. Not only is the credit limited in absolute amount, but the broker is denied the right to obtain credit from other than a Federal Reserve bank member. Thus all loans of this character are channeled into the system. Here the quantity of loans is under scrutiny, and under the Federal Reserve Board's order, banks may be required to limit or decrease loans to brokers.

The broker may grant margins only under the rules of the Federal Reserve Board. Such rules limit the broker as to the source of his credit and as to the use of the credit which he obtains. These regulations are the result of the extensive use of credit prior to 1929 from all sources, such as the call-money market which represented funds from any source, the banks, private sources, and individuals.

Another practice which had lent itself to an extensive speculative market was the borrowing of securities from accounts to be used for delivery upon other transactions. The broker is now prohibited from such borrowing unless he has the written permission of the owner. Of this same sort is the requirement that the broker cannot pledge any securities in his hands from accounts for more than the amount due him by such customers. This will avoid, of course, the pirating of an individual's account in order to carry the broker's credit and thus leave the customer without his security.

Other Regulations

In addition to the controls of the brokers there are a number of regulations reaching individual traders. The issuing firms are required to report data upon the remuneration of their officers and directors, the holdings of the principal stockholders, and the changes in these holdings. Insiders are prohibited from selling the firm's securities. In trading conducted by the principal stockholders, officers, and directors in securities of the concern, profits made on such transactions completed within six months are recoverable by a stockholder's suit on behalf of the company.

Evaluation

These extensive regulations of the securities exchanges and their member brokers have been accepted as proper in very large part by the institutions and firms. More comment has been heard in connection with the margin requirements than any other factor. Undue restriction of short selling has been criticized as giving the public only a cash market, in which the movements are likely to be more extreme, not less, since the speculator is not constantly interested under the present rules. Likewise the "insider" is not going to assume short-term positions with the prospect of forfeiting all profits. As stated by others, the control of the act is so sweeping that scarcely a single aspect of exchange operations is beyond reach.⁷

⁷ *Ibid.*, p. 71.

OVER-THE-COUNTER MARKETS

After creation of the Securities Exchange Act in 1934, there were sufficient problems to engage the attention of the commission in regulating the practices of the organized exchanges. For a time the over-the-counter market was left without any detailed control. The pattern of the stock exchange registration procedure suggested that something of the same character might be inaugurated if the brokers could be brought into area groups. Under the amendments of 1936 and the Maloney amendment of 1938, the necessary provisions were enacted.

The first amendment required that all brokers who might use the mails or agencies in interstate commerce, other than those who were members of exchanges, must obtain licenses. The second amendment provided for the creation of associations of over-the-counter brokers, after the fashion of the exchanges. Each association would be licensed and would have to operate under a series of rules containing practices in conformity with the regulations of the commission. These associations could then be fined or subjected to revocation of registration for failure to act against any member found to be violating regulations.

Membership in the associations was made important by the stipulation that members would not deal with non-members on any other basis than that used with the public directly. This meant no dealings in practice, for obviously the non-member could not purchase any securities at the public price and still resell to a customer. Only members may participate in underwriting or selling groups.

At this time there is but the one association, National Association of Securities Dealers, which is nation-wide in its range with about 2600 members or better than 90 per cent of the eligible brokers. This organization has given its efforts to enforcing rules of fair conduct, setting standards of financial soundness, aiding in the improvement of quotation practices, and supervising its members by questionnaire and accounting checkups. It is felt that much has been done to regularize the procedures and to insure a standard of business practice necessary to keep the confidence of the public.

BANK FUNDS IN THE SECURITY MARKETS

It has been suggested in the discussion of the exchange members that extensive financial controls have been created. From the standpoint of the banks and the effort of the Federal Reserve System to control the amount and use of credit, these controls are of extreme importance. Examination of the practices in the market before the crash of 1929 showed a wide range of poor credit practices. Among these were: association of commercial and investment banks as affiliates; use of credit from many sources—individuals, firms, and banks, both local and outlying; and the extensive granting of credit in margin purchases. Through these channels an unusual amount of

credit was drawn from the fiscal system into the purchases of the market, 1925-1929, both for primary issues and for exchange transactions.

The present regulations are aimed at limiting or stopping the repetition of such a financial involvement. Thus the divorce decree between the investment and the commercial bank was entered. The access to credit by brokers was limited to a single source, and the extent of margin allowance was subject to the government's order. To insure that there is no leakage of credit, the banking act carries a requirement that the banks, which are reminded that their loans on securities are too great, must restrict them or be subject to denial of rediscount privileges at the Federal Reserve bank. Beyond this point, the regulation provides that a continued refusal to conform may allow the removal of the officers and directors from the bank which has refused. Not many instances of this sort have occurred; but the fact that the government has tried on three separate occasions to exercise the power indicates that it is not a dead letter.

OTHER REGULATORY ACTS

Holding Company Act

Elsewhere there will be a complete survey of this act, but it is necessary to remind ourselves here that the act is concerned with the issuance of securities. All companies coming under this act must submit their securities to the commission for approval. The power exercised in these cases goes beyond that of information or the compliance with divestment of subsidiaries. The capital structure, and terms and method of sale of the securities are all subjected to the orders of the commission. As was mentioned earlier in the chapter, the Securities Act probably had no contemplation of the commission's supervising the nature of capital structures. In the Holding Company Act this power is included, and it is vigorously applied by the commission according to the regulations set up by it in order to effectuate the general purposes of the act.

The Chandler Act

Among the exemptions from registration under the Securities Act are securities created in a reorganization. Under the Chandler Act the commission is, however, required to file a report on reorganization plans where requested by the judge; and with the approval of the court the commission may, upon its own motion, become a party to the reorganization. All trustees under the act must file the plans with the commission. If the reorganization involves an indebtedness over three million dollars, the court cannot approve a plan until the commission has filed its report or indicated that it will not act.

Investment Company Act

Investment trusts' securities have had a checkered experience and one which has apparently pointed up the need for public supervision in some degree. The Investment Company Act of 1940 is primarily to require regis-

tration with the commission and to give a full disclosure of business policies and practices. Principal practices which are regulated have little to do with the issuance of securities and more with the internal management.

The possibility that "insiders" may charge advisory and trading fees is placed under control by regulations on who may be so employed. The minimum size of the companies is declared; limits of concentration of investments are prescribed; the situations in which senior securities may be created are stated; proper dividend payments, limits on loans, repurchase and redemption practices, and various aspects of control are regulated.

Apart from compliance with these general practices no limitation on the activities of the concerns has been stated. In fact, investment trusts may become major holding companies in all fields except the public utilities, which are subject to the Holding Company Act. From the standpoint of this important method of business combination as well as from the standpoint of the issuance of its trust certificates, the investment trust requires constant public attention.

QUESTIONS

1. What method of regulation is basic to "blue-sky laws"? Are these laws now applicable?
2. Outline the general defects which appeared in the course of security control by the several states.
3. Explain how the Federal Security Law operates in controlling the issuance of securities.
4. What expenses are incurred for security registration under the federal law?
5. Discuss criticisms of the use of the prospectus which the company is required to draw up.
6. In what ways are the regulations of the Federal Reserve System effective in influencing the offering of new securities through the banks?
7. Outline the controls which the Securities Exchange Act creates.
8. Indicate how the exchange, as well as the individual broker, is made responsible for trading activities. Does this make a listed security more desirable? Explain.
9. How does the over-the-counter market function? To what degree is it regulated by federal law?
10. Why have efforts been made so extensively to control the amount of credit reaching the security markets? Outline some of the controls which are operative.
11. Indicate the reasons for the enactment of the Investment Trust Act.

PROJECTS

1. Obtain a prospectus of an issue and write a report on the portions which you regard as of little value.
2. Prepare a report on volume of brokers' loans over the past ten years; relate this volume to volume of security trading and size of required margins.

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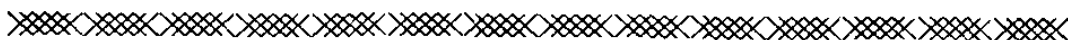
PART FIVE



Accounting for Financial Control

CHAPTER XXV

Accounting for Control and Information



ACCOUNTING or accountancy seems to have had its origin in the simple enumeration of goods and possessions.¹

The corporation and its financial problems are so intimately related to and dependent upon accounting that without fairly reliable accountancy the great industrial ventures of today would be impossible. Every student of corporation finance must sooner or later acquaint himself with the principles of corporation accounting.²

The work of the accountant is (1) to formulate, as of some particular date, what, on the basis of the costs involved, appears to be the recorded assets and liabilities of the concern's position, and (2) to keep a record of the changes in the accounts as time and business transactions cause such changes to occur.

The growth of the scale of business enterprise has increasingly divorced those who supply capital from those who manage businesses; at the same time it has alienated those who administer business organizations from those concerned with the detailed technology of actual operations. In the corporation another problem has arisen: that of informing the owners of the enterprise of the position of the business and the extent of progress or retrogression since the last taking of stock. Thus in the modern industrial era, there have been added three fundamental functions to accountancy: (1) informing those who supply capital (creditors and owners) as to the status and progress of the business; (2) informing those who manage the enterprise of their achievements (or lack of them) and of the competitive position of

¹The history of accounting has received some attention at the hands of scholars. The best works on the history of accounting which have come to the attention of the authors are: Richard Brown, *et al.*, *History of Accounting and Accountants*, and A. H. Woolf, *A Short History of Accountants and Accountancy*.

²Certainly the use of uniform terminology in a uniform manner by all those who set up accounts, make audits, etc., would remove a considerable amount of the haze which the average businessman finds when he tackles the work of interpreting and using the results of his last balance sheet and income statement. Cf. Albert Crew, "The Profession of an Accountant," *71 Accountant* 539-542, 580-582, 623-625. Any one of the following texts will be sufficient for the average student: E. A. Saliers and A. W. Holmes, *Basic Accounting Principles*; Roy B. Kester, *Advanced Accounting*, 4th ed.; W. A. Paton, *Accounting*; H. A. Finney, *Principles of Accounting*, 3rd ed.

its operations;³ (3) supplying to the absentee voters a basis of judgment so that they may decide upon the continuation of the present management.⁴

As summarized in the statements of the American Institute of Accountants,

Corporation accounting [is regarded] as one phase of the working of the corporate organization of business, which in turn it views as a machinery created by the people in the belief that, broadly speaking, it will serve a useful social purpose. . . . One manifestation of it has been a demand for a larger degree of uniformity in accounting. . . . Other phases have been increased recognition of the significance of the income statement, with a resulting increase in the importance attached to conservatism in the statement of income, and a tendency to restrict narrowly charges to earned surplus. The result of this emphasis upon the income statement is a tendency to regard the balance sheet as the connecting link between successive income statements and as the vehicle for the distribution of charges and credits between them.⁵

The professional certified public accountant has become an especially important force today for assistance in establishing acceptable standards of accounting. Through the professional organizations of these practitioners the general procedures have been stated, and those in current question for reporting depreciation, handling contingency reserves, and special inventory valuations have been enunciated. Such publicly certified accountants are prepared to adhere to the standards set by refusing to certify statements which do not conform.

³ Unfortunately, this function of accounting is sometimes used for personal advantages by the controlling shareholders. If voting and non-voting shares exist, the voting shares will control the accounting policies. Since many non-voting shares are non-cumulative, it is comparatively simple for an increase in depreciation, bad debts, etc., to eat up all or a large share of the profits for a period of years. Then with no asset value left to depreciate, the earnings are greatly increased, and a lion's share of them will go to the voting shares. As far as the authors can discover, no courts have considered the propriety of the general accounting system in assessing damage liability against voting shares as opposed to non-voting shares.

⁴ The question of how far managements and directors should or must go in disclosing the position of the corporation (1) to stockholders, (2) to creditors, and (3) to prospective stockholders and creditors is distinctly unsettled. On the one hand, there is the fiduciary theory of the position of directors which would prohibit officers and directors from dealing "at arm's length" with everyone. Opposing the fiduciary rule of corporate management is the viewpoint taken by many modern accountants, corporation lawyers, and managements, that such fiduciary relationship is mere fiction.

The fiduciary theory is the only one which assures a remedy to the creditor and the stockholder in the event of infidelity on the part of the management or directors. Certainly the fiduciary theory can be supported solely upon the theory that exploitation of the uninformed by the informed is inevitable when incomplete knowledge is had by all. But the responsibility imposed by the Securities Act will do much to make statements assume the character of accuracy so long needed. False statements are subject to penalty of both fines and imprisonment. This is apart from any civil liability to an injured party.

⁵ American Institute of Accountants, *Accounting Research Bulletins*, No. 1, pp. 1-2.

"Income" as the Ultimate Aim of Accounting

Everyone concerned with an enterprise—the management, the stockholders, the bondholders, the creditors, the public, the accountants, and the economists—is directly or indirectly concerned with the problem of income. For the business to continue, income must be secured; but it must not be thought to have been secured when in reality it has not. To determine what constitutes income for a given period is the central aim of all accounting procedures.⁶ The accountant presumes to inform the businessman as to the amount of his income; but, unfortunately, there has been much argument as to what should be the ultimate composition of that income. The American Institute of Accountants has issued the definition as follows: "Income is the gain derived from capital, from labor, or from both combined, provided it be understood to include profit gained through a sale or conversion of capital assets."

The Income and Operating Statements

The income statement most frequently is in "narrative form"; that is, it is a succession rather than a collection of items; it shows the results of the operation of the business during the income period and not the momentary status of the business.⁷ It is a comparatively simple process to determine the expenses of operations, that is, the payments made during the interval for which the income is being computed.

But beyond the point of actual expenses lie many intangible costs composed of wear and tear upon equipment, building, land, and other factors which have contributed to the production of the goods and rendition of services by the business during the year. These other expenses are not susceptible of precise measurement, and the accountant arrives at them through experience and judgment. He reports the cost of the assets at the beginning and end of the accounting period adjusted in accordance with the basis of capital expense assigned for the period. The difference between the two values should be chargeable to the operations of the business for the period.

This entire adjustment is not possible at all times because there may have been many forces affecting the business which are not properly considered

⁶ Some accountants take the position that income should consist only of "profits legally available for dividends"; others adopt a standard by which income is "realized income" whether available for dividends or not; again, a few accountants adhere to the proposition that "taxable income" or income for tax purposes should be the ultimate criterion. Certainly the "completed transaction theory of accounting" is the core of a prolonged argument.

⁷ Still further difficulty is encountered because the words "revenue," "income," "profits," "earnings," etc., are used with varying meaning from company to company. The growth and influence of the Federal Reserve System are doing much to increase the uniformity of practice. The federal income tax has had considerable effect on some practices. The formulation of definitions by the Committee on Terminology of the American Institute of Accountants has been of great help for the professional statement of practice.

in the method of evaluation used. If a machine is valued on a cost basis, changes in price levels may greatly alter its actual business value, yet these particular effects may not be included in the adjustments to operating income in the determination of net income. The adjustments to operating income which are made because of the changes in the present money equivalents of future incomes (mostly services) to be procured from the assets are extremely complicated.

Income statements, whether for internal or external use, should be prepared in sufficient detail and in such form as will show the following facts:

1. The gross volume of business for the income period.
2. The operating expenses, divided between material and labor.
3. Overhead expenses, shown separately from interest and fixed financing charges.
4. The non-operating income, itemized by major sources.
5. Reserves, if set up, each given separately to provide a possibility for judgment as to their adequacy.⁸
6. Dividend payments, segregated as between the different classes of shares.

An instructive operating statement both as to percentage comparison of items and as to the two last periods is shown in the Income Statement of the Continental Baking Company as follows:

	Year ended December 27, 1947 (000 omitted)		Year Ended December 28, 1946 (000 omitted)	
Net sales to customers plus miscellaneous income	\$150,302	100.00%	\$125,780	100.00%
Cost of ingredients and materials	\$ 74,896	49.83%	\$ 56,644	45.10%
Wages and salaries	44,175	29.39	37,990	30.20
Salaries of all officers and directors	404	.27	378	.30
Advertising	3,477	2.31	3,008	2.39
Depreciation	1,361	.91	1,303	1.04
All federal, state, and local taxes	5,836	3.88	6,915	5.43
Loss (or gain) on plant and equipment disposal of	(150)	(.10)	(27)	(.02)
Interest	462	.32	483	.38
Repairs and renewals	1,874	1.25	1,437	1.14
Contributions to pension fund	499	.33	386	.31
All other manufacturing, operating, selling, and administrative expenses	11,716	7.79	9,553	7.60
Amortization of goodwill	200	.13	200	.16
Sub-total—All expenses	\$144,750	96.31%	\$118,270	94.03%
Leaving net profit	\$ 5,551	3.69%	\$ 7,510	5.97%

⁸The more common reserves which are found in corporation balance sheets are:

- | | | |
|-----------|---|--|
| Valuation | { | 1. Reserves against receivables (bad debts). |
| | | 2. Reserves against depreciation of tangible assets. |
| | | 3. Reserves against intangible assets. |
| Surplus | { | 4. Reserves against contingent liabilities. |
| | | 5. Reserves against price fluctuations in invest securities. |
| Liability | { | 6. Reserves against accruing liabilities. |

Any good text upon accounting will add several more to this list.

The Consolidated Income Statement

The consolidated income statement is essentially a result of business conducted by a complexity of corporations or legal entities under a single controlling corporate entity. It has been developed as a *means of indicating* in a single financial statement the scope and magnitude of operations of all the companies included in the structure, an elimination being made of the intercompany operations or payments.⁹

The holding company device raises further problems of whether dividends received or all profits and losses of subsidiaries should be included.¹⁰ The purpose of the income statement is to show (1) the rate of profit on the total investment and (2) the rate of profit upon operations. If more than one type of activity is conducted by a holding company, the income operations from the various income sources may be shown separately, though there is no absolute rule on the subject.

Liability for Financial Statements

Any materially false representation of the financial status of a business will usually create a liability to anyone who is damaged thereby. The more common elements which appear to come under the heading of materiality are: deferred, contingent, and secured liabilities, assets, net worth, profits, receivables, amount of sales, amount of expense, terms of sale, ratio of profits, etc. Upon these facts a lender of funds is bound to place credence. The amount of production and the basis of valuation are somewhat less often included. Giving financial statements to mercantile agencies, even though they are not given specifically for purposes of securing credit, is the same as *giving to the persons who may later rely upon them*. Beyond misrepresentation lies mere silence, that is, concealment of material facts regarding the status of the business.¹¹

⁹ Consolidated income statements have been subjected to many abuses of greater or lesser financial importance. Some companies do not report as income the operations of the entire subsidiary group, but include only those which have or which would show a satisfactory status. Not to report all subsidiaries is to open the door to all sorts of abuses. The accounting profession now has well-accepted rules for inclusion and exclusion of items, which rules are reasonably well followed.

¹⁰ It is contended by some that since holding companies have no legal claim upon profits of subsidiaries which have not been declared as dividends, the holding company income statement should not include profits not declared. The objection to such a practice is twofold: (1) it means that losses would not be included; and (2) profits earned but not declared as dividends would constitute a hidden value to the shares of the holding company known only to those who were in possession of inside information. These two overt invitations to the manipulation of holding company shares are seldom long resisted. The entire profits and losses of all the subsidiary concerns should be included in the consolidated statement of the holding company. There should be devised by the accountants a uniform plan of holding company income statements which would show both the true income and the income which could possibly become available to the holding company as an owner of the voting stocks of the sub-corporation.

¹¹ Under the Federal Securities Act of 1933 the civil liability for the false statement or the omission of a material fact relative to a new issue of securities extended to "every

As a general proposition, accountants who certify to false statements are open to liability suits¹² at the hands of third parties. If the rule of fraud is extended to include "the pretense of knowledge when knowledge there is none," accountants may come in for much more liability than they have previously known.¹³ While to permit an unlimited access to damage liability for paltry errors would be socially undesirable, there should be a reasonable limit beyond which the accountant would be liable to third parties. In England it appears that much greater liability is imposed, especially under the legislation of the last five years.

The Machinery of Modern Accounting

Mere bookkeeping must be kept apart from modern accounting machinery. Thus the internal machinery of the concern is complete in itself; it is to be queried only because those who perform both the routine and the auditing are subject to employment and discharge by the management.

The external machinery of modern corporation accounting systems is the work of the certified public accountant. His work is professional in nature, and he is to provide an impartial check on (1) the accuracy with which the income statements and balance sheets conform with the books of account, and (2) the degree to which the accounting system employed by the company accurately reflects the condition of the business. The standard short form opinion of the certified public accountant states,¹⁴

To the Company:

We have made an examination of the balance sheet of the Company as at December 31,, and of the statement of income and surplus for the year In connection therewith, we exam-

accountant, . . . who has with his consent been named as having prepared or certified any part of the registration statement. . . ." A somewhat similar phrasing under Sections 18 and 20 of the Securities Exchange Act of 1934 indicates that the social order has come to recognize the influence of certified financial statements in the field of investments and intends to protect those who are unacquainted with the technical aspects of accounting.

¹² *City of East Grand Forks v. Steele*, 121 Minn. 296 (1913); *Smith et al. v. London Assurance Corporation*, 109 N.Y. App. Div. 882 (1905), 96 N.Y. Supp. 820 (1905).

¹³ The leading case involving liability to third parties directly contingent upon improper certification is *Ultramares Corp. v. Touche, Niven & Co.*, 255 N.Y. 170 (1931). In this case the accountants were employed by a company to prepare and certify a balance sheet after an audit by them. They discovered an overvaluation of \$303,863.20 in an inventory account, but through plain neglect failed to discover that \$706,843.07 of the accounts receivable were fictitious, there being no journal entries for the items. There were other transactions which should have aroused the suspicions of any careful accountant. In the language of the court, "A mere glance reveals the difference." These doctored books were not corrected; a balance sheet was certified therefrom showing a net worth of over one million dollars when, as a matter of fact, the concern was insolvent.

¹⁴ Prepared cooperatively by the American Institute of Accountants and the New York Stock Exchange.

ined or tested accounting records of the company and other supporting evidence and obtained information and explanations from officers and employees of the company; we also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions.

In our opinion, based upon such examination, the accompanying balance sheet and related statement of income and surplus fairly present, in accordance with accepted principles of accounting consistently maintained by the Company during the year under review, its position at December 31, and the results of its operations for the year.

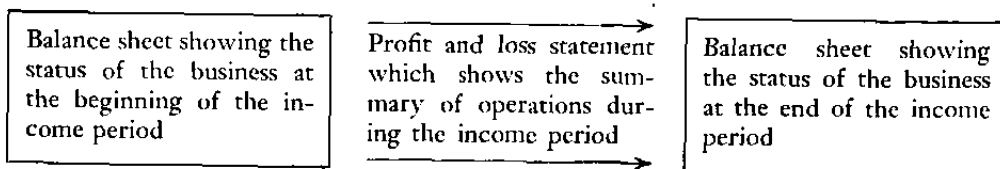
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 Certified Public Accountants

It often happens, however, that certifications are qualified, that statements are unnecessarily condensed, that statements take peculiar forms requiring expert interpretation (e.g., non-consolidated balance sheet).

The Balance Sheet

The balance sheet is a static representation of the financial condition of a business at a particular point in time; it has been likened to an instantaneous financial photograph. So, too, if the glimpses of the financial affairs of a business afforded by a series of balance sheets are studied with care, much may be learned about the operations of the business and the management policies in general. By comparing balance sheets in similar businesses, a fairly accurate judgment may be made concerning the management's ability. This is well represented by the Borden Company consolidated balance sheet of 1946 (page 71) when compared with the statements of 1945 and 1947.

The balance sheet and its companion, the income statement, are the two most important documents prepared by the accountant. It has been said that the balance sheet is most important to short-term financing, and that the income statement is most important to long-term financing. One may be used as a gauge of the nature, quantity, and liquidity of assets; the other provides data concerning the sources, quantity, and disposition of revenues. The balance sheet and the income statement are related in a way, in that the income statement presents in a summary fashion the causes of changes in net worth through appropriate income and expense classifications from the date of one balance sheet to that of another. The following diagram may be useful to students who are not well grounded in accounting:



A perfect balance sheet would give the current equivalents (in money) of the ultimately-to-be-determined values of assets and liabilities when discounted from the date of ultimate realization to the date of the balance sheet

at a rate of interest considered normal for capital in the type of business concerned at the time the statement is prepared. This would be a perfect statement, but its preparation would require an ability to see in the present what is actually going to happen in the future. Because of the utter impossibility of knowing in the present what will be true in the future, actual balance sheets are reports or summaries of the books of account, a complete history in condensed form, of the financial and income operations of the business unit as best they can be ascertained in the light of previous experience and present facts.

Technically, a balance sheet is a segregation list of captions and related figures purporting to show the debt-paying status of a business at a given date. If a business possesses a certain machine which experience has shown will probably last ten years, each year one-tenth of its cost, less the scrap value, may be considered deductible as depreciation.¹⁵ However, this is but experience; this particular machine may last twelve years or only eight. If it lasts twelve years, then to depreciate on a ten-year basis is to understate its *business value* in each year after the first; if it lasts but eight years, the reverse will be true. But the business accountant must put it in the list of assets at some value; he does the best he can and bases the value upon averages.¹⁶ It may have been the past experience of the business that 98 per cent of all receivables were collected, hence it is thought that 2 per cent should be charged off as bad debts this year. But in this particular year they may all be collected, hence the receivables are understated by 2 per cent. It is expected that a bond issue will be paid at maturity at par; but it may happen that the bondholders will receive only seventy cents on the dollar, hence the balance sheet has been overstating the liabilities. Similar reasoning is applicable to other assets and liabilities.¹⁷ It can never be hoped that balance sheets will become perfect in the sense here used; but as accounting practice is improved and extended, they should gradually become better.

Balance sheets are composed of two numerically equal groups: assets¹⁸

¹⁵ This is based upon the assumption that the "useableness" of the machine is uniformly employed. There have been some suggestions that depreciation might be made to vary according to the *rate* of use as well as the period of use.

¹⁶ Judgment as to future possibilities is also considered. When a new machine is bought, no experience may exist; then judgment becomes the sole basis of determining the value. However, a clear distinction must ever be maintained between mistakes, honestly made, and a policy specifically designed to do something not sanctioned by good accounting.

¹⁷ "The determination of the measured amounts of the several elements of cost, the proper differentiation between capital and revenue charges, and finally the calculation of the amount of depreciation necessary to the remeasurement of fixed assets, all are estimates." Roy B. Kester, *op. cit.*, p. 41.

¹⁸ W. A. Paton, noted authority on accounting, says: "To constitute a legitimate asset in the balance sheet, an element of cost incurred must be of such a character that the presence of the factor or condition represented by such costs makes it possible for the enterprise to avoid incurring another similar cost which would otherwise be required in the production of revenue." *Accounting Review*, June, 1931, p. 91.

and liabilities. The assets are usually divided into several subclasses based upon one or more of the common methods of classification: (1) according to tangibility, (2) according to degree of fixity, (3) according to liquidity, and (4) according to the degree of precision in the valuations in relation to ultimate realization. Under the first class there are tangible and intangible assets, although some assets are difficult to classify; under the second grouping there will be current and fixed assets, albeit each will merge more or less gradually into the other and all sorts of intermediary types will be found. Liquidity as a basis of classifying assets is not common; usually it more or less parallels the classification by fixity, the current items being more liquid than the fixed items. The same may be said for the last basis of classification: cash is stated with perfect precision; inventories perhaps somewhat inaccurately; fixed assets still less accurately, and so on to intangibles such as good will, where almost any reasonable guess may be as good as any other. Only the first two forms of classification are widely used by accountants.

The Pro Forma Balance Sheet¹⁹

The pro forma balance sheet, needed as an adjunct by corporate financial executives, purports to show the condition of the corporation after the financing operations are completed. It is an "if" statement; unfortunately, it is used to prove the desirability of the financing instead of showing the results of the financing upon the balance sheet. Moreover, it is often used to prove the strength of the new financial position rather than to show the result of the financing on the present position. As the addition of the new funds generally produces a temporary distortion of balance sheet, the pro forma statement alone may lead the reader to unwarranted conclusions.

The example on page 432 shows how a pro forma balance sheet should be prepared and exhibited for purposes of informing those concerned as to what has occurred, or will occur, by reason of the financing operations.

Most pro forma balance sheets²⁰ contain only the figures here shown in column (2). They leave to the user of the statement the work of discovering

¹⁹It appears that the term "pro forma" is used in two ways: (1) by accountants, to show the "form" for a balance sheet; and (2) by investment bankers, underwriters, etc., to show what the condition of a corporation *would have been* if a certain issue of securities had been outstanding at some time in the past. The discussion here pertains only to the second use of the term.

²⁰The Federal Securities Act of 1933 and the Securities Exchange Act of 1934 contain provisions relative to the age of balance sheets and the frequency with which new balance sheets must be given out by corporations. The Code of Fair Competition for Investment Bankers, adopted March 23, 1934, makes no direct reference to the subject, though it probably would rightly be considered as falling within the domain of the code. The provision of Section 3, Article III, of the code, that no investment banker is to aid in underwriting or distributing an issue "unless there is available . . . adequate information with respect to the issuer, the nature of its business, its financial condition, . . ." may be either a drastic rule or it may be devoid of all meaning, depending entirely upon the assiduity of the application of the rule.

CORPORATION FINANCE

Pro Forma Balance Sheet
of
THE DEPENDABLE MANAGEMENT MANUFACTURING CORPORATION
giving effect to new financing of \$40,000,000 debenture bonds

	As of Date of Balance Sheet Used (1)	After Giving Effect to the Financing (2)	Changes by Financing (3)
ASSETS			
Cash	\$ 1,362,548.01	\$ 11,657,481.00	+\$10,294,932.99
Receivables	964,413.82	964,413.82	0.00
Inventories	599,533.58	1,482,159.47	+ 882,625.89
Temporary investments	396,385.47	6,451,823.67	+ 6,055,438.20
Deferred charges	1,173,018.45	1,173,018.45	0.00
Investments in subsidiaries	47,876,463.54	47,876,463.54	0.00
Advances to subsidiaries	24,593,450.00	26,938,932.00	+ 2,345,482.00
Properties	397,482,542.00	397,904,062.92	+ 421,520.92
LIABILITIES			
Accounts payable	274,497.53	274,497.53	0.00
Notes payable	44,173,850.23	24,173,850.23	- 20,000,000.00
Deferred liabilities	535,867.80	535,867.80	0.00
Fixed debt	162,879,628.00	202,879,628.00	+ 40,000,000.00
Preferred stock	100,000,000.00	100,000,000.00	0.00
Class A stock	50,000,000.00	50,000,000.00	0.00
Class B stock	50,000,000.00	50,000,000.00	0.00
Surplus	66,584,511.31	66,584,511.31	0.00
	\$474,448,354.87	\$494,448,354.87	+\$20,000,000.00

the values of columns (1) and (3). Column (3) is the first item to be analyzed because it shows what use is or has been contemplated for the financing. In the example given, one half of the proceeds of the issue, which has been sold at par, has been used to pay off notes payable, hence changing short-term liabilities to long-term liabilities, the other half has gone largely into advances to subsidiaries, temporary investments, and cash. There has been a small increase in the "properties" account and nearly a trebling of inventories. What will be the ultimate use of the funds at present in cash and temporary investments depends upon the management. They may be used to acquire additional subsidiaries, or additional properties directly or merely "for other corporate purposes." In the case in question, the financing was about one-half for future requirements, i.e., anticipatory financing. It was done at a time of very free money on the theory that the cost of the capital until it was needed would be less than the greater cost of the capital acquired in a less propitious money market.

The Consolidated Balance Sheet

The consolidated balance sheet is a logical result of business conducted as a series of corporate parts or by several legal entities, and arises from a

desire to show "totality."²¹ It is always an imaginative figment of the accountant, for there is no individual business having the assets and the liabilities depicted by it; but it is the sole manner in which the combined condition of several companies, such as exists under the holding company device, may be properly shown. It presents the sum total of a group of businesses as a going concern.

The preparation and utilization of a consolidated balance sheet are necessary in holding company operations, although unless its limitations are clearly understood it may lead to erroneous conclusions. To those who purchase stocks or bonds from the parent companies the consolidated balance sheet is represented by investment bankers as the only fair basis of judging the financial strength of the parent concern. This is, of course, an unwarranted representation, for the consolidated balance sheet shows in no way the financial strength of the parent concern; what it does show is the conglomerate financial structure of all companies in the system. It is apparent that while strength in one subsidiary may offset weakness in another in a consolidated balance sheet, the rights of prior lien and minority claimants may prevent the actual use of the assets of one subsidiary in meeting the obligations of another.

Just what companies should be included in the consolidated balance sheet is one of the disputed points of consolidated balance sheet practice. Some holding companies include only such subsidiaries as are owned 100 per cent; others include those owned 51 per cent; a few include subsidiaries where a "substantial controlling interest" is owned.²² The Federal Reserve banks, in their rediscounting practices, have adhered to the rule that the consolidated balance sheet should include all controlled companies, and have maintained that the decision as to acceptability and eligibility of the paper of such corporations for rediscount is frequently dependent upon examination of separate balance sheets for the parent and the subsidiaries.²³

In consolidating the capital accounts and debt accounts, the problems of priorities should receive special attention. The claims of preferred shares of subsidiary companies and of bonds of the same companies should never be consolidated into the accounts of the parent company. It is often done,

²¹ The consolidated balance sheet was little used in Europe until American capital and banking and corporation financial technique exerted their influence following the influx of capital from the United States for reconstruction after World War I. Even at present its use is less extensive and is subject to certain important modifications, especially in Great Britain.

²² Sometimes the matter is worked in an opposite manner. For example, the Reading Co. (railroad), in 1923, carried a subsidiary iron company on its books at \$1,000,000 when in fact the iron company had an accumulated surplus amounting to \$18,500,000.

²³ The regulations of the Federal Reserve Board (Regulation A) state: "Whenever the borrower has closely affiliated or subsidiary corporations or firms, the borrower's financial statement shall be accompanied by separate financial statements of such affiliated or subsidiary corporations or firms, unless the statement of the borrower clearly indicates that such note is both eligible from a legal standpoint and acceptable from a credit standpoint."

however, and serves the purpose of preventing the disclosure of the capital position of the parent or the subsidiary.

Common Defects of Financial Statements

If study is devoted to the quality of financial statements over a wide range of companies and over a considerable chronological range, numerous frequent defects of statements will come to light. These are traceable to a wide variety of elements, some of which are sufficiently common to warrant brief discussion.

One of the objectionable features of financial statements as at present rendered is their complete lack of uniformity.²⁴ Not only do they differ from company to company, but they also vary in each individual concern so that it is next to impossible, even for an expert who has devoted years to the subject of financial analysis, to compare the statements over a period of years. Yet this practice of continuous changing, altering, shifting, etc., continues year after year.

The use of condensed financial statements is quite as objectionable as the detailed statement with fifty or seventy-five items on each side of the ledger.²⁵

Variations in methods of valuation are common. Some companies have written down their assets "in conformance with current values,"²⁶ while

²⁴ Professor R. B. Kester, in a paper read before the International Congress of Accounting, pointed out six advantages of the standardized balance sheet: (1) eliminates waste of time and energy of those who must analyze and try to interpret the balance sheets; (2) ultimately makes for development of better accounting methods; (3) causes more trustworthy and reliable data to be placed in published financial statements; (4) makes possible a better understanding and interpretation of the financial statements; (5) permits a more intelligent administration of the affairs of business; and (6) develops sounder business policies and practices. It may be added that further advantages accrue from (1) a reduction in the destruction of capital; (2) an increase in economic efficiency because of the impossibility of competing by poor management which often depends upon trick accounting strategy; (3) an elimination of much of the present-day wastage because of inability to determine with precision the status of enterprises; and (4) a reduction in the costs of public regulation. The authors have discovered but one valid opposing argument: chronological uniformity may retard the adoption of improved accounting methods.

²⁵ The best practice seems to be that of preparing balance sheets and income statements with a relatively small number of items on both the asset and the liability sides of the statements, and to accompany these brief statements with schedules to show necessary pertinent information for financial analysts.

²⁶ Against the practice it may be argued: (1) that original costs represent actual investment, and changes due to price level fluctuations would attempt to use the dollar not only as a unit of value but also as a unit of fluctuating size; (2) that to write up assets means an "unrealized profit" whereas to write them down gives a realized loss; (3) that accounting is fundamentally a system of logically recording the historical facts of a business enterprise, and this record will be most accurate and trustworthy if there is strict adherence to actual financial transactions and no attempt is made to incorporate into the accounting structure the hypotheses and postulates of economic analysis and dictates of individual judgment *Accounting Review* (Vol. II, p. 111); (4) that

others merely continued to carry the old values. Some practices tremendously reduced profits in the periods in which the write-offs occurred and, it was hoped, would increase them in the future; others operated to make apparent profits where such profits were only hopes based upon the future recovery of prices. One company has used the reproduction cost basis of valuation, another the original cost, and a third capitalized earnings.

Depreciation creates another abuse frequently cropping up in financial statements. It is bad enough to write off 1 per cent per annum against properties which at best could last but twenty years, requiring a quality of credence not possessed by most thinking men. It is equally misleading to write off 15 per cent annually against assets which will last thirty years, for this merely hides for the present the amount of actual earnings being received. The problem of depreciation will be discussed in detail in Chapter XXVII.

Equally unsettled are the problems of *appreciation*. Some concerns show special surpluses arising out of appreciation; some mingle all forms of surplus together. Not to report appreciation upon a rise in prices is to hide assets, according to some accountants. Some accountants say that appreciation is an "unearned increment" and base their conclusions upon the "realization" argument. Cases have been recorded where no depreciation was charged because it was "offset by appreciation."²⁷ At any event, appreciation, if considered, should be clearly shown, with some explanation. And in all instances, Professor Kester states no support can be found for the view that appreciation can be used as an offset to depreciation.

Omission of contingent liabilities is often a seeming "mite o' sin" which is the bane of a balance sheet. Any concern which makes it a regular practice to dispose of its receivables should show the contingent liabilities; otherwise, profits are assumed to have been realized which are only *contingently realized*. Along the same line of malpractices is that of the investment account, under which companies have been known to carry their own shares purchased in the open market.²⁸

A lump statement of surplus is without meaning, if not misleading, to the average person. It should be segregated to show surplus arising from revaluation of assets, from capital reductions, from voluntary donations, from sale of stock at a premium, i.e., paid-in surplus, earned surplus, etc.

inculcation of such fluctuations is a vicious practice which almost destroys the value of accounting as a device for business control. In favor of the practice, it is stated: not to do so in the face of violent and continued price change is to permit a complete breakdown of the fundamental aim of accountancy—the recording of the true status of the business values.

²⁷ Consolidated Gas Co. v. City of New York, 157 F. 855, 201, C.C. Rep. 344.

²⁸ The controversy of the Allied Chemical and Dye Corp. in 1933 was on this point. The balance sheet of the company carried an item, "U.S. and other marketable securities—\$90,000,000." In fact, this item consisted mostly of the company's own stock. Dividends, it seems, were paid on this stock contrary to law, and the dividends were credited to some secret reserve.

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A good surplus statement taken from the report of the Borden Company follows:

STATEMENT OF CONSOLIDATED SURPLUS

For the Years Ended December 31, 1946 and 1945

	Year Ended December 31	
	1946	1945
EARNED SURPLUS		
Balance at beginning of year	\$32,515,806	\$28,816,270
Net income	19,581,006	12,093,972
Transfers from Reserves:		
Provided out of income, 1941-1945:		
For wartime contingencies and transition to peacetime economy	10,732,912	
For deferred repairs and maintenance	3,200,000	
Provided out of earned surplus, 1939:		
For adjustment of foreign assets to U.S. dollar equivalent	460,938	
For purchase of employees' deferred retirement annuities	300,000	
TOTAL	<u>\$66,790,662</u>	<u>\$40,910,242</u>
Deduct:		
Dividends paid (\$2.25 a share in 1946 and \$1.80 a share in 1945)	\$ 9,508,900	\$ 7,623,711
Write-off of goodwill purchased during the year	519,839	770,725
Appropriations to reserves:		
For possible inventory price declines	5,000,000	
For losses on unusual property disposals	5,000,000	
For contingencies	383,939	
TOTAL	<u>\$20,412,678</u>	<u>\$ 8,394,436</u>
Balance at end of year	<u>\$46,377,984</u>	<u>\$32,515,806</u>
CAPITAL SURPLUS		
Balance at beginning of year	\$13,836,192	\$13,618,188
Proceeds from disposal of unessential properties previously written off against capital surplus, and fair operating values ascribed to other such properties adapted to some operating use	145,804	218,004
Balance at end of year	<u>\$13,981,996</u>	<u>\$13,836,192</u>

The income and operating statements are subject to several abuses, which should also be mentioned. Many companies do not show their gross revenues, but begin their profit and loss statement with the net operating revenues.

The expense items on the operating statement should be sufficiently well divided to allow an intelligent appraisal of their reasonableness. All sorts of subterfuges are possible in lump sum expenses, the most obvious being: salaries of officials, management expenses, engineering fees, etc., in the case of holding company organizations. The depreciation items are sometimes left to the imagination. Not only are no rates given for different classes of properties, but the operating revenues are given as "after allowing for depreciation." Finally, "other income" frequently covers a multitude of sins.

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If this item amounts to more than 10 per cent of the total income, it should be so itemized as to indicate the major sources. Certainly, to include in "other income" a profit which resulted from a revaluation of inventories is a grave error.

The following remedies may be suggested:

1. Uniform methods of accounting for similar industries would make a cross comparison possible.
2. Statement of the basis of valuation of assets would remove some of the vagueness now present.
3. Auditors should report to the stockholders, not to the directors; they should be elected, not hired.
4. A wider use of the "descriptive" balance sheet would do much to break down suspicions.
5. There is much to be said for the creation of an independent accounting department in the state corporate regulatory bodies.
6. It is insufficient that the balance sheets and income statements be correct as to the items listed; they must contain all the items substantially affecting the status of the business or the ability of external agents to judge the status of the business and the work of the management.

The interesting balance sheet statement of the Pillsbury Mills, Inc., which follows is a good sample of the improved method of statement.

Current assets:		
Cash on demand deposit and on hand.....		\$ 4,820,770
Trade accounts receivable, less reserve for bad debts of \$213,500		8,531,130
Bill of lading drafts under collection		1,752,799
Inventories:		
Wheat and other milling grain, at market including adjustment to market of open contracts	\$10,354,916	
Flour and millfeed, at developed cost based on market prices of grain	5,482,074	
Specialties, commercial feed, ingredients, soybeans, etc., at cost or market, whichever lower	6,698,738	
Sacks, supplies, etc., at cost or market, whichever lower	3,614,906	
	<u>\$26,150,634</u>	
Less reserve for valuation	1,800,000	24,350,634
Advances on grain purchases		767,128
Miscellaneous accounts receivable, less reserve for bad debts of \$6,000		693,445
Total current assets		<u>\$40,915,906</u>
Current liabilities:		
Notes payable		\$ 7,145,000
Accounts payable and accrued liabilities:		
Trade accounts payable	\$ 3,111,570	
Accrued wages and other compensation	901,766	

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Accrued property taxes	236,731	
Employees' withholdings	159,620	
Miscellaneous	456,292	
		<u>4,865,979</u>
Dividends payable		590,580
Terminated employment allowances payable ..		430,219
Reserves for pending claims		286,100
Reserve for taxes on income		4,748,768
Total current liabilities		<u>18,066,646</u>
Net current assets		<u>\$22,849,260</u>
Ratio of current assets to current liabilities		2.26 to 1
Property, plant, and equipment:		
Fixed plant, based on appraisal as at August 1, 1922, with subsequent additions at cost:		
Land	\$ 1,538,312	
Buildings, machinery, and equipment, less reserves for depreciation and amortization of \$14,571,325	11,791,972	
	<u>\$13,330,284</u>	
Automotive and office equipment, at cost less depreciation	1,082,730	
Investment in and advances to wholly owned subsidiary, representing equity in office building	470,912	
		<u>14,883,926</u>
Miscellaneous assets:		
Prepaid expenses	\$ 482,856	
Trade memberships and miscellaneous investments, at cost, less reserve of \$19,750	94,100	
Miscellaneous	73,066	
		<u>650,022</u>
Good will, trade-marks, trade names, etc., and hydraulic rights		1
Net assets		<u>\$38,383,209</u>
Ownership:		
\$4 cumulative preferred stock:		
Authorized, 100,000 shares without par value, with maximum sinking fund redemption price at \$102 per share and maximum other redemption price or \$105 per share		
Issued and outstanding, 96,278 shares at \$100 per share		9,627,800
Common stock:		
Authorized, 800,000 shares, par value \$25 per share		
Issued and outstanding, 549,224 shares		13,730,600
Accumulated earnings, retained and used in the business		15,024,809
		<u>\$38,383,209</u>

The Corporate Surplus

The surplus account finally becomes the balancing account which will equalize the difference between the assets, and liabilities and capitalization. In a very simple way, the surplus becomes a reservoir of value into which are poured increases in value of net worth and out of which are dipped decreases. Every transaction of the business will directly or indirectly ultimately bear upon the surplus account. But the idea of surplus is not nearly as simple as this.

Even after a careful examination of the affairs of the corporation has been made, there is not always a clear certainty that a surplus exists just because it is shown on the books. Inadequate maintenance and repairs over a period of years in order to make current earnings appear big enough to pay dividends without delving into surplus may actually undermine such surplus as is shown on the books of the company.

Divisions of Surplus

On the balance sheets and income statements of corporations appear many terms which have some relation to surplus. *Appropriated surplus* indicates a portion of the surplus set aside for a particular purpose, as for improvements, especially in public utilities; its complementary form is *unappropriated surplus*. Surplus reserves of various sorts represent segregated parts of the income of the corporation. The committee for the American Institute of Accountants has stated as to general contingency reserves, "The committee is therefore of the opinion that general contingency reserves, such as those created: (a) for general undetermined contingencies, or (b) for a wide variety of indefinite possible future losses, or (c) without any specific purpose reasonably related to the operations for the current period, or (d) in amounts not determined on the basis of any reasonable estimates of costs or losses, are of such a nature that charges or credits relating to such reserves should not enter into the determination of net income."

The Sources of Surplus

Corporations may acquire surplus in many ways. Most commonly it is acquired through earnings, ordinary or extraordinary. It may be considered as operational surplus since it is derived from operations. The nature of the operations will determine the regularity and quantity of such surplus.

The income from securities of subsidiary companies may be a major source of income for other corporations.²⁹

Possible and infrequent transactions may include sale of property at more than its book value, which is really the realization of incomes from conjunctural price fluctuations. It is generally doubtful if such surplus ought to be paid out in dividends, especially in cash.

²⁹ The Dupont-General Motors relationship is an excellent example.

The revaluation of assets has a bearing upon surplus either as an increase or as a decrease.³⁰

Sale of securities at a premium may provide a source of surplus, though it is *normally small in amount*. It is questionable whether surplus arising from this source can legally be used to pay dividends, at least without first informing the shareholders that such dividends represent a return of a portion of the funds given over for the securities.³¹

Paid-in surpluses arise in at least four ways, each of which has its special merits and abuses. One of the older forms is that which frequently occurs in banks, insurance companies, and trust companies under the laws governing the payment of dividends in those institutions. The statutes usually prohibit the payment of dividends until a surplus with a certain ratio to paid capital shall have been created. A second and increasingly common source of paid-in surplus arises in connection with no-par shares. Under many state laws the directors of a corporation have the power to divide the price received for no-par stock into two parts, one to be stated capital, the other surplus. The latter is available for dividends at once. A third relatively old form of paid-in surplus arises when a corporation sells its shares (in new financing) for more than their par value. The fourth source of paid-in surplus is the result of mergers and consolidations. It is a variation of the sale of stock at a premium. As a general rule, the use of paid-in surplus to pay dividends on common is scarcely justified;³² for preferred shares such payments may be justified from several points of view.

³⁰ From 1930 to 1933 many corporations wrote down their assets in conformance with declining prices, taking the decreased valuation directly from existing surplus. If drastic write-downs occurred, coupled with a recapitalization of the stock equities, it often happened that a surplus was created where none existed before. Again in 1940-1943, this was done where properties were in the war zones and all control passed to the enemy.

³¹ The rulings of the I.C.C. and public utility regulatory agencies are of interest on this point.

³² It is clear that where but one class of stock is outstanding in a company, the use of paid-in surplus is merely the return of a portion of capital receipts. But two objections can be raised to the practice: Bondholders and creditors may object on the ground of a decrease in equity, hence impairment of the corporation's ability to accomplish its purpose.

But if the common shares have the sole right of vote, they may reduce their capital after the preferred shares have been sold and thus create a paid-in surplus, also available in most states for the payment of dividends. Under the latter case the preferred shareholders most certainly would have grounds for complaint; it is hardly possible to discover a more flagrant form of financial treachery than this. Bondholders may prevent the payment of any dividends if the payment would injure them. Cf. *Hoyt v. E. I. du Pont de Nemours Powder Co.*, 88 N.J. Eq. 196 (1917).

It is submitted that the following propositions should, from a sound financial practice, be enforceable at law:

1. Payment of dividends to the common shares should not be permitted where the payment arises from funds created by a reduction in capital stock unless it has been agreed to by a *proper majority of preferred shares and/or bonds*.
2. Bondholders should be able to enjoin the payment of dividends to preferred share-

If unusually large reserves have been set up, they may be returned. To say that they are secret reserves may or may not be the case.³³

Donation of stock or of assets or the cancellation of liabilities can provide a source of surplus. The stock gift usually arises where it is desired to sell shares in a concern at less than par value without creating any liability on the purchaser.

Surplus resulting from consolidations offers several peculiarities. Such surpluses as result from the consolidation process *per se* will usually come from two radically different sources. They may come from the previously existing surpluses of the consolidating corporations, or they may come from the capitalization exchange, in which less stock is given than is received.³⁴

Summary and Conclusions

Absentee ownership has created many problems in the solution of which accounting and the accountant occupy the place of most importance. Upon the shoulders of the public accountant must fall increasingly the responsibility of protecting the interests of minority and absentee stock- and bondholders. He must be the impartial check upon the accuracy of the records of the financial operations of the corporation, upon the bases and precision of the valuations, and upon the care with which management conducts the affairs of the business. Deviations from accepted norms must be judged by him; and his knowledge of the details of the business should ever be available to those who undertake interpretation of trends and estimates to the end of formulating the general policies of the company. Whether lethargic shareholders and bondholders will ever overcome their inertia and initiate a movement for auditing to be their concern rather than the concern of the directors is not indicated by present evidence. As long as managements and officials can, they undoubtedly will continue to find convenient ways of making "changes in policy" which will cause revelation of only the desirable phases of operations and status. The certified public accountants are moving to set such professional standards that the public interest will

holders where the surplus out of which such dividend is obtained has been created by a reduction in capitalization of preferred and/or common stock.

3. Right of estoppel of payment of dividends from such surplus should rest with the non-voting shares when the dividends are payable to them, for they should be privileged to elect to keep the funds within the enterprise if they so desire.

³³ True secret reserves are very difficult to uncover in analyzing the practices of corporations. A common form is that of charging betterments to current operating expenses instead of to capital. Banks, mortgage companies, trust companies, building and loan associations, insurance companies, and others who deal in mortgages will sometimes create hidden assets (the complement of secret reserves) through charging past-due paper 100 per cent to the *operating revenues*. At a later date such paper may be realized and then the item is shown as a profit through the revenue accounts.

³⁴ Actually the same situation would obtain if the companies exchanged share for share and the assets of the old companies were then reappraised to create the surplus. The difference would be found in the size of the capitalization under the two methods.

be fully served. In this they will be joined by enlightened corporate managements.

QUESTIONS

1. What do you consider the principal task of a certified public accountant? Is his task different than an accountant's? Explain.
2. Why does modern accounting so strongly emphasize the income statement? What is your opinion on it?
3. Explain what peculiar problems arise in making consolidated statements of holding-company financial conditions.
4. How far does the certification of a public accountant guarantee the accuracy of a statement? Explain this situation.
5. It has been said that the income statement is most important for long-term financing and the balance sheet for short-term. Isn't this statement reversed? Explain.
6. How do you explain the idea that accounting statements contain such things as "estimates"?
7. Indicate the purpose of the "pro-forma" balance sheet. Why is it important to show the actual statement as well as the "pro-forma"?
8. If the standardized balance sheet seems so desirable, why do you think it is not readily adopted in practice?
9. How may a surplus appear on the balance sheet and yet the company may be hard pressed for cash resources?
10. Explain the various source divisions of surplus which may be entered in the statement and why their use is important.
11. Discuss the problem of reducing capital stock and, with the surplus so created, ordering the payment of dividends.
12. What is a "secret" reserve? State your position on the propriety of this action.

PROJECTS

1. Select at random two major industrials and after inspecting their latest financial statement write a report upon the features of the two statements.
2. Report upon the handling of surplus records in the five major rubber tire companies since 1932. State your criticisms.

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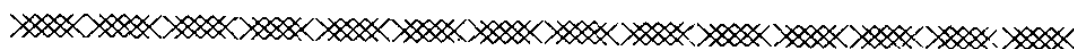
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CHAPTER XXVI

Management of Income—Control and Budgeting



WORKING capital and fixed capital gradually pass from a raw material form through finished goods, sales, receivables, and ultimately return to the corporation in whole or in part in the form of revenue.¹ Income, thus conceived, is a flow of economic power, usually measured and stated in terms of monetary units; it must always be conceived as a flow of values rather than a flow of money. It is one of the greatest achievements in the business world to maintain this flow of values, and so control it that work of the business mechanism will be well done. But few are aware of the tremendous effort which went into the creation of the precise rows of figures of a General Motors or a United States Steel Corporation income statement.

Whereas financial control emphasizes the technical aspects of income, the management of income considers the broader phases of working capital flow, fixed capital evaluation, and income utilization. The management of income aims to keep working capital circulating at a maximum efficiency, to invest temporarily the working capital not needed in operations, to control the form of the working capital to the end that it will always be available in a form and to the extent needed in the operations of the company, and to segregate revenues to prevent improper dividend disbursements. The management of income occupies a position intermediately between financial control, working capital, and surplus and dividend policy.

Sources of Income

From corporation to corporation and from time to time, the nature of the flow of income will change. Ostensibly a corporation derives its income from its business operation. But this is insufficient; a distinction between regular and extraordinary operations must be recognized. The income of a

¹The statics of finance deals solely with financial structure, financial plans, and capitalization plans; the dynamics of finance considers the flow of values, rather than their static relationships.

Some writers on corporation finance have more or less limited their discussions to the static aspects of the science or art. By so doing they have limited their conclusions and been confounded by relatively simple problems in financial dynamics. Throughout the limited discussion of this volume, care has been taken to indicate some of the dynamic aspects of finance. This chapter in particular seeks to present a few of the leading principles.

railroad company derived from hauling cargo and passengers is uniquely different from that derived from the sale of a terminal facility to another railroad; income from investments must be considered differently from income from regular or irregular operations. The investment income must be divided into two types: that from temporary investments and that from permanent investments, the last-named being composed of income from controlled companies and income from non-controlled companies. Some income is derived from changes in the value of assets; it is recognized by revaluations and is least controllable in fact, though most manipulated in practice.

The incomes derived from these several sources vary from time to time and from concern to concern. Since income from operations constitutes the major source of income to the average corporation, it will receive most attention in this discussion.

Gross Capital Turnover

Adequacy of gross revenues is the basic consideration to successful business operation. Too much capital invested in relation to the demand for the products or services, or in relation to the proportion of the demand which can be secured by the individual business, spells disaster for everyone concerned unless the demand can be stimulated by advertising campaigns or sales campaigns. Calculation of the annual gross capital turnover (or its reciprocal—the number of dollars of capital employed to produce one dollar of gross revenue per annum) and the number of dollars invested for one year to secure the sale of one unit of product, such as an automobile, a ton of pig iron, or a bolt of cloth,² are the first steps in analyzing the adequacy of the gross revenues.

Calculation of the proportion of the total business which is being secured by the individual corporation, or each group of corporations in the field, will indicate the progress or decline of the company in the field.³ Analysis of the gross revenues in relation to fixed assets will indicate whether the corporation is too heavily laden with fixed assets, this calculation being better than the rougher approximation based upon total capital turnover.

The larger the gross revenues per dollar of capital used by the corporation, other things being equal, the better the opportunity of securing adequate net earnings to the concern, unless the large gross has been secured by means of sales at cost merely for the sake of holding the firm's position in the field or to drive out a competitor.⁴ While no fixed rate of turnover can be

² In almost every industry there is some physical unit of production which can be used.

³ The automobile industry has made much of this particular comparison. It is most useful where a relatively small number of corporations exist in the field. Changes due to style ought to be closely observed in interpreting the values.

⁴ Some managements consider the practice of selling at cost to drive out competitors to be merely deferment of net income until a semi-monopolistic condition prevails. The fallacy of this contention lies in the fact that new competitors will spring up continuously. If the creation of these new firms can be prevented, the argument is of merit.

laid down for any particular group of industries, for an individual industry, or even for an individual company, limits have been determined within which the company probably will not be able to secure an adequate net return. Thus an average public utility tries to secure about one dollar of gross revenue per annum from each five dollars of investment; if it succeeded only in securing one dollar of gross revenue for each ten dollars invested, great difficulty might be expected. Railroads in a normal year secure, on the average, one dollar of revenue for each \$6.40 of capital employed.⁵

As a corporation's gross revenues fall below the average for its group, serious problems arise. If the market has not been saturated, some new plan of merchandising or distribution may be considered. The price policy may be critically reviewed, especially with the prospect of eliminating substitute goods through class prices.⁶ If one stratum of the market is saturated,

⁵ The figure given for railroads is based upon capital and revenue figures of all Class I railroads from 1934 to 1944 inclusive.

Industrial corporations vary greatly. The following are the gross capital turnover ratios of a list of some leading companies.

	1939	1940	1941	1942	1943	1944	1945	1946
Shell Union Oil Corp.	\$1.62	\$1.51	\$1.33	\$1.27	\$1.13	\$.90	\$.90	\$1.06
Bethlehem Steel Corp.	1.77	1.27	.90	.66	.55	.59	.67	1.10
Packard Motor Car Co.	.71	.98	.83	.54	.42	.33	.49	.88
Electric Storage Battery Co.	1.30	1.15	.89	.76	.68	.66	.68	.84
Alpha Portland Cement Co.	3.00	2.82	2.21	2.08	3.33	3.80	3.00	1.61
Johns-Manville Corp.	1.00	.95	.75	.74	.73	.73	1.02	1.03
Texas Gulf Sulphur	3.00	2.44	2.15	2.27	2.36	2.12	2.03	1.82
General Electric Co.	.99	.83	.66	.62	.45	.60	.61	1.23
Allis-Chalmers Mfg. Co.	1.32	1.31	1.07	.94	.67	.56	.62	2.00
Sears, Roebuck & Co.	.57	.52	.50	.42	.44	.48	.43	.45
Firestone Tire & Rubber	1.09	1.03	.84	.75	.50	.45	.39	.50

These values were found by dividing the total of the assets by the gross revenues excluding "other income." To have included "other income" would have reduced some more than others, though not by a sufficiently great amount to make important changes. It is recognized that the "asset" item in some instances has been inflated through the non-deduction of reserves for depreciation. But if profits have been retained as reserve, they are employed in the business somewhere. Deferred items cause additional small inconsistencies. The student is urged to recalculate these values, making all possible deductions to see how the results differ from these crude calculations.

If a larger percentage of the investing public used the simple total of the balance sheet as shown to calculate gross revenue turnover and net earnings ratios, corporation managements would soon see to it that a better system of balance sheet presentation was used.

⁶ The relation of price changes to revenues is one of the most complex problems of business. Little, as yet, is known about it. Rising prices apparently increase turnover, especially of fixed assets until they have been reappraised. The same appears to be true with respect to cash, inventories, and other current assets, with two limitations: (1) If the rise in prices has been forecasted, inventories will have been increased before the rise sets in, and may therefore gradually decline after the increasing prices are effective by reason of inventory liquidation. (2) After a continued rise of some magnitude, turnover ratios begin to drop because of the congested condition of business. Increased turnover ratios at the inception of a price rise may falsely picture the quality of the management, both to its own self-satisfaction and to that of the owners of the business. The absence of a critical evaluation of management is conducive to laxity

perhaps another can be cultivated and developed to add substantially to the gross revenues.⁷

Revenue Stability

Management of income is directly concerned, first, with the adequacy of income, secondly, with its stability, and thirdly, with the form in which the income is realized.⁸ Categorical analysis of the stability problem is almost impossible, for each element involved affects all other elements and is affected by them. It is commonly argued that stability of revenues is necessary to successful business operations. But the most deadening force in all industrial and economic activity is the knowledge that the business is holding steady, neither forging ahead nor lagging behind. Business must always be moving; it cannot stand still without dying. Stability in a business *sometimes* indicates a monopolistic condition under which there is little progress and no savings to the consumer.

Measurement of Revenue Stability

There are two fundamental ways to measure the stability of revenues: (1) the percentage change from year to year; and (2) the deviation from trend method, using either the average deviation or the standard deviation, and the coefficients thereof for comparison of widely different companies. The first of these methods is simpler, though less accurate. It may be briefly illustrated by the gross revenue comparison of four outstanding corporations in the United States in Table 62.

A moment's study of the percentage change columns indicates the great degree of diversity and the relative stability in the different companies. General Motors and the United States Steel Corporation are not companies

and a gradual separation of financial control from financial ownership. Something of a reversal of these tendencies occurs when prices fall.

Gross revenues will neither rise nor fall proportionately to price change. The nature of demand curves precludes this (unitary elasticity excepted). Neither will net revenues rise or fall in proportion to prices. Even in the case of unitary elasticity of demand, the existence of overhead costs and of semi-variable costs will cause a non-fixed relationship between gross and net revenues, and between prices and net revenues.

⁷The saturation point in demand has been the subject of many interesting studies. To date, the results of such studies have been encouraging, though it can scarcely be said that they have been entirely successful in forecasting the level, or the date, at which saturation of demand will occur. The automobile industry was an example of much speculation on the subject from about 1917 to 1930. More recently the radio industry has been investigating the same problem.

⁸On the question of whether the eternal monotony of stable or fixed prices is a good or a bad condition, or can be attained, the authors unequivocally take the position (1) that it cannot be attained and (2) that even if it could be attained a reasonably mild periodic fluctuation of prices would be preferred. Economic and social progress arises out of the struggle to overcome obstacles, not from the retention of the *status quo*. There is something of the principle of the survival of the fittest, in the creation of a strong business and financial structure, and a mild undulation of prices is a marvelous stimulant to active management.

CORPORATION FINANCE

TABLE 62. GROSS REVENUE COMPARISONS
(in millions)

Year	General Motors Corporation		Southern Pacific Railroad	
	Gross Revenue	Per Cent Change	Gross Revenue	Per Cent Change
1936	1439	....	162	....
1937	1607	+38.3	178	+ 2.5
1938	1067	-33.6	158	- 1.1
1939	1376	+28.9	174	+10.1
1940	1795	+30.5	186	+ 6.9
1941	2437	+35.8	237	+27.4
1942	2251	- 7.6	370	+56.1
1943	3796	+68.6	465	+25.7
1944	4262	+12.3	494	+ 6.2
1945	3128	-26.6	472	- 4.5
1946	1962	-36.3	383	-18.9

Year	United States Steel Corporation		Southern California Edison Company	
	Gross Revenue	Per Cent Change	Gross Revenue	Per Cent Change
1936	1099	....	41.7	....
1937	1087	- 1.1	42.3	+ 1.4
1938	633	-41.8	43.0	+ 1.7
1939	904	+42.8	45.8	+ 6.5
1940	1145	+26.7	46.4	+ 1.3
1941	1620	+41.5	48.6	+ 4.7
1942	1863	+15.0	53.3	+ 9.7
1943	1973	+ 5.9	57.3	+ 7.5
1944	2082	+ 5.1	64.0	+11.7
1945	1740	-16.4	67.6	+ 5.6
1946	1485	-14.7	73.1	+ 8.1

of stable gross revenues; the Southern Pacific Railway occupies a middle ground, while Southern California Edison Company would be characterized as having relatively stable gross revenues.

The second device, that of the average or standard deviation and the corresponding coefficient, may be used where extreme precision is necessary.⁹ The percentage change method takes into consideration the element of trend, and ordinarily no correction need be made as long as the trends in the companies compared are of the same type and have substantially the same gradients. If periods of less than one year are used, they must be compared to like periods of the preceding year; otherwise the seasonal variation will introduce errors.

⁹For the methods of calculating these statistical measures, reference may be made to any of the standard textbooks on statistical method. If periods of less than one year are used, seasonal variation will have to be eliminated; in all instances the trend must be eliminated, or the steepness of its slope will cause inaccuracies to creep into the comparisons. The coefficients of standard and average deviation are used only when extreme precision is desired or when the companies are widely divergent in nature.

Factors Making for Steady Revenues

The nature of the business will directly limit its possible revenue stability. The demand for the service may be seasonal, or it may be intermittent, especially if the commodity or service is one catering to fashion and the whims of a fickle public. Seasonality, irregularity, and intermittency of business can usually be overcome by working out a combinatory solution with another commodity or service whose demand fluctuates inversely. Another solution to extreme seasonality or intermittency lies in building up the demand during slack periods, even though it may slightly reduce the peaks at busy seasons.¹⁰ In small enterprises dependent upon local demand, there is much greater variability than in the large enterprises where a slack demand in one area may be largely offset by an unusually active demand somewhere else. This will be particularly true of world-wide enterprises as compared to local firms.¹¹

In competitive operations, the concern must stand ready at all times to meet any degree of variability in the demand, or it will be lost to a competitor. If an element of monopoly exists because of control over patents, copyrights, raw material supplies, limitations in sites, large cost of entering the business, length of time necessary to enter the business, or special franchises, the corporation may exercise some control over the demand. It can force a few to wait, hence can carry over a portion of the normal peak demand to a later date. The fact that waiting may be forced upon some will cause others to anticipate their normal demand period and consequently, in effect, shift forward a portion of the demand. Both shifts reduce the peaks and elevate the floors of the trade valleys of companies experienced in competitive operation.

Good management¹² makes the most of every opportunity to increase the volume of business done; it loses no chance to reduce costs, to devise new short cuts in production, to keep down personnel, and to do a thousand other things for the benefit of the business. Good management makes for a decreased and a more stable operating ratio; it makes for an increased as well as a more stable margin of profits.

A high operating ratio means a generally poor condition of management,

¹⁰ Public utilities have essayed such a shift in their load factor in order to obtain a better over-all distribution of their load.

¹¹ Such concerns as American and Foreign Power would be supposed to come under this head. As a matter of fact, in the depression of the thirties this company exhibited no unusual tendency to hold up any better than those entirely domestic in nature.

¹² There are two commonly accepted methods of preparing measurements of the "goodness" of the management of a corporation. The ratio of operating expenses to operating revenues (the operating ratio is often used for it) gives an indication of the extent of the gross or operating profits of the concern's operations. As a matter of fact, if one subtracts the operating ratio from 100 per cent, the difference is the percentage of operating profits. A second measure which is used to indicate the quality of the management is the activity of working capital as reflected in working capital turnover ratios. In all instances the measures are only relative in nature.

low profits, even on the last dollar of business done, and a less stable operating profit to the company. A low operating ratio usually means good management, a wide margin of profit, and a stable operating profit condition.¹³ Worst of all is a condition of a widely fluctuating operating ratio, which means one or more of the following conditions in the concern: (1) extremely poor management; (2) unsettled policies within the company; (3) a violently shifting nature of business as well as volume of business; (4) peculiar economic conditions, such as war, floods, political or monetary disturbances, etc.; and (5) serious maladjustments between the supply of and the demand for the product.

The degree of fluctuation in operations to which a company should strive to limit itself is a relative matter. A 20 per cent fluctuation in gross revenues or operating ratios, on the average, may not be abnormal in a manufacturing concern, but it surely would be viewed with alarm by a railroad company. Even within a given field the average may remain fixed while individual companies fluctuate considerably. The extent of variability in operating ratios may be measured by either of the two methods suggested above for measuring stability of gross revenues.

Relation of Increase in Revenue to Operating Expenses

Much of modern business is conducted under a condition of decreasing costs. That is to say, the greater the rate of production, the lower will be total costs per unit, or the more economical will be the production. It is not nearly so frequently true that as a greater and greater quantity is produced, the operating costs will decline. The logical conclusion in most business enterprises is that where several conditions of nearly equal total profits are to be found on the production expansion curve, the business will possibly best choose that condition which makes for greatest volume.

Benefits Derived from Stable Revenues

A corporation which maintains a stable volume of business at all times can do more business upon the same amount of working and fixed capital than one with variable operations. Steady business will mean that the fixed assets in plant, equipment, and trained personnel will be used to a higher degree of efficiency on the average. Smaller inventories may be kept; a smaller cash fund will suffice. Knowledge of a steady demand permits acquisition of the most competent personnel, which, in the knowledge of the probable permanence of its work, will achieve the highest degree of efficiency. The management may lay its plans with care and know with a relatively high probability that they need not be amended because of variability

¹³ The reasoning is based upon the principle of relativity. It is a relatively high operating ratio, or a relatively low operating ratio in comparison to similar and/or competing companies. A hydroelectric company with a ratio of 80 may be high as hydroelectric companies go, but it would be extremely low as meat packing companies operate; obversely, a railroad with an operating ratio of 40 would be low in comparison with other railroads, but it might be high in comparison with other types of enterprises.

in the rate of operation. Even the shareholders find they can do more with the directors and the management if the revenues are stable. There is no excuse for blunders because of unforeseen circumstances; there are fewer wild promises and there is less temptation to create secret reserves to cover up such blunders.

The development of a steady volume of business will ultimately lead to a *steady volume of profits and a steady dividend policy*. The latter enhances the company's credit and tends to eliminate any tendency toward manipulation and speculation. Over a long period of stable revenues, there may possibly develop a certain tendency toward price agreements, or informal pacts of a price-stabilizing character.¹⁴

The Ratio of Fixed to Variable Expenses

The continuous existence of an organized business requires an outlay to maintain that existence, whether business is conducted or not. Depreciation, obsolescence, organization, some forms of taxes, etc., remain relatively constant whether or not the business operates; variable expenses are incurred solely when the business is in operation. The fixed expenses tend to be proportional (approximately) to the potential scale of operation; the variable expenses tend to be proportional (not nearly so precisely) to the actual rate of operations. To have a wonderfully well-equipped plant is to have a large fixed expense; to operate any plant on a large scale is to incur large variable expense. As the fixed expenses increase, within limits, the variable expense, within limits, tends to diminish for any specified rate of operation. Sometimes an increase in fixed expense is incurred to reduce variable expense by an equal or greater amount. Thus a machine costing \$10,000 in a lump, or \$1500 per annum fixed charge, is purchased to displace two workmen to whom, when working, wages of \$2500 per year would be paid as a variable expense.¹⁵ The problems involved in the shift of costs from variable to fixed, or vice versa, are exceedingly complex, but in the final analysis depend upon capital costs in relation to wage, material costs, and certain other smaller variable items.

¹⁴ Economic theory has it that price agreements and trade pacts will be more likely to develop in or following conditions of chaotic competition than in stable, well-settled industries. Of course the fundamental philosophies of businessmen have an influence. The rugged individualist ever avoids such organizations, the highly intellectual management will probably drift inevitably toward combinations as a saving grace.

¹⁵ Serious errors can be made in displacing labor by machinery, or in any other expenditure where a fixed charge is substituted for a variable expense item. Those who manage income can vouch for the fact that in 1925-1930 there were many mistakes made on this score. If a machine actually costs \$2000 per annum, it can be used to displace labor costing as much as that sum divided by the percentage employment. Thus if one employed men 70 per cent of the time (business cycle employment) then the machine would have to do the work of about \$3000 worth of labor; the same machine on a 50 per cent employment basis would have to displace \$4000 in wage costs. Under the rigid wage agreements of the 1936-1948 era these comments become less true, and especially under guaranteed annual wage contracts.

A definite relationship exists between the ratio of fixed to variable expenses and a satisfactory operating ratio. As a general proposition, a business with a high ratio of fixed to variable expenses must have a low operating ratio; one with a low ratio of fixed to variable expenses may have a high operating ratio. Owing to the inherent relationships within the elements concerned, these relationships of ratios are more or less automatic. The greater the degree of stability of gross and net revenues, the higher may be both the fixed charge ratio and the operating ratio.

The Load Factor

The operating ratio, as well as the ratio of fixed to variable expense, is directly related to the elasticity of demand for the products and the corporation's plant and equipment. In technical discussions the ratio between the average demand for the products of the company and its plant capacity is known as the *load factor*. If a given utility had a plant capacity of 500,000 kw. and the average demand was 250,000 kw., it would be said to have a load factor of 50 per cent, or if an automobile plant could turn out 6000 cars per day and the demand averaged but 2000 cars per day, the load factor would be $\frac{1}{3}$, or $33\frac{1}{3}$ per cent. But no plant can be expected to operate at 100 per cent potential capacity because of repairs, breakdowns, small improvements and changes, necessary lost time because of pattern changes, and production improvements. Among those well informed on problems of this nature, it appears that from 85 to 90 per cent of potential capacity may be considered as the normal, continuously realizable output of a plant.

To approach this state of ideal load factor, the following rules are to be observed:

1. Reduce fixed costs to a minimum.
2. Increase the business done, both on a dollar basis and on a physical unit basis, to the maximum per unit of fixed capital.
3. Operate in conformance with the law of proportionality.
4. Eliminate seasonal fluctuation as far as possible.
5. Eliminate cyclical changes as far as possible.
6. Extend the market area to eliminate high amplitude of cyclic fluctuation because of a restricted market area.
7. So organize the financial structure that dependence upon specific sources of short-term capital will be eliminated.

The importance of operating near the ideal load factor is based upon a relatively common principle of elementary economics, namely, that the last or marginal increment of business tends to be the most profitable. As the ideal load factor is approached, the profitableness of each added dollar of business¹⁶ increases because the fixed charges are spread thinner and thinner.

¹⁶ Some students experience no small amount of difficulty in keeping a clear conception of the differences meant by "average dollar of business done," and "added dollar of business done." The former may rise or fall quite independent of the latter.

BUDGETS AND INTERNAL FINANCIAL CONTROL

Like human beings, business enterprises, when left to themselves, are more than likely to let their existence degenerate into chaotic successions of accidents. An army without organization and control is a mere mob; its battles are riots; its victories due to preponderance of numbers alone. So, too, business companies without effective organization become mere conglomerations of land, capital, and men; operations are haphazard; and profits are mere pittances of remuneration.

The planning of financial operations by financial budgets arose from the large scale of modern business undertakings. From the point of view of financial management, it faces both the necessity of scientifically reporting progress on the one hand, and, on the other, the formulation, transmission, and execution of scientific financial policy. This is closely related to forecasting. The budget attempts to prepare, in the present, a plan to meet the probable economic and operating conditions affecting the business in the future.

The Functions of Budgets

The highest degree of coordination in the business can be obtained only when the several elements are perfectly balanced. To permit a sales organization to be erected far beyond equipment capacity is sheer waste; to erect a huge production plant and be without funds to operate it, advertise, promote the product, and/or care for financing needy customers is equally certain to invite economic disaster. Under a budget, each department in the business is compelled to cooperate in achieving predetermined plans. Each division of the business is made more conscious of the composite nature of the business unit and the inability of any one of the departments to function properly unless the whole also functions.

In a dynamic society every business must continually be in a state of flux, constantly engaged in a process of adjustment to the remainder of the changing economic structure of which it is a part. The financial budget becomes both a plan of action and a basis or standard of comparative achievement. The larger the business unit, the greater the difficulty encountered in either increasing or decreasing the rate of operation, hence the greater the necessity for accurate planning which will eliminate the necessity of rapid changes. A budget likewise aids the business to achieve forelaid plans. In compiling a budget, the management is required to prepare plans and to estimate costs carefully; in executing it, the management is required to achieve those plans.

If financial budgets are carefully prepared they can be of much value to the banking institutions upon whom the business may depend for temporary or permanent financing. Such budgets are the only known way of predetermining when and to what extent financing will be necessary. Through

budgeting the probable demands for funds can be known considerably in advance, and steps can be taken to meet this demand.

The financial budget compels financial self-analysis by the company's own officials and employees. The mere fact that such periodic analysis and check on the company's operations and position are made improves the confidence of the management in its personnel and increases the degree of cooperation among employees.

Today business is said to be largely organized on a functional basis. Sales and production programs must be synchronized; advertising and sales methods must be united in a single project of distributing the product. The necessary complement and outgrowth is a budget which financially facilitates the accomplishment of these ends.¹⁷ The greater the degree to which business employs fixed capital and the greater the extent to which stockholders trade on their equity, the stronger becomes the need for accurate, planned control over the finances of the business. Since the business cycle is a major problem of budgeting, it is one of the phases of our economic activity in which budgets can possibly be of greater use.

Kinds of Budgets

There are many kinds of budgets, some of which are used more often than others. The most common form is the *sales budget*, which is an estimate of the sales for the future according to type of product, geographic area, and time intervals—weekly, monthly, quarterly, and annually. A *production budget* is a schedule of goods to be produced, arranged by type of product and time intervals. If more than one production unit operates, the schedule will indicate separately the production for each factory or unit. *Purchase and inventory budgets* show the quantity and kind of materials necessary (and place, if there is more than one producing unit) in order to meet the requirements of the producing departments. *Production expense budgets, overhead budgets and cash realization budgets* are other forms. *Financing budgets* are used to show the type and quantity of financing expected to be done in the next budget period. The *master budget* provides a tabulated summary of the other budgets.

Construction of the Budget

The construction of a budget is not a simple matter. Periodic reviews of the budgeting situation are almost always necessary to make allowances for

¹⁷ It seems that the budget as a business device was mostly an American invention, developed parallel with the growth of the size of the business unit and the extension of absentee management. Today, however, it finds quite as much use among the large business units of other countries as among American corporations. The greatest impetus to industrial budgeting in America was probably the depression of 1920, though many firms had made use of the formal budget for years. Cf. National Industrial Conference Board, *Budgetary Control in Manufacturing Industry*. In the 1920 depression the excess inventory condition of business was blamed for much of the trouble. Ironically, it may be noted that while budgeting may have been instrumental in preventing the same excess inventories from occurring in the 1929-1933 depression, it most certainly did not prevent them from being tremendously overextended in producing capacity.

the changes taking place in a dynamic business world. Discussion of the problems of the budget at intervals serves the useful purpose of increasing the community of interests of the major department heads and makes for cooperative effort. The technical information supplied by the several heads of departments forms the fundamental basis of the budget.¹⁸

Demand is normally the point of departure. The total expected sales are often used as a basis for the budget. The period covered will normally be a year broken into quarters or months.¹⁹

Upon the general demand estimates the sales department will prepare its budget. At this particular point the time element must be carefully considered. Goods must be had sufficiently ahead of actual sales dates to permit their sales distribution, but they must not be held unnecessarily, since funds so tied up are always open to some risk as well as being costly to the corporation. Certainly no greater mistake can be made in budgetary preparation than that of applying a flat percentage to the actual results of previous years' operations.²⁰

The production or manufacturing department must next determine whether or not the output required by the sales department can be turned out by the existing equipment, plant, and personnel, and in accord with the time schedule laid down in the sales budget.²¹ If extensions and additions

¹⁸ The following check list of general principles will be of service for beginners in the preparation of the budget:

1. Confine the budget period to a convenient estimating period.
2. Provide for necessary adjustment in budget items.
3. Base sales or requirements on a careful analysis of customer-demand factors.
4. Place responsibility for making dependable estimate on persons who have the responsibility for securing results.
5. Have the budget items parallel the classification of accounts.
6. Set up the budget to follow organization lines in order to confine and define responsibility.
7. Simplify procedure as much as possible.
8. Estimates must become actual agreements to accomplish.
9. Make systematic comparisons of results with budget estimates.

¹⁹ The length of the budgeting period is neither easily determined nor constant, and it is impossible to prepare a usable budget until the length of the budgeting period has been determined. It is generally conceded that the shortest period for which a budget may have meaning is the period of production. It is likewise generally accepted that the length of the budget period will vary with the length of the turnover period for merchandise inventory, though a very strong seasonality in sales, coupled with a seasonal displacement of buying, processing, and selling, may fix the budgetary period at an arbitrary length of one year.

²⁰ To do this is not to distinguish between profitable and non-profitable products, or between increasing and decreasing demands. Although it may be desirable, for competitive purposes, to continue such non-profit operations, it is not sound logic completely to ignore these differences when budgeting.

²¹ The reader's attention is called to the fact that the revenues expected to be received in return for the goods sold constitute a complex resultant of many elements, the more important of which are the prices at which the goods are sold, the terms of sale, the quality of collections, the policy on consignments, etc. It follows that any attempt to control this item must really be directed toward controlling the sub-elements composing it. See discussion of "The Financial Budget," *infra*, p. 457.

are required, estimates of their costs are next in order. Thus, a special budget for "plant additions and alterations" will appear. The chief function of this budget is to indicate the degree to which working capital may be depleted through investment in fixed assets during the various periods considered. If the drain on working capital is too heavy and new financing or temporary borrowing must be done, the budget will provide a schedule for the financial officials.²² The rate of technological advance, i.e., the rate of replacement of men by machines, will be of prime importance.²³ Young and rapidly expanding industries will have to devote much more attention to the capital expenditures budget than old and well-established or decadent industries. Errors in this budget are likely to prove very costly since their rectification requires much time and may result in the destruction of previously invested capital.²⁴

Upon the showings made, plans as to temporary investments, debt extinction, preferred stock redemption, stock dividends, and surplus appropriations must be based.

Execution of the Budget

The usefulness of a budget is possibly divided between the benefit from precision in planning and the benefit from deprivation of non-essentials. Its execution should be strict in most instances. It is, in a sense, a financing plan; and banks and other credit sources have every reason to demand that the plan be followed or that it be not made. To prepare any plan and discard it summarily is but to waste the time, energy, and money consumed in its preparation.²⁵

Concessions to departments, which are really admissions of errors in the plan, should be given only because of (1) unforeseen business and economic conditions, and (2) unforeseen technological changes. Once a good budgetary system has been set up, forecasts of profits and losses, credit position, bank position, and current inventory position can be depended upon to

²² Between this budget and the "operating capital budget" is a wide line of demarcation. The latter may be more accurately described as a working capital budget and actually constitutes a division of the master budget. The major benefit of such a budget seems to be that of forcing the various operating departments to lay their course of action with due respect to capital requirements.

²³ The problem of controlling such expenditures is a troublesome one. If a lump sum appropriation is made by the directors and the expenditures are left to management, there are always dangers of maldistribution of the funds, as well as the diversion of funds saved in one activity to non-essentials in another direction. On the other hand, to insist upon individual appropriations is time-consuming and tends to reduce the initiative of the management.

²⁴ Capital expenditure budgets are commonly drawn up for several years, usually three to five. They are indicative of basic trends rather than season-to-season estimates.

²⁵ A special budgetary device known as the "flexible budget" is frequently used in businesses where the operations of the business are open to relatively wide and uncertain amplitude of fluctuation. The flexible budget is adjustable to, or provides for, varying volume of sales, prices of materials, wage levels, etc.

maintain the financial problems at a minimum. During periods of easy business there is a general tendency for new businesses and small businesses to operate beyond the proper safety position set by their financial resources.

The Budget Committee

It will be usual to have the budget committee include the production manager, sales manager, controller, purchasing agent, treasurer, research statistician, and the general manager, the president, or his representative. The work of the committee is often largely accomplished by subcommittees who take charge of special divisions of the budget work.

The Financial Budget

While budgets generally may be regarded as plans, the financial budget is of particular importance, for upon its success or failure largely depends the success or failure of the other budgets.

From the point of view of the financial budget, all departments are regarded as (1) revenue sources, (2) expenditure items, or (3) both. Every department is regarded as a station in the circulating capital cycle—(1) cash, (2) inventory, (3) sales, (4) receivables, (5) cash. The operation of a business is merely the passing of capital in various forms through this cycle. It is at once apparent that the time element introduces sufficient eccentricity so that the ideal business situation—the receipt of cash day by day exactly equal to disbursement—can never be achieved. A financial budget is a plan of meeting the daily disbursement requirements with a minimum of borrowing. A perfect financial budget would provide each day exactly the amount of cash needed to pay the day's debt maturities. Since this is impossible to achieve, a "cash balance" is used as a buffer.

In the financial budget a distinction should and must be maintained between long-time and short-time operations. The long-time financial planning pertains essentially to the problems of capital structure, authorization of stock and bond issues, arranging refunding, providing for serial and maturities and redemptions, permitting conversion, arranging for rights, etc., all in accord with the fundamental economic and financial trends of the times. Short-time financial budgets are chiefly concerned with bank borrowing, collections, credit, receivables, discounts, price levels, profits margins, interest and dividend payments, tax and other disbursements. Occasionally the two will converge though they seldom coincide and each is more or less independent of the other in the average business. It may generally be observed that the short-time finances of a company are much more precisely determinable; long-time financial budgets are mere curbings of extension and structural financial balance.

Cash Disbursements

From the records of past years much may be learned as to the quantity of cash the business will need from time to time. Recurrent fixed or semi-

fixed payments may be set up, such as bond interest, stock or cash dividends, sinking fund, and taxes on property. Next will be the semi-variant expenses²⁶ which are subject to some control, such as advertising, product improvement, and similar items. Thirdly, the decidedly variable expenses must be estimated; these will include materials, power costs, wages, and royalties and transportation costs.

Cash Receipts

As a general proposition, it is easier to control the cash outgo than the cash income. Since the major source of cash will usually be from commodity sales and services, these items are first accorded attention. If the percentage of cash operations is known, these receipts may be immediately prepared from the estimated sales quotas.²⁷

Temporary Financing Estimates

It is rare that cash receipts exactly synchronize with cash disbursement requirements. The excess of receipts over disbursements will enable the company to build its bank balances, make temporary investments, or reduce current borrowing at the bank or elsewhere. An excess of disbursements will necessitate the sale of temporary investment holdings, a reduction in bank balances, or an increase in bank borrowings. The minimum cash balance which the company should or can get along with may not be the minimum cash balance which the company should carry.

Budgeting and the Business Cycle

With the prime function of the financial budget that of controlling the business, it would seem that the business cycle should be flattened considerably. However, every business is a profit unit; every business manager is torn between two fires: joint action and collective effort versus personal and individual success. Sometimes a third element enters—personal vanity and naïve optimism.

One phase of the financial budget which is always given careful consideration in the light of the business cycle is that of the fixed capital financing. Maturities, refunding, conversions, "rights," new issues, etc., must be partly conditioned by such things as the speculative and investment psychology of the business cycle. The financial budget must allow for a lower rate of collectivity during the downward movement of the cycle. During periods

²⁶ It is always desirable to recognize that some semi-variable expenses are nearly constant at one rate of production but highly variable at other rates of production. Thus some expenses may appear to be fixed expenses at low production quotas but become highly variable at high production quotas, and vice versa.

²⁷ The percentage of sales made for cash may vary considerably during the different periods of the year, so that it is incorrect to apply a flat average percentage to the sales expectancy and assume that the result is an estimate of the cash from sales in the different months of the year.

of recession and depression there will be a lesser amount of current disbursements and a larger amount of current assets; during a period of recovery or prosperity there will tend to develop a larger amount of disbursement relative to current assets.

An Appraisal of the Accomplishments of the Budget in Practice

About the only undisputed conclusion concerning budgets at the time being is that there is no unity of opinion as to their goodness or badness. It is perhaps safe to state that formal budgeting, as a part of the normal procedure of management, is increasing slowly.

The history of budgetary practice in American business is not entirely without qualification. In a good many instances executives hailed the idea as a device which would remove the work from management and which would automatically solve all problems. The acceptance of budgets as perfect controls was an illusion; time would quickly disillusion anyone beginning with this idea, and, unless a keen judgment was present, the disillusionment would be likely to spell disaster.

QUESTIONS

1. How would you distinguish between management of income and financial control? Why is this a problem in a business?
2. Explain why the gross capital turnover is significant in testing the management of income. In what is it of the highest significance? Why?
3. What policies of prime importance are connected with stability of earnings?
4. Indicate the principal factors which contribute to a stable earnings showing.
5. Explain the significance of the relationship between fixed and variable expenses as a factor in income stability.
6. What would you intend to accomplish by a budget?
7. Explain the various types of budgets and their usefulness.
8. Why is periodic review considered one of the important practices in connection with a budget? Do not changes make the original budget worthless?
9. In what way is a financial budget something more than a cash receipts and disbursements budget?
10. How is budget practice connected with the business cycle and the firm's operation?

PROJECTS

1. Select four companies in the commercial or industrial fields and report the gross capital turnover for the past five years.
2. Select a major company in each group—industrial, public utility, and railroad—and contrast total fixed charges—interest, depreciation, property taxes—with total income over the last five years. State your conclusions.

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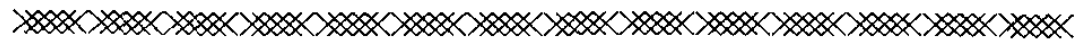
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CHAPTER XXVII

Depreciation and Wasting Assets



THE instant business assets are prepared for operation, inexorable forces of decadence set about the destruction of their value.¹ Wear and tear because of operation, chemical and physical disintegration, action of the elements, accidental stresses and breaks, new inventions, and changes in the policies of the company sometimes slowly and sometimes rapidly, but eternally and inevitably, reduce the values of the assets from what they would have been otherwise. Often mere negligence or idleness is quite as potent as wear and tear in bringing about these changes. The effect is to reduce the recoverable value of the capital assets. To offset the increasing differential between investment and retrievable value, deductions are made from current incomes. These deductions are called depreciation.² Possibly no single problem of business finance is as difficult of solution as that growing out of the maintenance of the capital fund of the corporation intact while paying out net income to the shareholders.³

The Accounting Nature of Depreciation

The nature of depreciation is possibly as completely misunderstood by the public and industrial leaders as anything could be. Depreciation is the periodic retrieval from current incomes of the value which has been at some particular time embodied in the fixed assets of the concern. For the accounting profession the Committee of the American Institute of Accountants

¹Every student of the problems of depreciation and wasting assets should study carefully the work of P. D. Leake, *Depreciation and Wasting Assets in Their Treatment in Assessing Annual Profit and Loss*.

²Three meanings for the word "depreciation" are found in economic writings: (1) a decrease in the price of commodities and services, (2) a decrease in the purchasing power of money, and (3) a reduction in the value of the capital assets of a business. It is with the third meaning that this chapter is concerned. The expressions "expired capital outlay" and "amortized cost," which are increasingly common both in England and in America, are descriptive of the meaning as here used.

³Cf. H. R. Hatfield, *Accounting*, p. 131. "Depreciation is not a disposition of part of the profits, but an expense without which profits can never be earned." Accountants generally emphasize the *cost* aspects of depreciation, while economists emphasize the *value* aspects. During periods of stable prices, business, and profits, there is very little difference in their practical meaning.

has formulated the statement: "Depreciation accounting is a system of accounting which aims to distribute the cost—of tangible capital assets, less salvage, over the estimated useful life of the unit in a systematic and rational manner. It is a process of allocation, not of valuation." The value at the time of its embodiment was a fixed and determinable amount; it was so embodied in the hope and expectation of receiving future incomes. Whether the total incomes are greater or smaller than the expenses of procuring them, plus the embodied values, determines whether or not profits have been made.⁴ There are four points of view in the element of depreciation: (1) exhaustion of the useful life of an asset, hence a writing down of its cost during the period it serves; (2) an attempt to obtain a valuation of assets; (3) inclusion of depreciation in manufacturing costs; and (4) provision of resources for the replacement of an asset when it is necessary to retire the asset for any purpose.⁵

Thus far the discussion has had little to say regarding the terminology common in sinking fund, depreciation, and related discussions. There are three terms in current use which are frequently differentiated from one another. *Depreciation* is used to mean that decrease in the value of an asset because of wear and tear. *Obsolescence* indicates that decrease in the value of an asset because of improvements in technological processes; it results from the passage of time simply because it depends on the progress of society. *Depletion* is the decrease in the amount of an asset, as opposed to a decrease in the unused services of an asset, which is considered in depreciation proper.

⁴ In the opinion of the authors, depreciation proper has nothing whatever to do with changes in the value of an asset because of changes in the price level unless the asset is sold or abandoned, wherefore it becomes necessary to close the property account. At that time the accuracy of the depreciation policy may be tested if no changes in the price level have occurred. If changes in the price level have occurred, the differential adjustment is a profit or a loss arising from two non-separable sources: (1) errors in depreciation calculation and (2) conjunctural changes in the price level.

⁵ If depreciation is regarded as a fund which is created during the useful life of an asset to equal its cost when the asset has no further use, the charge should be based upon production. If depreciation is considered as the balancing differential between cost and current value, then both positive and negative depreciation must be realized. As a third approach treats of depreciation only in relation to manufacturing costs or costs of goods sold, it is concerned with naught but the problem of adding the cost of the asset to the total costs of the goods processed through the use of the asset. This approach is not concerned with whether prices of reproduction go up or down, or whether the selling value of the asset at any particular time is greater or smaller than the depreciated value on the books.

But the fourth approach, that of replacement, must constantly consider the present as well as the probable price level. An asset bought in 1913 to be replaced in 1948 would, according to this approach, be depreciated not on the basis of 1913 costs, but on the basis of 1948 costs. In the opinion of the authors, this is the least defensible of the approaches for it is based upon two fallacious doctrines: (a) that present users under present price levels must pay for an asset to be used by future users under future price levels, and (b) that it is possible to forecast price changes accurately.

It would be superfluous, perhaps, to add that most accountants use the term "depreciation" as a general designation for the diminished useableness of an asset for any cause whatever, except the "wasting" of assets such as the decline in value of timberlands, mines, petroleum wells, etc., because of exhausting the asset.

The wide variation in practice of companies in the same field may be illustrated in Table 63 for the rubber products industry. That this has an

TABLE 63. DEPRECIATION IN RUBBER PRODUCTS INDUSTRY⁶
(Per cent of fixed assets)

	1934	1935	1936	1937
Average, all companies	...	5.11	4.89	4.70
B. F. Goodrich	4.98	4.67	4.45	4.27
Goodyear	5.10	5.04	4.72	4.60
Lee	...	2.70	2.90	3.50
Firestone	...	7.05	7.00	6.00

important bearing upon the determination of profits is clear. In the year 1937 the widest spread in the rate was 2.5 per cent, but applied to the company it amounts to \$1,700,000, a sum which would make an 18 per cent difference in its reported profit for the year.

The Economic Nature of Depreciation

The question may well arise whether the accounting concepts of depreciation will adequately prepare for a "going concern" operation. That is, will the accounting depreciation process while maintaining dollar values in the business fail to prepare "purchasing power" values? For the economic process of the business, management must replace the capital equipment at the reproduction cost figures and thus the corporation faces a practical reason for preparing for a possible price level increase. There is evidence aplenty in 1948 to show that the present depreciation charges based on money costs or original acquisition are inadequate to replace the expiring real capital values or "the economic value of capital."⁷

Managerial policies may be misguided if managers are not warned, therefore, that the reported money earnings shown on the accounting depreciation basis may not be a sound guide for their current action, it is pointed out.⁸ Some commentators have raised the question whether or not the failure

⁶ Source: *Selected Information on Manufacturers of Tires and Other Rubber Products*, Securities and Exchange Commission, 1939, Industry 30, Report #5.

⁷ The Bureau of Internal Revenue will allow nothing as an expense beyond the regular accounting depreciation.

⁸ "In long periods of changing price levels—as distinguished from the day-to-day fluctuations in price—it is apparent that due solely to the changed purchasing power of money, it will cost more or less than original cost to replace the asset, according as money has become cheaper or dearer. Other factors, of course, such as improvement of product, cheaper methods of manufacture, etc., also affect the amount of capital

of the accountant to assist at this point may not lead the businessman to so misjudge circumstances as to add to the violence of boom and bust periods.

If it be accepted that there is merit in this problem of replacement values and yet recognition is given to the accounting concepts, the important question is whether a realistic presentation can be made. A general contingency reserve directed toward the provision of added capital for price changes in the cost of assets may be the proper answer.⁹ This approach would recognize that the cost for replacement of assets may be not alone in price levels but in technological change as well. As Professor Kester concludes, "Financing the replacement of retired assets is a separate financial problem and only concerns accountancy so as the records may reflect that policy."

A further phase of the problem has appeared in the valuation of inventories. Only recently has the federal tax bureau given approval for the use of LIFO (last in first out) methods, which has great appeal at the moment because it freezes into the cost of current sales some of the high replacement costs of the inventory. Basically, the method will not provide the financial basis of operations; anticipation and provisions of funds are still the policies of the management. That the economics of the market may require this preparation is true. To expect the accounting methods to step outside the role of record analysis and presentation may be a more serious error than the critics now recognize.

Depreciation Reserves and Depreciation Funds

A "depreciation reserve" is an account into which there is periodically transferred from the operating income a sum known as depreciation. This account is commonly shown on the liability side of the statement, though on published balance sheets it often appears, more correctly, as a deduction from the proper asset items. It may be segregated against various assets so as to show the amount of depreciation which has been cumulated against each.

It does not, *per se*, indicate that the deduction has been made from the depreciable value of the assets involved, or that a special asset has been

required to purchase the new asset when the old one is retired from service. Very often, identical replacements do not take place; improved devices may combine in one unit processes for which previously two or more units were required—all of which may require replacement expenditures of very different amounts from those originally invested in particular assets. It must be apparent, therefore, that the basic purpose of the depreciation reserve is not to provide for replacements, but solely to maintain the integrity of the original capital." Roy B. Kester, *Advanced Accounting*, 4th ed., p. 300.

⁹"Capital is not impaired if the cost of a fixed asset is absorbed in operations by depreciation charges based on cost; additional funds required for the replacement of assets at higher price levels can be retained from profits by a limitation of dividends. The theory underlying the provision of depreciation on the basis of replacement cost to prevent an impairment of capital is based on the assumption that a business must retain, as a realization of deliberately overstated costs, rather than by limitation of dividends, a sum sufficient to replace the fixed assets at current prices." H. A. Finney, *Principles of Accounting*, 3rd ed. (Intermediate), p. 338.

created to take the place of the decreased value of the depreciated asset. As charges to the operating profits are made, and as equal sums are transferred to the depreciation reserve, "equivalent funds are automatically locked up within the business," so that apparent profits are prevented from consuming the "expired capital asset value."

If, as is sometimes done, a transfer to the depreciation reserve is accompanied by a segregation of assets of equivalent amounts, the special segregated assets (usually cash at the outset) are termed a "depreciation fund."¹⁰ These special assets offset the decrease in value which is presumed to have occurred in the depreciated assets. Such special funds are sometimes invested, though in public utilities they are more frequently utilized in construction or for replacements and improvements. The depreciation reserve is "the deduction for depreciation from the original property accounts, while the depreciation fund contains the assets accumulated to replace the accrued depreciation."¹¹

Methods of Calculating Depreciation

A large number of devices and methods for the determination of depreciation charges have been developed. Only a few of the more important can be mentioned here.

Straight-Line Method. Under the straight-line method, the loss in value of an asset is presumed to be proportional to the passing of time. The depreciation charged in each individual year is the same and is determined by the formula:

$$D = \frac{C - T}{N}$$

where D is the *amount* of depreciation for the year, C is the cost value of the asset, T is the terminal or scrap value, and N is the number of depreciation periods (equal in length) over which it is expected that the service use of the asset will extend. The method is simple; it is direct; it is seemingly approved by the courts, by the Interstate Commerce Commission, and by state regulatory bodies for the most part; and it is probably used in nine-tenths of the business of the nation.

Constant Percentage Method. Under the constant percentage method the assumption is that a constant percentage of the value of the asset at the beginning of each particular depreciation period is lost during the period. The *rate* in per cent is to be applied each period to this diminishing value.¹²

¹⁰ In an examination of 100 annual reports, 1947, chosen at random in the industrial field, not a single instance was found of a fund for depreciation. Funds for pension reserves and employees' accounts did appear.

¹¹ *Encyclopaedia of the Social Sciences*, Vol. V, p. 101.

¹² The formula for the constant percentage method is:

$$R = 100 \left(1 - \sqrt[n]{\frac{T}{C}} \right), \text{ or } 100 (1 - i),$$

Sum of Life Periods Method. Instead of applying a constant percentage to a diminishing base, as does the preceding method, the sum of life periods method applies a varying percentage to a constant base.¹³ This method is likely to be particularly useful where style or fashion has much to do with the value of the asset. It is defended also on the ground that the heavier charge in the early years is justified because when assets are new repairs will be small, and as the age of the asset increases repairs will increase, so that the sum of repairs and depreciation will tend to be constant.

The Sinking Fund Method. Under the sinking fund method of calculation, the amount set aside is determined to be a sum which, when cumulated at a predetermined rate of interest compounded annually, will equal the value of the asset at the end of the depreciation period.¹⁴ The sinking fund method is used quite extensively in public utility regulation, though the higher courts have not as yet approved it.

Effects of Depreciation Burdens

The various methods of charging depreciation followed by a company will have quite different effects upon the finances of the company. Those dependent upon time only, even though the method is acceptable at the outset, will bear down with undue heaviness in periods of slow business and will prove no burden in periods of unusually good business. The fundamental assumption in the time methods is that the decrease in value, as well as the ability of the corporation to bear the burden, is in a fixed and determinable relation to the passage of time. Methods of charging depreciation in proportion to net earnings suppose that if the company did not make any money there was no diminution in the value of the fixed assets. If depre-

where i is determined by

$$\log i = \frac{\log T - \log C}{n}$$

In both expressions n is the number of periods over which it is desired to depreciate the assets to its terminal value, C is the cost of the asset, and T is the terminal or scrap value. Where T is zero, the equation cannot be used, but an assigned value of one dollar can be used to accomplish the same practical result.

¹³ The *amount* of depreciation chargeable in any particular period is defined by the formula,

$$D = \left(\frac{(N-x)+1}{1+2+\dots+N} \right) (C-T),$$

in which N is the number of depreciation periods over which the asset is to be charged off, x is the number of depreciation periods which have already elapsed, C is the cost of the asset, T is the terminal or scrap value, and D is the amount of depreciation for the year.

¹⁴ The formula used to determine the annual depreciation charge is:

$$D = (C-T) \frac{i}{(1+i)^n - 1}$$

in which C is the cost of the asset, T is the terminal value of the asset, i is the rate of interest at which the depreciation fund is cumulated per period, and n is the number of depreciation periods.

ciation is charged in proportion to gross earnings, the assumption is that the rate of decline in capital assets is proportional to the gross dollar volume of the business done; thus a concern with a wide margin of profit can and should set aside the same amount as one with a narrow margin of profits. And if depreciation is charged in proportion to the physical volume of business, the assumption is that the value embodied in the capital assets decreases in proportion to output. As a general proposition, if depreciation is charged on a non-chronological basis the assumption is made that the mere passage of time has no effect upon the worth of an asset.

Depreciation and Sinking Funds

A dual relation exists between sinking funds for bond issues and depreciation funds against assets, in that the effect of either may partially remove the necessity for the other. Strictly speaking, sinking funds are to retire debts; depreciation is to prevent dissipation of the capital assets of the company. Bondholders should be interested in sinking funds for they operate to reduce the effective debt ratio; they should be interested in depreciation policies both as to conservation of the net worth equity in the company and as to a proper statement of the corporation's earnings.¹⁵

Clearly, then, a large sinking fund which would rapidly efface the debt would, from the bondholders' point of view, permit a degree of laxity in the depreciation policy. On the other hand, a depreciation policy which quickly wrote off the apparent assets of the company would cause the retention of earnings to increase the otherwise protective assets of the company. During the period when large depreciation was being written off, the profits were understated; likewise, the number of times bond interest was earned would have been understated. After the asset has been written off, the profits may actually be overstated. It should always be remembered that depreciation funds and reserve funds are used for fundamentally different purposes.

A distinctly undesirable practice on the part of certain corporations with respect to the relation between depreciation and sinking funds has frequently been observed. Some companies will compute the "number of times bond interest is earned" before deducting depreciation charges. This is incorrect; for it includes in the earnings that portion of the capital fund which was depleted during the preceding year, as well as the actual earnings. Thus a concern which earned its bond interest but once would, according to this method, at the exhaustion of its assets have no assets with which to repay the principal of the issue. The calculation of "*number of times bond*

¹⁵ Occasionally bond indentures will contain provisions as to depreciation. The Public Service Company of Oklahoma in its \$22,500,000 issue in 1945 provided (1) for a market purchase fund of not more than 1 per cent of the issue annually, should the bonds be available at less than par; and (2) for a maintenance and renewal fund of not less than 15 per cent of the gross revenues to be used for (a) maintenance and repairs, (b) property additions not eligible to serve as security for additional bonds, and (c) redemption and cancellation of outstanding bonds.

interest is earned" should be made after depreciation has been deducted, but before sinking fund is deducted.

Offsetting Depreciation by Conservation of Assets

Since depreciation and the similar charges discussed in this chapter operate as deductions from income, it would be natural to seek ways and means of reducing these charges. The best of the suggestions noted to date is to *take care of the assets*. Keep them in a good state of repair,¹⁶ and don't overwork them. Iron and steel are quite as much subject to fatigue as is any biological organism. Unless machinery has an opportunity to rest, it breaks down much more quickly than is necessary. Buildings should be kept painted; the same is true of all mechanisms exposed to the elements. Do not expect machinery to withstand severe usage when kept in bad repair.

On some occasions the lost values may not be recovered. The only solution is to create new assets to take the place of the old ones, charging the old ones to surplus immediately; or, if insufficient surplus exists, to recapitalize the corporation. The shift from the silent to the talking motion picture is a case in point.¹⁷ To write off such losses over a period of years operates to show an apparent capital asset value actually non-existent; on the other hand, to write them off instantaneously operates to affect radically the financial position of the company.

Objectionable Accounting of Reserves

Occasionally corporations stray from the most satisfactory methods of accounting. We have already mentioned the objectionable practices in reporting earnings and those engaged in by holding companies. Three further objectionable practices may now be considered.

1. Some corporation accountants assume that sinking funds against bond issues and redemption funds against preferred stock issues are the same as depreciation, deterioration, obsolescence, and depletion. Sinking funds are for the fundamental purpose of providing an asset value to pay a debt at its maturity.

2. Some companies have assumed that if they set up sufficient new construction, this would suffice to offset a diminution in the value of fixed

¹⁶ Much controversy has existed over the extent to which repairs constitute depreciation, to which depreciation constitutes deferred repair or maintenance costs, and to which depreciation includes repairs. The general rule is difficult to formulate, but ordinarily repairs constitute expenditures to keep up the operations of the asset in its best efficiency. Any expenditure which improves its efficiency or its adequacy beyond normal is a betterment and not a repair.

¹⁷ The write-off of motion picture films is quite rapid. Warner Bros. did amortize under 1943 schedule their production costs as follows: in 8 weeks, 35 per cent; 13 weeks, 57 per cent; 39 weeks, 90 per cent; 52 weeks, 96½ per cent; and 65 weeks, 100 per cent. Positive film costs are amortized over 24 to 30 weeks. The 52 weeks' write-off is: in 4 weeks, 15 per cent; 8 weeks, 40 per cent; 12 weeks, 69 per cent; 26 weeks, 96 per cent; and 30 weeks, 100 per cent.

assets and that they would therefore not need to set up charges for obsolescence, depreciation, depletion, etc. This practice is in error. A company failing to write off \$500,000 in fixed charges for depreciation, etc., and allowing a \$500,000 extension of new construction is in reality concealing the fact that \$500,000 loss was sustained on the old assets and a like amount of surplus from past earnings was appropriated to new construction to take the place of the loss.

3. A few companies have followed the practice of assuming that a fixed relation exists between *net earnings* and *reserve requirements*. Seldom, if ever, is this true. Irregularity of depreciation charges is usually condemned by both accountants and economists, for the logical inference of the policy is that no depreciation occurs unless there are profits.

Depreciation as a Legal Requirement

In the past fifty years business and corporation law in the United States has gone through a complete reversal of position with respect to depreciation.¹⁸ Introduction of rate control by state public utility commissions and the work of the Interstate Commerce Commission have probably been the two most important forces leading to a judicial admission of the necessity for permitting (and later requiring) depreciation. The continued improvement in practices from a legal point of view, however, must be shared by these two agencies with the Treasury Department, Bureau of Internal Revenue, which, under the administration of the corporation income tax law, has met more varied problems than the two earlier agencies.¹⁹ All legal opinion holds the tenet that dividends may not be paid out of capital; hence in determining the availability of earnings for dividends, the decline in capital asset value must be logically considered. If income and debenture bonds are outstanding, the question of whether there have or have not been earnings often hinges upon the question of depreciation.²⁰ In industries or corporations where the regulatory bodies are charged with permitting a "fair return on a fair value," both the value and the return may quite properly be affected by the depreciation of the assets involved.²¹

Entirely aside from, but closely allied with, the legal necessity for depre-

¹⁸In 1878 (*U.S. v. Kansas Pacific Ry. Co.*, 99 U.S. 459, 1878), the Supreme Court denied the validity of depreciation, though it clearly recognized repairs, improvements, and betterments. The weight of authority since 1897 has been distinctly in favor of depreciation charges, though it was not until some years after the opening of the century that the Supreme Court included it as a proper charge against revenues in arriving at profits. *Knoxville v. Knoxville Water Company*, 212 U.S. 1 (1909).

¹⁹The Bureau of Internal Revenue has approved the straight-line method, the unit of production method, and the job method, but allows considerable leeway both in method and in amount.

²⁰Most of these indentures contain elaborate provisions on the determination of net income. The depreciation charges will be described therein.

²¹Since 1910, with the violent price fluctuations which have occurred, the problem has been extremely troublesome.

ciation is the question of public concern over depreciation. The increasingly far-flung distribution of security ownership, of economic interdependence, and of socialized responsibility of business management indicate that unsound financial policies cannot be condoned.

The Interstate Commerce Commission on Depreciation

Under the Interstate Commerce Commission Act and the amendments thereto, the Interstate Commerce Commission exercises control over depreciation and appreciation in all business corporations within its jurisdiction. Prior to 1920, the power of the commission over the problem of depreciation was discretionary; the 1920 amendment made the power definite and its exercise mandatory. The problems of depreciation and appreciation touch the work of valuation, of rate determination, of property accounting under the uniform accounting laws, and of the administration and control generally of the operations of the corporations relating to finances.

The commission has defined depreciation as a division of maintenance, having for its chief function properly "to account currently for consumption or exhaustion of the service life of property from causes known to be in operation and the effect of which can be forecast with reasonable accuracy." The commission takes the stand that depreciation is inevitable and cannot be ignored without causing the accounts to be incomplete and misleading; and it regards depreciation as a speculative charge only in so far as the conclusions drawn from past experience and existing facts may be in error in the future. The use of appreciation to offset depreciation is not permitted, though it is clearly recognized that there exists a difference between elapsed life and suitability for use. The commission recognizes "functional" depreciation or obsolescence,²² which arises from want of adaptation to function.

The method of charging depreciation is the straight-line calculation, though it is only a device of practicality, the commission recognizing that the loss of usefulness in an asset does not proceed at a uniform rate from the date of the first installation to ultimate retirement.²³ Unless the Interstate Commerce Commission can establish that the amount charged by the company is excessive, the company's judgment on the question of depreciation will be upheld as long as no unusual rate is sought. On the subject of whether depreciation represents mere deferred maintenance costs, the Interstate Commerce Commission has repeatedly held that such is not the case. The Supreme Court decided that whatever basis of valuation is used for rate-making purposes, depreciation should be computed upon a like valuation base, so that a railway could not use present cost of reproduction

²² In the case *Telephone & R.R. Deprec. Charges*, 118 I.C.C. 295 (1926), inventions or improvements were admitted to be factors to be reckoned with in determining depreciation charges.

²³ *Atchison, Topeka & S.F. Ry. Co.*, 127 I.C.C. 1 (1927); *Augusta Northern Ry.*, 125 I.C.C. 14 (1927).

as the basis of rate determination, but would use original cost as a basis for the calculation of depreciation in determining earning or net income to stockholders.

Public Utility Practices

In publicly regulated corporations the commissions have not been able to obtain completely satisfactory depreciation policies.

From the earliest days of regulation a conflict has existed in the public utility field over the method of imposing depreciation rates. Those who argue for the sinking fund method take the position that the depreciation reserve which is charged against earnings is not the property of the company but of the rate payers. For the straight-line method, it is argued that it is simple and more practical, that it is the only logical method where original cost less accrued depreciation is used as the valuation base. Likewise, it has been repeatedly upheld by the United States Supreme Court in its decisions.²⁴ Both methods are proper if they are properly applied, and neither appears to be more accurate than the other when adjustments are made in the depreciation charges from time to time.²⁵ The basis of valuation of the assets may be original costs,²⁶ depreciated value as of a fixed date,²⁷ appraised value (less depreciation or plus appreciation), reproduction new

²⁴ *Joplin Gas Co. v. Pub. Serv. Com. of Mo.*, 296 Fed. 271. The Supreme Court would seem to deny the "trust fund" principle involved in the sinking fund method, for it has several times stated that the public has no right or control with respect to cumulated reserves. *Galveston Electric Co. v. Galveston*, 258 U.S. 388, 395 (1922); *Georgia Ry. & Power Co. v. Railroad Commission*, 262 U.S. 625 (1923); *Newton v. Consolidated Gas Co.*, 258 U.S. 165 (1922); *Holland v. McGuire*, P.U.R. 1920B, 167 (Mich.).

The Interstate Commerce Commission (Telephone & R.R. Deprec. Charges, 118 I.C.C. 295 [1926]; *Ayrshire Coal Co. v. S. Ry. Co.*, 535-536 [1926]) has made its position clear: "The straight-line method is based upon the theory that the property or capital of the company is continually being consumed in service and that the owners should be reimbursed therefor concurrently with the consumption. Under this theory the funds reserved from earnings by the depreciation charges are immediately made available to the company for use for all corporate purposes. The sinking fund method, on the other hand, is based upon the theory that the company is entitled to a fair return upon all property maintained in condition for proper service, regardless of the fact that a part of its service life has been consumed, and that the owners should receive no reimbursement for property consumption until the unit has finally been retired. Funds reserved from earnings by the depreciation charges are, therefore, segregated and allowed to accumulate at interest pending such ultimate reimbursement.

²⁵ There is an argument made by some of the corporations to the effect that the sinking fund method is better, in that they are able to receive an assured income from the fund whereas they may not be able to reinvest dribbles from the depreciation fund under the straight-line method as their capital is returned to them. Some commissions have attempted to straddle the two methods by charging a rate based partly upon one method and partly upon the other; e.g., *Dept. of Public Works v. West Coast Telephone Co.*, P.U.R. 1933A 490 (Wash.); also, *Bay State Rate Case*, P.U.R. 1916F, 221 (Mass.).

²⁶ *Re Patrons of Lakeville Water Co.*, P.U.R. 1932D, 138 (Conn.).

²⁷ *Re N.Y. Telephone Co.*, P.U.R. 1930C, 325 (N.Y.), where accrued depreciation was used as a measure.

cost, or book values. During rising price periods the utilities use pressure to cause the commissions to consider reproduction cost, but during declining price periods they see the folly of reproduction costs and exert as much pressure to have the commissions use original costs.

Gross or net revenues as a depreciation base will seldom be found among the later decisions of public utility commissions, for they need have no relation to the decline in the value of assets or the consumption of the capital investment, except, perhaps, on the average, over a period of years. Physical production seems to have been used *more commonly with natural gas companies* than with any other type of utility, and finds its justification in the combination of depreciation and depletion.

Control over Depreciation Reserve Funds. In rather sharp contrast with the practice of industrial corporations and with the policies of the Interstate Commerce Commission, the public utility commissions have rather generally insisted that they had the power to control the investment of the depreciation reserve funds or, if not to control the investment, to control the rate at which the corporation was to be charged interest to be credited to the depreciation reserve.²⁸

Valuation and Depreciation. Public utilities are entitled to charge such a rate as will enable them to earn a fair return on a fair value.²⁹ In determining what constitutes "fair value," the matter of depreciation is considered. When, for the first time, the properties of a utility are valued, the accrued depreciation is estimated and (usually) set up in a depreciation reserve.³⁰ From that point forward, the customary practice is a series of adjustments designed to repay the utility for the investment in the asset.

QUESTIONS

1. Explain the significance of the idea that depreciation accounting involves allocation, not valuation.
2. Why is it sometimes claimed that accounting concepts improperly register the economic effects of depreciation?
3. Explain your concept of "depreciation reserve" and "depreciation fund." Are both present in any depreciation operation? Explain.
4. Indicate the general position of accounting theory on financing the replacement of capital in a business, and the position depreciation plays in this concept.
5. Suppose the business cycle reaches the prosperity peak and turns down-

²⁸ The question of whether the commissions legally have any right to control the investment of the depreciation fund is open to further court adjudication. In Michigan the state courts have consistently refused the right of control over depreciation funds to the commission. *Mich. Pub. Ut. Com. v. Mich. State Tel. Co.*, 228 Mich. 658 (1924).

²⁹ It is, of course, impossible for a precise definition to be given of "fair return" and "fair value." The commissions are not unified in their opinion, or always constant. Perhaps it is better not to have the terms defined precisely.

³⁰ *Re Wis.-Minn. Light & P. Co.*, P.U.R. 1920D, 428 (Wis.); *Alpha Portland Cement Co. v. Lehigh Nav. Elec. Co.*, P.U.R. 1924E, 737 (Pa.).

ward to recession and depression. Discuss the long-term result of the theory that accounting should record economic values.

6. Why are the security analyst, the security holder, and the banker interested in depreciation policies?
7. Explain your position on the proposal to offset depreciation by the appreciation of assets.
8. Trace briefly the shift in attitudes, historically, on the part of various legal or regulatory authorities in reference to depreciation.
9. What problem does depreciation create in public utility valuation? How is it connected with capitalization in this field?

PROJECTS

1. Select three public utility concerns and write a report on their depreciation policies over the past ten years.
2. Examine statements of ten concerns and write a report on the evidence of "depreciation funds" in their records over the past ten years. Report on additions to the property account in the same period.

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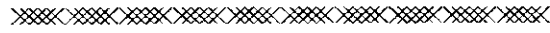
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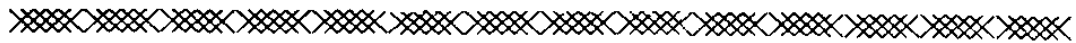
PART SIX



Current Financing

CHAPTER XXVIII

Working Capital



FOR the most part, the problem of capital in corporations has been thus far considered as if fixed capital were the only important factor. But this was due to emphasis, not omission. At the present time the estimate is that more than one-half of the business failures are caused by either inadequacy or mismanagement of working capital. Some business managers tend to give almost all of their attention to fixed capital, naively supposing that the problem of working capital will automatically care for itself. Unfortunately, working capital requires more and closer attention than any other. It will slip away by dissipation, drop into oblivion because of carelessness, and solidify by transformation into fixed capital. Only the management feels a pressure to look after it, whereas borrowing in the form of mortgages, funded debts, or even preferred stocks will find the creditor as well as the stockholder intensely interested.

Terms Used

Properly to discuss the subject of working capital necessitates the definition of several terms. Unfortunately, there is at the present time no accepted definition of working capital. The common definition states that working capital is the current assets less the current liabilities.¹ Current assets less current liabilities is commonly referred to as *net working capital*; while working capital as equal to the total current assets is frequently called *gross working capital*. These definitions, however, do not get at the heart of the matter at all, for they ignore the nature of working capital and conclude incorrectly what is to constitute working capital; they define neither its extent nor its nature. *Working capital is that portion of the assets (the capital employed) of a corporation which is in a form that may, and ordinarily will, over a short period of time be devoted to a variable operative*

¹ Another definition is that working capital is the amount of the quick, or the current, assets. At the risk of repeating, the distinction between quick and current assets is again stated: Quick assets are those which can be turned into cash or its equivalent on short notice and with little sacrifice; current assets are those which in the normal and regular course of business will be turned into cash or its equivalent in the relatively near future, usually less than one year. An improvement fund investment in bonds may be a quick asset, but it is not a current asset. A half-finished office building is a current asset to a contracting firm, but it is not a quick asset.

purpose. It is that portion of the assets which may be used for a choice of business purposes, within short time limits; it is the most liquid portion of the capital.² The distinction between working capital and other capital rests upon the position and function of certain assets in the business process, not upon either the source of the funds or the particular accounting terminology used to describe them.³

Not all of the working capital is continuously passing *from stage to stage* of the business operations. Some of it is kept aside, that is, it is not currently employed in operations. That portion which does not circulate may be known as non-circulating working capital; that portion of the working capital which passes recurrently, in the normal and regular course of the corporation's operations, through a sequential series consisting of cash, costs of production, inventory, receivables and/or cash may be designated as circulating capital. Temporary investments may be considered working capital, but such funds would not usually be considered circulating capital. At different periods of the year a larger or a smaller proportion of the total working capital fund may become circulating capital.⁴

Analysis of Working Capital

The working capital employed by a business is generally analyzed from one of three viewpoints: (1) the degree of permanence of its employment, (2) the purpose for which it is used, and (3) the form in which it is maintained. When considered on the basis of permanence, it will be found that some working capital is regularly and normally employed by the corporation and that other working capital is intermittently employed to meet unusual requirements. The former should be a permanent part of the corporation's capitalization; the latter is usually borrowed temporarily.⁵ That

² Professor Dewing gives a definition: "The working capital or consumer's goods readily and quickly evaluated in terms of exchange value—they can be converted into cash because they have an immediate usefulness to the ultimate consumer."—*Financial Policy of Corporations*, p. 262.

The following excerpt from an unpublished manuscript is interesting: "The working capital of a corporation is the life blood which flows through the veins and arteries of that structure. It energizes every part of the structure, gives courage and morale to the brain (management) and muscles (personnel), digests to the best degree the raw materials used by its constant and regular flow, rapidly purifies itself, and returns to the heart (cash account) for another journey. And so when working capital is lacking or slows up, the financial body corporate is enervated. Should it cease flowing, the body dies and has value only as junk."

³ Again it must be emphasized that there is no particular correspondence between any particular dollar on the liability side of the balance sheet and any particular asset. A good many who have undertaken to interpret accounts have erred in this respect. There are important financial meanings to relations between the sizes of funds on the two sides of the balance sheet, but not between the accounts directly.

⁴ Professor C. W. Gerstenberg seems to have been the inventor of the term "circulating capital."

⁵ It has been suggested that working capital which is permanently employed could be designated as "fixed working capital," and that that working capital which is temporarily or intermittently employed should be called "variable working capital."

portion of the working capital fund which is normally employed may be called "permanent working capital"; that which is temporarily or intermittently used may be referred to as "temporary working capital." Permanent working capital is used *only for purposes of initiating and sustaining* a going concern, and for regular operations to the extent of the minimum requirements during a year.⁶ Temporary working capital is employed (1) to meet seasonal fluctuations in operations and (2) for any emergency or extraordinary purpose which the corporation management may deem necessary. The emergency uses include such items as borrowing during refunding operations, for periods of underwriting until payment has been received from a syndicate, payment of interest or dividends, meeting taxes, judgments, damage suits, taking advantage of unusually low prices of raw materials, construction funds, etc.

Initiation Capital. Initiation capital is that portion of the capital fund which is used up in launching the enterprise or in its continued expansion and development. Under most conditions, there remain no tangible assets from expenditures for overhead expenses during the period of construction; furthermore, experimentations with the product and with technological and distribution methods is most important. Mistakes will be made in the launching of every new business, no matter how careful the planning; they must be paid for.⁷ There is a general tendency for promoters to underestimate initiation capital for they are anxious to show as large a capital return as possible when attempting to interest those who own or control capital funds. Too much working capital and too much initiation capital are quite as bad as too little, however, for either leads to inefficiency in financial management. The natural enthusiasm of the management at the inception of the business ought to be used to force economies whenever possible.

The initiation capital of a business will come more wisely from the owners or the long-term creditors than from short-term bank borrowing or the trade. The credit of the company remains yet to be established and the limited borrowing which may be possible will be both dangerous and costly.

Normal Working Capital. The conduct of a business necessitates operations involving payments before receipts from the sale of finished goods.⁸

⁶ It is difficult to determine how far this distinction between permanent and temporary working capital should be carried in the light of the changes in working capital requirements in the different periods of the business cycle. To aver that all working capital, except the minimum requirement at the lowest point in the cycle, ought to be borrowed will be to defend the tremendous risks which would follow from so large a current debt as would be thus necessitated at the peak requirement. On the other hand, to carry even the average amount of working capital needed in the various stages of the cycle will entail a loss on the idle working capital in the periods of subnormal operations.

⁷ The characteristics of these expenditures much more closely approach fixed capital than any fund which implies some connection to the "workings," or the dynamic phases of capital operations.

⁸ This is not always true of public utilities and railroads, since these sometimes collect some revenues in advance of service.

This time differential, coupled with the fact that the business will not always instantaneously find a market for its product or make immediate collections from its sales, requires a sum of money to be tied up in inventories and receivables. Some cash must be on hand to meet prospective purchases, wages, maturities of bills, and other expenses. The normal working capital requirement is, then, the sum of the cash, receivables, inventories, and pre-paid expenses which will be normal for the business, plus a small fund for experimentation and research to maintain the product, and expansion funds temporarily held. This fund, when examined, will consist of two functional parts: (a) a constant sum called the fixed normal working capital, usually equal to the minimum requirement at any season of the year; and, (b) the seasonal normal working capital, which is a fluctuating quantity equal to the absolute variation in working capital requirements in the different seasons of the year.

It is probably better practice to have all or a large proportion of the normal working capital obtained by permanent investment through the sale of bonds or shares, or from a reinvestment of earnings. Seasonal working capital may be better obtained through either direct or indirect current borrowing, that is, directly from bank loans, bank acceptances, sale of commercial paper, and individual loans, or indirectly from trade acceptances or open accounts.⁹

Cyclical Working Capital Requirements. With the increasing volume of business during a period of recovery and prosperity, a higher working capital turnover is realized. But the needs for additional operations cannot be indefinitely met by speeding up the turnover of working capital. Both rising prices and increasing volume sooner or later require additional operating funds. The use of common shares, retained earnings, and short-term borrowing for this extra fund is mandatory. Under most circumstances cyclical working capital should not be secured by sale of bonds or preferred stocks; this would add a fixed charge to obtain capital only cyclically employed. Prolonged depressions sometimes require extra working capital for the maintenance of idle equipment and for overhead expenses.

Emergency Working Capital. Labor difficulties, strikes, fires, floods, earthquakes, unusually inclement weather, and other unexpected things often interfere with normal operations and consume considerable working capital. Special operations such as war contracts may not only necessitate extra working capital for their own accomplishment but so interfere with the normal operations as to reduce the efficiency of the working capital in general to the point where additions are necessary. These extraordinary re-

⁹ Businesses have been very active the past ten or fifteen years in eliminating the seasonal fluctuations and requirements for working capital. By widening their geographic area of operations, they have made slack seasons in one area offset active operations elsewhere; by combining products with non-synchronized seasonal changes they have lessened the over-all seasonal variation. A general tendency for interest rates to fall, hence decreasing capital costs of storing goods, together with improved storage methods, has done something toward lessening the effects of seasonality.

quirements cannot be foreseen; some extra funds should be carried as a matter of insurance.

The Circuit Flow of Working Capital

The outstanding characteristic of working capital, as contrasted to fixed capital, is its higher state of flux. It is always being changed with a considerable speed from this to that; and its quantity ebbs and flows like the pulse of the sea in the trade tides of the business cycle. The qualitative aspects of working capital change pertain essentially to its form, and the problems are those of internal relationships; the quantitative aspects of working capital change are confined to external relationships.

Initial Point. The internal circuit flow of working capital may be begun at the cash account. These funds are employed to pay wages and salaries, to purchase advertising, to acquire raw materials and power, to meet rentals, and to pay generally for all the things required in the operation of the business. If the cash funds are more than ample, some of them may be temporarily placed in investments to be withdrawn at a time of need. From the expenditures for materials, wages, etc., there arise inventories of finished goods, thus completing the first major step in the circuit. The inventory costs are increased by overhead costs, including depreciation and fixed capital charges such as interest on bonds, to arrive at a minimum price. If possible, a market price is obtained in excess of this figure. The second major step is the transformation of inventories into sales. Sales may be for cash, but are more likely to be for credit, so that they will show as receivables on the books of the company. Completely stated, the second step is from inventories to receivables or to cash. If a profit is made, the receipts from the sales will exceed the disbursements; and the cash fund, when the collections are complete, will be larger than at the beginning of the circuit flow by more than the charges for depreciation (interest having been added). If a loss has been sustained, the reverse will be true. Rearrival at the cash fund completes the circuit flow of working capital in the ordinary operations of the business.

Turnover. And so goes the process of business, each circuit flow adding (or subtracting) a bit of profit (or loss). These processes are more or less continuous, that is, a portion of the working capital fund is always just passing from cash to inventories, another portion from inventories to receivables, and another from receivables to cash. The portion of the fund flowing into or out of the temporary investment's reservoir operates to adjust the directly employed working capital fund to just the correct amount. The more frequently each dollar of working capital completes the circuit (turnover), the better the chance of the business's being successful. But to force the dollars to race around the circuit without carrying any profit with them fails to achieve the purposes of the business.

Balanced Use. A balanced relation must be maintained (1) between the speed of circulation and the amount of profit per circuit turn, and (2) be-

tween the different stations along the circuit where the working capital may be temporarily located. To permit sales to keep up, there being a retarded flow from receivables to cash, will necessitate added working capital. As the successive circuit flows are completed, the accretions to the working capital fund may permit the payment of dividends, though the particular form of dividend will probably be conditioned by the balance between the different forms of working capital, a large cash fund allowing cash dividends while a small one might force stock dividends.

Additions to Fund. The external flow of working capital is quantitative in nature in that it always represents accretions to or subtractions from the total working capital fund. Every form of accretion, except that from shareholders through investment or retention of earnings, adds to the fund, at the same time creating a contract (credit liability) under which sooner or

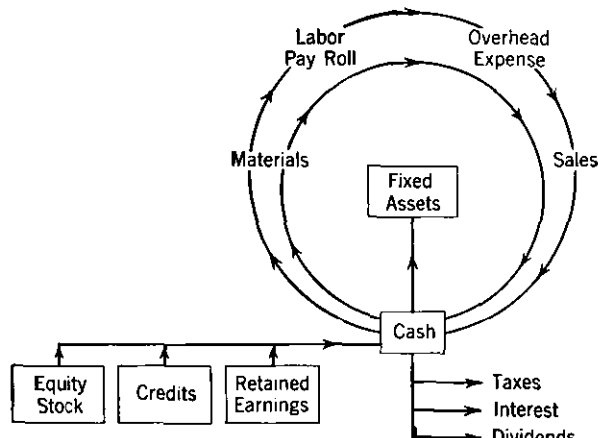


FIG. 29. Circulation System for Working Capital at Two Levels of Business Volume.

later a return of the funds so acquired will operate as a subtraction from the total working capital fund. It happens, then, that to every source of working capital other than shareholders (and to them sometimes) there are two channels, incoming and outgoing. As the management turns the valves, so to speak, funds flow to or from the company's working capital fund through these channels. The policies which control the flows, coupled with those that determine the distribution of working capital among the major way stations (cash, inventory, receivables, and temporary investments) along its circuit, constitute the working capital policy of the corporation. Some managements make use only of the channels leading to and from the working capital fund to commercial banks; others use banks and bond investors; a few make use of all sources of short-term funds.

As illustrated in Figure 29 the flow of working capital is a continuous movement of values from one asset to another, as it were. If the circulation would stay entirely within the bounds of the inner circuit then problems

once solved could be used repeatedly as the next procedure. There is a tendency, however, as prices shift, let us say upward, for this inner circuit to have to expand to an outer one. To do this involves more cash for the whole movement to pay for the total increase of all costs. The problem is aggravated by the fact that the margins may not be increased at the exact moment or in the same amount as the cost of materials and labor. Further, we should note that the taxes, interest, and dividend payments are a constant drag on the cash account's *being* fully prepared to meet rising needs.

But it is possible that the price movements may be downward from the larger circuit. This is equally a problem for the operation of the circuit; for whereas many of the material items and labor costs will be at high levels, the sales figure will be reduced. Thus the flow into cash will be at a much lower figure; in other words, a portion of the current asset values will be lost. Yet through all this shrinkage the payments out of cash for taxes, interest, and dividends must be made.

Factors Determining the Amount of Working Capital

The proper amount of working capital of a corporation is now to be calculated.

Nature and Regularity of Gross Income. Public utilities can generally operate with a very small quantity of working capital relative to their total assets, for the reason that they receive their income with a fair degree of regularity at stated intervals from a wide section of the population and from a wide range of economic activity. Because of the relatively high degree of certainty of receipt of, and the small degree of variability in, their revenues, these corporations may eliminate that working capital which in other companies must be carried for contingent events of one sort or another. In fact, they make a practice of so rendering bills as to have a fairly uniform flow of revenue to the corporation.¹⁰ In contrast to these corporations there are some industrials which have extremely wide fluctuations in their business in different seasons of the year. Large seasonal variations means that great quantities of working capital will successively be used in raw materials, rents, wage and power costs, inventories of finished goods, receivables and cash. Moreover, in some types of business fixed capital is of relatively minor size while the working capital is a very large proportion of the total. See Table 64 for a comparison of these business types.

Scale of Operations. As a general proposition, small and large concerns will require a greater quantity of working capital per unit of business than medium-sized concerns. In the small concern, poorer technological methods, higher overhead, poorer buying terms, high cost of selling, etc., will be the prime elements; competitive expenses in all forms will be involved on occa-

¹⁰ Gas and electric companies of any size make it a practice to divide their territory into about four groups, so that the meter readings and the bills are being rendered over the month by weekly groups. The result is to smooth out the revenues materially.

sion; and there will commonly be necessary "growing" costs representing expenditures for the purpose of increasing the scale of operations. The small quantities borrowed for seasonal variation and emergency are not sufficiently important to insure good terms or encourage competition by banks to secure the placement.

In the instance of the unusually large company, quite different factors will be effective. There will be competitive expenses, especially against competing goods as contrasted with competing producers. As the demand for any commodity is exhausted, the cost of obtaining and retaining each

TABLE 64. DIVISION OF ASSETS, CURRENT AND PERMANENT, 1946

	Per Cent in Current Assets	Per Cent in All Other Assets
Chesapeake & Ohio Railway	11	89
Allis-Chalmers	58	42
General Motors	59	41
American Rolling Mill	54	46
Eaton Manufacturing	70	30
International Harvester	54	46
U. S. Steel Corporation	48	52
W. T. Grant Company	70	30
Sears, Roebuck & Company	77	23
Libby, McNeill & Libby	79	21
Radio Corporation of America	68	32
Texas Power & Light	7	93
Great Northern Railroad	8	92

successive unit of business becomes increasingly large. Moreover, very large businesses have certain aspects of monopolies and they are more or less continuously on the alert against political exploitation. The places where a \$100,000,000 temporary loan may be secured are few in number; consequently the working capital so obtained tends to be acquired under non-competitive conditions.

Nature of Business Function. Businesses which are essentially engaged in the rendition of personal services will usually require somewhat less working capital than those engaged in processing or merchandising operations. Thus a barber shop has less working capital per unit of business done than a grocery store.

Intimately related to the type of business is the factor of time. Those enterprises with a long period of production need more working capital because of the increased risks to inventory, finished goods, receivables, and technological processes.¹¹ Rapid turnover allows little time for deterioration, obsolescence, or style changes; there is scant opportunity for processing

¹¹ In some lines partial payments are used to reduce this tremendous working capital requirement. In the construction industry it is customary to state in the contract when payments are to be made as the building progresses.

changes. It may be remarked that the modern chain store has brought about large working capital economies through rapid turnover.¹²

Terms of Purchase and Sale. A corporation which buys on long credit terms, other things being equal, will require less working capital because there is an increased possibility of having acquired cash from the disposal of the goods before the date of payment. The terms of sale operate opposite to the terms of purchase; the longer the credit term, the greater will be the working capital employed in the form of receivables, and vice versa. The change in working capital is not proportional to the credit term because other factors affect the quantity of working capital.

Some companies engage in what is known as "shoestring" operations with respect to working capital. They obtain as long purchase credit terms as possible and sell on as short credit terms as possible. There have been known instances in which longer terms were obtained for purchase than were given in selling, a condition in which it is possible not only to operate with no owned working capital, but even to obtain a portion of the permanent capital by continuously borrowing from trade creditors.

Hazards of the Business. The greater the degree of risks in a business, the greater the working requirements, for risks mean uncertainty as to the volume, time, and payment of business. Concerns producing highly competitive products and luxuries or semi-luxuries would observe this; the same would be true of the production of petroleum, shipping, etc., wherein much uncertainty rests. But a staple line of groceries or dry goods would need no such protection. Sales to a single customer, if cut off, would not demoralize the whole enterprise.

The Business Cycle. Clearly, since inventories, collections, sales, credit conditions, liquidity, etc., vary from period to period in the business cycle, the working capital requirements will vary, and the ease of acquiring additional working capital will vary. Probably the turnover factor is the most important.

Sources and Methods of Securing Working Capital

Working capital is normally secured from four sources: (1) short-term borrowing, (2) trade creditors, (3) sale of securities, and (4) earnings. It is not considered proper by many students of finance to acquire working capital by the sale of bonds;¹³ furthermore, the use of earnings may bring about an unhealthy condition simply because of inattention to current credit and bank balances.

¹² In measuring the working capital turnover, two processes are used: the number of days required to turn the working capital once, and the number of times working capital is turned over each year.

¹³ There are many exceptions to this theory. In fact, the practice is sufficiently common as to raise serious debate on the validity of the theory. The argument appears to be sound for new companies, but to find exceptions among old concerns. It is valid only where permanent assets may increase in value if owned by a going concern.

Conservation of Working Capital

Once the proper amount of working capital has been determined and the actual amount adjusted to the optimum condition, a further problem arises in maintaining the working capital fund at the proper balance. In experience, working capital is characterized by a peculiar tendency to become too large or too small. Financial budgets aid in determining the amount and in conserving working capital. Economy in the use of the fluid capital of the business may be attained through the same channels and through careful standardization of the product, method, and processes. Indeed, unless proper care is exercised, there appears to be a tendency on the part of most standardized industries to become non-standardized; the constant temptation to produce a new type of commodity, to render a special service, and to have unique characteristics as an aid to sales will in time interfere to a major extent with standardized operations. Such interference increases the working capital needed and at the same time decentralizes and disperses the effectiveness of the working capital already held. Frequent management and policy changes are likely to have somewhat similar effects, as they invariably result in the discard of partially exhausted assets and loss of business momentum, good will, and public and consumers' favor. Abandonment of expensively acquired plans means net losses to working capital for it is upon that fund that the expense of creating "going concern" value falls.

There are no definite rules for the successful maintenance and management of working capital. It should neither be exhausted through unwise cash dividends, dribbled away by wastage, nor congealed into fixed assets under the pressure of expansion. To reduce administrative and other overhead expenses to the point of sacrifice is an unwise move if a slack collection program allows the circuit flow of working capital to be dammed at the receivables account. But one makes only trouble by bringing pressure upon collections to secure cash for the purchase of inventories which do not move. The working capital fund is best maintained when a smooth, even, and constant circulation is maintained without waste and at a minimum overhead cost.

Measurement of the Efficiency of the Use of Working Capital

As in the case of fixed capital, working capital should be kept employed at a reasonable degree of efficiency. Not to do so is to develop a sluggish business; to try to secure super-efficiency will invite trouble. The efficiency with which working capital is employed is commonly measured by the turnover of gross and net working capital. The number of dollars of working capital, gross and net, which were employed to create one dollar net operating revenue is the point of the ratio.

Benefits from Ample Working Capital

If a corporation has ample working capital at all times, it gains many advantages. The operations of the business will move smoothly; there will

be no shortages of raw materials, supplies, and other material necessities for the work of the concern. Inventories will be carried at a level which will allow the corporation to render satisfactory service to its customers; there will be no delays in getting out unexpected orders, for a small overstock will be on hand to carry even an excess production rate until they can be replenished. Ample working capital will assure the corporation that it will be able to meet its bills on time or even take cash discounts, hence actually buy cheaper. Those from whom it buys will be willing to give the best possible prices, for there will be no bad-debt risks involved. In short, the operations of the concern will be accomplished more economically if sufficient working capital is available than if not.

Banks, especially those engaged in commercial operations, place much emphasis upon the current position of the concern; that is, they like to see a favorable working capital position. Any tendency to convert working capital into fixed capital is considered by the commercial banker to be especially bad. Even the investment banker is concerned. Unless adequate working capital is obtained, the sale of bonds and stocks for long-term funds will be more difficult.

In the case of businesses which are markedly affected by the business cycle, working capital performs another important function. It is the capital which relieves the strain and stress of rapidly shifting conditions in the periods of the cycle. A paucity of working capital means that the concern may be embarrassed to pay interest and/or dividends during a period of slow business.

Dangers of Too Much Working Capital

Food is a necessity to all men, but too much is quite as dangerous as too little. So, too, with corporations; too little working capital means starvation, and too much leads to an inflation which is certain to sap the very foundations of strength.

Too much working capital encourages waste. There is no attempt to economize on anything simply because more is always forthcoming from the unfailling fount of the corporation's credit. Equipment is acquired which is neither needed nor long employed.

Too much working capital invites manipulation. Since idle funds in commercial banks ordinarily earn nothing or a modest income, the excess working capital will normally lead to investment of the surplus to secure some income.¹⁴ Investment in the company's own stock invariably leads to specu-

¹⁴In 1929 a large number of corporations found themselves with superabundant working capital which they loaned in the call money markets. For a time, call money rates were far above commercial paper rates, and corporations were able to borrow at banks for a rate less than call rates. Banks would often lend their own funds at call and borrow from the Federal Reserve for the needs of their customers. Both banks and corporations were severely criticized at the time, and most of the larger corporations stopped the practice. American Telephone and Telegraph Co., U.S. Steel Corp., General Motors, General Electric, and Walworth Co. were powerful influences in eliminating the practice.

lation or manipulation of the company's own securities or the securities of other companies. Besides leading to speculation, an excessive working capital position results in a lack of interest in the corporation's bank position. Thus little or no credit will be forthcoming. Finally, excessive working capital may indicate a regressive management, afraid of expansion, unwilling to trust to future business ability to create an income.

The Uses of Excess Working Capital

The business having a large seasonal variation, and sometimes non-seasonal industries having excesses of working capital, desire to obtain an income from such more or less idle capital. This they may try to do in many ways. Bank deposits have in recent years earned no interest, since there was a surplus of funds in the banks. This has forced the use of other channels. They may be used to reacquire securities of the company or of other companies, or government securities. If securities are bought, care should be exercised that not too much of one security is bought.

Working Capital in Reorganizations

The working capital problem in reorganizations is somewhat different from that in the ordinary going concern, as well as from that in a new concern. Not infrequently the major cause of the failure of the corporation was inadequate and mismanaged working capital, either of which would find the newly reorganized concern with restricted credit lines and run-down plants and equipment. The road back to public favor will be more difficult of travel than for a new company; hence more than ordinary service must be rendered and a superior product must be offered at the price of competing products. Both require additional working capital. Ample circulating capital will not infrequently mean the difference between successful and non-successful reorganizations. Industrial corporations are more sensitive to lack of working capital than are railroads or public utilities; consequently they must give a great deal more attention to the adequacy of working capital.

QUESTIONS

1. Explain the idea involved in the term "working" capital. Does this indicate that other capital does not contribute to earnings?
2. Indicate how we may regard the circuit flow of working capital as the important concept in its management.
3. Discuss briefly why a working capital cycle typically does not remain balanced.
4. Explain briefly why the working capital of a railroad is so small in relation to the total and is only a fraction of the amount in a merchandising concern.
5. How do the credit terms of purchasing and selling the goods handled by a concern affect the working capital cycle?

6. Discuss the validity of the idea that too much working capital may be bad for a business.
7. Explain the relation of regularity in gross earnings to the management of the working capital cycle.
8. What are the usual sources for funds added to the working capital cycle? Do you regard some as more desirable than others? Explain.

PROJECTS

1. For a company in each field—industrial, public utility, and railroad—prepare an analysis of its working capital position each fifth year from 1930 to date.
2. Prepare a report on five companies covering their working capital growth, property additions, and the growth of surplus since 1935.

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CHAPTER XXIX

Analysis of Financial Statements



IN THE interest of good health, *medical authorities urge every individual* to have a periodic examination, merely as a matter of insurance. In the interests of a sound financial policy and condition, corporations should do the same thing. They accomplish something by their periodic audits; financial analysts complete the examination by checking every possible phase of the company's financial condition against some norm.

Financial examination of corporations has become one of the most important phases of business finance whether the standpoint is that of internal management, external investors, creditors, stockholders, or public regulatory bodies. With the spread of corporate ownership, security holders have found themselves in a position of greater and greater dependence upon financial statements to determine the progress and status of corporations.¹

There is nothing of a magical nature in financial ratios and their application. Their usefulness is confined to the maintenance of a proper balance in the financial structure, to the discovery of the forces which make for a disturbance of that balance, and to the development of standards for the comparison of statements of different corporations on the same or on different dates.

The Aims of Financial Analysis

Although it is probably true that the analysis of financial statements is traceable originally to the relation of debtors and creditors, it must be said that today the use is much broader. There are three distinct and non-overlapping uses of financial analysis. The law of most states requires that the stockholders of the corporation shall have placed before them at least once each year a statement of the affairs of the concern so that they may form a judgment as to the work of the management, and other pertinent facts.

A second aim of financial analysis, wholly different from the foregoing, is the so-called "investment" analysis made by or for persons interested in

¹ Most states have enacted laws which make it a fraud to issue an incorrect statement for purposes of securing credit. The Securities Exchange Act of 1934 requires all corporations whose securities are listed upon "registered" exchanges to make public annual reports and places liability upon those issuing incorrect statements.

security ownership. Financial analysis has a purpose too of informing the management as to the status and progress of their corporation.

Preparation of Statements for Analysis

Because of the degree of variation in form in which financial statements are rendered, they must or should be reduced to a more or less standard form for reference and analysis. The usual procedure will be as follows:

1. As far as possible, the assets should be reduced to a fourfold classification: (a) current, (b) miscellaneous, (c) fixed, (d) intangibles. In holding companies, a special classification should be prepared to distinguish investments in controlled subsidiaries from investments in non-controlled companies.

2. The liabilities should be reduced to a sixfold classification: (a) Current, (b) Miscellaneous, (c) Fixed Debt, (d) Net Worth, (e) Stock, and (f) Surplus. If contingent liabilities are large in amount, as where bond issues have been guaranteed, these should be set up in a special classification.

3. All reserves should be deducted from the proper items so that the balances will show as net, rather than gross.

A critical financial analyst will use the following ratios:

1. The financial ratios of industry as a whole.
2. The financial ratios of this particular industry.
3. The financial ratios of companies of similar size and operations.
4. The financial ratios of companies of unlike size and operation in the same industry.
5. The size (absolute) of the ratios in the company.
6. The historical trend of the ratios of the company.
7. The trends of the ratios in other companies of similar size and operations.

It is a fundamental rule of financial analysis that relative size, and not absolute size, of asset and liability items is the significant fact; likewise, it is not the amount of change from year to year, or from month to month, but the relative change which must be given first place in interpreting financial statements.

The Use of Type Ratios

In practically every treatise on the analysis of financial statements, no inconsiderable stress is given to the use of "type ratios" secured from an average of other companies in a similar line of operation.² These type comparisons are of value and should always be kept handy for reference by the analyst. They supply objective relative standards which reflect the changes in fundamental economic conditions; they supply trend growth comparisons; they are not open to the peculiar influences which play upon the

² See the industry studies prepared under supervision of the Securities and Exchange Commission.

individual concern's finances; therefore, they aid in discovering when and to what extent unique forces are affecting the individual company.

Expressing Relations in Financial Analysis

There are two schemes of expressing relationships in financial analysis: (1) the "phrase method," such as "two for one" or "one and one-half to one"; and (2) the percentage method, such as 275 per cent current ratio. The phrase method has an advantage in that it may develop facts which will be easily remembered. The percentage scheme has the advantage of greater precision in statement. While the phrase method may occasionally err in making little distinction between financial statements with small variation in relative position, the percentage scheme may magnify and emphasize a distinction when in point of fact there is no difference.

The 100 Per Cent Balance Sheet

Financial analysis is most valuable on a comparative basis; hence it is of paramount importance that a series of statements over a period of years be used. One of the simplest forms of financial analysis will be found in the 100 per cent balance sheet. Here, the assets and liabilities of the corporation are reduced to a basis of 100 per cent of the total; that is, every item on the balance sheet is expressed as a percentage of the total assets, or the total of the liability side of the statement. The 100 per cent balance sheet solves two important problems: (1) It permits concerns of widely differing size to be directly compared; and (2) it permits an accurate historical comparison of the financial status of a corporation which has changed greatly in size over a few years. It is of some use in comparing balance sheets of companies with large seasonal variation. This procedure can be followed, too, with the income statement.

General Groups of Financial Ratios

The ratios or relationships concerning the financial affairs of a corporation which are commonly used fall primarily into three groups: (1) *balance sheet ratios*, which are essentially static in nature, being computed from the balance sheet as of a fixed point in time; (2) *income statement ratios*, which are essentially dynamic in nature, being computed from the income statement upon the basis of activity over a period of time; and (3) *activity ratios*, which are computed from items on the balance sheet and items on the income statement. These three classes of ratios should be kept clearly in mind, for a rule applicable to one class is not necessarily applicable to another. A clear distinction between these ratio groups and their separate interpretation will often provide the most important clues to poor administration.

Leading Problems in Financial Analysis

To combine the many relationships which may be made from balance sheets and income statements in a fashion that will answer definite questions

is an art acquired only with considerable practical experience. A consideration of some of the leading questions may be divided into the groups which follow.

The sources of the capital employed in the business may be effectively analyzed through consideration of the liability side of the balance sheet over a period of years. The first step is that of setting up a series of 100 per cent balance sheets from which may be discovered the distribution of the liabilities among the various accounts. The ratio of the net worth to total debt will provide the first general differentiation, showing the proportion of the owned to the borrowed capital. Next should be considered the ratio of the current debt to the total liabilities, for this will measure the extent to which borrowing has been done on a short- or a long-term basis. Too little current borrowing will mean idle capital in a slack period if the business has a decided seasonal variation. Once the static position of the company with respect to the sources of its capital has been examined, the next logical step is to consider the trend of affairs.

The uses made of the capital of the company require an analysis of the asset side of the balance sheet much like that of the liability side in determining the sources of capital. A percentage distribution is first set up to permit the relative distribution of the capital to be determined. This examination will include the amount of fixed capital per dollar of total capital, the amount of working capital, and the extent of miscellaneous capital, including such intangibles as have been allowed to remain in the assets at the time the balance sheet was prepared for the diagnosis.

The supply, use, activity, and position of working capital is a third definite line of inquiry along which analysis is usually directed. Whether the relative supply of working capital is large enough is usually determined (1) by the current ratio, the "quick ratio," the "acid-test" ratio, and the net working capital ratio, computed from the balance sheet, and (2) by the turnover ratios computed from the income statement and the balance sheet. The ratio of sales to that portion of working capital embodied in merchandise inventories may indicate something of the merchandising ability of the concern. Any decline in this ratio should be regarded suspiciously unless it has previously been unusually high. Also, the ratio between the merchandise and the receivables may show overstocking or lax collections.

Finally, attention should be given to the working capital employed per physical unit of sales. This particular measurement is affected more by price changes than the others, but it is free from all direct effects of varying profits margins. A large or a small profit margin may have considerable influence upon the ratio of dollar volume of sales, but not upon physical volume.

The adequacy and activity of the fixed and total capital is the next logical step after some conception of the sources, uses, and working capital position has been obtained. To secure an indication of the degree of activity of the fixed capital, the ratio of the fixed capital to the total production,

as well as its ratio to the net sales, is considered. One will show the number of dollars or units of product turned out each year for each dollar of capital in the form of fixed assets, and the other measures the number of dollars of sales obtained per dollar of fixed capital.

The profitableness of the employment of the capital is a prime consideration. Without profits there would be little excuse for borrowing capital, and none for retaining it. Certainly there is no social justification in any submarginal operations. A single year may show a considerable loss, but the average condition must be one in which the value of the goods produced will at least be equal to the cost of their production. Besides the profitableness of the capital as a whole, one must consider the profitableness of the business done, either per dollar of sales or per unit of product sold.

BALANCE SHEET RATIOS

Balance sheet ratios with some possible interpretative values may be prepared between every item or group of items on the balance sheet and every other item or group of items. With a large number of items, the possible number of ratios and relationships increases very rapidly and it becomes necessary to select some particular relationships as being the most useful.

The Current Ratio

The percentage of the current assets to the current liabilities is possibly the most commonly mentioned ratio on the balance sheet. The current ratio indicates the number of dollars of current assets available to meet each dollar of maturing debts.³ It may, in a way, be considered as a measure of the liquidity of the assets, and it gives a crude measure of the working capital position of the company. The ratio may be made to rise by a growth in current assets or a decrease in current liabilities, or by both. As a general proposition, a high current ratio will mean good management, high merchandising capacity in the business, a wide profits margin, a liquid position of working capital, and little current debt. A rising ratio may be the result of a growing profits margin, decreased prices of raw materials, increased prices of finished goods, a shift from credit to cash buying, or a shift from cash to credit selling. In fact, the current ratio has so many meanings that it must usually be broken down into sub-ratios and studied before its meaning is at all clear. Its usefulness is corroboration or denial rather than distinctly independent analysis.

³For certain types of analysis it may be better to invert this ratio, that is, express the current liabilities as a percentage of the current assets. Thus when the normal current ratio would be 300 per cent, the inverted ratio would be $33\frac{1}{3}$ per cent. The inverted current ratio shows the number of cents which must be realized from each dollar of current assets in order to meet the current liabilities. In estimating possible liquidation under receivership, assignment, and bankruptcy, the inverted ratio may be quite valuable.

Some analysts, especially bankers, use what is known as a "quick ratio." This is found by dividing the quick assets by the quick liabilities. See Chapter XXVIII for meaning of the assets and liabilities to be included as "quick."

As a second general proposition, the importance of the current ratio varies as the degree of *regularity of income* and the certainty of the periods of expenditures. Railroads and public utilities, tending to have a more steady

TABLE 65. CURRENT RATIO

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufacturing Co. (machinery)	5.2	4.5	2.6	2.7	2.7	2.6	2.0	4.6
American Rolling Mill Co. (steel)	4.0	4.2	3.0	2.7	3.2	3.5	3.5	3.1
General Motors Corp. (cars)	3.4	2.4	2.0	2.0	2.1	2.3	3.0	3.4
Merchandising								
Safeway Stores, Inc. (retail)	3.7	2.9	3.2	3.1	3.1	3.4	2.7	2.4
Ely & Walker Dry Goods Co. (wholesale)	5.5	5.4	2.5	2.6	2.0	2.2	2.1	2.0
Public utility								
Texas Power & Light Co.	2.0	1.9	1.5	1.6	1.4	1.4	1.4	.9
Railroad								
Chesapeake & Ohio Railway Co.	2.0	1.9	1.9	1.4	1.0	1.1	1.8	1.3

revenue realized at regular intervals, may usually operate at a very low current ratio, perhaps 125 or 150 per cent, whereas other enterprises may require two or more to one. See Table 65 for the comparison by industry types.

Working Capital Ratio

There are two working capital ratios commonly computed from the balance sheet: (1) the ratio of net working capital to the total capital, showing the number of cents out of each dollar of total assets which is in the form of net working capital,⁴ and (2) the ratio of net to gross working capital, which is found by dividing the difference between the gross working capital and the current liabilities by the amount of the gross working capital.⁵

The proportion of the total assets existing in the form of working capital, free from the necessity of meeting current debts, will grow with more active business and with an increase in the profits margin. During periods of rapid expansion, working capital has a tendency to become fixed capital, and changes in this ratio may be the first indication. In so far as gross working capital is composed of circulating capital, it is valuable to know where, in the circuit flow of capital, the large proportion of the working capital happens to be. If it is in cash, there is no need to worry over losses because

⁴ This value can be found directly from the 100 per cent balance sheet by subtracting the current debt from the current assets. That is, if current assets comprise 23.8 per cent of the total assets and current debts amount to 11.8 per cent of the total liabilities, the ratio of the net working capital to the total capital employed will be 23.8-11.8, or 12 per cent.

⁵ If by gross working capital is meant current assets, the ratio of gross to net working capital is the current ratio minus one. However, it is not the best plan to use gross working capital and current assets as exactly synonymous terms.

of non-collectible items, or over temporary borrowing because of slow or deferred collections. If it is in receivables, there is no additional expense of selling, nor delay in liquidation; and there need not be a question of variation in price levels such as must enter into the problem when a large portion of the working capital is embodied in inventories. Even when the inventories alone are considered, bankers and other short-term lenders will observe the distribution as between raw materials, goods in process, and finished goods. Raw materials will necessitate expenses of processing before they can be sold and turned into cash; finished goods are nearer to realization, but open to risks of style change and product deterioration losses.

Ratio of Net Worth to Total Debt

The ratio of net worth to total debt is an important calculation, for it measures the over-all extent of trading on the equity. It is usually found by dividing the true net worth by the total debt, current and fixed. The result is customarily expressed as a percentage. As this ratio rises, it is indicative of increased ownership equities in relation to the borrowed funds. The higher the ratio of the net worth to the total debt, the better will be the credit rating both for current and for long-term borrowing. The slower the turnover of inventories and receivables, the larger the ratio of net worth to debt ought to be.

Fixed Assets to Debt Ratio

The ratio of fixed assets to debt, often used in investment analysis, is found by dividing the fixed assets by the debt. It is generally thought that this ratio

TABLE 66. FIXED ASSETS TO TOTAL DEBT

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufac- turing Co. (machinery)	1.3	1.2	.9	.5	.3	.4	.5	.9
American Rolling Mill Co. (steel)	6.0	3.7	2.6	1.9	2.4	2.4	2.0	1.3
General Motors Corp. (cars)	3.9	2.1	1.5	1.0	.8	.8	1.7	2.0
Merchandising								
Safeway Stores, Inc. (retail)	1.1	1.2	.8	.8	.6	.5	.1	.2
Ely & Walker Dry Goods Co. (wholesale)	.7	.7	.3	.4	.5	.6	.7	.6
Public utility								
Texas Power & Light Co.	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.9
Railroad								
Chesapeake & Ohio Railway Co.	1.7	1.6	1.7	1.6	1.5	1.5	1.8	1.9

should never fall below unity; if it does, it indicates that short- and long-term credit has been used not only for all fixed capital but also for working capital. That is, the stockholders or owners are not supplying even the work-

ing capital for the business.⁶ See Table 66 for comparisons with the footnote statement especially in mind.

Ratio of the Merchandise to the Receivables

The ratio of the merchandise to the receivables is found by dividing the receivables by the merchandise. A very small ratio is quickly affected by costs; a very large one, by selling prices. The ratio is also useful in showing poor merchandising capacity, as well as fundamental changes in selling policies. Moreover, it indicates the degree to which the management has elected to place the working capital risks in inventories and in receivables.⁷ Great changes can occur in this ratio without any effect whatever upon either the current ratio or the working capital ratio.

Ratio of Cash to Thirty-day Debts

By comparing the cash on hand to debts maturing in the next thirty days, some conception of the extent to which the corporation must depend upon current collections or future cash sales to meet these debts can be obtained. The ratio is of practically no significance in corporations whose revenues are regular, such as public utilities and railroads. But in manufacturing and merchandising corporations its significance is not to be ignored. An "acid-test" ratio, found by expressing the sum of the cash and receivables as a percentage of the current liabilities, may be used. Any figure under 100 will indicate how much merchandise must still be sold to liquidate current debts. Generally banks will insist that this ratio be kept greater than unity.

Current Debt to Total Debt

The financial vagaries of the future assume increasingly important roles as one moves from the domain of the monopoly of a necessity on through semi-monopolies of semi-necessities, and finally to the competitive production of goods dependent on fad, fashion, and luxury. Ordinarily, the limits of total debt to total assets will be of a decreasing order as one arranges corporations along these lines. The ratio of current to total debt should likewise decline in the same way, for current debt means that in the relatively near future revenues sufficient to meet the debt must be realized, or it will have to be extended under a renewal or by funding, or it must be converted to net worth through the sale of shares. The less regular and dependable the revenues, the greater the degree of risk and the lower ought to be

⁶ The logical limit of trading on the equity would place the minimum net worth equal to the difference between gross and net working capital. That is, the limit of long-term borrowing will be the fixed assets; the sum of the net worth and the current borrowing would then equal current assets. Intangibles would add to net worth; prepaid expenses would likewise add to net worth.

⁷ A preponderance of working capital in receivables tends to raise the current ratio for two reasons: (1) the selling process expenses and profit have been added in the receivables, and (2) smaller inventories will mean less current payables.

the ratio of current debt to total debt.⁸ See Table 67, in which the differences by types of companies are easily traced.

TABLE 67. CURRENT DEBT TO TOTAL DEBT
(expressed in per cents)

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufacturing Co. (machinery)	33.9	19.0	39.0	22.0	24.0	41.0	100.0	100.0
American Rolling Mill Co. (steel)	86.5	61.7	54.2	56.6	59.7	64.0	69.6	51.1
General Motors Corp. (cars)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	72.4
Merchandising								
Safeway Stores, Inc. (retail)	50.1	58.6	52.0	54.6	59.7	58.0	62.7	72.0
Ely & Walker Dry Goods Co. (wholesale)	100.0	100.0	100.0	100.0	100.0	100.0	89.6	80.0
Public utility								
Texas Power & Light Co.	5.2	5.0	6.3	6.8	9.0	11.2	10.4	13.6
Railroad								
Chesapeake & Ohio Railway Co.	9.2	11.3	12.3	22.7	18.4	15.7	17.5	20.3

Other Calculations from the Balance Sheet

The ratio of goods in process to finished goods, the ratio of reserves to total assets, and the ratio of specific reserves to particular assets are of value in checking valuation problems. The quantity of deferred charges and prepaid items bears directly upon the current ratio, and upon the usefulness of quick assets; investments ought to be divided between investments in subsidiaries, which will usually not be available for sale in emergencies but which may be pledged for short-term borrowing, and those investments of a temporary nature which it is expected will be disposed of in the not far distant future. The problem of contingent liabilities and questionable assets is worthy of special attention in some companies.

INCOME STATEMENT RATIOS

The analysis of income statements will not ordinarily involve as many different relationships as the analysis of balance sheets.

The Operating Ratio

The operating ratio (sometimes called the gross profit ratio) is by far the most common of the income statement ratios and is presumed to be of very great importance in financial analysis. It is found by dividing the operating expenses by the operating revenues and expressing the result as a percentage.

⁸ This proposition is valid for corporations engaged in these various lines of operation having the same total debt. Clearly a corporation with a 20 per cent total debt ratio could have a much higher current debt to total debt ratio than one with a 75 per cent total debt ratio.

Interpretation of the operating ratio will be aided by one of the following type cases: A high ratio means a small profits margin, high sensitivity of the business to price changes (usually to business volume changes also), large risks to high bond ratios, and a condition of strong competition. See Table 68 for these indications and contrasts between fields. It may mean

TABLE 68. OPERATING RATIOS
(expressed in per cents)

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufacturing Co. (machinery)	86.4	84.0	82.0	81.6	80.5	81.0	87.5	123.0
American Rolling Mill Co. (steel)	90.5	86.6	80.0	80.6	83.6	86.5	84.0	83.5
General Motors Corp. (cars)	78.2	78.2	75.7	83.8	86.3	87.6	91.6	89.6
Merchandising								
Safeway Stores, Inc. (retail)	96.0	94.1	96.7	98.6	96.6	96.6	96.8	96.8
Ely & Walker Dry Goods Co. (wholesale)	97.0	97.6	93.8	88.8	90.4	88.3	88.0	87.1
Public utility								
Texas Power & Light Co.	39.7	39.7	41.8	42.3	39.5	40.3	42.8	46.7
Railroad								
Chesapeake & Ohio Railway Co.	60.0	51.5	47.6	46.4	49.0	55.5	65.0	67.3

$$\text{Formula: } \frac{\text{Operating expenses (excluding all taxes and depreciation)}}{\text{Gross revenues}}$$

a relatively high cost condition. A relatively low but rising operating ratio will mean increasing sensitivity of profits to price changes, increasing borrowing risks, and/or a condition of increasing competition. It can mean also that selling prices are declining relative to costs, or that the company produces at an increasing relative cost position within the industry. A relatively high but declining ratio will ordinarily have an opposite meaning. A low operating ratio means wide profits margins, slight sensitivity to price changes, low borrowing risks even with fairly high bond or debt ratios, and, usually, some monopoly elements in the business. It may also indicate a relatively low cost position in the industry. An unsettled, fluctuating ratio is definitely indicative of unsettled conditions in the business and is usually considered an unfavorable omen.

Ratio of Total Fixed Charges to Net Operating Revenues

The ratio of total fixed charges to net operating revenues is significant because it indicates the extent to which the stockholders have an equity in the earnings. As far as common shares are concerned, fixed charges include depreciation charges, bond interest, sinking funds, and preferred stock dividends. In many instances, to compute these items successively instead of in combination will facilitate more accurate interpretation.

Closely allied with this ratio is the "margin of safety" which is frequently encountered in investment analysis. It is calculated by dividing the earnings available for the payment of interest on the bonded debt by the amount of the interest. It is most important that depreciation and reserves be deducted⁹ before making the calculation. The figure is shown in most of the investment manuals, and many investors who evaluate the income element of corporation credit place the ratio in the front rank. Where sinking funds are required, the calculation not infrequently is based upon both interest and sinking fund requirements.

Ratio of Net Profit to Gross Revenues

The extent to which a business can withstand economic adversities is partly conditioned by the margin of net revenue which the company is able to secure in normal times. It is common to make use of the percentage of the net revenues (*earnings*), after depreciation and taxes have been deducted but before bond interest and sinking fund items have been deducted, to the gross revenues from all sources. The net income or earnings will include all income from operations, investments, etc., except those revenues secured from the sale of fixed assets. When interpreted in the light of the sources of earnings, this ratio may achieve vital importance. See Table 69, where the wide variations which developed between kinds of business can be traced.

TABLE 69. NET PROFIT TO GROSS REVENUES
(expressed in per cents)

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufacturing Co. (machinery)	8.6	8.8	6.9	4.6	4.2	3.8	3.2	.03
American Rolling Mill Co. (steel)	4.4	7.0	7.0	4.9	3.6	4.0	5.1	8.6
General Motors Corp. (cars)	14.4	11.9	9.1	8.5	5.0	4.1	6.2	4.5
Merchandising								
Safeway Stores, Inc. (retail)	1.8	1.3	1.2	.9	1.0	.9	.9	1.4
Ely & Walker Dry Goods Co. (wholesale)	2.7	2.2	2.5	2.0	1.6	1.8	3.3	4.6
Public utility								
Texas Power & Light Co.	40.0	37.9	32.4	32.2	33.6	30.3	26.0	26.0
Railroad								
Chesapeake & Ohio Railway Co.	32.8	31.6	35.2	22.7	18.6	15.9	12.6	17.9

A low ratio means that the success of the business depends upon two things: continued ability to sell goods, and no violent downward disturbance of price levels.

⁹ Reserves for preferred and common stock dividends, if set up from current earnings, should not be deducted. But all valuation and direct liability reserves should be deducted.

Ratio of Earnings to Dividends

Bond interest and all fixed charges are deducted before computing this ratio, so that it really is the ratio of the earnings available for dividends to the dividend requirements. The ratio indicates the possibility of paying dividends without encroaching upon the capital fund of the business.

General Calculations from the Income Statement

If several products are turned out by the company, the revenues and expenses may be segregated by products and analyzed from the point of view of the selection and emphasis of the more profitable. Or the expenses and revenues may be analyzed along functional lines. The ratio may be computed between goods sold and returned, between cash and credit sales, between large and small orders, between wholesale and retail, and between geographic areas, especially if regional distributors or subsidiaries exist. Expenses may and should be broken down into materials, power, direct and indirect labor, repairs, maintenance, supervision, sales, advertising, and general overhead.

ACTIVITY RATIOS

Activity ratios show a fixed or static position, such as fixed assets, in relation to a variable cumulation or dynamic element, such as gross revenue. In so far as they represent actions of the business, they are *turnover* ratios, or *activity* ratios.

Inventory Turnover

The activity of the merchandise inventories may be roughly measured by comparing them to gross sales on a percentage basis.¹⁰ It is common to use net annual sales as the dividend and the average monthly inventories, where these values are available, as the divisor. The factors of this type are presented in Table 70. It is thought that the merchandising capacity of the management may be measured by the number of dollars of sales produced by each dollar of inventory. While the calculation may show the comparative turnover of inventories from year to year (or other time interval), its interpretation is not always simple or specific. The usefulness of this ratio is often obscured by variations in profits margins, business cycle changes, and policy changes with respect to cash and credit sales and purchases. Probably its greatest worth to the person interested in the financial aspects of business lies in its ability to show an "over-inventoried" or "under-inventoried" position. Because of this particular fact, many business concerns are careful

¹⁰ This is not an exact measure of turnover because merchandise inventories are carried at cost or market, whichever is lower, while sales are entered including expenses and profits. True inventory turnover may be measured (1) by dividing cost of goods sold by inventories in dollars or (2) by dividing sales in units by inventories in units. In both instances average monthly inventories are used.

to render their annual statements at that period of the year which will best reflect their inventory position, and thus engage in "window trimming."

The activity of inventories is not a freely calculable item or one which is reasonably constant from concern to concern. If the processes of the con-

TABLE 70. INVENTORY TURNOVER

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufac- turing Co. (machinery)	2.5	2.5	2.4	3.1	3.7	4.4	4.6	1.2
American Rolling Mill Co. (steel)	2.9	3.3	5.3	4.0	4.4	4.6	4.4	3.8
General Motors Corp. (cars)	5.9	6.8	7.2	4.8	6.7	8.6	9.0	3.6
Merchandising								
Safeway Stores, Inc. (retail)	11.8	12.1	9.5	11.7	10.8	11.6	10.1	8.5
Ely & Walker Dry Goods Co. (wholesale)	3.7	3.7	3.5	5.6	6.3	5.6	5.5	4.4
Public utility								
Texas Power & Light Co.	16.6	16.3	13.5	16.4	21.1	19.0	15.4	10.0
Railroad								
Chesapeake & Ohio Railway Co.	26.1	25.0	22.1	26.6	29.7	24.1	20.2	17.0

cern are slow and long, no matter what might be desired the turnover will probably be slow. It is said that manufacturers selling through wholesalers have a much better inventory turnover than those distributing direct to the consumer.¹¹ An integrated company controlling all processes from the raw materials to the finished products has a higher inventory turnover than non-consolidated companies.

TABLE 71. TOTAL CAPITAL TURNOVER

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufac- turing Co. (machinery)	.7	.8	.9	1.1	1.5	1.8	1.6	.5
American Rolling Mill Co. (steel)	.7	.7	.9	.9	1.1	1.0	1.1	1.0
General Motors Corp. (cars)	1.0	1.2	1.4	1.1	1.7	2.0	1.7	1.0
Merchandising								
Safeway Stores, Inc. (retail)	5.0	4.9	4.7	6.1	5.6	6.3	5.7	5.9
Ely & Walker Dry Goods Co. (wholesale)	1.7	1.7	1.7	2.4	2.8	2.6	2.3	2.0
Public utility								
Texas Power & Light Co.	.13	.13	.13	.14	.16	.17	.22	.22
Railroad								
Chesapeake & Ohio Railway Co.	.16	.17	.20	.23	.27	.27	.31	.31

¹¹ Myron M. Strain, *Industrial Balance Sheets*, p. 114.

Turnover of Total Capital

The ratio of sales to total assets is a valuable item because this particular relationship, when studied in conjunction with the operating ratio, indicates the gross and net revenue-producing ability of the capital funds utilized by the business. The lower the turnover of the assets, the lower must be the operating ratio if a satisfactory net revenue is to result at the end of the year. Inspection of Table 71 will show the vast differences between fields. A greater probability of satisfactory earnings will be found where a high turnover of total assets is maintained than where there is a low turnover. Moreover, the probabilities are that in the case of a high turnover, the proportion of working capital to fixed capital will be larger, hence there will be a large degree of liquidity in the capital structure.

Turnover of Net Worth

Where trading on the equity is practiced, it is always important to discover the activity of net worth separately from the activity of the total capital. This is ordinarily done by dividing the sales by the net worth. A high ratio, indicative of great velocity and activity of invested capital, may be desirable, though it becomes dangerous if it is accompanied by narrowed profits margins.

Percentage of Profits Available on Net Worth

The relation of net profits available for dividends to total net worth is a measure of the extent to which trading on the equity has or has not been successful. The calculation should be made after the deduction of depreciation, bond interest, sinking funds, and valuation reserves. Should the rate of earnings thus computed be less than the average rate paid on borrowed capital, the extension of the business by borrowed funds has operated to the disadvantage of the stockholder.

Turnover of Gross and Net Working Capital

Activity of working or circulating capital is measured by dividing (1) the annual sales by (2) the gross and by (3) the net working capital respectively. First of all, the ratio of working capital to net sales will indicate the number of dollars of sales produced per month or per year by each dollar of working capital.¹² Too high a turnover is dangerous, for a slight restriction

¹² The analysis of working capital position should always be interpreted in the light of the business cycle, both present and prospective conditions being considered. While an ideal position can scarcely be hoped for, the major swings should be as follows: (1) In a period of recovery advancing prices give every advantage to inventories which will be sold later in competition with goods acquired by competitors at higher prices. Receivables can be permitted to grow while cash may drop to a minimum so that the ratio of cash and receivables to thirty-day debts will barely equal unity. (2) The period of prosperity should be one of a rapid shift from maximum inventories to minimum, from a condition of low receivables to a high, with cash remaining medium in amount. (3) The crisis, however, is a signal for hand-to-mouth buying, and for a shift from

in the quantity of working capital may put a breaking strain on the balance; too low a turnover is likely to mean a lazy management, or stagnation brought on by refusal to engage in fixed expansion. On occasion, a comparison of working capital to gross sales will also be helpful. Inactivity of working capital means insufficiency of capitalization or inertness of the management. The mere paucity of inventories may be the stumbling block to increased sales. Use of an installment system of selling will quickly increase the capital tied up in receivables and consequently lower the turnover. But if such contracts are sold or disposed of under contingency liabilities, the analyst may be completely misled. A sudden and continued rise in the working capital turnover ratios may be the first warning of the need for added capital in the business.

Receivables to Annual Sales

Dividing the annual sales by the amount of receivables provides a rather clear index of any changes in the average credit term. That is, the ratio (when divided into 360) tells the average number of days which elapse between the date of sale and the receipt of money therefor by the business. It does not give the average number of days for which credit is extended for credit sales.¹³

Rate of Earnings on Total Capital

By establishing the ratio of total net earnings, after all deductions except interest on borrowed capital, to the total capital employed in the business, a criterion may be set up for success. The comparison of this rate of earnings

credit to cash sales and from a condition of large credits outstanding to a minimum. Receivables will be fairly collectible for some time following the crisis. (4) The period of liquidation is one of quiescence as far as working capital is concerned. Cash is liable to be depleted through taxes, bond interest, and preferred stock dividends, but a little attention to merchandising methods and price changes should enable the firm to enter the period of depression in a fair cash position. (5) The period of depression will see the ultimate elimination of all old inventories and receivables. There should be a large cash fund to be put into inventories as soon as prices begin to rise and it is fairly clear that buying is being generally resumed.

¹³ If it is possible to secure credit sales only (which should be available for all internal analysis) and express them as a percentage of receivables, the result gives a direct measure of the credit term. Sometimes the calculation is made by dividing the amount of receivables on hand by the average credit sales per day, and the result gives the average number of days' credit given on credit sales.

Still a third method, and one which is very practical, is to subtract from the receivables a running total for as many days' credit sales immediately preceding as the length of the credit term. A positive answer means that collections are slow; a negative one, that maturities are being anticipated. Suppose a company had made a practice of giving 60 days' credit. The total credit sales for the 60 days ending July 1, when the analysis was made, amounted to \$93,800. On the same day the receivables were \$103,200. The collections were slow in the amount of \$9400, or about 10 per cent behind schedule. This method of checking receivables is free from the influence of either seasonal variation or the business cycle.

to that achieved by similar and competing businesses may usually be made at intervals as a check upon the relative efficiency of the management and as a check of progress. The ratio definitely "grades" the business in relation to profits margins. In publicly controlled businesses, such as railroads and the utilities, it will be fairly stable and about the same in all companies. The

TABLE 72. EARNINGS TO TOTAL CAPITAL
(expressed in per cents)

Company	1939	1940	1941	1942	1943	1944	1945	1946
Manufacturing								
Allis-Chalmers Manufacturing Co. (machinery)	5.9	6.7	6.5	4.8	6.3	6.8	5.2	.2
American Rolling Mill Co. (steel)	2.9	5.0	6.2	4.4	3.7	4.3	5.4	8.8
General Motors Corp. (cars)	14.9	13.9	12.7	9.7	8.4	8.1	10.7	4.5
Merchandising								
Safeway Stores, Inc. (retail)	9.0	6.7	5.8	5.3	5.7	5.9	4.9	8.3
Ely & Walker Dry Goods Co. (wholesale)	4.5	3.7	4.5	4.9	4.3	4.6	7.7	9.4
Public utility								
Texas Power & Light Co.	5.3	4.8	4.4	4.5	5.4	5.1	5.8	5.8
Railroad								
Chesapeake & Ohio Railway Co.	5.2	5.5	7.1	5.3	4.9	4.2	3.8	5.6

greater the degree of fluctuation, the more attention should be devoted to limiting debt structures and to increasing turnovers. Records of these facts for different types are set out in Table 72.

Ratios Computed Between the Balance Sheet and the Operating Statement

These ratios, which may have use under some circumstances, include: (1) ratio of depreciation to total fixed assets; (2) reserves to items against which they are kept; (3) working capital per physical unit of output; (4) fixed capital per physical unit of output; (5) total capital per physical unit of output; (6) net profit per physical unit of output; (7) fixed charges per physical unit of output; and (8) sales volume per physical unit of output. The last six ratios based upon the physical output will frequently provide clues to the financial standing of the business when many grades of product are turned out by different companies.

Common Ailments Detectable Through Ratio Analysis

About four-fifths of all business failures are chargeable to internal conditions, such as lack of capital, mismanagement, incompetence, etc., which when carefully analyzed will yield some eight or ten business ailments, most of which can be fairly readily diagnosed from the analytical methods discussed.

Instability of operating conditions can best be discovered where successive quarterly or monthly statements are available. Turnover ratios will

usually fluctuate in much greater amplitude than balance sheet ratios. Inventory turnover will probably exhibit a decided lag as compared to the total capital turnover; in extreme cases it may appear to have an inverse correlation.

Insufficiency of the profits margin will have as its first definite symptom the continued tendency for net working capital to be depleted. The acid-test ratio will decline along with the current ratio. The proportion of the total debt to the total capital will generally grow, though there is no diminution in the absolute value of the net worth unless a deficit develops under conditions of negative earnings.

Inertness is a condition arising normally from either laziness of management, policy, or conflict of policies in different departments of the business. The impasse will be characterized by very low turnover ratios. A relatively high ratio of cash and investments to inventories and merchandise will be common. If fear is the major cause of the inactivity, a low debt ratio will obtain.

Over-investment in fixed or current assets is closely allied to inertness. It arises out of inability to employ the capital profitably, whereas inertness arises from neglect to employ the capital profitably. Physical units of output in relation to investment give a measure, but the symptoms are much the same as for inertness. The ratio of annual sales to the average inventory and the ratio of quick assets to current liabilities are to be emphasized in diagnosing over-investment in inventories. If too much capital is being invested in receivables, the ratio of the annual sales to receivables will be the most reliable index, though the current ratio is of some aid. Over-investment in the plant and other fixed assets will be quickly shown through the annual capital turnover and the rate of earnings on total capital. A high current ratio accompanied by a low working capital turnover, a normal total capital turnover and a high fixed assets turnover will be strong evidence of an over-investment in working capital.

Insufficient capital, especially working capital, is a very common complaint. It results from poor planning, and its cure is not always better planning. There will most commonly be an attempt to secure the needed capital by borrowing; hence the ratio of net worth to total debt will fall. Because the borrowing will normally be done first on short term and then funded to long term, the ratio of current debt to long-term debt will rise at first, but later fall. The ratio of total debt likewise will usually rise by reason of the tendency to put the extra capital into inventories first and fixed assets later. Trying to do too much business with a fixed amount of capital causes the turnover ratios to go up and the profits margins to decline (because of extra costs).

The many and very complicated ailments which afflict business enterprises from time to time can no more be universally detected and diagnosed by financial analysis than can all the ailments of the human race be detected by use of a stethoscope. But just as there are almost always a few common

symptoms of disease, so too the onset of financial debility can be detected by some common symptoms.

QUESTIONS

1. What is the general purpose of ratios in a financial analysis of a firm?
2. Why are ratios used for financial analysis? State the main problems raised by such analysis.
3. Outline the principal ratios from the balance sheet.
4. Discuss the showing developed by the current ratio and why it may be expected to vary in the various fields of business.
5. Indicate the debt-fixed assets ratios you might normally expect in an electric utility, an automobile plant, and a department store. Explain them.
6. Why should the operating ratio be stressed in analysis? Why should all financial costs be carefully excluded?
7. Indicate the general business fields in which we may expect the ratio of net profits to gross revenues to be very low and those in which they should be very high. Give your reasons.
8. Why is the inventory turnover in a merchandising concern so important as compared to that in a railroad concern?
9. Explain the significance of the turnover of total capital for the size of the profit percentage on sales.
10. Indicate some of the common ailments that may be disclosed by financial ratio analysis and the signposts of such ailments.

PROJECTS

1. Prepare a report on the profit margin to sales for five retail chain concerns over the past ten years. Is profit on net worth proportionately the same. Why or why not?
2. Examine the current ratios of three companies in 1935, 1940, and 1945; analyze the make-up of the current accounts; and comment on any situations not revealed by the ratios.

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CHAPTER XXX

Current Borrowing and Credit Extension



THIS chapter considers two somewhat related problems: that of current borrowing normally represented in the balance sheet by current liabilities, and that of the extension of short-term credits normally represented in the balance sheet by receivables. In the one instance the corporation is the credit-receiving agency, in the other it is the credit-giving agency. Each problem constitutes a phase of the broader subject of working capital and its management.

Role of Short-Term and Commercial Credit in Industry

In giving to the capital fund employed by business a high degree of expansibility and contractibility, credit occupies a key position in the financial problems of modern industry. The complexity of the business cycle and its effects upon financial operations and policies are, on the one hand, increased through the effects upon prices, expansion, purchasing power, and other general economic factors, and, on the other, simplified through the possibility of elimination and control of the cycle.

Whereas long-term credit is basically concerned with the fixed expansion of business now in existence or the creation of new businesses, short-term and current credit is associated with the operations (the workings) of the business. Temporary borrowing occurs essentially to maintain operations when something has interfered with the usual circuit flow of working capital, or for the temporary expansion of operations beyond the scope permitted by the working capital obtainable from the permanent investment.

CURRENT BORROWING

Although current borrowing is a special aspect of working capital, it is intimately related to many other phases of financial policy. In the one direction it is related to both short-term and long-term borrowing because of its temporary use at periods of refunding and bond financing; in the other its ramifications extend into and often condition surplus and dividend policies, not to mention inventory, credit terms, and collections.

Purposes of Current Borrowing

Any use of capital whatsoever may and can create a justifiable cause of short-term borrowing. But current borrowing operations fall into two great classes, either of which is more or less independent of all other borrowing. They are: (1) current borrowing in which the borrowing term coincides with the capital use term—for example, borrowing for seasonal variation, say, three months; or borrowing to meet bond interest requirements when collections happen to be slow; (2) current borrowing in which a temporary substitution of short-term credit is made in an operation which is essentially a long-term credit problem. Thus, borrowing for three months until refunding can occur, or borrowing for six months until a bond issue can be arranged to care for the current debt which is being funded, will fall definitely into the second class.

Bank vs. Open Market Borrowing

Against the policy of open market borrowing it is argued that alienation of the corporation's financial affairs from local commercial banks is fraught with many perils. Breaking away from local banks causes the corporation to become less community-minded in other things, breaks down the principle of local pride, and even develops local animosity on occasions. Unless the management can exercise the proper amount of self-restraint, open market borrowing encourages over-borrowing currently as well as over-borrowing generally; it may lead to overexpansion, especially if borrowing is easy by reason of the past history of the business. Analysis of the financial statements and balance sheets by persons not intimately acquainted with local intangible elements in the business may lead to a conclusion at wide variance with the accepted fact. Open market operations are often so easily productive of funds that management will become careless or completely fail in its function of financial control.

Open market borrowing enables the corporation to arrange for its current borrowing at the most advantageous rate, in fact, at the lowest rates existing in the confines of the area over which the open market extends. It permits the corporation to make use of commercial banks more or less as a "last resort," or, what would be possibly more desirable, purely for temporary or emergency borrowing. By borrowing at least a portion of short-term funds in the open market, the corporation will find that, because of the lessened borrowing needed from commercial banks, it can be financed by smaller commercial banks than if no open market borrowing were used. By thus increasing the number of possible banks, the corporation may considerably improve its bargaining position in good times or bad. Furthermore, corporations which borrow in the open market will be likely to have their affairs checked over and analyzed by many minds, in contrast to commercial bank borrowing, where but a single analysis is made.

Discounting Receivables

Both discounting and pledging of receivables amount to reborrowing funds once used. For a long time it was considered a point of weakness for any business to discount or sell its receivables. Pledging of receivables was viewed in the same light. But of recent years, the practice has come to be increasingly frequent for several reasons: (1) The development of installment selling has created a strong form of contract; (2) there has been a general improvement in the technique of credit operations in recent years; and (3) better accounting practices, coupled with a clearer understanding of financial statements, have removed the tendency toward an unfavorable attitude on the part of the public. Moreover, the better the accounting methods, the more accurately those who manage the affairs of the business will be informed concerning the actual condition of the business; the management will accordingly more often be protected against making the mistake of borrowing when borrowing is unwise.

The technique of utilizing receivables varies somewhat and may take one of three forms: (1) discounting receivable negotiable instruments such as drafts, notes; (2) assignments of finance contracts; or (3) sale of accounts receivable, pledging of receivables. There is considerable difference in the liability position of the company in the respective cases.

Commercial Bank Relations

Most short-term borrowing is accomplished directly or indirectly through the commercial banks, as contrasted with long-term borrowing, which is done through investment banks. Because short-term borrowing problems are likely to be acute, they present certain peculiarities not present in long-term financing.

Selection of a Commercial Bank. Offhand, it would appear that any bank would be equally acceptable, personalities and subjective relations ignored. But this is far from the truth; the selection of a commercial bank should no more be a mere matter of guesswork and chance than should the financial plan of a corporation. Especially is the selection of a commercial bank a matter of study when the business has a violent seasonal fluctuation necessitating *very large credit lines at certain periods of the year*. In any event, it must be definitely ascertained that the bank is of sufficient size to be in a position to advance the seasonal and emergency financing desired by the corporation without running afoul of the laws and regulations concerning loans made to a single customer.¹

Besides the attitude of the officers and directors of the bank toward the business in question, *their general economic outlook and disposition* should be investigated. While too conservative a policy may at times impose limita-

¹ National banks may not make unsecured loans to a single customer to exceed 10 per cent of their combined capital and unimpaired surplus. Similar regulations are made for members of the Federal Reserve System.

tions upon what, from the corporation's point of view appears to be a reasonable credit policy, an unguarded "progressive" policy is equally dangerous. The latter policy makes for large loans, and it also causes the bank's money to be loaned near to its limit, hence introduces a degree of uncertainty as to whether the bank will or can protect its old customers in periods of financial stress. Finally, the bank must afford some guarantee that it will be in a position to render the necessary services desired by the corporation.

Tests of Credit Standing with the Commercial Banks. Banks have more or less standardized their analysis of short-term borrowers, and most of the factors considered are fairly well known and understood by the public. They are given here merely in outline form, for they are sufficiently well understood not to require explanation.

- A. Character and ability of the management
- B. Character, capital, and capacity of the business
- C. Earning ability of the business
- D. Use of earnings
- E. Recent financial activity
- F. Past history of loaning experience with the corporation
- G. Current position of the company
 1. Net working capital
 - a. Amount
 - b. Turnover
 2. Nature, quantity, and turnover of receivables
 3. Nature, quantity, and turnover of inventories
 4. Nature and quantity of payables
- H. Purposes for present borrowing
- I. General condition in the industry
- J. Type and intensity of competition
- K. Price trends
- L. Nature and extent of markets

It is not intended that the above outline should be exhaustive, but only suggestive of the major elements usually considered.

The Borrowing Limit on an Unsecured Basis. Borrowing on an unsecured basis has increasingly occupied the attention of commercial bankers until they have now formulated a fairly definite body of knowledge and set of principles upon which they proceed. Corporation officials soon become fairly well acquainted with the elements which determine their borrowing limit on an unsecured basis.

To approach the problem of borrowing limits on a short-term basis with the theory of protecting the bank's depositors at any cost will generally set too low an upper limit. For the bank to assume no risk whatever will result in slowing up business progress; for it to extend loans without due risk limitations encourages business expansion, if not inflation and its subsequent train of evils. The discussion of borrowing limits as extended by banks thus

becomes mingled with the broader social and economic problems of business cycles, price levels, and social attitudes.

One of the major elements which determine the borrowing limits on unsecured loans will be the circumstances surrounding the corporation attempting to arrange such short-term credits.

A second major element in determining an unsecured loan limit will be the current and prospective liquidity of the firm's assets. Historically, more emphasis was given to existing liquidity; currently, banks and commercial paper houses are giving less attention to current and more attention to prospective liquidity.

Lack of proper financial control is one of the most potent of the restrictive forces affecting unsecured borrowing. A concern with a strong financial budget policy and a budget prepared in some detail, and which executes its financial policies with *finesse and precision*, can usually secure a favorable hearing from the banker. No matter how clever the management or how liquid the business assets, unless adequate financial control is maintained the banker knows that financially the business is like a ship full rigged and manned to the davits but with no means of holding her to the course. A strong financial structure capable of withstanding severe economic shocks will enhance the control of the concern's affairs and will improve its borrowing status. Improperly or weakly controlled companies have a tendency to regard the commercial bank as a permanent source of funds instead of a source to be used for seasonal and emergency purposes only.

Factors Adversely Affecting the Borrowing Position of a Company

Any action or fact which would materially reduce the capacity of the business to produce an income or which would reduce the value or the liquidity of assets will lower the credit limits (though not necessarily affecting loans already made) as soon as discovered. The ability of a concern to borrow funds from banks will be adversely affected if their balances fall below the reasonable 20 per cent requirements, if overdrafts are frequent, and if the concern exhibits the characteristics of declining management ability, lack of capital funds to maintain a reasonable equity in the concern, poor collections, and an unreasonable credit term, or shows a tendency to engage in sharp practices. A record showing that the concern is increasingly given to paying by notes or trade acceptances will cause the credit analyst to infer that the business is in a weak financial position or is suffering from lack of competence in the management, misuse of capital, or lack of capital. Reports from the trade are often given considerable weight by bankers, and a tendency to operate contrary to trade trends will usually result in a demand for some explanation.

The personal habits of officers and directors have a bearing upon borrowing ability. These men may become suddenly extravagant or neglectful of the affairs of business. Any tendency to stray from good and accepted business practices, as evidenced in price cutting, unfair competition, false

advertising, and unethical practices of operations, will be looked upon doubtfully.

The Rate of Interest on Short-Term and Current Borrowing

The interest rates on commercial loans are affected by numerous factors, the more important requiring a passing comment. Through the various periods of the business cycle the market for commercial loans is variously unbalanced on the supply and demand side. In recovery and early prosperity the rate will be low; it will rise rapidly before the crisis, and recede slowly during the period of liquidation and recession to low levels of depression. There is some seasonal variation in commercial paper rates; hence to borrow at one period of the year may be more expensive than at another. A good picture to have in mind is given in Table 73. The quantity of risk in the loan

TABLE 73. INTEREST RATES²
(average per cent per annum)

Year	Open Market Money Rates in New York City						Commercial Loan Rates			
	Comm. Paper 4-6 Months	Book Accep- tances 90 Days	Stock Ex- change Call Loan	U.S. Government Security Yields			Total 19 Cities	N.Y. City	7 North- ern and East- ern Cities	11 South- ern and West- ern Cities
				3 Months Bills	9-12 Months Cert.	3-5 Months Tax- able				
1942	.66	.44	1.00	.326	...	1.46	2.61	2.07	2.58	3.26
1943	.69	.44	1.00	.373	.75	1.34	2.72	2.30	2.80	3.13
1944	.73	.44	1.00	.375	.79	1.33	2.59	2.11	2.68	3.02
1945	.75	.44	1.00	.375	.81	1.18	2.39	1.99	2.51	2.73
1946	.81	.61	1.16	.375	.82	1.16	2.34	1.82	2.43	2.85
1947	1.03	.87	1.38	.604	.88	1.32	2.28	1.81	2.33	2.76

will be essentially a result of its duration, the nature of the business, the age and past record of the business, the use to which the proceeds are put, and the quality of the management. In various geographic areas there is some variation. A new customer at a bank may expect to pay a higher rate and to procure only a somewhat limited amount of credit at first. Small borrowers in small towns will have to pay more than in the large cities.

Short-Term Collateral Borrowing

Unsecured borrowing must always be subject to greater risks than secured borrowing, and with corporations attempting to secure every possible economy it would be logical that some scheme of adding security to short-term and current borrowing from banks should be developed. Some concept of the general banking relations with business is reflected in the analysis

² Source: *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, December, 1945, p. 1227; January, 1948, p. 75.

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of bank loans shown in Table 74. In this division of credit extension, we see the dominance of general business loans, with real estate and consumer the next most important groups.

TABLE 74. LOANS OF ALL INSURED COMMERCIAL BANKS IN THE UNITED STATES³
(in billions of dollars)

Call Date	Total	Com- mercial, Includ- ing Open Market Paper	Agricul- tural	Loans for Purchasing or Carrying Securities		Real Estate Loans	Con- sumer Totals	Other Loans
				To Brokers and Dealers	To Others			
1942-Dec. 31	18.9	7.8	1.6	.9	.6	4.6	2.3	1.0
1943-Dec. 31	18.8	7.8	1.5	1.4	.9	4.4	1.9	.9
1944-Dec. 30	21.4	7.9	1.7	2.3	2.3	4.3	1.9	.9
1945-Dec. 31	25.8	9.5	1.3	3.2	3.6	4.7	2.4	1.2
1946-Dec. 31	30.7	14.0	1.4	1.5	1.6	7.1	4.0	1.1
1947-June 30	33.3	14.8	1.5	1.5	1.3	8.2	4.9	1.0

Pledge of Bonds for Emergency Finance

It will sometimes happen that banking facilities are entirely lacking or so restricted in periods of severe financial depression as to make difficult current or emergency borrowing on an unsecured basis. A corporation having unissued bonds in its treasury or even bonds held in the treasury under a sinking fund provision may pledge them for emergency purposes under a collateral bank loan arrangement. If any of the pledged bonds are outstanding and are currently traded in, this market price will be more than likely to be used to determine the quantity of bonds pledged as collateral under a given loan.

The Extinction of Short-Term and Current Debt

The extinction of short-term debt is accomplished in ways not unlike those employed in the extinction of long-term debt—by conversion, by extension or refunding, and by payment. Payment is the common practice, conversion being relatively infrequent except in reorganizations, and extension through renewal sufficiently common to form a feared practice. Funds for payment are usually obtained from the normal and regular revenues of the business. For this reason short-term maturities ought not to be large in amount at any one date, though they may be frequent, perhaps even daily. When corporations fund their current debt it is usually an indication of poor planning or weak financial position unless the current debts were specifically created as preliminary to permanent financing. Meeting maturi-

³ Source: *Ibid.*, July, 1947, p. 872; January, 1948, p. 68.

ties through the issuance of notes is done ordinarily only when companies are short of capital or embarrassed by poor sales and collections.

SHORT-TERM CREDIT EXTENSION

Almost every business at times will extend credit to its customers. Although no essential difference exists between the principles which govern the receipt and those which govern the extension of short-term or current credits, the varying points of view result in no small difference in emphasis.⁴

The Factors of Credit

The extension of merchandising credit is analogous to a commercial bank loan. In business parlance, credit is determined by the "three C's of credit," to which a fourth C is sometimes added. The fundamental elements are character, capacity, capital, and sometimes collateral. The character element, as far as it can be evaluated in terms of moral principles, personal habits, reputation, and honesty, essentially considers the willingness and the desire of the person receiving the credit to meet his obligations promptly at their maturity. The importance of character is largely in the fact that it changes slowly, whereas the other elements may change quickly. Some credit executives give much weight to character or, as it is more commonly called, the moral risk; others will give more importance to tangible elements. If the credit is unsecured, that is, without collateral, the moral risk is very important; if it is without a formal evidence of debt, i.e., open account, the moral risk becomes the most important feature in credit extension.

Collateral removes these three basic elements of credit, and places the risk essentially upon fluctuations in the value of the collateral. In fact, only the final loss coming after the seizure and sale of the collateral rests upon the first three elements of credit—character, capacity, and capital. Collateral is not often employed when a corporation is extending credit, though intercompany advances in holding company structures have not infrequently used the device of late years.

The relative emphasis which the credit department will be likely to place upon these factors depends largely upon personalities. If the credit manager is idealistic, he will be likely to emphasize the personal elements; a pragmatist or materialist will base his decision upon the assets existing and prospective. The same emphasis is rarely maintained in different businesses, and it varies from time to time even in the same business.

Length of Credit Term

The length of the term upon which credit is extended by the corporation to its debtors depends primarily upon the practices of the trade and

⁴Some difficulty is always encountered by the average student in gaining a clear conception of the current and short-term credit problems. The second part of this chapter concerns the credit which is given, as contrasted with the first part which was concerned with the credit which is received by the corporation. It should be clearly understood that the two problems simply view credit from the angle of the buyer or the seller.

secondarily upon those elements which should be characterized as particular to the individual buyer and seller. A large buyer in a strong financial position will be able to force concessions for cash from weak sellers, hence reduce the amount of credit given and also the profits margin. A large buyer desirous of so doing may, on the other hand, force unusually harsh credit terms upon a seller, sometimes so lengthening the credit term that the marketing process will be completed before maturity. The strong, large buyer thus will commonly pursue one extreme or the other. The same reasoning is likely to be true the other way around for weak, small buyers. Sellers who are in a strong financial and competitive position will either deliberately refuse any but short credit terms or, by taking a lion's share of the over-all profits, elect to carry the weak purchaser until he has collected from his sales.⁵ The strength of the buyer or seller will be dependent, first, upon his internal financial strength and, secondly, upon the degree of competition. The more intense the competition among buyers or among sellers, the greater the probability that the credit burden will be borne by the competitive companies either as buyers or as sellers.⁶ The financial position of the business is likely to depend largely upon the profits margins, cash position, and strength of the financial structure.⁷ It is generally conceded that goods produced under exclusive patents or carrying widely advertised trademarks will be able to exact shorter credit terms, as the producer can dictate terms of sale in the absence of competition. The regularity and volume of relations between buyer and seller will have some influence. Regular customers may reasonably expect better terms than irregular buyers. If the trade practice includes "datings," it is customary to meet this practice; the seller must accordingly expect to finance his customers to the regular dates in the trade.⁸

The Problem of Cash Discounts

Wherever the business between a buyer and a seller assumes any considerable volume, the question of cash discounts arises.⁹ Shall they be allowed? If so, at what percentage? Cash discounts speed up the realization

⁵ Strong sellers often dominate the credit terms given by these weak sellers to such an extent that the latter may truly be said to become the agents of the former.

⁶ The influence of corporate concentration has generally reduced credit terms. Cf. W. H. Steiner, *The Mechanism of Commercial Credit*, p. 40, for an illustration of how concentration in the iron and steel industry had affected credit terms up to 1920.

⁷ One writer on credit has argued that the larger the proportion of labor and cash material to the total cost, the shorter will tend to be the credit term. Cf. *ibid.*, p. 42.

⁸ "Dating" means deferment of the due date, irrespective of purchase date, to some more or less generally accepted date. Thus, a great deal of trade for Christmas articles is "dated" 2 per cent, 10 days as of January 1st, even though purchase and delivery may occur in October.

⁹ There exists wholesale confusion among writers on business credits as to the precise meaning of the terms "cash discount," "trade discount," and "terms." As here used, "cash discount" is any payment made prior to the due date, which is a premium allowance made for the early payment.

of revenues, consequently minimize the quantity of working capital tied up in receivables. The amount of the cash discount is likely to be a measure of minimum gross profits. Such cash discounts may, for competitive purposes, be increased to the point of reducing the net operating profit on the transaction to zero; but if they are increased beyond that point, governmental prosecution for unfair competition may ensue. As a general rule, credit men offer higher discounts to poor credit risks than to good ones, simply because the deterioration of an account is more rapid for a poor risk with the passage of time, and it is therefore more important to secure early payment from a poor risk than from a good one.

Some Aspects of Installment Selling¹⁰

From the point of view of the consumer, the method of installment selling and purchase is said by some to be a very "dear form of saving, with no interest and a number of disadvantages," and by others to be the deliverance of the wage earner from the follies of frittering away his income. But whatever the arguments for or against it may be, it has come to stay and must be recognized as a factor in the financing of the distribution of commodities to the ultimate consumer.

It is argued that the widespread use of the installment contract has served to regularize the revenues of corporations using it, and that consequently it has eliminated some of the worry of seasonal financing as well as making it possible for the firms to stabilize their production and sales. Of course, upon the banker and the investing public will sooner or later fall the burden of all installment credit—upon the banker through his credit extension, and upon the public through the investment of new savings in bonds and stocks resting upon such contracts.

Capital Sources for Installment Sales

The great increase in capital necessitated by installment sales is confined essentially to working capital. At least, this is the conventional classification which is employed. There are so many peculiarities in the financial problems accompanying the wide use of installment sales that this particular group of assets is more wisely considered apart from ordinary working capital, or at least as a special phase of the working capital problem. The sources utilized to obtain the special additional working capital may or may not be the same as for permanent working capital as opposed to those to which recourse is had for temporary working capital. Shares should be given preference over long-term bonds because of the risks which accompany such installment operations. Debenture bonds have been the choice of most companies. Certainly short-term bank loans should not be used. The growth of the installment method of selling has been tremendous in the United States during the past decades, and there have arisen numerous "finance

¹⁰ For a general survey of the installment sale method of distribution, the student is referred to E. R. A. Seligman, *The Economics of Installment Selling*, 2 vols.

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companies" which specialize in the purchase of installment contracts, hence supply capital for purposes of installment sales. Their work is really a special form of banking. A few larger corporations, such as General Motors, have subsidiary financing corporations to provide facilities for installment selling.

A good analysis of the consumer credit field is given by a review of the reports in the Federal Reserve Bulletin as given in Table 75.

TABLE 75. TOTAL CONSUMER CREDIT, BY MAJOR PARTS¹¹
(estimated amounts outstanding, in billions of dollars)

End of Year	Total Consumer Credit	Installment Credit						Single-Payment Loans	Charge Accounts	Service Credit
		Total Installment Credit	Sale Credit			Loans				
			Total	Auto-mobile	Other					
1935	5.4	2.6	1.8	.9	.9	.8	1.0	1.3	.5	
1936	6.8	3.5	2.4	1.3	1.1	1.1	1.3	1.4	.5	
1937	7.5	4.0	2.8	1.4	1.4	1.2	1.5	1.5	.6	
1938	7.1	3.6	2.3	1.0	1.3	1.3	1.4	1.5	.5	
1939	8.0	4.4	2.8	1.3	1.5	1.7	1.5	1.5	.5	
1940	9.1	5.4	3.4	1.7	1.7	2.0	1.5	1.6	.6	
1941	9.9	5.9	3.7	1.9	1.8	2.2	1.6	1.8	.6	
1942	6.5	2.9	1.5	.5	1.0	1.5	1.4	1.5	.6	
1943	5.3	2.0	.8	.2	.6	1.1	1.2	1.5	.7	
1944	5.8	2.0	.8	.2	.6	1.2	1.3	1.8	.7	
1945	6.6	2.4	.9	.2	.7	1.5	1.5	2.0	.8	
1946	10.1	4.0	1.6	.5	1.0	2.4	2.3	3.1	.9	
1947	13.4	6.2	2.8	1.2	1.7	3.3	2.7	3.6	.9	

Investigation of Credit Status of Customers

The decision to extend credit is reached only after an investigation of the prospective customer. The amount involved and the term for which it is granted will further condition the extent to which the investigation may be carried. Ordinarily a more complete investigation is made at the beginning of credit relations than at any other time, though a good credit department will continuously maintain an up-to-date file of information about each name. The investigation process usually takes one or both of two forms: indirect and direct.

Indirect Investigation. Analysis of credit risks by indirect investigation is often referred to as the secondary method, in that the sources of information are external to the customer and his organization. Mercantile credit agencies such as Dun and Bradstreet, Inc., always are used. Credit interchange bureaus, trade associations, competitors of the customer, other companies that have had credit relations with the customer, banks, commercial paper houses, trade and financial newspapers, Moody's and Standard and

¹¹ Source: *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, February, 1948, p. 228.

Poor's statistics services and records add further to the evidence for and against the applicant for credit. Of recent years, credit interchange bureaus have received a considerable amount of comment pro and con. For the system of exchange bureaus it is argued that small accounts may be more economically carried, that an average credit status may be greatly in contrast to credit positions at a particular time, that it is automatically kept up to date, and that the information will not intentionally be biased. Against the system it is pointed out that special conditions often explain an apparently poor account which this exchange fails to consider, that some credit men refuse to file complete information for fear that competitors will obtain it, and that one ill-minded credit man can almost ruin the credit of a firm through his reports to the exchange. Exchange bureaus are growing in importance and appear to be rapidly developing to the point of being absolutely necessary for a well-managed credit department.

Direct Investigation. Because direct investigation is immediately concerned with the prospective customer, it is often called the primary method of analyzing credit risks. Four basic elements, each with its advantages and limitations, are employed: (1) the credit man or a member of his organization; (2) the salesman; (3) an outside, professional investigator; and (4) correspondence. The three personal contact approaches are much to be preferred, as many intangible items will be observed in this way which will not be discoverable through any amount of correspondence.

Credit and the Business Cycle

Proper credit management may exert a very strong influence for good or evil in the various stages of the business cycle. As business expands, credit may be extended freely as long as prices are rising. When they begin to sag and sellers are no longer in a position to control the market, the temptation is large to grant concessions in credit terms to secure sales. But this is a poor policy; rather, cash discounts should be increased and prices dropped to move existing inventories before they become reduced in value.¹² Likewise in periods of recession or depression when unemployment is heavy, buying slow, and collections somewhat uncertain, the normal thing is to shut down on credit. The opposite should be done, for it will boost sales and create good will for the period of recovery and prosperity which will follow.¹³

An interesting and paradoxical situation may be observed when one examines the business cycle in terms of credit existence and use. The theory of credit is that of permitting the individual without present income or purchasing power to spend in the present and pay in the future. Therefore a large quantity of spending through credit should occur in a period of

¹² What usually happens is almost exactly the reverse of this.

¹³ There is always a question of financial balance between the losses on goods sold below cost and the losses entailed because of idle plants and equipment. To close down entirely may mean much larger losses than to maintain some operations.

depression and low prices. This will help business, and it would help people. Then when a period of prosperity comes along the loans will be paid off. The repayment will prevent overexpansion and flatten the top of the cycle.

So much for theory. The facts are otherwise. In depression the individual or the business can scarcely borrow at all, no matter what interest rate is offered; therefore his ability to purchase is limited to his narrowed income and business goes to pot. When the mystical corner is passed and prosperity becomes a reality, everyone can secure credit. The result is an overexpansion of business upon credit. The more credit the individual or the business gets, the better business is, and the easier it becomes to repay loans, perhaps with money units of diminishing purchasing power.

Some Financial Aspects of Credit Policy

Too strict a credit policy will necessitate a watchful financial management and may economize upon working capital requirements, but it will also reduce the efficiency of the sales organization and may even undermine the morale thereof. Too liberal a credit policy increases sales tremendously, but, because of the poorer quality of receivables on the books, it increases the requirements for working capital and probably will reduce the gross working capital turnover. The fact that a free credit policy permits working capital on its circuit flow to "pile up" at the "receivables way-station" will reduce the possibilities of paying cash dividends without borrowing. The degree of liberality which can be permitted is limited by the financial strength of the company.¹⁴

QUESTIONS

1. Explain how a firm hopes to make use of current borrowing as a more efficient source of capital than the use of capital obtained by long-term indebtedness.
2. Outline the difference between bank and open-market borrowing. Why has the latter decreased in use in recent years?
3. Indicate how the discounting of receivables is an aid to the working capital cycle of a concern. What is the risk?
4. Outline the general considerations in setting the borrowing limits of a concern.
5. Why is there a series of different rates for money use in the market? Are all concerns subject to this variation?
6. Discuss the importance to the banker of an adequate margin in the firm's operation for its available credit. How does variation in earnings enter this situation?

¹⁴ The control of credit policy is a difficult problem in financial administration. If the sales department or an individual closely allied to sales work is given the control, the result will almost invariably be liberal terms to increase sales. If the treasurer, controller, or a chief accounting officer is given control he will be likely to ignore moral risks and sacrifice sales to reduce bad debt losses. The better policy is to maintain a disinterested credit department.

7. Explain why rates for credit should in general rise as the length of a loan is increased. Is this relation strictly true for the loans of a concern?
8. Indicate the relation of installment sales to the capital needs of the business using them. What are the usual sources of funds for this type of operation?
9. How is the volume of mercantile credit connected with the business cycle? What does this relationship indicate about the security needed in a prosperity period?
10. Do you regard the increase in all consumer credit as dangerous or would you emphasize particular classes of use? Explain your position.

PROJECTS

1. Prepare a report on the total amount of bank credit in relation to national income from 1930 to date.
2. Chart the rates on commercial paper, four-to-six month paper, and banker acceptances from 1920 to date. Comment on the degree of correlation.

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CHAPTER XXXI

Surplus Reserves and Dividend Policy



THE management of a corporation is expected to operate the assets of the corporation in such a fashion as will result in a net income to the stockholders. Whether the income is to be immediately withdrawn in the form of cash, temporarily left with the business, or permanently reinvested in the enterprise is theoretically a matter for the stockholders, through their elected representatives, the directors, to decide; practically, the stockholders have nothing to say about the matter. There is a saying that American business has grown from within, i.e., through the reinvestment of earnings. The extent to which this statement is true varies from industry to industry and from concern to concern.

INCOME AND ITS DETERMINATION

At the outset, the whole question of dividends and surplus policy, including the setting aside of reserves, rests basically upon the income of the enterprise.

Income, Earnings, and Profits

A corporation may show a large income and still no earnings, or large earnings and no profits. Profits tend to be what is left from operating income after proper deductions are made.¹

That a high degree of accuracy in the determination of income and earnings is desirable is not the only reason for the interest of the student of corporation finance in the problem. The corporation earnings and profits problem is one of impersonality. Improper distribution of earnings may create liability, however innocent the act which originates it.

Profits, as used here, shall mean the surplus legally available for the proprietorship after the payment of all expenses and taxes, the creation of reserves to keep the capital fund intact, and the payment of interest on borrowed money.

¹ In their admirable work, *The Modern Corporation and Private Property*, Professors A. A. Berle and Gardiner Means have adopted the point of view that (1) profits as here defined should go to those who control the corporation as an incentive to their best efforts; and (2) earnings should pay a fair return to the capital of the owners before arriving at profits.

THE PROBLEM OF RESERVES

The revenues of a business eventually are used for one of two purposes: reinvestment in the business or payments to those who supply the capital employed in the business. The inexactitude with which, at any particular time, the earnings of the business can be determined, coupled with the uncertainties of the future, often makes it desirable to have a fund into which a portion of apparent earnings can and should be diverted to meet risks and contingencies of business, and to act as a buffer (1) for the errors in the determination of earnings, and (2) in the stabilization of dividend policy. The common thing is to have a reservoir, the several compartments of which are called "reserves."

The special reserves for depreciation and wasting assets have been given detailed attention, for these particular reserves usually overshadow all others in size and importance. Other uncertainties in the calculation of earnings are met by various reserves which do not affect the profit or earnings estimate as long as they insure the payment of dividends only out of surplus.

For practical purposes, the reserves² set up in corporation balance sheets are divisible into three broad general classes which we may designate as (1) asset reserves, which are portions of the surplus set off against uncertainties as to the actual value of assets; (2) liability reserves, which are portions of surplus retained to meet liabilities expected to accrue in the future, the exact amount of which cannot be foreseen in the present; and (3) those appropriations from the surplus account to meet specific obligations, such as bond interest, expansion, or preferred stock dividends.

The first general division, asset reserves, has three subclasses: (a) reserves set up to overcome unusual destruction of property by storms, frosts, droughts, earthquakes, inventions, floods, tidal waves, etc.; (b) reserves for price changes, especially in inventories, securities, and fixed assets where they may be disposed of prior to their ultimate sublimation through depreciation charges; (c) realization reserves, especially against receivables, where the amount of actual revenue may be different from the book value.³

The second general grouping of reserves also may be divided into three subclasses: (a) reserves for taxes, licenses, and other charges levied through

²From a purely practical point of view, reserve terminology in accounting is hopelessly confused. When an asset depreciates, a reserve for depreciation is set up; when it appreciates, a reserve for appreciation is put on the books; when an oil company takes part of its oil out of the ground, a reserve for depletion will be placed in the balance sheet; when a new deep zone is discovered by the same company, a reserve for undeveloped resources is entered; if bond interest is payable in July and a balance sheet is made up in June, a reserve for bond interest is set up; if a bond issue is to be retired, a reserve for bond retirement is created. Thus one finds the word "reserve" used to cover increases in assets, decreases in assets, increases in liabilities (existing), liability yet to exist (contingent), profits already earned, profits yet to be earned, profits earned but not realized, surplus earmarked for special purposes, and a long list of other things.

³The depreciation reserves would make a fourth subdivision of asset reserves.

public authority; (b) reserves for unexpected expenses demanded in the conduct of the business; (c) reserves against fluctuations in economic conditions, such as demand for the product, raw material supplies, labor and wage disputes, trade wars, and the general business cycle.

The third general division may be subdivided into: (a) reserves against fixed charges, such as bond interest, note amortization, sinking fund requirements, cumulative preferred share dividends, and redemption requirements; (b) reserves for expansion, improvement, and acquisition. There are a few additional reserves created occasionally which could be classified only under the head of miscellaneous.

Asset Reserves

Unusual loss of property value can arise in the least expected manner. A new invention may absolutely revolutionize an industry and require much special equipment, all of which may be swept aside a few years later by another revolutionary invention. Fire or explosion may destroy the equipment of a manufacturer or contractor and leave him unable to fulfill contracts.⁴

Reserves for price changes should be created wherever substantial changes in the price level can be foreseen. During World War II a number of corporations which had large munitions, ordnance, and supplies inventories, especially in textiles, leather, and chemicals, built up huge reserves in anticipation of the decline in prices which they expected immediately following the termination of hostilities.⁵ Banks, trust companies, and insurance companies have created similar reserves as it became increasingly doubtful that they would recover the full costs of their investments.⁶ Any price decline in fixed assets which may or may not be recovered in the future may and should be offset by some sort of reserve.⁷ If the price decline does not directly affect the revenue-producing capacity of the asset, no such reserves need be created.

Realization reserves cover two items in the balance sheet, receivables and inventories. When set against receivables, such reserves should equal the probable proportion of the current debts due the company which will not be collected. When set against inventories, the item is supposed to meet the decreased salability because of fashion and style change, or the sudden offering of substitute goods which render the inventory obsolete.⁸

⁴ Some types of assets, such as forest properties of lumber and paper companies, are not insurable against destruction except at prohibitive premiums.

⁵ See the reserves in the statements of such companies as Consolidated-Vultee Aircraft Corp. (1943)—\$12,500,000; Swift and Co. (1947)—inventory prices \$5,767,000; U.S. Leather Co., which has kept a reserve regularly since 1930.

⁶ The Economic Investment Trust, Ltd., and International Holdings, Inc., are examples of companies with investment reserves.

⁷ As illustrations, the Dow Chemical Co. has an electrolytic cell replacement reserve; and Swift and Co. has a reserve for high cost additions to fixed assets.

⁸ R. H. Macy and Co., Inc., in 1943 set up a reserve for decline of inventory values.

Liability Reserves

Tax reserves of various sorts should be set up from time to time. As the income statements show profits from month to month, a portion must be set aside for the federal income taxes. Property and franchise taxes can be estimated on the basis of past experience, and provisions made for them. In periods of great strain on public finances, new tax forms are invented. Their amount is uncertain; but reserves can be set aside to cause their burden to fall upon the proper accounting periods.

Reserves for unexpected expenses may be required in almost any enterprise. Of recent years, publicly regulated industries such as railroads and public utilities have had many bitter experiences with unexpected expenses. Railroads have had to eliminate grade crossings and install all sorts of safety systems primarily because of public demand. Some of these unexpected expenses are productive and some are not. The elimination of grade crossings by railroad companies, the burial of wires in tunnels by telephone companies, or the installation of fire escape equipment in office buildings is not directly productive.⁹ But, productive or not, every corporation must recognize their inevitability and make some preparation for them. Some carry either insurance against accident damages or a reserve account to meet such claims.¹⁰

Reserves against economic fluctuations cover those risks arising from the dynamic nature of economic society and from the ebb and flow of economic tides in our material welfare. Corporations whose operations are international in scope may require protection against adverse foreign exchange fluctuations.¹¹

Reserves against contingencies are a catch-all for items which cannot be differentiated in financial statements. From some points of view, reserves against accidents, damage suits, guarantees of securities, and even employees' pension funds may be included under the heading of contingencies. As a matter of practical policy, most smaller corporations carry but two reserve items on their balance sheet: taxes and contingencies, the latter being used as a blanket reserve for any and all purposes.

Appropriation Reserves

Reserves for fixed charges will be for two general purposes: to meet the requirements for retirement or redemption¹² directly or indirectly, and to

⁹ While such expenses as elimination of grade crossings and burial of wires may not be exactly forecasted, a study of population growth, municipal trends, and other elements well known by public utility and railroad engineers should enable a somewhat satisfactory guess to be made. These things must be done sometime; preparation therefor would be a wise policy.

¹⁰ For such an account, see the Dow Chemical Co.'s accident and other contingency reserve.

¹¹ L. C. Smith and Corona Typewriters, Inc., has a reserve for foreign exchange.

¹² The A. O. Smith Corp. had a preferred stock sinking fund of \$2,635,595 at the close of business in 1927, against a preferred stock account of \$1,511,900 in preferred stock out-

meet fixed charges on securities outstanding at periods when current revenues may be deficient.¹⁸ Naturally, the asset form in which this reserve is maintained may have a bearing upon the facility with which it may be used.

Reserves for expansion and improvement are said to form a normal part of the financial history of the average company. When a need for more funds in the business arises, four options are open to the management. First, they may borrow currently from banks or on short-term notes, later retiring them from income, hence make future surplus earnings available for use at the time of expansion. Secondly, they may pay out the present surplus and sell bonds or long-term debentures, hence spread the cost of expansion over a long period of time. Thirdly, they may pay out the earnings in extra large dividends and on the strength of the dividend record sell shares to the public, perhaps at quite high prices. Or, fourthly, they may put the surplus directly into the business and pay stock or bond dividends. Owing to the general misconception of stock dividends by the public, the last-named is the best policy. It costs the company no underwriting or other capital acquisition expense as would a bond or a stock issue; it avoids the

standing. The following year this fund disappeared from the balance sheet while the preferred stock remained at \$1,364,500, despite the fact that the profit and loss statement showed a charge to the preferred stock sinking fund of \$474,105 in 1928. It is not clear from the published statements what became of the sinking fund.

In Moody's *Manual of Industrial Securities* for 1929 (p. 29) appears a note to the effect that there existed a preferred stock sinking fund of \$1,500,950 in 1928, though no such item is shown in the balance sheet. However, there was an item, "U.S. Govt. securities, etc. . . . \$3,667,041."

¹⁸ American Car and Foundry has since 1907 maintained a reserve for dividends on the common stock. The amount of \$600,000 was set aside in 1908 and remained intact until 1914. In 1915, \$450,000 was withdrawn, leaving a balance of \$150,000 in the fund. Beginning in 1917, the fund was increased each year until by 1920 it amounted to \$10,000,000, at which figure it remained until April 30, 1927. After April, 1927, the fund was then drawn upon, until at the close of business on April 30, 1932, it amounted to but \$2,983,495. This amount was maintained in the reserve through April 30, 1937. In 1938 it was reduced to \$2,833,645 and remained at that figure through 1941. Since then variable amounts have been in the reserve.

Consumers Gas Co. of Toronto is required by the charter to set aside in a dividend reserve fund all premiums realized on the sale of its stock. This fund may be called upon to meet dividend requirements (subject to payment of some minor items) whenever profits are insufficient to meet the dividend requirements. The fund is to be restored out of earnings. The dividend rate is fixed by law at 8 per cent, and the company is empowered by statute to raise prices when the earnings are insufficient to meet the requirements.

Prior to 1929, the Cudahy Packing Co. carried approximately a quarter of a million dollars reserve for preferred stock dividends, the amount being equal to six months' dividend requirement on \$6,550,500 of 7 per cent cumulative preferred and \$2,000,000 of 6 per cent cumulative preferred.

If dividends on preferred shares are earned in whole or in part and it is not desirable to pay out the funds at the moment, a reserve may be set up to prevent payment for some other purpose. The Hermitage Portland Cement Co. set aside a reserve equal to the accrued dividends in 1929 and 1930, but did not pay them.

drain upon cash which must follow short-term borrowing or the expenses attendant upon refunding of short-term issues; and it enables the directors to maintain a much better control of the financial structure of the business. In anticipation of such expansion, there is created a reserve. This action merely notifies the shareholders that they need not expect a cash dividend from earnings so appropriated. However, it also tells them that a stock dividend may not be an unreasonable expectation when such reinvestment has reached sizable proportions.

Income Management and Dividend Policy

A mutual dependence exists between the management of income and the dividend policy of a corporation. Clearly, without a cash income, cash dividends cannot be maintained. If the cash or other revenues are allowed permanently to go into fixed capital, either for replacement or for expansion, the company is forced to declare stock dividends or borrow against the assets so acquired to meet the dividends.¹⁴

A stable dividend policy is definitely dependent upon proper income management if any degree of fluctuation in the revenues is common. Creation of a large surplus may be involved in the achievement of steady dividends under such circumstances.

Investment of Surplus Cash Funds

The size of the cash fund is influential. There is always a temptation to allow receivables to lag, to permit sales of inventories on hand to drag, and to permit inventories of materials and supplies to grow when no pressure is felt to secure and maintain adequate cash reserves. All sorts of luxuries are required; experiments in this or that at some officer's whim will result. When these large balances develop, expansion is the rule, first, by establishing new distribution branches, second, by new production units, and third, by the acquisition or absorption of competing units.

But the investment of funds cannot ignore the problem of liquidation when the reserve is needed. The outlets for investment are many and no need exists for a discussion of them here.¹⁵

¹⁴ In effect, if income has been used to increase the fixed assets and bonds are used to acquire cash for dividends, the proceeds of the bond issue, plus the excess of earnings over dividends, have been used to increase the permanent assets of the business.

¹⁵ Outlets for investment:

1. Government and municipal obligations
2. Corporation bonds
 - a. Long term
 - b. Short term
3. Mortgages
4. Corporation stocks
 - a. Preferred
 - b. Common
5. Corporation notes

Temporary investments are purchases expected to be liquidated by resale within a relatively short period of time, usually less than a year. With the exception of corporations of a financial character, and the case of the holding company, the investments of most business corporations are of a temporary nature. The uses of the cash fund are essential in operations and a high degree of liquidity is necessary if the concern is to make the most of changing prices and business conditions.¹⁶ Irrespective of whether the investment is permanent or temporary in nature, the principles of sound investment policy should be followed as far as possible.

DIVIDENDS: PRINCIPLES AND PRACTICES

The payment of dividends to the stockholder as compensation for the risk and use of his capital (stock purchase price) is the intention of every corporate enterprise. This payment may be made in various forms, each of which has a different effect upon the company.

Types of Dividend

If for some period of time a corporation has paid a certain dividend upon its shares at stated intervals, the payment comes to be known as the *regular dividend* of the company. When a dividend declaration is designated as *extra*, the implication is that it may not be paid at subsequent dates. There appears to be a certain moral obligation to pay *regular* dividends, but none to pay *extras*.¹⁷ *Liquidation dividends* arise out of the sale of the company's capital assets and represent a return of capital to the shareholders.¹⁸

The form in which dividends are paid may embrace as many as five

-
6. Bank paper
 - a. Time deposits, certificates of deposit
 - b. Acceptances and notes
 7. Call money
 8. Foreign exchange
 9. Commodities
 - a. For use by the company itself, i.e., inventory investment
 - b. Open market purchases, not used by the corporation itself

¹⁶ Some corporation managements have abused the investment account in various ways: by using it as a cloak under which the corporation's own securities were manipulated in the open market; by using it as a hiding place for the actual though not *de jure* retirement of the company's own shares; and by using it as a means of misstating the debt ratio of the company.

¹⁷ The problem of the *extra* dividend is a large and complicated one. There is a distinction maintained by some that extra dividends paid out of extraordinary current earnings are one thing, and an extra dividend paid out of cumulated past earnings is quite another.

¹⁸ Under the order of dissolution of the American Light and Traction Co. a *pro rata* distribution of its stock in Detroit Edison Co., Michigan Consolidated Gas Co., Milwaukee Gas Light Co., and Madison Gas and Electric Co. was made to common stockholders of the parent concern in 1945 and 1946.

variations: (1) *cash dividends* are paid in checks, drafts, etc.; (2) *stock dividends* are transfers from surplus and/or undivided profits to the capital account; (3) *property dividends* are payments in kind; (4) *scrip dividends* are simply IOU's given by the corporation, under which the company agrees to pay the dividend in the future. Dividends are paid in this form when the cash position of the company is weak.¹⁹ (5) *Bond dividends* are used when the corporation desires to postpone the cash distribution of the earnings for a long period of time.

The amount of dividend at each declaration is dependent upon both the total paid per year and the number of times the dividends are declared each year. Probably the most common forms are quarterly and semi-annual. Thus a share which received dividends of \$6 per year would receive \$3 at each payment if dividends were paid semi-annually, but only \$1.50 at each declaration if the dividends were paid quarterly. Annual divided declarations are not common; cases are on record of monthly dividends.²⁰

Stock Dividends. In recent years stock dividends have been increasingly common. When a corporation declares a stock dividend, only two accounts are altered, the stock account and the surplus account. Thus a corporation having 10,000 shares of \$100 par value stock and a surplus of \$5,000,000 could declare a stock dividend of 500 per cent. If it did so, the capital stock account would be increased to 6,000,000 and the surplus decreased to zero. Should the same corporation declare a 200 per cent stock dividend, the stock account would be changed from \$1,000,000 to \$3,000,000, while the surplus account would be decreased from \$5,000,000 to \$3,000,000.²¹

If one carefully examines his position before and after the stock dividend, he may discover many differences. First of all, a portion of the earned surplus previously available for dividends has been permanently removed from the surplus account. Second, one may discover his stock tends to be less stable in price. Third, the preferred shares and other prior claims now enjoy an increase in the permanent invested equity. Fourth, the extent of trading

¹⁹ A sample of a scrip dividend policy was that of the Associated Gas and Electric Co. which issued, either itself or through subsidiaries, in 1932 a total of \$864,292 in 7% interest-bearing scrip certificates which were to mature in 1937.

For July, 1948, United Light and Railway Co. ordered a stock dividend of 1 share of a subsidiary for each 50 shares held, and Consolidated Royalties ordered a 10% stock dividend. For September, 1948, the Standard Oil Co. (Ind.) ordered the issue of 1 share of Standard Oil Co. of N. J. stock for each 10 shares held.

In 1940 all corporations paid 140 million dollars in stock dividends out of a total of 6,228 million dollars; and in 1943 the declarations were 224 million dollars out of the total of 5,951 million dollars.

²⁰ International Shoe Co. paid ½ per cent per month and an extra 1 per cent in December for each year from 1912 to 1920. The total came to 7 per cent per annum. Public Service of Colorado paid monthly dividends on its preferred stocks until retirement in 1947.

²¹ A stock dividend should be differentiated from a stock split-up. If a split-up is made, each share merely represents a smaller proportion of the capital account, the total of which does not change. Also, the surplus account does not change in a stock split-up.

on the equity has been reduced by reason of the increased stock investment. Fifth (with reference to controlling the corporation), the increase in the number of shares will tend to spread the ownership. The consequence of greater dispersion is an increase in the influence of small blocks of stock in controlling the company. Sixth, one observes changes in the financial structure, the effects of which have been noted. Seventh, the receipt of fractional shares in a stock dividend may prevent a pro rata increase in voting, cash dividends, and stock dividends.

The circumstances and motives which lead the board of directors to use the stock dividend device are many and varied. The corporation may be short of cash; there may have been unusually heavy demands for expansion and money was high in price; underwriting expenses for new financing may be large; it may happen that stocks cannot be easily sold and further bond financing is undesirable because of financial structure; rising stock prices in the open market may cause stock dividends to appear to be a source of unusual profits.

As a general rule, the creditors of the corporation, both current and long term, will favor stock dividends on the theory that such dividends lock up additional capital within the business which will act to protect their interests. This, in fact, is true, but to accept it as a sure sign of a stronger position would be to overlook a possible vote to reduce the capital stock and the same rate of cash dividend would require added cash.

Some Legal Aspects of Dividends

Over the past century, thousands of points on the payment of dividends have come up for adjudication before the courts of the land. A few principles have been laid down with fair certainty.

1. *When May Dividends Be Paid?* In English law dividends may be paid only when currently earned, but in the United States there are two general rules: (a) No dividends may be paid which will result in an impairment of capital; and (b) dividends may be paid only from earnings, current or cumulated.²²

2. *The Declaration of Dividends.* If it is clear that majority groups are freezing out minority holders through non-payment of dividends, the court

²² There is a considerable degree of diversity among the several states as to when dividends may be legally paid. The four following rules will cover existing variations: (1) Dividends may not be paid while the corporation is insolvent or when such dividend payments would bring about a condition of insolvency; (2) dividends may not be paid if the payment would reduce the worth of the remaining assets below a specified minimum; (3) dividends may not be paid except from the sum total of net profits remaining to the corporation since its organization; and (4) dividends may not be paid except from current earnings. The question of the payment of dividends out of surplus arising from a reappraisal of assets (appreciation) has generally been decided upon the following: If the assets are sold and the higher value is realized, the surplus arising therefrom may be legally paid out as dividends. *People v. Sohmer*, 143 N.Y. Supp. 313 (1913); *Equitable Life Assurance Society v. Union Pac. R.R. Co.*, 212 N.Y. 360 (1914); and *People ex rel. Queen's County Water Co. v. Travis*, 171 App. Div. (N.Y.) 521 (1916).

will usually act.²³ Fraud will at all times be sufficient reason to compel payment. But the courts will not always wait for proof of fraud.

3. *Payment of Dividends May Be Limited.* It would appear reasonable that if the shareholders could compel the payment of dividends, they should also be able to protect themselves from the declaration of exploitative or exhaustive dividends as is sometimes done in manipulated holding company operations.²⁴

4. *Disposition of Illegally Paid Dividends.* If payment has been completed, no action may be taken. If dividends have been merely declared but not yet paid, estoppel may be exercised.²⁵ Suits should be taken against directors rather than shareholders themselves.

5. *Parties to Legally Receive Dividends.* The corporation is bound to pay dividends only to its registered shareholders, all of whom in the respective stock classes must receive identical treatment.²⁶ Payment to a party other than a recorded shareholder does not excuse the corporation from payment to the recorded owner.

Factors Affecting Dividend Policy

Economic and financial factors will probably be the limiting elements in the dividend policy, assuring that the directors are seriously mindful of their position. The more important of these elements will be briefly considered. The declaration of cash, scrip, or stock dividends has a direct relationship to the working capital position of the company. The effects may be tabulated:

Type of Dividend		Effect on Amount of Gross Working Capital	Effect on Amount of Net Working Capital
Cash dividend		Decrease	Decrease
Scrip dividend	immediate	No effect	Decrease
	ultimate	Decrease	No effect
Stock dividend		No effect	No effect

If the ratio of gross and net working capital to total assets is considered, there is an effect in every instance. A corporation with ample working capital may use any of the three forms; one temporarily short of

²³ One of the cases goes so far as to permit the recovery of salaries paid directors while they were refusing to declare dividends. *Jones v. Van Heusen Charles Co.*, 246 N.Y. Supp. 204 (1930).

²⁴ Mere manipulation of accounts with the aim of benefiting the common shareholders at the expense of the preferred may be estopped if an attempt is made to pay dividends to the common shares. *Day v. United States Cast Iron Pipe & Foundry Co.*, 123 Atl. 546 (1924).

²⁵ Public service corporation regulation may usually exercise the right of estoppel if dividends have been declared but not paid. Even in cases where they have been paid, it appears the commissions have power to force restitution from future earnings before additional dividends can be paid.

²⁶ In declaring dividends, corporate directors declare them payable to stockholders of record of such and such a date. If no date is specified, the assumption is that the dividends are payable to holders of record on the date of the declaration.

working capital should use the scrip dividend, and one permanently short of working capital can use only the third, or stock dividend. It may be noted that continued use of the stock dividend may be the result of a poor working capital position, but, obversely, it may also become a leading factor in the development of a poor working capital position.²⁷

But the current financial position is not to be considered entirely aside from the fixed capital position, especially with reference to needs for new capital in the near future. Some companies like to grow from within; they attempt to keep such earnings as will supply the needs for expansion; consequently when there is prospect of expansion they will lower cash dividends and pay stock dividends. Such companies will probably have a large stock equity and generally follow a conservative dividend policy.

Examination of the dividend records of corporations does show a marked tendency for the percentage of earnings available for dividends to vary widely in the various industrial corporations, though industrial corporations as a whole have distinctly different policies from public utilities and railroads.

Benefits Arising from Stable Dividend Policy

Having a large and high credit rating is beneficial to any business, especially if the concern is subject to violent seasonal fluctuations. This status of credit may be at least partially dependent upon a stable dividend policy, for such a policy indicates conservative operating and financial management as well as a relatively secure and profitable position in the field of economic endeavor in which the company is operating. The rating of securities as well as the distribution of securities is improved by a long record of steady dividends.

Of quite a different nature is the effect of a stable dividend policy upon the personnel of the company. Lastly, the tax aspect of a stable dividend policy must not be overlooked. If the dividend is kept at an average over periods of time, the income taxes paid by shareholders will be at a minimum. Any irregularity of dividends sufficient to shift the stockholder from a lower to a higher rate class will increase his total taxes over a period of time.²⁸

The Ratio of Dividends to Earnings

Decision as to the proportion of dividends to earnings is difficult. The degree to which the directors of a corporation have faith in the accounting

²⁷ Because the stock dividend device has no effect upon the working capital position of the company, the management of companies which make extensive use of the stock dividend become inattentive to working capital problems. They are lulled into a feeling of false security from which a stock market crash is likely to awaken them very rudely.

²⁸ It is possible to conceive of a condition of income where this would not be true. In this case the average income over a period of years is sufficiently near the lower limit of the rate group so that reducing the dividend to bring income into a lower rate group in one or more years will not increase the income sufficiently in the remaining years to force it into the next higher rate group.

methods, and the accuracy of the profits as determined thereunder, is the first limiting factor.

A rapidly expanding corporation may consume all or a major portion of the earnings. A concern expanding less rapidly would need a smaller proportion for reinvestment, hence release a larger amount for cash dividends.

The nature of the capital structure and its prospective future changes place certain fairly well-defined demands upon the existing stockholders if they would retain control over the company. Protection of bond interest payments and non-voting stock dividends is important; in good years a surplus must be set up to forestall loss of control by reason of default when earnings are low or absent.

The degree of reliability of forecasts of the probable future profits of the corporation is of paramount importance. If future conditions could be foreseen with accuracy, the ratio of dividends to earnings would be high; but when the future is uncertain, reserves and surpluses must be erected against the risks.

Lastly, the degree of regularity desired in the dividend policy may govern some decisions. Those corporations desirous of a broad distribution and a high rating will use but a portion of the earnings; those who do not desire these factors will pay out all or a large proportion.

The Public and Dividend Policy

Even a superficial examination of the dividend policies of corporations brings to light the fact that many people have a very real interest in the dividend policy of the companies concerned. On the one hand, the consumer argues that payment of unusually large dividends or the creation of a large surplus can occur only when large profits are made. The conclusion would be that the prices of the product are too high. On the other hand, the laboring classes, especially if they possess a labor consciousness, will find in the large profits or the large surplus a measure of the degree of exploitation. They would not lower prices to the consumer, but would raise wages.

Of recent years, the concern of the public has been altered slightly because of the tremendous growth of the number of shareholders in the country. The effect has been for the public to desire to eat its cake and have it too.

QUESTIONS

1. What distinction is made between asset, liability, and surplus reserves?
2. Explain the justification for the several classes of reserves. Do you agree entirely with the procedure? Explain.
3. Why does the creation of reserves fail to solve the problem of adequate funds? Where funds do exist, what is management's major task?
4. Explain why a company may declare stock dividends when it is also showing substantial profits.
5. Explain the difference, if any, between declaration and payment of dividends. How is this apparent in stock trading practices?

6. If a stable dividend policy is desirable, is a reserve for such payments likewise desirable? Explain your position.
7. In which concerns would you expect the larger portion of earnings to be paid out in dividends? Give reasons for your answer.
8. Analyze the proposition that the appearance of a large surplus in a balance sheet is evidence of labor exploitation.
9. How would you relate a firm's dividend policy to the sale of added securities? Would you take the same position if the securities were bonds only?

PROJECTS

1. Prepare a report covering the past ten years for six concerns, three with regular dividend payments and three with irregular payments. Chart the price variations on their stocks indexed with the first year's high and low as the base point, and draw your conclusions.
2. Chart the record of stock and cash dividends for all corporations for the past ten years. Is there any correlation with the volume of corporate profits?

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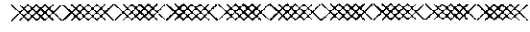
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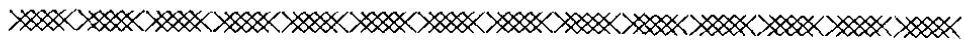
PART SEVEN



Growth and Expansion

CHAPTER XXXII

Financial Expansion—Direct and by Combination



THERE is an old adage in the business world to the effect that every business must either progress or retrogress; it cannot stand still without disintegrating. Whether or not this proposition is true, the student of modern finance finds business in a state of continued flux, sometimes contracting, more often expanding, but always changing.

Discussion of some of the problems which arise from the expansion of an enterprise may be divided into several parts: the first will outline the general theory of business expansion; the second will consider the financial aspects of internal expansion; the third will discuss special problems of lease arrangements; and the fourth will discuss expansion by merger and consolidation. Lastly, a method of distinct type, known as the holding company, will be examined.

THE GENERAL THEORY OF BUSINESS EXPANSION

Business expansion is fundamentally a matter of economic expedience in the pursuit of profits and is only incidentally a problem in finance. Though there are many and very complex problems of social and economic philosophy involved in the shift from small- to large-scale enterprise, attention will here be confined to the essentially financial aspects of the problems.

The Most Profitable Size

The crucial question in all business expansion is that of the most profitable business size.¹ If monopolistic elements and the dynamic nature of general economic conditions are ignored, there is in every industry, at a given stage of development, a business size which will be most profitable. But actual economic conditions continually shift, and every important change causes a variation in the most profitable business unit size. It is proper, therefore, to regard the problem of business size as being dynamic in nature; this most desirable size business will be understood not to exist in reality. It is a

¹ Studies for reference are: Twentieth Century Fund, Inc., *How Profitable Is Big Business?*; W. L. Crum, *Corporate Size and Earning Power*; Temporary National Economic Committee, Mono. #13, *Relative Efficiency of Large, Medium-sized and Small Business*.

size toward which all businesses gravitate but which an individual business rarely achieves.

(The rate of return rather than the absolute amount of return on the larger capital employed in the expanded business should be the point of departure in the financial analysis of expansion. The largest possible rate of return need not be the sole criterion, however, for the business should expand as long as the rate of return (considering a reasonable number of years) is larger than the normal rate demanded on capital funds in that type of enterprise. Capital thus takes advantage of the best business opportunity, considering both present and prospective incomes.² It is incorrect to assume that a business has reached the proper size or degree of expansion when its costs per unit are lowest.³ It will generally be true that when the proportion of capital costs to non-capital costs is high, large-size business units will predominate, and vice versa.⁴

² There is no more dramatic proof of the failure of businessmen to consider future conditions in the expansion of business than conditions in the United States from 1927 to 1929. Everyone was trying to achieve a new record every day. The business mushrooms erected in these years collapsed like houses of cards when the future incomes, which had been fantastically conceived, failed to materialize. Yet in 1947, the steel industry was constantly criticized by public officials for not expanding more.

³ Cf. A. L. Bishop, *The Financing of Business Enterprises*, p. 514. A business may be very much overexpanded and yet find its costs nowhere near their minimum per unit. Or it may not have reached the desired degree of expansion until some time after the cost per unit of output has passed its minimum and is rising. To use the minimum cost per unit as the measure of expansion is to confuse the size of the producing unit with the size of the business organization, and to ignore the entire demand side of the profits formula. If a business is producing 1000 units per day at a cost of \$1.50, and is selling them for a price of \$1.75, hence netting 25¢ per unit, it does not follow that the expansion should stop there. If such an arrangement provides a return of 15 per cent at 6 per cent, to expand to where the company is producing 1500 units per day at a cost of \$1.55 each and selling them at a price of \$1.70 may yield a net return of 20 per cent on the owned capital and would be a good move. However, the extent to which such borrowing for expansion should be carried may be limited by other factors.

⁴ See discussion in A. S. Dewing, "The Law of Balanced Profitableness," *Financial Policy of Corporations*, 4th ed., Book IV, chap. ii. The extent to which large-scale operation, under conditions of relatively large capital costs, results from the efficiency of the corporation as a means of raising capital may easily be overlooked in arriving at a conclusion that the proportion of capital to total costs is the sole determining factor.

Large-scale production tends to result because of advantages in several of the following ways:

A. Production

1. Complete use of capital equipment and processes
2. Application of research
3. Gains of specialization

B. Marketing

1. Large volume with standard types
2. Lowered sales cost spread over varieties

C. Finance

1. Cheaper cost of funds
2. Stabilized earnings, by market control and keyed production

Business Is Continuously Seeking a More Profitable Size

Every new scientific achievement and invention has an influence upon business directly or indirectly.⁵ It may offer a scheme for producing the same goods at slightly less cost; or it may make possible the production of a slightly improved product at the same price, and so provide a prospective if not a real competitive advantage in the pursuit of profit; the new discovery may bring a new commodity to be enjoyed by man, probably resulting in a decrease in the consumption of other commodities. Primarily because of this method of technological progress, every business is forced to battle continuously for its competitive position.

The most cursory examination of business phenomena quickly demonstrates that without financial plans for expansion and contraction the management of a corporation is navigating a ship without charts; and without proper financial control the management is attempting to steer without a rudder. Earlier in this volume considerable attention was devoted to the formulation of financial plans; at this time the peculiar importance of flexibility in the plan is again emphasized, for successful financing is most unusual and is pure good luck when it has been accomplished without a dynamic plan.

Expansion may be a natural result of the success of the business. For a business begun in a small way, perhaps in a semi-experimental fashion, historical experimentalism provides a scheme for discovering difficulties before the business has achieved such a size that a slight mistake means thousands, if not millions, of dollars. Moreover, where the business has been started in a small way, the owners supply the initial capital, hence acquire a large proportion of the early earnings; their expansion will tend to be by reinvestment of earnings instead of by borrowing or selling stock to strangers, both of which not only jeopardize the control of the business but permit profits to be diverted or alienated from the originators of the business.

The Forms of Expansion

The forms of expansion may be examined from the point of view of either (1) the *nature of the added assets* growing out of the expansion or (2) the *manner in which* the added assets are acquired. Management must not fail to distinguish between temporary and permanent changes in demand. One involves temporary expansion; the other permanent expansion. One may be met by the mere use of an increased number of shifts, subletting portions

D. Purchasing

1. Integration of sources
2. Large-scale price gains

⁵ There seems never to have been nearly so good an analysis made of underexpansion and undercapitalization as has been frequently repeated in studies of overexpansion and overcapitalization. Perhaps the latter is more spectacular, hence attracts more public attention.

of the production, and adding to the working capital. The other involves accretions to permanent fixed assets, hence permanent financing. In almost every industry there are technological changes occurring constantly. Some of these are such as will lead to an increase in the size of the producing unit. Increases in the efficiency of transportation tend to concentrate production in larger units at specific centers. Shifting price levels appear to have some effect upon unit size in business. A shift from hand to machine operation almost always brings about an increase in business unit size.

Justification of Expansion

Expansion ought always to be considered in the light of immediate *vs.* ultimate justification. Certain types of business may be forced to expand by definite steps, hence appear to be overexpanded just after an extension has occurred; intervals of apparent losses or reduced profits may visually be expected immediately afterward. In other lines of activity, demand must be largely created after the goods or services are produced; hence these businesses also appear overexpanded at the time. Expansion at the peak of prosperity may bring immediate profits and mislead the management to conclude that the expansion was justified when in fact it was far from being so.) Unless profits may be realized at other than the peak of prosperity, the business is overexpanded or is not securing a fair proportion of the total demand. Conversely, expansion in the middle of a depression may appear unjustified at the time, though it is clearly justified at a later date.

Economics and Business Expansion

The validity of the expansion of a business enterprise depends ultimately upon the soundness of the economic theory which serves as its foundation. There are many theories of economics intimately related to the expansion and growth of any enterprise. Among the more important are (1) the marginal utility theory of the utilization of the factors of production, (2) the principles of variable costs, and (3) the principle of diminishing returns. Business expansion should be examined in the light of each of these, for a clear understanding of these principles may prevent many mistakes by the management of enterprises.⁶

1. *The marginal utility theory* of the utilization of the factors of production may be stated as follows: In economic activity, the tendency is to extend the use of every one of the factors of production until the last increment of any agent which is added to the production process will only add as much to the value of the product as its cost. To extend utilization beyond this point is to operate at a loss; not to extend the utilization up to this point is to permit some opportunity for a profit to escape.⁷

⁶For a more careful examination of these principles the student is referred to volumes treating economic theory.

⁷Under no circumstances should it be supposed that the principle of marginal utility will never cause a business to operate at a loss. The fundamental idea in practice is to

2. *The principle of varying costs* merely recognizes the general facts of costs in certain types of enterprise. In most hand industries, the cost per physical unit of output remains almost the same throughout a wide variation in the total volume of output for a business unit. This might be illustrated by hand-tailored suits, where the cost per suit, made from similar materials and under similar conditions, is almost the same whether 100 or 10,000 suits are turned out per week. But there is a relatively high degree of constancy in the costs over a wide range, and such industries are called *industries of constant costs*. They will usually employ a relatively small amount of capital per unit of output; hence the problem of securing added capital is minimized. In other industries, particularly mining and agriculture, as the amount produced is increased the cost per unit tends to increase. This particular trend appears to be most marked in industries directly dependent upon the utilization of natural resources. In mining it becomes necessary to use poorer and poorer grades of ore or to obtain the same quality at greater depths; in agriculture, to make use of poorer and poorer grades of land, or to use land farther and farther from the market centers.

3. *The principle of diminishing returns* states that as production grows, each unit of the factor requisite for the added total quantity of production will produce the added product only under a condition of increasing cost.⁸ This proposition is most important to corporations which have to utilize land extensively. It is more important to a concern operating in a rapidly growing population than in a slowly growing population because its effects will be felt more quickly and intensely under such circumstances.

Dangers in Expansion

The management of business is always accompanied by risks; in corporate expansion there are some special risks. It is much easier to expand a business than to contract it; moreover, the losses from expansion cannot ordinarily be made up by profits from contraction. Once materials and machinery have been placed in a business, the capital can seldom be recovered, for the assets usually cannot be sold for as much as the investment unless they are profitable. The decision to expand may have been incorrectly reached. The size of the market area as well as the trends in the demand for the commodity and for substitute goods may have been erroneously estimated;

achieve the no-profit margin over a period of time. Hence today a concern expands into an unprofitable zone because expansion must occur at stated intervals instead of by the infinitely small increments presumed by the theorist; tomorrow it may be expanded to the limits of productive utilization by reason of changed demand conditions. The average which is desired will be the limit set by the marginal utilization process.

⁸ Notice the news item in the *Wall Street Journal*, April 15, 1948, which reports as follows:

1. Container Corp., sales up 4 million dollars, profits down 1 million dollars.
2. National Biscuit Co., sales up 7 per cent, profits down 30 per cent.
3. Libby-Owen-Ford Co., sales up 10 per cent, profits down 9 per cent.

the profitableness of the increased business volume may have been misjudged or miscalculated. The need for temporary expansion is frequently confused with the need for permanent expansion.

DIRECT CAPITAL EXPANSION

The Nature of Financial Growth

The financial growth of an industrial enterprise is a complex process, not readily reducible to simple elements. For the past century the amount of capital utilized per unit of output has been increasing steadily, so that, although the production output of a particular business remained constant, added capital was required to maintain the concern's relative position in the industry. This trend will undoubtedly continue with further technological changes.⁹ The expression of the demand for added capital may be through any of the six basic processes of business growth, namely: (1) extension of capital use, including the wider use with the advance of the industrial arts; (2) acquisition of an increasing proportion of the business volume in a more or less constant market; (3) acquisition of a larger volume of business in an expanding market, the percentage of the total business remaining the same; (4) addition of new products to those already produced; (5) extension of technological processes, either forward toward the ultimate consumer or backward toward the original raw materials, or both, a process usually referred to as integration; and (6) acquisition of the business of other corporations directly through merger, consolidation, or purchase, or indirectly by stock ownership control. Improvements and betterments which necessitate more capital but do not increase the production output are illustrated in many public service corporations in the elimination of grade crossings, placing of telephone and electric wires underground, installation of safety devices on trains, and modernization of office buildings. An increasing proportion of the total business in a given industry may arise out of an unusual competitive position, better management, lower costs, withdrawal of other concerns from the field, or patent control.

Cyclic Expansion and Contraction

With the succession of the various stages of the business cycle the capital employed by a corporation to meet its normal requirements should slowly expand and contract in sympathetic response to the semi-rhythmic convolutions which characterize social and economic affairs. Actually, expansion and contraction occur with more or less violence and eccentricity. Great amounts of capital are used within corporate capital structures while

⁹ One of the interesting developments of the past three decades has been the increasing substitution of capital (machinery) for labor as business output has increased. Any number of instances can be found in which the productive capacity was two or three times greater and yet the number of laborers diminished. A rapid increase in wage costs, plus a plethora of capital and better organization, appears to account for the shift. Thus financial expansion has kept pace with or even exceeded the increases in output.

business is good or when the capital can be cheaply obtained; sharp financial contractions or even reversals in the flow of investors' capital occur when business is bad. Whether or not such cyclical changes ought to be regarded as temporary expansions from a normal minimum or as temporary contractions from a recognized maximum involves postulates beyond the scope of this argument.¹⁰ Businessmen tend to regard all expansion as hopefully permanent; temporary expansion they must regard as more or less abnormal.

Instruments for Temporary Expansion

Difficult as may be the task of distinguishing between temporary and permanent expansion, it must be done if the structural growth of the corporation is not to be relegated to chance. The cyclical expansion and contraction of business as the several stages of the business cycle occur constitute one of the central problems of finance. Probably the choice of instruments to be used under such uncertain conditions would be: (1) short-term notes with extension or conversion privileges reserved to the corporation; (2) long-term bonds with both a call and a similar conversion privilege; (3) preferred shares with an optional redemption clause under which the management may reduce the capital directly, and with conversion clauses under which the nature of the capital structure may be altered to reduce its burdensomeness.

Instruments for Permanent Expansion

Shares and long-term bonds are usually employed for permanent expansion. The particular characteristics of the instruments depend upon forecasts of future investment markets, the source of funds for the expansion, and prospective conditions in the industry and for the individual company. Notes and other short-term instruments should be employed only when it is fairly certain that these temporary contracts may be refinanced upon a reasonable basis or when the cash position of the company will probably be such that no serious embarrassment will arise at their maturity. Whether the permanent expansion ought to depend essentially upon stocks or bonds will be determined by (1) the stability of the revenues of the business and (2) the degree of risk which the shareholders are willing to assume.¹¹

¹⁰ The late Thorstein Veblen was a champion of the theory that depression is the *normal* state of business and that prosperity is accidental. See particularly *The Engineers and the Price System*.

¹¹ There are, however, many elements which interfere with a free choice between shares and bonds. State laws may limit the bond-share ratios one way or another; peculiar state laws on dividend payments sometimes make one more desirable than the other; current investment psychology may limit public offerings to bonds or to shares, though by combining conversion privileges, purchase warrants, redemption clauses, and cumulation of credits the differences between the employment of bonds and of shares may be practically eliminated. The past history of the company may condition and limit new financing to one or the other, or the restrictive clauses in outstanding issues may force the choice of shares in some circumstances and bonds in others.

Growth from Within vs. Growth from Without

Although a corporation enlarges its scale of operations solely by growth, there are two distinctly contrasted methods employed in this extension: the reinvestment method and the financing method. Occasionally the two are used in combination, or as intermittent alternatives.

The Reinvestment Method. When using the reinvestment mode of expansion the corporation leans toward a policy of minimum cash or other property-alienating dividends; and the acquisition of new capital by offering securities to the public will be minimized. Financial growth thus is the result of cumulating earnings in the surplus account followed by stock or bond dividends, thus tending to fix the capital permanently within the business. The taxation of cash dividends and the tax exemption of stock dividends has often caused those who have controlled corporations to choose this method in preference to cash dividends followed by public financing. As a general rule European corporations pay out a larger percentage in cash dividends in both good and bad years; hence they engage in financing more frequently. From the shareholders' point of view the reinvestment method is a forced choice of reinvestment in the company by shareholders who may desire neither to invest their own money in it nor to expand the business. The decision to reinvest earnings is made by the directors and almost invariably approved by the stockholders; hence the method places sole discretion in the management. The permanent fixation of earnings, if maintained as the sole method of expansion, usually results in a pure stock capitalization, or in an increasingly large one. Since bond dividends are not the rule, increases in the creditor-supplied capital are not common where the reinvestment theory of expansion is used. The profits encapitalization method, in its pure form, has not been used extensively by corporations desirous of trading on the equity to a large degree. Corporations in which the risk is relatively high should lean toward the reinvestment mode of expansion rather than toward the market financing method.

The Financing Method. Under the financing method the corporation sells its own securities through investment bankers or other channels and pays out its earnings to its own shareholders. The corporation maintains constant contacts with investment bankers even though financing occurs intermittently. Control of the financial policies of American corporations following this method of growth often drifts away to the bankers; the management may be concerned less with operation and more with financing.¹² When financing is done through high-quality investment bankers

¹² It should be noted that corporations in most European countries have favored the financing method of expansion and that they have generally paid out a much higher percentage of their earnings in the form of dividends than have American companies. It is debatable, however, whether European corporations have been subjected to more or less banker control than have corporations of the United States. Perhaps it may be ventured that European bankers have been less exploitative in their control of corporations.

it is probable that they will check much more carefully upon both the wisdom of the expansion and the ability of the financial management than will the old security holders who must usually approve new issues. It is doubtful if any particular type of financial structure results from the employment of this method in its pure form, though the types of securities offered for sale by the company will be colored by the fashions in the investment market at the moment. Since the amount of funds available for expansion, as well as the usability of the method, is independent of the existence of surpluses or even current earnings, it follows that the financing method is more flexible than the encapitalization method of growth, especially following prolonged periods of business depression.

The Sources of Funds for Expansion

Three basic sources of funds are to be found for the expansion of an enterprise: revenues, stock or bond sales, and current borrowing. They are by no means as clearly marked today as they were a few decades ago, for the position of the shareholder is steadily becoming more and more analogous to that of the creditor.¹³

Earnings. If the corporation is profitable, the dribbles of net revenue from day to day eventually amount to enormous surplus accounts, sometimes much larger than the capital obtained from all other sources.¹⁴ In the discussion of surplus and dividend policies, it was pointed out that the surplus account may be divided into funds, some of which are specifically dedicated to corporate expansion.¹⁵ Ordinarily current assets are expanded first; later fixed assets are extended. Where the unit of expansion is comparatively large, it may be desirable to cumulate the surpluses from earnings over a period of years to avoid at the time of actual expansion the creation of too much debt by current borrowing.

Once the earnings cumulated in the surplus account have been employed in fixed expansion, two avenues of treatment are open: the surplus so embodied may be simply nominated "appropriated surplus," thus indicating

¹³ The old trust fund doctrine, by which the capital contributed by the shareholders constituted a trust fund for the benefit of the corporation's creditors, has, by legislation and court decisions, been largely destroyed. Under the theory the management (directors) became the agents of the share owners in controlling the fund and in operating the corporation. From the point of view of the holding of the trust fund there was a sort of separation of the corporation from its owners, but there was inseparability in other matters such as operative control.

The gradual evolution of differences between shareholders and creditors has been admirably studied in A. A. Berle, *Studies in the Law of Corporation Finance*, and A. A. Berle and Gardiner Means, *The Modern Corporation and Private Property*, to which the student is referred for further treatment of the subject.

¹⁴ Sears, Roebuck and Co. and F. W. Woolworth and Co. are two typical examples of corporations whose growth and expansion came almost entirely from cumulation of earnings.

¹⁵ "Appropriated surplus," "reserves for construction," and "reserves for expansion" are typical of these special segregations of surplus.

that it is to be left in the business and not distributed as dividends; or it may be "encapitalized" through the declaration of stock or bond dividends. If too long a time intervenes between the receipt of the earnings and the encapitalization there may be some injustice, for the continual flux in stock ownership would prevent the distribution of the benefits to those to whom they belong. There is much to be said for the argument of realizing profits as they accrue.¹⁶

Earnings as the source of new capital for purposes of expansion are open to a good many objections. Earnings are irregular, at least partly dependent upon general operating efficiency, and largely the result of fortuitous economic circumstances. Their amount is often affected quite as much by the accounting practices as by the volume of business done. The expansion of a corporation is a planned procedure; it should not be enlarged or contracted by a decision to change the depreciation rate or the method of valuing the assets. Moreover, argue the shareholders, the final decision to expand the company ought to be allocated to those whose capital is being employed for the expansion. The stock dividend, as well as the creation of huge surpluses, denies this privilege to the shares. If the corporation is actually able to make much profit, say the share owners, the disbursement of these earnings in the form of dividends should enhance stock values and make financing both easy and inexpensive to accomplish. Construction, once it has been begun, must be forthwith pushed to completion; and if future earnings must be relied upon, no inconsiderable risks are assumed.

Sale of Securities. The sale of securities may be but a variation of the use of revenues, or it may constitute an entirely independent source of funds. As a variation in the use of surplus, this method employs "rights," the amount by which the price is below the stated value or par value of the shares being the extent to which surplus is passed into the share account. If the shares are sold to the general public in the usual way, the sources of capital will be more than likely to overlap, though somewhat differently from the distribution of old stock. A few of the old shareholders will be certain to buy some of the shares from the underwriters.

The use of share equities in expanding an enterprise may be accompanied by various and often little-suspected motives and conditions. Preferred shares and non-voting shares are commonly employed when (1) it is desired to extend trading on the equity by the controlling shares, and bonds cannot be sold at a satisfactory figure; (2) it seems wise to retain the assets free of lien for future financing; or (3) there already exists a line on the assets which it is impossible or undesirable to amend in such a way that bond financing can be accomplished satisfactorily. The usual theory is that where rights on shares can be successfully sold to old shareholders, shares can be easily sold in the open market, and, conversely, when rights cannot be successfully disposed of, shares probably cannot be sold in the open market.

Share warrants, conversion privileges, and share bonuses may be employed

¹⁶ Cf. C. W. Gerstenberg, *Financial Organization and Management*, p. 599.

to make a bond offering attractive, and can be extended to erase many of the differences between the sale of shares and direct borrowing. Obversely, however difficult stock financing may be, the temporary employment of bond forms may be used to overcome the prejudice. Conversion to shares, automatic or optional with the corporation after a specified time, together with dividend participations in the meantime, will be a satisfactory solution to some problems of this nature.

Current Borrowing. Borrowing for expansion may occur through the following ways: (1) trade credit—dangerous, and usually limited in its extent; (2) current borrowing at commercial banks and open market—likewise dangerous if employed for fixed expansion unless new sales can be depended upon to refund these items; (3) long-term borrowing through mortgages or debentures. This last form should be used when a substantial excess of earnings over the borrowing rate can be expected from the added capital. If only a small excess is possible, share financing should be used or there should be no expansion.¹⁷ In a borrowing program for expansion, it is always a wise policy to use the poor credit sources first, saving the best security to the last, for as the borrowing ratio increases in the capitalization, better and better security will have to be given for the funds.

In general it may be said that expansion by borrowing is not a good policy where earnings are subject to considerable variation unless there has been created a substantial surplus which is maintained in such asset form as to assure interest and other fixed charges.

Financial Expansion Through Current Borrowing

As the average business conducts its affairs, the desire to be successful in terms of total profits makes itself felt first in its merchandising practices. Slight increases in inventories carried, in materials kept on hand, and in labor to do the work necessitate additional working capital. But to employ the additional working capital successfully may require more tools, more machinery, and more space. Thus by slow gradations the business passes to problems of fixed expansion as opposed to those of temporary expansion. Clearly, at the time the added capital is permitted to enter fixed expansion, it should no longer be represented by current borrowing from the trade, from banks, or from any other source. If such capital has been borrowed on short term, it will have to be refinanced.

Influence of the Unit of Financing in Expanding a Corporation

The business may be of such a nature that expansion must occur in fairly large units and that within or between these units there is only a relatively minor amount of flexibility. Thus a blast furnace company has a unit of operation of one blast furnace, more or less, and there exist but minor

¹⁷ Practically every statistical study of corporate expansion which the authors have examined shows a pronounced overestimation of the extra profits to be realized from the expanded business.

degrees of control within these limits. Some variation is possible, but hardly as much as in a machine shop where both the rate and the time of employment of the machinery may be varied within rather wide limits. If new financing is to be done through investment bankers, the amount of the issue must be large enough to attract the attention of the underwriters. This means, for practical purposes, at least \$100,000, and ordinarily will mean as much as \$250,000. The minimum financing unit thus becomes the minimum unit which can be disposed of by the sale of securities to the public. Because of this fact, the financial expansion of small enterprises is usually subject to somewhat greater risk than that of larger companies.

Some Dangers Resulting from Growth

Though the advantages resulting to the business from growth are many, there are certain difficulties and inefficiencies, when the business has grown from within. Those who have begun the enterprise that has turned out so fortunately are often men of limited abilities.¹⁸ Where there is one individual capable of managing a General Electric or a General Motors, there are thousands capable of managing quite efficiently a small store or a novelty manufacturing company with a dozen employees.¹⁹ Therefore, the growth of an enterprise forces the replacement of a type of management which is plentiful by the type of management which is scarce.

EXPANSION BY COMBINATION

Business units may be brought together for operating results by informal cooperative agreement, or by formal agreement involving legal and financial interrelations. The so-called informal agreement for combination may partake of one of several forms: (1) interlocking directorates, (2) pooling agreements, (3) "gentlemen's agreements," or (4) long-term purchase and sale contracts. These agreements in no way disturb the original existing legal entities, but instead the separate units are directed toward a mutual end.

The formal agreements lead to some change in legal forms, the first group being effectuated by a new organization created to control the existing units, such as (1) trusts or (2) holding companies. The second group of formal agreements for combination create definite legal relations involving

¹⁸ A related danger in expansion lies in the misinterpretation of the profitableness of the expansion. For a time after expansion the corporation management is often lulled into misleading conclusions. The new capital will temporarily increase the firm's competing power; there may be unusual cash available; hence working capital is presumed to be ample when in fact it is deficient. Carelessness develops, and the corporation falls into greater difficulty than if it had not expanded.

¹⁹ As an illustration of farsightedness, we find that not a few corporations rid themselves of their debts, and some even eliminated their preferred shares, during the speculative era which ended with the market crash of 1929. The financial policies of General Motors and of the United States Steel Corp. from 1920 to 1929 are particularly instructive in this connection.

not only legal entities but the control of actual operations as well, such as (1) lease agreements, (2) mergers, or (3) consolidations.

Informal Combination

The practices of informal combination are principally illustrated in the United States by the early industrial and railroad history of the country. In the railroad field the early traffic and earnings pools were of extensive importance and became one of the principal practices against which the public revolted and insisted upon public regulation. The early "granger" laws were directed against these practices, out of which grew the whole effort of state regulatory commission procedures as to railroads. In this period, likewise, the growing industrial giants of 1870-1900 were operating by the process of community of interests and "gentlemen's agreements." The most famous of the latter were those of the steel industry (after 1900) as to prices and market areas, which became marked by the so-called "Gary dinners," named after E. H. Gary, then president of the United States Steel Corporation. All of these actions invited legislation beginning with the Sherman Anti-Trust Act, followed by the important Clayton Act, 1914, which sought to reach interlocking directorates. In the Banking Act of 1933, the separation of commercial banks and investment affiliates was required, as well as the directorships held by bank officers and directors. In the Transportation Act of 1920, the Interstate Commerce Commission was granted the power to supervise such combinations as affected railroads.

Formal Combination

Those agreements which reach control but may not regularly seek operating supervision are set up as trusts and as holding companies and have been effective methods. Trusts which are legal units are usually constituted by stocks of the operating units being surrendered by the owners to a group known as trustees, who under a contract-trust agreement are given powers to exercise the privileges of the stock, viz., voting and collecting the dividends. The dividends are subsequently paid over to the original stockholders as beneficiaries of the contract agreement. By this device, which is good for a limited period of years, a common policy can be exercised. Old and familiar efforts along this line were the Standard Oil Trust, 1879, and the Sugar Refineries Company, 1887. Combinations are limited by the Sherman Anti-Trust Act today, but such devices are practiced in a smaller way even now. A particularly apt use today is in the voting trust created as a part of a reorganization plan.

The more common practices of combination available today are the lease agreements, mergers and consolidations, and holding companies. Each of these procedures will be surveyed.

EXPANSION BY LEASE

With the exception of the royalty system of use payments, the lease represents the only financial device by which a corporation expands its scale of operations without directly or indirectly acquiring title to the additional capital assets. Like most other financial devices, it seems to have been originated by the railroads.

Historical Development of the Lease and Its Use

The lease was the earliest method of combining or consolidating the assets of American railroad corporations, having been in common use before the period of the Civil War.²⁰ In fact, until the development of the holding company after 1880, the lease was the only device, other than purchase, by which the direct acquisition of the assets of other corporations was achieved. The great railroad lines, or systems, which were erected between 1873 and 1893 were largely the result of lease combinations. Industrial corporations have not made extended use of the lease; real estate, office buildings and public utility corporations have frequently employed it. Public utilities began to use it quite extensively as early as the nineties, but it has now been largely superseded by the holding company device.

Nature and Characteristics of the Modern Lease

In simple language, a lease is an agreement or contract between two corporations by which one of them, the lessee, agrees to make certain payments to the other, the lessor, in return for the lessee's use of the lessor's property. Commonly the use is "exclusive use," and the property, "all property." Sometimes these contracts are for only one or five years; sometimes they are long term (999 years is common among railroads). *Short-term leases* are usually simple in form, and commonly provide for a flat payment by the lessee. In them all expenses of maintaining properties, with the possible exception of minor repairs, are borne by the lessor. Renewal or extension of short-term leases is made at the option of either the lessee or the lessor, depending upon the individual contract. *Long-term leases* are often very long, detailed, and complex legal documents, and usually provide for all upkeep, taxes, insurance, etc., to be paid by the lessee. The rental payment then becomes a net revenue to the lessor corporation, normally sufficient to pay the interest on its fixed charges and to provide something for its share equity. To secure the payments of the rentals, bonds, stocks, or other properties of the lessee are sometimes deposited with the lessor or with a trustee for the lessor's benefit. It is customary to accept inventories, receivables, investments, and cash from the assets of the lessor; if the current assets are taken over, they are commonly purchased at a cash price, for only

²⁰ Formerly leases of one railroad by another were approved by special acts of the legislatures, e.g., N.Y. St. 1900, chap. 468.

continuing property is normally included in the terms of the lease, especially of a long-term lease.

Short-term leases, or even long-term leases involving but a relatively small proportion of the assets of the corporation, are usually made by the board of directors without reference to the voting shares. But practically speaking, all long-term leases, or those involving substantially the whole of the corporation's assets, must be submitted to voting security holders.

Determining the Rental on Leased Property

The rentals paid on leases are varied, some of them being clearly royalties, others being nothing but clear interest on the capital securities outstanding.²¹ If the properties which are leased are subject to depletion, unless a special schedule of depletion charges is used it will be customary to put into the lease some additional payments dependent upon the amount of product taken from the properties. This system is used in the extractive industries. Real estate leases commonly have a rental variable according to some fixed schedule or according to the variation in assessed valuation.

The difference between "net" and "gross" rentals depends entirely upon the provisions contained in the lease to be met by the lessee or the lessor corporation. Where all fixed charges, repairs, taxes,²² insurance, and other items are to be met by the lessee, the rentals will be low; but where they are met in whole or in part by the lessor, corresponding amounts must be added to the rentals. As is often the case in income and debenture bonds, the amounts and the standards of repair and maintenance (in some instances construction, also) which are to be maintained are the basis of much contention and should be clearly specified in the lease agreement.

Use of Lease Arrangements

Industrial Companies. The earlier industrial concerns created most of their combinations on bases other than leases. But today it is a different story. Beginning with the early mining leases, which allowed development of small claims by larger operating companies, the general industrial expansion after 1910 found many ways to use the lease form. Principal developments came with the rise of chain-store merchandisers and the extensive movie chains. In most instances these chain operators leased their principal locations, for this was a great saving of capital.

Other applications of the lease have now been made to the use of expensive office equipment, as is the case with International Business Machines. The shoe-machinery business of the United Shoe Machinery Company is an-

²¹ S. L. McMichael, *Leases: Short and Long Term*, 4th ed., 1947, p. 253.

²² See joint lease of Fort Worth and Denver City Ry. Co. and the Chicago, R.I. and Gulf Ry. Co. (1931), under which the lessor paid taxes and assessments in the first instance, but 55 per cent of the charges were to be transferred to the joint tenants. In this same lease additions and betterments were to be made by the lessor, but no amount in excess of \$5000 could be expended without the consent of the joint lessees, who were bound to pay a rental upon the valuation of 3½ per cent per year.

other example of lease operations, and still another is the automatic machinery in much of the tobacco industry.

Within the two years 1947 and 1948 a very extensive practice of selling properties owned to life insurance companies and leasing them back has been followed by a number of important national systems. Among such firms are Safeway Stores, Inc., Sears, Roebuck and Company, and Continental Can Company. The objectives to be served here are two in number: one, release of capital for working capital, and two, adjustment of income tax computation since lease rental is totally deductible.

Railroad Companies. The railroads were the first to exploit the use of leases for extensive combination efforts. In 1945 railroad lessor companies owned 15 per cent of the total mileage in the country, and the rental amounted to over 150 million dollars annually or one-fourth of capital charges as shown in Table 42. Two of the largest systems in the United States, the New York Central and the Pennsylvania, show a large mileage under lease. But in almost every major system this procedure has been found most effective in acquiring interests in many small lines, thereby adding what may be important access to terminals but not requiring a direct capital outlay.²³

Utility Companies. The utility industry has not found the occasion for extensive lease combinations; instead this field has made unusually large use of the holding company. Perhaps the strongest reason operating against the use of the lease was the lack of physical connection of many of the utility properties. The lease is used today by the pipeline companies for right-of-way agreements, and in metropolitan centers the combination of the utilities is frequently accomplished by lease agreements.

The Merits of the Leasing Arrangements

Evaluation of expansion by the leasing arrangement is complex and various points of view must be considered. Some general observations will be made by way of introduction.

It is an open question whether a corporation lessee, passing into receivership, will give authority to the receiver to dissolve the lease. Bankruptcy of the lessee effectively terminates the lease. The lease provides a solution to a stalemate in consolidation negotiations where the companies have not been able to agree upon terms of consolidation or the nature of the securities to be exchanged, or where the owners of one company refuse to accept the kind and amount of security offered by the acquiring company. Sometimes the lease may be used effectively when the company desiring to expand cannot finance the expansion, or when financing will be so expensive as to make any chance of profit dubious.

²³ The Interstate Commerce Commission appears to regard the lease as a first step toward a consolidation and therefore affected by the ultimate systems which it is proposed shall be developed under the Railroad Act of 1920. Sometimes the commission has refused a line permission to lease on the ground that the lessor lines would fit more properly into other systems, or into greater systems.

The Lessee Corporation. The lessee finds the lease arrangement a convenient method of acquiring properties without any outlay; there are no promotional expenses, no underwriting expenses, and there is less banker control or interference when continued financing has to be thought about. It is much more economical to lease than to purchase assets if only temporary expansion is desired. Acquisition under a lease is normally under terms which will leave a profit to the shareholders after paying the rentals out of revenues secured from the leased assets. It may happen that there exist underlying security issues with such strict provisions as to make impossible financial expansion by the usual and ordinary methods.²⁴ There are no delays in the expansion program when the lease is used; such delays as arise from construction, financing, etc., are costly as well as risky. It is not necessary to load the corporation with extremely heavy fixed charges to secure expansion during a period of depressed security markets. In fact, lease rentals will usually be less in depressions; therefore, at the time that it will probably prove most difficult to expand by new financing, it will be cheapest to expand by leases. It will ordinarily be possible to determine the probable profitableness of the leased assets, for there is available the experience of the management of the lessor corporation. Therefore, there is less likelihood of unprofitable expansion under the leasing system than under some other plans of expansion, especially those using reinvestment of earnings and the holding company. A good many leases contain adjustment provisions under which rentals may be altered; hence the lease is less risky in terms of fixed charges than would be a bond issue of the same annual cost. Since there are no maturing obligations under the lease, there is no problem of refunding, refinancing, or conversion; the amount of intergroup conflict among security holders is assumed to have been lessened.

If the merits of the lease plan are examined from the standpoint of individual classes of securities of the lessee corporation, some pros and cons may be found. The bondholders find that there has been a fixed charge inserted ahead of their bonds as far as income is concerned, for rentals under lease arrangements are always considered as an operating expense rather than a capital charge. The same is true of the preferred shareholders. But as long as the revenues from the leased properties exceed the rentals, the net income available for bond interest is increased and the "times bond interest earned" ratio will be increased. The percentage increase, both positive and negative, is greater for preferred than for bonds in the same

²⁴ The use of the lease as a method of avoiding the restrictions of after-acquired property clauses was explained in Chapter VIII. A variation commonly used involves both a lease and a subsidiary corporation. Under it the subsidiary corporation is created chiefly to provide or make possible the issue of first-lien bonds which could not be issued by the parent company. However, the parent company may give some apparent value to the subsidiary's bonds through a guarantee. The proceeds from the sale of the bonds are employed by the subsidiary to acquire assets desired by the parent company. The parent company by leasing the assets so acquired has actually acquired these assets by means of prior liens on its total revenues.

corporation, and still larger for the common shares. Because of the effect of inserting fixed charges ahead of them, some bond issues and some preferred shares have provisions requiring their consent before lease arrangements can be entered into.

The acquisition of properties under the lease device has several drawbacks to the lessee, however.²⁵ It forces the lessee to furnish working capital from its own funds, and it provides no additional security for such bank or short-term loans except that arising from the operations of the leased property. If the lease contract provides that improvements are to be made by the lessor, not only is there no added security available to be pledged for the improvement costs, but improvements made must be amortized over the life of the lease, as the usual provision is that such improvements pass without remuneration to the lessor at the expiration of the lease. The effect of such an arrangement in the short-term lease is that the rentals which will be paid by the lessee will be reduced to provide the annuity value of the expected terminal value of the improvements. Otherwise, under the short-term lease the lessee's costs would be increased and his competitive position endangered. Under a long-term lease the lessee raises no particular objection to improvements since the company expects to realize on such improvements prior to the expiration of the lease. Unless, then, the lessee has a good credit rating and can finance both improvements upon and the working capital for the leased properties, the lease device is somewhat limited.

In a few instances lease arrangements have been employed by power companies as a means of meeting extraordinary or emergency demands upon their facilities.

The Lessor Corporation. Minority shareholders of the lessor may have to be considered in making a lease, since all stockholders, unless statutes or the charter provide otherwise, will have to approve a lease involving all or a major portion of the corporation's assets. Both railroads and public service corporations, even though specifically empowered in their charters or by statute to lease out all or a portion of their properties, must generally obtain the approval of the regulatory bodies before making such leases. If the lease transfers all properties to the lessee, it also transfers regulation to the lessee, the lessor being inactive as far as the regulatory body is concerned. However, the lessor may be liable for maintaining the properties of a public service corporation if the lessee fails, despite the fact that the lease agreement calls for maintenance by the lessee.

Probably the greatest advantage which the shareholders of the lessor obtain from a lease is the freedom from management and its hazards. Where the operator under the lease has any financial responsibility at all, this shift

²⁵ A holding on income taxes in 1942 which ruled the lessor road liable for the taxes on rents, which operated to severely reduce payments for stock, caused the Lackawanna system to merge thirteen of its leased lines; and the guaranteed stock of the Morris and Essex leased line was exchanged for Lackawanna bonds. See A. E. Jansen, "Leased Line Mergers Aid D. L. & W.," *Barron's*, October 15, 1945.

is of material importance. Whereas the shareholders of the lessor, when operating their own assets, must depend entirely upon residuals after paying expenses, when they receive rentals under a lease they have actually a claim ahead of bondholders, not to their own revenues, but to the revenues of combined properties of the lessee corporation.

The Lease Device in Default, Receivership, and Bankruptcy

A receivership may or may not mean the termination of lease arrangements between two corporations, though the records of corporate receiverships and reorganizations in the United States contain a large number of cases in which unprofitable leases have been abrogated under court approval. If unprofitable leases are the major cause of financial embarrassment, a threat of voiding them by a receivership is frequently sufficient for a readjustment of the rentals. The receiver of a corporation may elect to accept or reject existing leases,²⁶ and even if he accepts he may pay only a "reasonable" rental instead of the payment stipulated in the lease. If he rejects the lease, the estate of the company in receivership becomes liable for damages. In consent receiverships, which are becoming increasingly common, one of the chief aims is that of being rid of onerous rentals under existing leases.²⁷ It is usually held that a receiver has the power to make new leases covering additional properties, if in his opinion such leases are desirable. It follows that these receivership leases must be considered at the date of the reorganization. Sometimes they are repudiated by the new management, sometimes they are compromised anew, and sometimes they are assumed and continued by the reorganized company.

Some bond indentures provide strict regulations for the trustee by which he is given the power of leasing the assets. In many debenture bond issues, where the right of foreclosure and sale is not directly given in the pledge, the right of seizure and operation by the trustee will include the right of lease.

Provisions for Capital Expenditures in Leases

In long-term leases capital expenditures, improvements, and extensions to the leased properties during the life of the lease are likely to be quite large. Leases will usually contain detailed provisions regarding the nature, amount,

²⁶ The acceptance or rejection of a lease by a receiver need not be decided at once upon the receivership, for he has a reasonable length of time in which to determine which leases, if any, will be continued. But the receiver will usually have to pay the stipulated rental from the date of receivership to the date of his rejection or acceptance of the lease.

²⁷ Two of the best-known consent receiverships which apparently were specifically intended to eliminate burdensome leases were the F. and W. Grand and the United Cigar Stores. What usually happens in such cases is that the lessee company transfers or assigns its rights on all valuable leases to a third company, then goes into receivership to be rid of the unprofitable leases. The latter had such disputes that a Liggett Landlord's National Protective Committee was created.

and control of such capital expenditures. Sometimes specific improvements, such as the abolition of grade crossings in railroads, or the placing underground of telephone cables by telephone companies, are required in the lease.²⁸ Leases usually make provisions for securing funds for additions and betterments. Sale of the securities by the lessor under a guarantee by the lessee is a common arrangement. Either the lessee or the lessor may control the kind, terms, and amount of securities to be sold.²⁹ The lessee will usually prefer shares, though bonds may be somewhat cheaper if the lessee simply agrees to pay the interest requirements on debts. The use of bonds may run afoul of state laws regulating the ratio of capitalization. If the lessor has an open-end issue outstanding, the lessee may take over the unissued portions and sell them from time to time to secure capital for extensions and improvements. Unless specific arrangements have been made for the financing, it will come from the lessee in most instances, especially in long-term leases where there is scant risk of losing the capital so invested.

Another solution would be for the lessee to furnish funds for all improvements, and to provide for the lessor to pay the "then" value of the assets added at the date of the termination of the lease. This, however, leads to disputes over the basis of valuation, as well as to questions of whether the expenditures were warranted at the time they were made. In the case of public service corporations the latter question may be answered by the evidence of approval by a public service commission or the Interstate Commerce Commission. Industrial corporations enjoy no such quasi-judicial approbation of their acts. A system of original cost less depreciation at a pre-stated rate would encourage the lessee to take chances on expansion near the end of the lease.

Satisfaction of Creditors

A corporation may not, any more than an individual, divest itself of its assets without arranging for the satisfaction of its debts. Where one corpora-

²⁸ Practically all leases contain some phrase such as "in equally good operating condition as at the date of this lease." This clause is a source of no small amount of dispute in railroad leases. Here are some questions which can arise, assuming they are not covered elsewhere in the lease: Upon whom rests the expense of installing safety devices required by law? Suppose the mechanical standards requisite for the service demand are changed, must the lessee or lessor pay? If only small cars are included with the leased equipment and larger ones must be used to meet the load requirements on carload rates, who supplies them?

²⁹ The lease of the Boston and Albany Railroad Co. to the New York Central and Hudson River Railroad Co. (lessee) for 99 years, dated November 15, 1899, contains the following provisions relative to control over new issues of the lessor at the option of the lessee: "If the board of directors of the lessor, by a majority vote, shall consent to or approve of any or all of such permanent additions and improvements or the doing of such other things . . . or if, after a hearing, the Board of Railroad Commissioners of Massachusetts approves an issue of bonds therefor, fixing the amount and purposes for which said bonds may be issued, the lessor shall, at the request of said lessee and to the extent that it lawfully may, issue its bonds at such lawful rate of interest as may be determined by the lessee for such sums as may be necessary or specified by said Railroad Commissioners, to meet the cost and expense thereof. . . ."

tion leases its assets as a whole to another, two types of debts must be considered: (1) secured liens such as bonds, mortgages, or debentures; and (2) those to unsecured creditors. Sometimes the lessee corporation agrees in the lease to meet interest and sinking fund requirements directly; but more often the rental in the lease is such "as will pay the interest, etc., requirements on the lessor's indebtedness now existing, or to be created," plus such other items as may be deemed desirable. Unless control over future debt is given to the lessee corporation, it may discover that a bad bargain has been secured. The satisfaction of unsecured creditors is usually left to the lessor, who will be able to pay them out of the cash proceeds from receivables and inventories. Occasionally the lessor will be in such financial straits that even current debts will have to be shouldered by the lessee.

The Evaluation of Leases

The problem of how much a lease is worth arises in two ways: (1) in public service corporations where rate regulation is the major problem and (2) in ordinary corporations when they desire to show the effects of a profitable or unprofitable lease in the balance sheet. Public service corporations, both under state and under national control, find themselves subjected to strictly interpreted rules: rentals must not be considered as operating expenses if the value of the leased properties is included in the rate base; and, conversely, if the rentals are considered as (i.e., included in) operating expenses, the valuation of the leased properties must not be included in the rate base for a fair return of capital. Amortization of repairs, betterments, etc., over the life of the lease will usually not be permitted unless it is conclusively shown that they will have no lease termination value, or that the company intends to abandon the property at the end of the lease.³⁰ Occasionally a lessee corporation will repay the rentals for a number of years or even for the life of the lease. There should then be shown on the books of the lessee a discounted value of these items (prepaid charges). The commissions are entirely undecided as to how the value of a lease is to be determined when a corporation transfers its rights to a new company, but it is common to find book value or original cost less depreciation.

Special Accounting Involved in Leasing

The improvement of leased properties should be shown as an asset where the lessee furnishes the funds for the improvement, but against it there should be maintained a reserve which, over the period of the lease, will amortize

³⁰ P.U.R. 1933A, 143 (Ill.). This problem becomes very troublesome when there are renewal options in the lease contract. It is probably a wiser policy to force clauses into the lease by which the lessor must pay for unamortized costs when the property is returned to him, and then apply the usual rates of depreciation against the operating expenses of the lessee. This rule, though simple enough in its statement, becomes difficult to apply, for some items are clearly neither repairs nor betterments. If the lessor furnishes all funds for betterments and extensions, while the lessee is required only to keep the assets in as good condition, normal wear excepted, as when they were received by him, the rule is equitable.

the funds so expended. If the lease has a value as such—for example, when there is clearly a net profit from it—that value may be shown on the books, but it should be amortized over the period of the lease. If considerable quantities of properties are operated under leasing arrangements, errors may be made in the analysis of the financial statements of the lessee corporation. The more common errors will be grouped about (1) working capital requirements; (2) working capital, cash, and inventory position; (3) number of times fixed charges are earned; and (4) the activity ratios in general.

QUESTIONS

1. Considerable comment has been provoked recently by the large dollar profits reported in 1947. Does this establish the fact of large or unusual profits? Explain.
2. How do you explain the fact that a business may find it profitable to expand beyond the point of the lowest unit cost for its product?
3. Explain your position in reference to the idea that the correct and profitable size for one business in a field may differ from that of another firm in the same field.
4. What are the general bases of economic principles used to justify expansion plans?
5. Outline what may be regarded as the risks of business expansion.
6. What are the various possibilities for direct capital expansion?
7. Discuss the relation of financing expansion to a firm's dividend policy.
8. Explain how the expansion of a business which is financed by current borrowing is dangerous. Under what circumstances might the danger still be risked?
9. How does the use of lease agreements actually operate to expand a business? Just what financial differences are there in such expansion procedures compared to direct capital expansion?
10. Outline briefly the major problems of a lease agreement as a financial arrangement for a business.
11. Trace the general pattern of lease use in the major business fields—industrials, railroads, and utilities.
12. Discuss the status of leases in receivership proceedings. Is this situation therefore a danger to the lessee?

PROJECTS

1. Using the totals of all business corporations, compare the volume of wages paid, interest, taxes, and dividends with total sales over the past ten-year period.
2. Report on additions to corporate assets and the sources of the funds over the past five years. Indicate the percentage of retained earnings to total profits.

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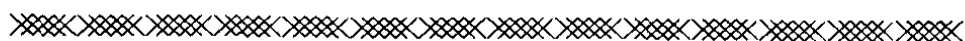
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CHAPTER XXXIII

Expansion by Consolidation and Merger



CORPORATE expansion frequently occurs by the absorption of one corporation by another, or by the absorption of two or more corporations by a third newly formed for that express purpose. Aside from the legal problems, which will receive some attention shortly, there exist no basic differences between these two devices of corporate expansion. Though there are several technical financial differences between the two methods, they will be treated together, for in both cases a single, larger corporate unit is substituted for previously existing smaller units. It is most unusual to find among American corporations a concern which has grown to any substantial size without a consolidation or merger at some point in its evolution.

The Strict Legal Meaning of Consolidation

A consolidation is brought about when a new corporation is created for the purpose of absorbing two or more other corporations. The process is frequently that of forming a new corporation and exchanging its shares for the entire properties of the old companies. At the proper time the old corporations vote to dissolve and to distribute their assets (the shares of the new company) to the old shareholders (and sometimes creditors). Under the second and more common method, the new company is created by the board of directors or other officers of the companies entering the consolidation. The new company then offers to exchange its own securities for those of the companies to be consolidated.¹ If there is reason to suppose that creditors and non-voting shareholders will have valid basis for legal action, all difficulty from this source may be forestalled by submitting the question to these groups at a special election.

¹The procedure in the average merger is as follows: The shareholders entitled to vote on the subject of consolidation and merger are sent proxies which authorize an affirmative vote by the proxy holder. The shareholders return these proxies (after proper urging) to the officers of the corporation to be merged. At the same time the shareholders are usually asked to endorse and mail their stock certificates to the trustee who has been selected for holding the shares. The trustee issues a receipt for the shares so received and holds them until the new shares are ready. Upon the voting of the exchange, the new shares are delivered to the trustee and by him delivered to the shareholders, together with fractional scrip warrants. Adjustments involving fractional shares are made later.

A third method of consolidation is known as the statutory plan. Under it a formal consolidation plan is drawn up by the board of directors, by outside interests, or by committees of the shareholders or other security interests. The plan is next submitted to the security holders having a right to vote, usually by means of a proxy system. If the plan is approved, the articles of agreement for the consolidation are filed with the proper state official (usually the secretary of state) much as are the articles of incorporation for an entirely new company. Necessary fees are paid, and the technical exchange of securities is arranged through a trustee at a later date.

The Strict Legal Meaning of Merger

A merger occurs when one corporation loses its identity² by absorption in another existing corporation. A new corporation is not created by a merger, but one is always created in a consolidation. The process of effecting the merger may be any one of the processes employed in effecting a consolidation, except that one of the previously existing corporations occupies the role of the new company in the consolidation.

Motives for Merger and Consolidation

Alert Management. In any industry the quality of management in the various concerns varies greatly at any given time. Some companies will have alert, aggressive heads who will be very active in making as much progress as possible; other concerns will be largely content to hold their place. Alert managements may be anxious to acquire larger business units; they can do this in much less time and without risks of construction by acquiring existing companies. Furthermore, there may be substantial possibilities of eliminating duplication of overhead, sales organization, advertising, warehouse stocks, etc., by the consolidation or merger of several companies. The concern which first learns of the possible merger, which offers the greatest advantages, or which has the best financial connections may be able to add substantially to the percentage of return on owned capital by taking over other companies.³ The expenses of developing new business are largely eliminated if expansion is by merger or consolidation. The control of prices is made more certain as well as more effective through market control and absorption of competing concerns. Consolidation and merger to eliminate competition may be the result of cold calculation,

²For purposes of meeting liabilities, defending suits, etc., the nominal continuation of the merged or consolidated corporation is required as a matter of law in most states. But if the absorbing corporation, by agreement, assumes the entire liabilities of the merged company, only damage suits can arise. The suits will be brought by dissenters and minorities against majorities who assented to the merger.

³Professor Dewing has made much of the combination movement as a characteristic of particular industries. He indicates that there are, consequently, three modern types of consolidations: those in automatic industries, those in integrated industries, and those in the chain-store type. See A. S. Dewing, *Financial Policies of Corporations*, 4th ed., Book IV, chap. 4.

for direct purchase is often cheaper than indirect payment through competitive losses.

During periods of speculative activity investment bankers promote many corporate mergers and consolidations solely for purposes of providing new securities to sell to the public.⁴ Finally, it should be noted that many corporations are absorbed by others for purposes of economic expediency.

— *Competitive Position.* Other motives for combination and consolidation may occur on special occasions. (1) Elimination of competitive expenses may furnish a motive if the two concerns were competing before. They need not be engaged in the same line of activity, but may be engaged in the creation of substitute goods. The expenses most commonly eliminated will include advertising, duplicate stocks of goods, duplicate machinery and equipment, direct selling expenses, general overhead costs, etc. (2) Advantages of size through the greater division of labor, purchase of raw materials, etc., arise if there is a substantial increase in the size of the consolidated concern over the previously existing independent concerns. (3) Control over prices and markets will be more certain and more extended because of the tendency toward monopoly. Although this may appear of little consequence in a localized consolidation, in one of nation-wide extent it could easily become the impelling motive. (4) Patents, copyrights, franchises, and other special privileges of a monopolistic nature may be used to a greater advantage if pooled in a single concern than if scattered among several. (5) Absorption of competing goods producers is a common enough practice where the stronger concerns find a change in their own line too expensive or more expensive than the cost of buying up the competitor. Thus a manufacturer of a certain typewriter discovers that a patent which has been issued to a small competing concern will result in serious reductions in the sales of his own machine. It may be cheaper to buy the company outright than either to buy the patent or to suffer the future losses on operations without the use of the patent. (6) If a group of individuals control a series of small concerns, they may receive little or no public attention. Because of this lack of knowledge on the part of the public, it may be expensive, or almost impossible, to secure new capital. By consolidation, the single corporation's issues will be large enough to be listed on the exchanges and brought before the public in such a favorable manner that future financing will be facilitated. Even though the public were informed of the securities of the several individual companies, the greater probable, as well as more stable, earnings of the consolidated company would improve the investment position of the securities of the consolidated concern over the securities of the individual firms. (7) The consumption habits of people in various sections of the country differ to a considerable extent. When several widely scattered firms, which have previously produced for all sections of the country, are con-

⁴ Testimony in the United States Senate hearings (1933-1934) indicated numerous cases in which those who had been in the business of selling securities had "manufactured" securities in this way.

solidated into a single company, it may be possible to secure considerable economy merely by practicing geographical plant specialization.⁵

Fundamental Approaches to Consolidations

Consolidations do not just happen; they are the results of long hours of tiring work on the part of someone. To say that there are a few well-defined and established approaches to consolidations would be incorrect, for, like people, every consolidation is different from every other; but not to state that there are a few rather clearly defined avenues of operation through which consolidations are arranged would be to evade responsibility for a statement of fact.

The simplest way to bring about a consolidation in the average corporation is to arrange through the officers and directors of the company for a purchase of its assets, or its shares. The controlling shares, if they are reasonably well concentrated in a small number of shareholders, can be secured through direct negotiation or, if they are widely distributed, through quiet purchase in the open market. Funds to purchase either the shares or the assets of the consolidated company may be acquired from the sale of securities to the public, borrowing in the open market, or borrowing from other corporations in the system.⁶ The purchase method has the advantage of better legal position than some of the other methods, but it is open to an objection because of large capital requirements. Unless great care is used in the open market purchase of shares, the price of the shares will rise sharply as soon as the rumor of a possible merger is afloat, or as soon as the open market purchases have absorbed the floating supply of shares. The open market purchase of shares can best be used by individuals or corporations which (1) are in possession of or can gain access to large quantities of capital and (2) can directly or indirectly control, through policy and accounting manipulation, the apparent worth of the shares of the corporation being consolidated.⁷

The direct purchase, or negotiated purchase, method can be used in those cases in which "conservative" policies have created large hidden assets. Perhaps a temporary financial embarrassment may not be undesirable for such negotiations. A direct purchase of the shares can often be secured advantageously in the event that a reorganization is in prospect or has been under way for a considerable period of time. The outright purchase of assets

⁵ Special references for study are: National Industrial Conference Board, Inc., *Mergers in Industry*; Shaw Livermore, "The Success of Industrial Mergers," *Quarterly Journal of Economics*, November, 1935; W. L. Thorp, "The Persistence of the Merger Movement," *American Economic Review*, Supplement, March, 1931.

⁶ In the public utility field when mergers and holding company developments were in the public eye from 1925 to 1930, intersubsidiary advances to acquire the assets or shares of additional subsidiaries seem to have been relatively common.

⁷ The direct purchase method is not a rapid procedure. Often the acquisition of shares will be spread over a number of years.

requires the cooperation and support of at least a few of the officers and directors of the consolidated company.

A second general method of bringing about consolidations is called the *option method*, though it merely places the emphasis upon another phase of the consolidation process. Under the option method, the approach may be either through stock or through assets. If the shares are owned by a small number of holders, negotiations are carried on directly with these holders, individually or in a group. If the shares are widely distributed, the first move may be to secure a deposit of the shares with a "consolidation committee," which will then negotiate the shares as a unit. If the option to purchase is secured, further calculations may be made to determine if the option is worth anything and how the funds will be raised to exercise it. The option device permits financing on the part of the acquiring corporation *after* the basis of consolidation is known. If temporary borrowing has been used, refunding may be carried out directly the options are exercised.⁸ The investment trust (so called) has been used in both the direct purchase method and the option method. When so used, it is merely a device of the cheap promoter and unethical investment banker who desire to use other people's money to their own personal advantage.

A third general avenue of approach to consolidation may be termed the *negotiated exchange method*. Under this method the promoter of the consolidation will approach the officers and directors of the corporation to be consolidated, and negotiate directly for the exchange of stock.⁹ When an agreement is reached as to an equitable basis for the exchange of the stocks, a prospectus of the proposed exchange is drawn up. The plan is then submitted to the stockholders at a special meeting and, if "approved" by the officers, a few large stockholders, and perhaps some bankers, will generally be approved by the shareholders.

Often much time and effort are put into "building up" the market position of the stock of the offering corporation; and, conversely, no particular effort is made on the part of those who have approved the plan to build up an opposing position by having a rise in the price of the shares to be acquired. The success of the exchange method is likely to be further conditioned by the attractiveness of the exchange ratio. In exchange arrangements, it is not uncommon to make special provisions for non-assenting shares, i.e., payment in cash at appraised values, or court procedure to secure their value.

⁸ The option method does not require capital to be tied up in the consolidation process nearly as long as does the purchase of shares, though consolidation is no more speedily consummated from the inception of negotiations than in the purchase method.

⁹ If only a portion of the directors and officers of the company are included in the negotiations, any arrangements may be open to question. In the case of the litigated consolidation of Bethlehem Steel and the Youngstown Sheet and Tube Co., the fact that some of the directors, known to be probably opposed to the merger, were not informed of the proceedings was considered by the court to be a material factor in setting aside the proposed consolidation. See 11 *Boston Univ. L. Rev.* 376-392.

Pre-Merger Analysis of Corporations

If an amalgamation is to be effected upon the most equitable grounds, the responsibility of the officers and dominant shareholders of the respective corporations who will later recommend for or against the merger or consolidation extends far beyond the mere consideration of balance sheets and income statements. Those who would bring about the unification must, for themselves or for those they represent, make careful analyses of every phase of the proposed arrangement. These analyses customarily examine the business from three points of view: accounting, engineering and economic. Each of these examinations involves the work and opinion of an expert.

The pre-merger audit must be painstakingly thorough and critical; it should extend to the policies as well as to the technical precision of the accounting practices of the several corporations. Differences in depreciation policy, in maintenance, in obsolescence, and in depletion may add to or subtract from both the realized earnings and the book value of assets. Reconciliation of these differences constitutes a problem of prime importance, for they are of such a nature that many security holders who will be asked to approve the proposed unification will find difficulty in understanding them. The accuracy with which the stated method of asset evaluation has been applied should be reported to all concerned. Actual appraisal of the assets upon a common basis may be desirable if justice for the several security interests is to be secured; sometimes several such appraisals upon different bases must be made to secure a real appreciation of the merits of the proposed plan. If one corporation supplies largely services while another deals only in commodities, the differences in value resulting from use of the different bases are great enough to cause trouble. Reserves must be accorded attention both as to amount and as to form. The items of bad debts and contingencies are frequently difficult to handle. In fact, the pre-merger audit is for purposes of furnishing comparative balance sheets and income statements upon as nearly uniform a basis as possible.¹⁰

The engineering examination is intended to establish the technological position and characteristics of the several companies. Physical layout of the buildings, modernity of the processes employed, raw material resources and quality, and operating flexibility of the establishments will be most important. Analysis and determination of the efficiency and standard operating capacity of the respective units, if they are to be linked together in sequential processes, are conditioning factors which largely determine the ultimate efficiency of the unification.

The economic survey of the several concerns deals almost exclusively with elements external to corporate operations. Market areas, growing or receding demands, and the degree of competition of the respective concerns

¹⁰ These reports ought to be submitted to the voting security owners at the time they are called upon to pass judgment upon the proposed plan or plans of unification. As a matter of practice the security owner usually receives a pro forma balance sheet, a summary of the plan, and a proxy.

must be carefully and critically examined. The respective cost positions of the concerns in the industry will often largely determine their bargaining powers in proposals for amalgamation. Good will and its maintenance should be considered, though a change of name and the acquisition by new control may wholly or partially destroy the favorable attitude of the public. Finally, it is always desirable to give some attention to the purely social aspects of the proposed amalgamation. That is, the economic survey must give consideration to the reaction of the public as consumers, as employees, as investors, and as an organized state in the regulation and control of business.

Matching Equities Preparatory to Consolidation or Merger

In the negotiations for the merger or consolidation of two or more corporations it will usually happen that the market prices, book values, earnings, dividends, surplus, debts per share, and other elements substantially affecting the position of the shares of the various companies entering into consolidatory negotiations will be materially different. The results of the analysis mentioned above will determine most of these differences. Thus, suppose the following data relative to three companies:

	A	B	C
Market price per share	\$285	\$118	\$48
Book value of assets per share	125	142	80
Debt per share	250	0	20
Earnings per share, 5-year average	12.83	7.62	3.84
Earnings per share, last year	4.86	5.23	4.12
Dividends paid per share, 5-year average	10	6	3.50
Surplus per share	25	117	30
Preferred outstanding per share common	.....	40	10
Depreciation reserves	large	large	small
Depletion reserves	none	large	none
Obsolescence reserves	small	small	large
Bad debts reserves	small	none	small
Contingency reserves	large	small	none
Maintenance reserves	none	none	large

Under normal circumstances it is clear that some sort of "matching up" of the positions may be required before any sort of agreement can be reached relative to the merger. There are two ways to solve the problem: (1) vary the ratios of exchange for securities in the consolidated company or (2) so alter the equities of the shares of the several corporations that they will be somewhere equal. A combination of both processes is needed in many merging problems. If one or more of the companies is under financial pressure, such matching may not result in a completely uniform condition.

✓ The Problem of Valuation in Relation to Merger and Consolidation

The problem of valuing a business for purposes of merger or consolidation differs in practice from the simple case of applying the usual rules of

appraisal to the crude assets or to the going concern. There is the question of "control," which may mean the difference between success and non-success for the proposed combination. That is, management will be the final controlling factor in making a decision to merge or consolidate. Exorbitant values are not infrequently given to assets, behind which the management really proposes to obtain personal benefits eventually. Moreover, making a high appraisal for assets enables a high exchange price to be offered, and an assurance of the success of the plan results.

On occasion there are opposite tendencies in valuation and action. A small concern may have an admirable product but lack the quality of management, the necessary finances, or the proper connections to put its product across. A larger concern may work against the smaller in every way possible, putting various impediments in its way—only to take it over as soon as it can be bought cheaply enough. If raw materials or patented processes are necessary, the management may be able to control these to the detriment of the company which it hopes to acquire cheaply. If the outlet for the product is limited or if the distribution system can be controlled, these offer avenues of bringing the smaller corporation into submission. When the company may be acquired cheaply, the acquiring concern may find it convenient to expand by taking over the assets of the weaker company. Under such circumstances the valuation becomes entirely artificial.

On the Profitableness of Mergers and Consolidations

The erection of great business empires has usually been the result of promoters' dreams. On the basis of the claims at the time of the mergers, almost fantastic promises have been made in many instances. Professor Dewing has generally attacked the results and has concluded that the failure of many of these empires usually was due principally to diffusion of responsibilities, substitution of untrained or ill-trained employees for those highly skilled, betrayal by officers seeking personal aggrandizement, lack of attention by the central management to the laborious parts of the business, prejudice on the part of the public to big business in spite of its improved organization, and fear of big business, as such. By and large, these early findings of Professor Dewing remain true today, though it must be noted that some differences exist. The companies he studied were built up partly with the idea of securing at least a partial control over prices and markets. Vigorous antitrust prosecution by the federal government undoubtedly reduced the effectiveness of these great business units. Many of them had too heavy fixed charges, an indictment which seems particularly apt when applied to mergers in the public utility field. It often happened that a plant which was a profitable business as a competitor would be so badly located as to be a liability when included in a merger. In a good many instances in effecting the mergers, working capital was either withdrawn prior to the merger or dissipated in paying the expenses of the merger.

As to any general conclusions, the following is about the only safe one:

Mergers brought about in bad business years will be more likely to succeed than those undertaken in good times or in speculative eras.

Determining the Total Capital of the New Company

Assuming it is clear that a consolidation may be successfully brought about between existing concerns, the first problem to arise is the total amount of capitalization which the new concern is to have. Should it be larger, or smaller, or equal to the combined capitalization of the previously existing companies? Should it be based upon assets or upon earnings? And should the earnings be taken before or after the consolidation?

The answers to these questions are not simple, nor are they always based upon the same factors. At one stage of the business cycle one group of factors will dominate; at another a different set of facts will dominate. The following suggested bases of total capitalization are made only to indicate how the capitalization may, not how it should, be determined in any individual case:

1. Total average earnings of the old concerns.
2. Total average earnings of the old companies plus the extra earnings which are expected to arise because of the consolidation.
3. Total assets of the old concerns plus the capitalized extra earnings expected from the consolidation.
4. Total assets of the old companies, both tangible and intangible. This will be the same as (1) unless a different capitalization rate is used from that of the past management.
5. Fixed assets of the old companies plus capitalization of such earnings as represent an excess over the interest requirements on bonds.
6. Bonds and preferred stock plus capitalization of the earnings in excess of fixed charge requirements.

A student may easily conduct experiments for himself to demonstrate the variations which will result from the use of the different schemes proposed. A simple example is given in which it is proposed to consolidate A, B, and C corporations. The data are as follows:

	Company A	Company B	Company C
Bonds	\$ 1,000,000—6%	\$ 8,000,000—5%	\$ 40,000,000—5%
Preferred stocks	3,000,000—7%	2,000,000—7%	30,000,000—6%
Total assets	10,000,000	16,000,000	100,000,000
Fixed assets	5,000,000	11,000,000	85,000,000
Average 5-year earnings	1,500,000	1,000,000	7,500,000
Bond interest requirements	60,000	400,000	2,000,000
Total fixed charges	270,000	540,000	3,800,000

Assuming that the extra earnings from the consolidation amount to \$500,000 per annum, then the total capitalization, as computed by the above methods, using a rate of 10 per cent for capitalization, would be:

Plan	Capitalization
1	\$100,000,000
2	105,000,000
3	131,000,000
4	126,000,000
5	181,400,000
6	122,900,000

A casual examination of these figures indicates that in this particular instance but little choice exists between plans 3, 4, and 6. If there had been a higher ratio of earnings to the total assets, the results would have been more varied. Plan 5 makes a very large capitalization owing to the small ratio between bonds and fixed assets and between the rate of earnings on the assets and the rate of interest paid on the bonds. It is interesting to observe that the average of all plans is \$127,716,667, a figure closely coinciding with that given by plans 3, 4, and 6.

One of the major assumptions made by most promoters of consolidations is that the combined value of the consolidated companies will be more than the sum of the values of the individual companies.¹¹ As a rule, should a proposed plan of consolidation be carried into the courts, it will be difficult to furnish sufficient evidence to convince the judiciary that securities ought to be issued against anticipated earning power. If substantial creditor interests are at stake, the courts will usually be more careful and critical of the proposed capitalization of earnings than if only minority shareholders are objecting. By and large, original costs and reproduction costs have had less influence than anticipated earnings in fixing the consolidated capitalization.¹² If a choice exists between a larger and a smaller capitalization, the principle of expediency will always dictate the larger capitalization. It is infinitely easier to give a bondholder a new bond and ten shares of stock than just a new bond, or to give an old preferred shareholder a new preferred share and a half share of common than just a new preferred share. Even common stockholders prefer to receive two new shares for one old one, despite the

¹¹ *Cleveland, C. C. and St. L. R. Co. v. Backus*, U.S. 439, 444 (1894), although an old case, gives a good résumé of the reasons why this should be so. In fact, however, promoters' estimates of success due to consolidation are not commonly attained. Cf. C. S. Tippetts and Shaw Livermore, *Business Organization and Control*, pp. 455 ff., as to the success actually achieved by consolidations as compared to the promised profits.

¹² Actually, it seems that audits are playing an important and increasing role in the determination of the equitableness of consolidation plans. There can be, de facto, so great a difference between the actual value of assets and the book value or the amount of bonds or preferred stocks outstanding that a brief analysis almost convinces one of the relative worthlessness of old capital structures in determining the amount of capital in the new concern. The wide differences in depreciation policies, in valuation reserves, in contingency reserves, in bases of asset valuation practically require a careful audit before any plan can be called good or bad. The question naturally arises as to how a stockholder, perhaps thousands of miles from a corporation, may be reasonably expected to have an intelligent opinion upon any plan. The need for some institution or device to supply information and interpretation service external to judicial institutions is very real.

fact that the two new shares may not be worth as much as the one old share.

The degree of emphasis to be given to assets and to earnings will vary from case to case. Although from a purely theoretical investment standpoint, considering only the future, the use of earnings only would be justified, there are practical objections to any such method of determining total capitalization. First, to use earnings only is to disregard past investment, opportunity values, and the law of proportionality as laid down by economists. Second, to use earnings only is to predicate the present capitalization upon future incomes which cannot be known with precision, especially when those incomes are open to technological and conjunctural determination. Third, the stockholders would not be likely to sacrifice their past investments merely because the prospective company would not allow a "nuisance value" for the assets of a particular subsidiary which might not be operated in the future.

The valuation of the companies for purposes of consolidation is an extremely complex task. It is commonly accomplished as follows:

1. Each company is asked to prepare a statement of its assets, tangible and intangible, and earnings over a period of years. In arriving at the earnings, salaries above certain levels will often be added back, as well as unusual reserve deductions.
2. These reports are turned over to a committee in which at least the balancing vote shall be held by disinterested parties.
3. The committee, by means of the reports, independent audits, and other investigations, submits a finding which is usually binding upon the corporations.

Determining the Nature of the Capitalization

While it is to be remembered that the amount of capitalization in a particular case is dependent to a degree upon the nature of the capitalization, it seems best to distinguish sharply between the two problems. As in the case of the problem of how much the total capitalization should be, many solutions have been suggested for the distribution of the capitalization; that is, many bases have been suggested as to how much bonded debt, preferred stock, etc., should be in the capitalization. The composition of the consolidated company's capitalization may be based upon:

1. Bonds equal to bonds previously outstanding, preferred stock for balance of fixed assets, common stock for remainder.
2. Bonds equal to fixed assets, preferred stock to balance capitalized old earnings, and common stock for capitalized excess earnings from the consolidation.
3. Preferred stock for tangible assets, bonds for bonds, and common stock for the remainder.
4. Bonds for both bonds and preferred stock, common for the remainder.
5. Preferred stock for both bonds and preferred, common for the remainder.

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6. Bonds for bonds, preferred for minimum earnings of old companies, common for remainder.
7. Bonds for bonds, preferred for preferred, common for the balance of the capitalized earnings.

Let us suppose that a consolidation is being worked out for companies A, B, and C, and that the following conditions obtain:

	Company A	Company B	Company C
Bonds	\$1,000,000	\$ 8,000,000	\$.....
Preferred stock	3,000,000	.....	40,000,000
Total fixed assets	5,000,000	20,000,000	100,000,000
Tangible assets	6,000,000	22,000,000	90,000,000
Earnings (average)	400,000	1,800,000	12,000,000
Earnings (minimum)	300,000	1,500,000	5,000,000

Further it is supposed that the excess earnings expected because of the consolidation will amount to \$800,000, and that it has been decided to use a rate of 10 per cent in capitalizing all earnings. The total capitalization as determined under plan 2 of the preceding section has been fixed at 150 million dollars. Under the respective plans suggested above, the composition of the consolidated company's capitalization would be:

Plan	Bonds	Preferred Stock (in units of \$1,000,000)	Common Stock	Total
1	9	116	25	150
2	125	17	8	150
3	9	109	32	150
4	52	..	98	150
5	..	52	98	150
6	9	68	73	150
7	9	43	98	150

Plans 1 and 2 operate to make an extension of trading on the equity; plans 4, 5, and 7 increase the common equity. To accomplish the exchange, common stock must frequently be used as a bonus. This would be especially true of plan 7, in which, after giving share for share for the old common, the balance may be used for bonuses to secure exchanges.

As to choosing among the several plans, the following general principles may be observed: Unless some of the bond issues are in or dangerously near default, the bondholders will probably have to be given as many bonds as they now have. Therefore, the minimum quantity of bonds will be set up by the issues already outstanding. If control of the company has been maintained for some time prior to the consolidation, it may be possible to offer conversion rights to the bondholders and to get them to convert their bonds into stock prior to the exchange and consolidation. If some of the bonds are periled, the bondholders may be willing to accept preferred shares, or even common shares, in the consolidated company, and under these circumstances the total quantity of bonds may be reduced. If the

market psychology is unusually adverse to bonds or to stocks, the ratio may be favored one way or another. When one or more corporations are to be merged into a single company, the principles governing the proportion of bonds may be altered by the financial position of the continuing company, by the recent market action of its securities, by the reputation of the management, and by many other factors. Sometimes the reputation and prestige of the investment banking house which happens to be fostering the consolidation will be involved. Treatment of preferred holders will be conditioned by pretty much the same elements as in the case of bondholders, except that the additional danger of participation clauses, voting power, actual or potential, and cumulated dividends must be considered. At all events, the quantity of common stock, especially non-voting, should be at a maximum.¹⁸ It does not threaten control; it need not seriously affect the percentage return to those holding residual voting common; and it will be useful in bargaining with the holders of various classes of securities.

SECURITIES OF CONSOLIDATIONS

Distributing the Securities to the Consolidated Companies

The problem of distributing the securities of the consolidated companies to the several groups of holders may be accomplished in two ways. Blocks of stocks and bonds may be turned over to the corporation *en masse* and distributed to the several groups in whatever fashion is necessary to effect exchange. Or dickering may be carried on directly with the groups of holders, giving as little as possible to each. In so far as bonds are concerned, it will be necessary in almost all cases to replace them with bonds. Whether any bonus is necessary to effect an exchange will depend upon the question of whether the consolidation bonds are stronger or weaker than the original company bonds. Given the same contractual provisions, the same equity protection, and the same margin of earning protection, the bonds of the consolidated company should be stronger than the bonds of the original concerns because of advantages of stability.

Preferred and common stocks offer somewhat more complex problems. Professor Gerstenberg has offered two "scientific" methods of distributing the ownership equities in the consolidated company. They are: (1) Issue preferred stock in proportion to the tangible assets, and common stock in proportion to total earnings. Presumably the total earnings are to be measured after payment for bond interest. (2) Issue preferred stock in proportion to the amount of tangible assets, and common stock in proportion to the rate of earnings.

Disposition of Preferred Shares in the Merged or Consolidated Company

Since common shares will usually be retired through direct exchange or as a result of contractual arrangements for the dissolution of the merged or consolidated company, they offer comparatively few problems other

¹⁸ Non-voting stock is not readily accepted for listing by the exchanges.

than the dissension of minorities. But preferred shares present more complicated situations. If they are exchanged, retirement and cancellation constitute the order of the day; but if they are not exchanged, they must be redeemed under a redemption clause or bought at whatever price the holders will take. If no redemption clause exists, the procedure may be indirect. A very profitable conversion into common shares may be used as strategy if the added common vote would be insufficient to cause trouble. If the controlling margin on the common share voting power is too small to risk any addition to the opposition through conversion of the preferred into common, the preferred shareholders may be offered an exchange for bonds with call features, and, once the conversion of preferred to bonds has been completed, they may be treated as creditors and the amalgamation completed.

The status of preferred shares which are about to acquire voting power because of unpaid dividends or some other reason is not clear. Under these circumstances merging with another company may be open to question unless preferred shares are permitted to vote along with the common stock. Past accumulations of dividends must be funded or paid before the merger, for the preferred shares have the same preferential status at the dissolution of the old company by merger or consolidation as they do in any other dissolution.¹⁴ It is not uncommon to find the absorbing company paying substantial amounts of cash to preferred shares for all or part of the cumulated dividends.

If the preferred shares have already acquired voting power, their status is somewhat more certainly determined. If they have acquired sole voting power, they may be open to attack by common shares in a merger or consolidation of the company. Even the sale of a majority of the assets by the preferred shares during the period when the preferred shares hold sole voting privileges can impair the position of the common shares. Thus mere loss of voting power is not tantamount to loss of all interest or equity rights on the part of the common shares. The preferred stock may not destroy the future values of the common shares, and a merger or consolidation ignoring the common shares will be open to injunction and to damage suits.

Disposition of Bonds, Debentures, and Notes

The following alternatives are usually available for these creditor contracts: (1) The bonds may be retired as credit instruments by the common shares. (2) The bonds may be exchanged for bonds of the consolidated company. (3) The bonds may be "assumed by the continuing corporation." The last is the most common; the first is least common. The practice of assuming bonds of merged or consolidated companies has often made the

¹⁴ Even though the preferred has no right to vote, if it has a right to a stated amount (par or no-par apparently makes no difference) in the event of dissolution, since the merger dissolves the corporation this right is to be enforced as if any other dissolution had been brought about. Thus the preferred shareholders come to be entitled to par or stated value plus accumulated dividends, if any; and they may not be forced to accept a market value for their shares.

financial structures of the growing corporation quite complex after two or three such mergers or consolidations. If nothing is said in the arrangements for the merger or the consolidation respecting assumption of liabilities of the merged company, the courts will assume that the resulting corporation expected to meet the obligations and that the acquisition of assets of the merged companies was *cum onere*.¹⁵

That there should be a considerable difference in the status of secured and unsecured creditors naturally results from the formality of the existing contracts. Unsecured creditors appear to be in a somewhat weakened position as compared to secured creditors, both as to their power to intercede in the completion of a merger or consolidation and in their rights of recovery after the consolidation or merger has been completed. In those states which have statutes providing for the legal continuation of the company for a specified period of time following its de facto dissolution, all actions come against the original corporation and not against the absorbing company.

Fractional Securities in Mergers and Consolidations

Since it is the rule rather than the exception that exchange of securities preparatory to merger or consolidation will not be in units, or integral exchanges, the problem of fractional shares or odd-denomination bonds will be common. When new bonds are issued, odd denominations will be the simplest remedy, or the adjustment of such terms as interest, maturity, purchase warrants, and conversion privileges so that the bonds will exchange on about an even basis. If the bonds are exchangeable for both new bonds and new shares, a syndicate could so control the price of the shares to be given as a bonus as to make the exchange appear worth while. If shares as well as bonds are to be exchanged, the shares should be exchanged before the bond offer, rather than after.

Dilution of Share Equities

In mergers and consolidations if the acquired corporation's assets are valued by a method which results in a higher valuation than would be given by the method employed in computing the earnings of the absorbing concern, the surplus from the old shareholders will be redistributed among the new shareholders. Thus it would never be to the advantage of shareholders to have a conservative accounting of share earnings in absorbing, on an equal basis of book values, companies which had followed liberal accounting methods. To have hidden reserves in the shares of the absorbing corporation is always to divide them with the new shareholder unless the latter's share is so priced in relation to his aliquot part of the assets as to force him to con-

¹⁵ That is, the acquiring corporation receives the assets in trust and subject to any previously existing claims. The limit of any such liability, in the absence of fraud or any basis for damage suits, is the assets acquired by the successor corporation. Even this limit may be ineffectual if the statutes of the state in which the absorbed corporation was chartered provided for assessments of shares to meet such liabilities.

tribute an equal amount to the hidden assets. Both preferred shareholders and bondholders may have honest complaints if large surplus items have been built up in the past for their protection. The prospects of the surplus being thinned down may not only reduce the probable regularity of income but also introduce some uncertainty as to whether income will be received at all.

SPECIAL PROCEDURES

Treatment of Dissenting Stockholders

Experience in consolidating corporations soon teaches the lesson that men are inexplicably prone to diversity of opinion and almost universally avaricious in their capacity as stockholders. No matter how advantageous the basis of exchange which is offered, some shareholders will be certain to procrastinate if not refuse to make the exchange. In the case of consolidations there will be almost certain to exist a few "strikers"¹⁶ among the stockholders who will ask an exorbitant price for their shares, or who will seek to prevent the consolidation from being effected. It is one of the most disturbing and discouraging problems in combinations. Three problems are up: (1) the grounds for dissension, (2) the protection and procedure of dissenting holders, and (3) methods of dealing with them.

1. *Grounds for dissension* from any plan will usually be stated as based upon the propositions (a) that the act or process of combination is illegal, contrary to public policy, and/or prejudicial to the interest of the corpora-

¹⁶ Also called "professional privateers." See *Gen. Inv. Co. v. Bethlehem Steel Co.*, 102 Atl. 254 (1917). Of course many stockholders occupy the opposite position. They tend to be awed by the great assets and resources of others who favor the consolidation and consent, even when they know such action is not to their best interests. The psychological effect of having a long list of widely publicized names assenting to a consolidation thus becomes of real worth.

Of recent years a new form of this professional privateering has increasingly appeared under the guise of a "stockholders protective committee." The usual method is to secure a list of the stockholders in the corporations which are considering a consolidation plan and to send to each shareholder a circular describing the possible serious financial losses which may occur and asking the shareholder to engage the undersigned committeemen to act in his place. To defray the "legal and other" expenses of the committeemen (who are reported to give their services for nothing), a small charge of from 1 to 2 per cent of the value of the stock is made. This fee is to be sent in cash with the proxy. A typical case reads: "Let us help you recover all you invested in—company plus interest. It will cost only 10% of your original investment and our evidence will force the officers and directors of the corporation to pay our claims rather than have their crooked dealings exposed." When a corporation has thousands of stockholders, such a scheme will net a handsome sum to its proponents. If there appears to be any probability of recovery, they torment the corporation officials until they "pay their fine" in advance." The case is now closed as far as the committeemen are concerned, and a new case of "injustice" is hunted for the next fee.

No corporation in which an honest attempt is being made to bring about a consolidation on an equitable plan resents full and complete publicity; but pernicious and iniquitous attempts on the part of unscrupulous lawyers and speculating racketeers to drum up cases ought to be punishable at law. They represent pure blackmail under the cloak of honest intent.

tion in general and of the dissenting shareholders in particular; and (b) that the act of consolidation is fraudulent or unfair to the dissenting holder.

2. *Protection of dissenting shareholders* may result in at least three lines of procedure.¹⁷ The dissenting holders may bring an equity suit for damages in the proper court, seeking redress from the assenting holders. In this case they simply show damages, and do not attempt to restrain the act of consolidation itself. The argument is not against the act of consolidation, but against the basis of consolidation. If the shareholders are opposed to the act of combination as well as the basis of combination, their normal act would be to seek an injunction against the assenting holders and the officers, prohibiting the continuation and ultimate consummation of the plan.¹⁸ Courts have been quite zealous in their protection of minority groups; in some states laws have been passed against the exploitation of minority groups by majority groups. They have not been nearly so zealous in the protection of non-voting security holders, whether majority or minority interests. A third procedure is to do nothing, though their rights may be lost through laches.

3. *Methods of dealing with dissenters* are many, and no general solution may be offered. Sometimes they are bought off and therefore removed from the scene of battle; sometimes damage suits are allowed to be brought into court on the theory that to pay the damages may be cheaper than to buy off the "strikers," as they are called. A large number of states have statutes providing for the appointment of an appraiser to determine a "fair value" for the shares. Fair value is based upon earnings, on contractual provisions, on past treatments at the hands of majority holders, book value, and equity position. The plan may best be used where stock subscription waivers have been placed in the share contracts held by the non-assenting group.

Rights of Non-Voting Securities in Consolidations

Ordinarily, only voting stock need be considered in arranging consolidations. But sometimes preferred shares, and even bonds, will come in for consideration. Brief mention may be made of their rights and the grounds of settlement commonly employed.

Bonds. Bondholders may have, or claim to have, a voice in the matter of consolidations on the ground (1) that they are about to acquire voting or legal control through default and the consolidation proposed is merely a method of thwarting their action (2) that under the consolidation their position will be substantially altered from that they at present enjoy (a) be-

¹⁷ Many newer corporation laws limit the extent to which minority groups can obstruct consolidation plans. 45 *Harv. L. Rev.* 233, 241. A difference is usually maintained between a condition of future profitability and unprofitability, the majority of the voting stocks having distinctly greater power in the latter than in the former case. 17 *Iowa L. Rev.* 313, 322; *Treadwell v. Salisbury Manufacturing Co.*, 7 Gray 393 (1856).

¹⁸ See *Wall Street Journal*, April 15, 1948, for item of dissenters' action to enjoin sale of Continental Bank and Trust Co. to Chemical Bank and Trust Co., New York.

cause the earnings of the consolidated concern may result in a decreased sinking fund, rate of retirement, and reserve for interest payments where such payments have been made contingent upon earnings, and (b) because purchase warrants and conversion rights held by the bondholders will be affected; and (3) that the consolidation is contrary to the terms of the indenture under which the bonds were issued.

Preferred Shares. Preferred shares may enter into the problem of consolidation by reason of (1) conversion contracts; (2) purchase warrants; (3) terms of the stock in regard to consolidations; (4) the default of dividend payments;¹⁹ (5) redemption clauses requiring redemption funds to be built up from earnings; (6) participation clauses and, sometimes, provisions for cumulations; (7) voting powers about to be acquired; (8) reduction in equity protection on assets; and (9) the fact that consolidation increases the effective bond ratio, hence (a) operates contrary to debt-limiting clauses in the preferred contracts and (b) is a breach of faith of the old voting shareholders.

Short-Term Notes. It is not often that short-term notes will play an important role in consolidations, for they are not subject to the elaborate agreements of bonds or to the rights of shareholders. Their position is much the same as that of general creditors and, like the latter, they are not commonly considered in combinations and consolidations.

Merger or Consolidation of Corporations in Different States

The amalgamation of corporations which have received their charters in different states offers some most unusual financial complications. In the eyes of the law, in the event of such a merger or consolidation, the separate corporations continue to exist for a time in the several states. Even after the *de jure* termination of the old companies the merged or consolidated corporation will be regarded as a citizen of each state which was the legal domicile of one of the old corporations. Thus the consolidated corporation becomes a sort of managing or directing agency whose corporate existence falls partly in each of the states, but in no one of them fully. Instead, therefore, of having three methods of consolidation or merger open to corporations in two or more states, the practical solution will usually be (1) the sale of the assets of one company to another for the securities of the second, and (2) the dissolution of the first company and the distribution to its own security holders of the proceeds of the sale. Such an arrangement will generally require the absorbing company to provide sufficient cash to dis-

¹⁹The case of *Colgate v. U.S. Leather Co. et al.*, 73 N.J. Eq. 72 (1907), illustrates this point. The preferred shareholders of the U.S. Leather Co. were offered \$50 in bonds, \$50 in preferred stock, and \$23.50 in common stock of the consolidated company, for each \$100 share of cumulative preferred in the U.S. Leather Co. and on which dividends had cumulated to \$48.08 per share. A suit was brought and the consolidation was stopped on the grounds that the plan amounted to a subrogation of the rights to cumulated dividends already accumulated.

charge current liabilities, but it may be the means of avoiding litigation in the future.

Reincorporation as a Prelude to Merger or Consolidation

It follows from the preceding paragraph that the amalgamation of corporations may be best achieved when all the corporations to be merged or consolidated are chartered in one state. Reincorporation in a common state is therefore often a first step in arranging the merger or consolidation of a number of companies. It is legally no different from the merger, but in practice the operation is much simpler. The new company is incorporated in the proper state with a capital structure identical to the old one in shares, bonds, etc. The assets of the old company will be sold as a whole to the new concern, which will give its shares and bonds as payment. The old corporation votes to dissolve and distribute its assets (the securities of the new company) to its security holders. Termination and dissolution of the old company are thus completed, leaving the business legally in the new corporation.

Merger and Consolidation Contrasted with Growth by Purchase

Direct purchase and merger may be alike where the entire assets are acquired by one corporation. However, they differ in several respects. If a corporation's assets are purchased, it still possesses its corporate existence, may acquire new assets, and may continue as before. In the merger and consolidation, the act of acquiring the assets is accompanied by the dissolution of the former corporate holder.²⁰ There is, therefore, in the merger or consolidation less confusion on the part of the public; there is also less risk to the growing company from regenerated competition. Assets may be purchased in their entirety, or only as a portion of the total; but under the merger or the consolidation there is no partial acquisition. The whole of the assets, good and bad, profitable and unprofitable, are acquired in a lump. Acquisition of assets is more likely to be based upon profitable expansion;²¹ merger is not infrequently the result of financial ambition and a desire to profit by security price manipulations.

QUESTIONS

1. Outline the general motives of expansion by mergers or consolidation.
2. What do you regard as the chief problems to be solved in a consolidation proposal?
3. Indicate the probable difficulties in the theory that a merger or consolida-

²⁰ That is, there is usually a formal agreement by which the dissolution will be effected in one way or another.

²¹ See testimony of Mr. W. E. Sachs of Goldman, Sachs and Co. before the U.S. Senate May 20, 1932, in *Hearings* before the Committee on Banking and Currency, 72nd Congress, First Session. In this case it was admitted that \$24,500,000 was paid for the General Foods Co., which represented an investment of only \$1,750,000.

tion should result in earnings somewhat larger than those for the two separate companies.

4. What do you regard as a typical pattern of consolidation proposals for the capitalization of a new concern?
5. Explain why the voting rights of the stockholders in a consolidation may create special problems.
6. Indicate the procedures which may be employed in dealing with dissenters in consolidation proposals.
7. Why may non-voting securities claim they are entitled to special consideration in a consolidation plan?
8. Explain why consolidations are made most often in the prosperous periods, whereas the record seems to indicate that those formed in the less prosperous stages of the cycle are more successful.
9. In view of the anti-trust decisions of the past decade, what special problems beyond those of a financial character may be created in consolidations and mergers?

PROJECTS

1. Examine the records of the constituent companies which were consolidated to create Robertshaw-Fulton Controls Company and comment on the promotion.
2. Prepare a report indicating the plan and basis which you would propose for a merger of Skelly Oil Co., and Continental Oil Co.

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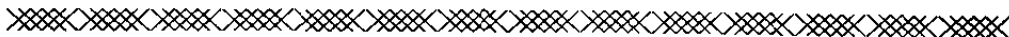
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CHAPTER XXXIV

Holding Companies



THE holding company represents a curious result of the combination of ownership, operation, and financial strategy. Although originally and widely used for the justifiable purpose of centralizing control over groups of companies, it has been used on occasion for purposes of defeating or evading certain statutory regulations, of escaping frequently the peril of public criticism, and sometimes of achieving questionable politico-economic ends. The holding company is not a uniquely American institution, but its possibilities have probably been more thoroughly explored and applied in the United States, where it was apparently first widely developed as a means of evading antitrust legislation, than in any other country. The holding company contains so many points of view and problems peculiar to it alone that a single chapter can give only the merest of outlines.¹

Origin and Development of the Holding Company

Corporations acquired the power to own stocks of other corporations relatively late in their development and application in business.² In fact, the holding company is a phenomenon of the past five decades primarily. One author appears to find its earliest use in the railroad industry at the beginning of the era which brought about the consolidation of the numerous short lines into "systems" of substantial size and extent.³ With the beginning, in

¹Two volumes dealing exclusively with holding companies are: Arthur J. Simons, *Holding Companies*, an English book with an accounting point of view, which gives an interpretation of their development in England and a telescopic picture of American companies, and J. C. Bonbright and G. C. Means, *The Holding Company*, which discusses American problems in a free and comprehensive manner. Students are referred to these volumes for many broader phases of the subject.

²A. J. Simons, *op. cit.*, p. 3, says: "As with so many good things, the origin of Holding Companies is to be found in America and, in the same way that so many good things grow from something ill, so, too, did Holding Companies." Unfortunately, a nearer view would or should have caused a qualification of both statements: holding companies have quite as many faults as virtues, and they did not arise from "something ill."

³E. Jones, *The Trust Problem in the United States*, p. 29. This would place the beginning of the holding company about 1870, but there are known cases forty years earlier. Thus, in 1832 the Baltimore and Ohio Railroad Co. was empowered by a special act of the State of Maryland to acquire the stock of the Washington Branch Road. As

1888 in New Jersey, of legislation giving corporations the right to acquire, own, and exercise stockholder rights in other corporations, the holding company acquired prominence as a form of financial structure. From 1888 to 1910 the great trusts of the country were formed, and the holding company became a permanent device for that purpose. With the declaration by the United States Supreme Court that the Standard Oil holding company was illegal and in violation of the Sherman Antitrust Act, the use of the holding company was materially reduced in industrial corporations.⁴ Under the Interstate Commerce Commission it had been somewhat checked in the railroad industry. Its use in public utility operations increased rapidly, and it was perhaps only the work of the holding company and the investing company which brought about the rapid expansion of the electrical industry. After 1920, when the attitude of regulatory bodies appeared more favorable toward large-scale business, a new wave of holding company development included industrial, public utility, and railroad corporations.

Use of Terms

As soon as one corporation acquires shares of stock of another corporation, there is set up the mechanical arrangement found in a holding company. The nomenclature must include (1) terms designating the *owning* corporation, (2) terms designating the *owned* corporation, and (3) terms for the relationship between the corporations. The usual term for the owning company is the *parent* company; the corporation whose securities are owned is known as the *subsidiary* concern.

A holding company in the technical sense of the term means a concern or corporation formed for the purpose of owning the stocks of other corporations. Its origination is dependent upon the existence of the companies whose stocks it owns; it need not follow any particular pattern of arrangement of the corporations whose securities are owned, nor need the subsidiary corporations have any peculiar or unusual relation to each other.⁵ Tersely put, a holding company is a business whose business it is to own, operate, and/or control other businesses.⁶ These types may be found: (1) vertical holding

early as 1853 the Pennsylvania Railroad Co. was empowered to buy the stocks of other railroads.

⁴ Standard Oil Co. v. U.S., 221 U.S. 1-106 (1911).

⁵ A holding company is any organization, corporate or non-corporate, which directly or indirectly owns, or controls by a community of interest, a sufficient quantity of the voting (and non-voting) securities of other corporate or non-corporate business enterprises as substantially to affect, and for the purposes of continuously affecting, the operative policies of those concerns in conformance with a policy of uniform nature, and whose income is largely derived from and dependent upon the concerns controlled.

⁶ In J. C. Bonbright and G. C. Means, *op. cit.*, p. 10, a holding company is defined as "any company, incorporated or unincorporated, which is in a position to control or materially influence, the management of one or more other companies by virtue, in part at least, of its ownership of securities in the other company or companies." The same authors also quote a series of other (mostly old) definitions. It may be pointed out that

companies, which combine the concerns engaged in the successive steps of production from the raw materials to the finished product; (2) horizontal holding companies, which acquire and hold the stocks of concerns engaged in the same line of business; (3) integration holding companies, which combine vertical and horizontal types; and (4) companies which seem to have no particular theory of formation. In actual practice, very few holding companies are of a purely vertical or horizontal type.⁷

Some holding companies do not engage in any work or operations and should be called *pure holding companies*; others not only hold the stock of corporations but also engage in operations, and should be called *operative holding companies*.⁸ The *investment company* or *investment trust* owns the stocks of other corporations, but its prime function must or should be that of practicing the principles of investment on a group basis for the benefit of its participants, and not that of controlling subsidiary companies.⁹

Amount of Stock Necessary to Control Subsidiary Corporations

Legally, control of a corporation is held by an agency when it possesses sufficient voting strength to elect a majority of the board of directors. Generally speaking, this amounts to one vote more than 50 per cent of the total votes cast by all the stock. In some companies, because of provisions in the by-laws, it may be considerably more than this amount, and in other cases considerably less. Classified voting, discussed in Chapter VI, usually increases the percentage necessary to control; the same is true of directed balloting.

A sharp contrast exists between the amount of stock necessary for legally controlling the concern and the amount which in practical life will actually control the company. This difference arises because of two things: (1) the inactivity of outside stock and (2) the effectiveness of organized *vs.* un-

under the definition given by Bonbright and Means permanence of control is not made an element of the holding company. Nor could they rule out promoters, syndicates, stock corners, etc. Moreover, the definition fails to include the "affiliate," as well as to exclude "management companies" which control corporations through contracts. What these authors would do with the voting trust is not entirely clear, since it is not an "association" where shares never were in the hands of the public so they could become "voluntarily associated." Finally, stock and bond committees could be slipped through the back door of this definition.

For some interesting observations on the English Companies Act of 1929, cf. 170 *L. Times* 4. The difficulty of statutory definition is greater than might be thought.

⁷ Still another way of sorting holding companies is in accordance with the nature of the business, viz.: (1) public utility holding companies, (2) railroad holding companies, (3) industrial holding companies, and (4) financial holding companies.

⁸ The terms "operating holding company" and "mixed holding company" are also found. Cf. Lewis H. Hai ey, *Business Organization and Combination*, p. 228.

⁹ The investment-managing company was probably to a degree responsible for the development of the electric power industry in the United States in the period from 1914 to 1920. Prior to 1914 the electric power industry was largely conducted by small local companies, with more or less uncertain and inefficient management.

organized voting. No matter how urgent or controversial the affairs of a corporation may be, some of the stock is almost certain not to vote. Even given the nation-wide publicity over the control of the Standard Oil Company of New Jersey, or Indiana, some of the shares will not be represented. The explanation is found in part in the fact that shares are lost, stolen, secreted, etc., owners go off to Europe or on a vacation; others are too ill to attend to business matters promptly; many are inert, uninterested, or lackadaisical in casting votes; and a few will desire not to participate in the affairs directly. Some shares will get into trust funds; a few will be in the process of delivery; and a few may actually exist as fractional units, hence have no vote under the usual corporation by-laws.

The second principle, that of the effectiveness of organized *vs.* unorganized voting strength, may be applied in two ways. The organized voting strength concentrates its vote in the proper fashion to be most effective; it is like most political machinery, under which the man, and not necessarily what he states his platform to be, is the end in view. But if the attention of the unorganized groups is kept focused on the controversial problems, some stockholders are almost certain to be converted to the point of view of those desiring to achieve any definite objective. At any particular test of voting strength, the actual number of shares to be controlled will depend on the solidarity of the opposition and the unorganized stock. Complete solidarity would mean one share more than the legal fraction necessary to elect a majority of directors or to pass upon the proposition under controversy. Conversation with corporation officials indicates that from 25 to 35 per cent, properly organized, will normally be sufficient to control a corporation.

In the case of the holding company, in which permanent and unquestioned control is a necessary condition, other elements must be considered. It is not sufficient to have and to maintain voting control at a single election of the board of directors or upon a single proposition submitted to a vote of the shareholders; the control must be permanent, hence holding companies must have permanently under control at least a majority of voting shares if they are to avoid the uncertainty and the expenses of continuous campaigning to effect a balance of power in their favor. Even a majority control is insufficient because of the possibility of minority groups becoming obstreperous and unmanageable for one reason or another.¹⁰

Subsidiary Financing

The parent company may frequently be much interested in the financing of subsidiaries. The cardinal principles are that control over the subsidiaries shall not be jeopardized by new issues, and that the position and financial

¹⁰ It is not the losses which will be directly sustained through judgments on account of wrongful acts that concern the holding company, but rather the expense and worry of continuously defending suits and the adverse effect of the publicity growing out of the litigation.

soundness of the subsidiary shall be maintained. The first consideration involves two problems: (1) protection against increasing the normal voting power to an extent which would jeopardize the normal voting strength of the parent company, and (2) protection against the sudden acquisition of voting power by the normally non-voting securities of the subsidiary. The first is accomplished by controlling the quantity of voting stock outstanding so that at least a majority always rests with the parent company. Protection against acquisition of voting power must be accomplished by keeping up payments on bonds and preferred stocks. It will follow that some form of stock would be very useful which carries a fixed maximum dividend, and which does not have foreclosure or voting privileges at all, or only under very restricted terms. Class A common stock comes close to fitting these requirements in normal times; a few preferred shares and some debentures will also meet the test. This "buffer" element is an important aspect of corporation financial control.

A second general proposition is to the effect that, if the holding company is to be of service, it must contribute to the welfare of the subsidiary as well as to its own. A common benefit to the subsidiary comes through making possible subsidiary financing at a lower rate than would otherwise be possible, either by reason of the use of the holding company's name in connection with the financing or by the holding company's itself borrowing and then relending to the subsidiary. Not infrequently the parent company will guarantee or endorse the securities of the subsidiary concern so that money may be obtained more cheaply. The choice between these methods is dependent upon a wide variety of elements which are not properly included in an elementary discussion.

The Uses of the Holding Company

The holding company represents possibly the most flexible device in the entire field of corporation finance. Its uses are so varied that an exhaustive treatment would extend far beyond the scope of this volume. Among the more common uses we may mention the following:

1. *Adjustment to Local Conditions.* In a nation which has forty-eight states, each having laws governing corporations formed therein, and some occasionally engaging in retaliatory legislation, conflict is certain to occur. Advantages will be found in some states which cannot be had in others; restrictions will be found in some but not in others. To escape adverse legislation, corporations form subsidiaries in the states having adverse legislation. The parent company will operate in the states not having it.¹¹

¹¹ A classic example of this was recorded some years ago when Wisconsin imposed a tax on corporate incomes. Numerous corporations in the state immediately formed subsidiary companies in Illinois, which had no such tax. The parent companies in Wisconsin sold their product to the Illinois subsidiary on such terms as would free them from the Wisconsin income tax. The profits of the concern were realized in Illinois and were not taxed. But subsequently the United States District Courts sustained actions to tax these corporations.

Or community conditions often make it very desirable to follow a peculiar policy which may be contrary to that followed by the company as a whole. The solution will be effected by creating a subsidiary concern operated on a basis common in that particular community. A similar solution may be employed in case the corporation desires to operate in a foreign country.

2. *Segregation of Risk.* A very large prospective loss from damage liability suits, because of some operation, often leads to use of the holding company arrangement. Instead of the larger concern's becoming the target of the suits, the subsidiary must be sued. Accordingly, the loss by reason of the judgment must be limited to the assets of the subsidiary; the loss to the parent company will be limited to the investment in the stock of the subsidiary.

It will often happen that a company desires to make a product which has not been tried out; if it is successful, well and good, but if it should fail, the failure might seriously reflect upon the company and its original product. Sometimes the problem of two products is solved by the use of a new name; sometimes the better financial solution is the use of a subsidiary corporation.

But, besides introducing an entirely new product, subsidiary concerns are frequently used to experiment with various grades of product, marketing schemes, and financing of customers. Old and well-established firms which have a product of high quality that has gradually acquired an accepted standard are loath to place their name on a cheaper product of lower quality. At the same time such concerns may lose their financial standing in the industry if they are not able to meet a "priced" product, although much lower in quality. The use of the principle of the holding company is a solution to the problem. A subsidiary concern is formed to produce and market the poorer-grade product to meet trade competition.

3. *Acceleration of "Trading on the Equity."* Gaining of control of several subsidiaries¹² through ownership of stock interests will permit an original investment to control a sufficient number of concerns arranged in order on top of one another. This pyramiding allows the original capital to be "stretched" several times; in other words, the "trading on the equity" may be greatly enhanced. Profits may be piled, so to speak, on top of profits. But the reverse is also true; the losses will have an equal ballooning effect.

In our example, Figure 30, if we suppose that ownership of all common stock is desirable, but that one-half the capitalization of the holding concerns is preferred stock, then if at least \$25,000,000 common stock exists in S_1 , S_2 , and S_3 , the parent company would have \$12,500,000 minimum common

¹²In the act of *merging* businesses as well as in the expansion of old businesses, the holding company finds a use in modern industrial organization. If it is known that corporation A is attempting to buy up a group of *smaller corporations* to expand its own operations, persons controlling the small concerns hold out for prices much above a fair value. The same is true in merging a group of companies. Unless the key concerns are first brought under control, they may organize hold-outs and demand exorbitant prices. To avoid being thus unfairly coerced into paying unjustified prices, the corporation management will often form several subsidiary concerns.

stock. However, this compares favorably with the \$25,000,000 which would have been necessary had not the intervening subsidiaries been used.

It is clear that with the growth of superstructures pyramiding proceeds at a rapid rate. Whereas the pyramiding within an individual concern occurs in a ratio proportional to the fractions of voting capitalization to the total capital, it is the voting powers of these fractions which are used when stratification occurs in holding companies. The measure of the degree to

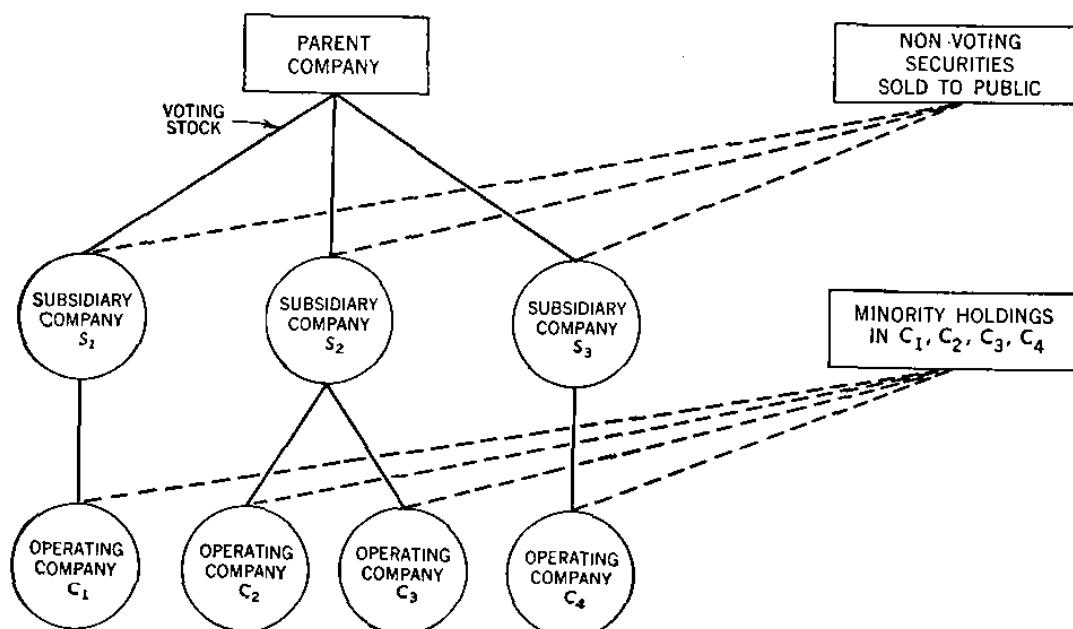


FIG. 30. The Use of the Holding Company Device in Reducing the Amount of Capital Needed to Control or Acquire Subsidiary Corporations.

which economy may be attained in the acquisition of subsidiaries is the increase in the minimum capital required in the parent as compared to the increase in the controlled capital of the subsidiaries.

4. *Competitive Gains.* Of quite a different character is the increased efficiency throughout the entire industry resulting from the elimination of intercompany competition. The more common expenses which are lessened over the industry as a whole will be the decreases in advertising, overhead in general, inventories, duplicated equipment, etc. There will be a decreased cost to the company because purely competitive expenses will be cut. Moreover, whereas three or four small concerns as independents attempt to produce every type and variety of product, when these small companies are subsidiaries of a single holding company they are in a very different position. They no longer compete; instead, they cooperate and even specialize on particular types and varieties of product. Some writers point out that the elimination of cross freights and the plant specialization of subsidiaries are major uses of the holding company.

These gains are extended in financing operations; for often the better-known concerns will guarantee issues for subsidiaries, thus gaining lower

interest rates, or the parent concern may sell collateral trust issues secured by the securities of the subsidiaries which would have poor markets for small amounts or unknown units. Likewise there may be gains in the common usage by the subsidiaries of various technical staffs maintained by the holding company, such as engineers and legal counsel. This is a form of cooperative buying but through the channels of the holding company's direction.

5. *Diversity of Investment.* Through the holding company many fields of operation may be entered, either in the same kind of business or in varieties of business, thereby bringing a type of stability to the holding company which may be very desirable. Often the very type of subsidiaries controlled may be brought to supplement the work or needs of other concerns controlled, and in this fashion material sources may be assured or market outlets be guaranteed. The diversification may be made, therefore, to work by spreading risks or by mutually supporting each subsidiary's field of interest.

The Abuses of the Holding Company Principle

After a recital of the uses to which the holding company principle is put, it is well to give some attention to its abuses. The list of abuses is scarcely as long as the list of uses; the abuses represent exploitation and misapplication of principles.

1. *Reduction of Taxation.* In view of the fact that corporations are not taxed uniformly in the various states, the holding company is frequently used as a method of limiting taxes. One of the common methods of doing this was mentioned above, the device being the maintenance of sickly subsidiaries, the losses of the subsidiaries offsetting the other profits of the parent concerns.

2. *Dissipation of Good Will.* In the creation of a great holding company through the absorption of numerous subsidiaries, the proper treatment of good will is extremely difficult. If company A is acquired by B, it does not follow that A's good will remains the same; it may increase, but it is more likely to decrease.¹³ The tendency of many holding companies to capitalize good will and dispose of the new stock to the public is only a way of befuddling investors and leading them to pay much more for the stock than it is actually worth.

3. *Manipulation of Security Prices.* The market values of the stocks of companies acquired by the holding company arrangement as well as those of the stock of the parent company are affected directly when a holding

¹³ Advertising of the parent concern is sometimes pro-rated and inserted in operating subsidiary expense accounts, though it is forbidden by regulating commissions when discovered (New Hampshire, *Re New Hampshire Gas and Electric Co.*, 1932). Similar rulings have been made with respect to salary increases, display windows, sale of stock by employees of subsidiaries during working hours, management services of management companies, etc.

company arrangement is entered into. The stock of the subsidiary will rise or fall, depending on whether the financial architecture of the concern is strengthened or weakened by the new relationship to the parent company and to other concerns of the industry as well as competing enterprises.

More specifically, the holding company as a rule provides economies which make for greater total profits (lesser expenses) when that relationship is developed than when it is not. The degree to which these economies ought to be passed on to the consumer or allowed to accumulate to the benefit of the shareholders of the two concerns is an open question. No doubt some of the profits should rightfully accrue to the shareholders and be reflected in increased earnings and, consequently, increased stock values.

There is no way, as far as is known at present, of preventing the insiders¹ from speculating in the securities of both concerns. The acquisition of conservatively managed concerns by more "progressive" companies is too frequently the signal for multiplying the capitalization of the subsidiary several fold, without provocation or justification.

4. *Manipulation of Subsidiary Company Accounts.* An entirely different type of exploitation frequently encountered in holding company operations is in the manipulation of the accounts of subsidiary companies. The purpose may be to hide profits, to divert them into channels for private exploitation by the officials and "insiders," or to create apparent profits where none exist.¹⁴ The first is often accomplished by changes in depreciation, reserve, or surplus policy. Rates are raised and lowered, surplus is dissipated by the elimination of intangible items or the creation of unusually large reserves or write-offs of the concerns. But much more common than hiding profits is the business of so manipulating subsidiary company accounts that an apparent profit is earned when none actually exists.

5. *Manipulation of Subsidiary Policy.* Probably the most insidious form of abuse which is perpetrated against holding company operations is that of "policy control." Innocent as this item may appear, it is the screen behind which lurk greed and avarice for personal profit. Power appears ever to be abused and forced to serve the ends desired by its possessor. Prices are set, and credit terms, sales methods, quantity and quality of product are dictated from the hierarchy of the parent concern in the interests of company welfare and policy. In the business of standardizing the work and operations of the smaller concerns, the group interests of officers and employees frequently sway the final decisions one way or another. The extent to which a parent concern may control the policy and operations of a subsidiary concern is one of the nicest legal problems.

6. *"Milking" Subsidiaries.* "Milking" consists of exacting the greatest possible dividends for a series of years, dissipating the accumulated surpluses,

¹⁴ Possibly the most vicious practice yet devised as a method of befuddling the regulatory bodies, as well as the public, is the "inter-company loan on open book accounts." It should be prohibited completely. Most commissions at present take much trouble to trace such loans if they can.

and then disposing of the shares to the public, who will be required to hold the non-paying securities while a satisfactory surplus is built up. The process is especially profitable to a concern which follows the scheme of buying up controlling interests in enterprises in fluctuating industries which have had conservative managements over a period of years. Concerns which have stable net revenues will be less likely to build up large surpluses and are less often victims of the practice. Whether the "milking" process will be more profitable to those in control of the company by exploitation by one or another of the methods mentioned above depends upon circumstances in the investment and money markets and the immediate financial problems of the exploiting group. Three methods are common to obtain a transfer of accumulated surplus from the subsidiary to the parent concern: (1) unusual cash dividends, (2) stock split-ups, (3) stock distributions by (a) dividends and (b) rights. These more or less direct methods are easily recognized and must not be too violent or a reaction will set in against the exploitation of the company. Often the schemes are applied in combination, but always to the end that there is an effective transfer of surplus.

EXTENT OF HOLDING COMPANY USE

The holding company device has been one of the most effective methods of American business combination.¹⁵ Today we see its greatest fruits in such concerns as the American Telephone and Telegraph Company, the Pennsylvania Railroad, and the United States Steel Corporation. Until the divestment procedure under the Holding Company Act of 1935, it was true that twenty-two major utility companies controlled more than 90 per cent of the electric power of the country. Bonbright and Means state a general conclusion as follows: "Even without the holding company . . . there would still have been a notable upward trend in the size of dominant business enterprise . . . nevertheless . . . the essence of the holding company device—the concentration of capital into larger business units—would certainly have had a much slower growth. . . ."¹⁶

Use by the Railroads

Early History. Some of the earliest companies of this sort were formed in the railroad field by special acts of the several legislatures, such as the Pennsylvania Company created in 1870. But the other devices of direct security exchange, leases, and purchase of stock control were much more favored. Until well into the twentieth century, therefore, the problem of railroad holding companies did not appear.

Present-Day Importance. In the swirling twenties a great deal was heard of the Van Sweringens, who created one of the largest of modern railroad holding companies. The key to this structure was the Alleghany

¹⁵ A. A. Berle, Jr., and G. C. Means, *The Modern Corporation and Private Property*, pp. 205-206.

¹⁶ J. C. Bonbright and G. C. Means, *op. cit.*, p. 5.

Corporation, which ranged down through the Chesapeake Corporation to the Chesapeake and Ohio Railway; Pere Marquette Railway; New York, Chicago and St. Louis Railway; and the Missouri Pacific System. By domination of this channel, with even lessened investment, Mr. Robert Young has come to the control of the Chesapeake and Ohio Railway and is in the midst of an effort in 1948 to gain control of the New York Central Railroad. Another illustration of holding company operation in the railroad field was the well-known Pennroad Corporation, a factor in several operations with the Pennsylvania Railroad.

After the Transportation Act of 1920, the I.C.C. was granted supervision over the purchase by one operating company of the stock of another railroad. The holding companies referred to above were usually created by stock interests in the holding company directly and thus were not subject to the control of the act just named. This was corrected by an amendment in 1933, so today all operations of every character in railroad securities, voting trust arrangements, leases, and consolidations are subject to the approval of the commission.

The pure holding companies probably have control of less than 20 per cent of the total mileage of the country. The extent of combinations in all forms, however, is extreme and has been estimated to leave the country with approximately fourteen major railroad systems. These systems now operate about 87 per cent of all mileage in the United States.¹⁷

Use by Industrials

Early Days. The early movement for combination among the industrials did not employ the holding company; the trust and outright purchase were much the more favored. But after the initial period of non-use and the attack upon the trusts, the holding company came into its own. First to give it prominence was the Standard Oil Company of New Jersey, and then followed such companies as Amalgamated Copper, American Locomotive, American Smelting and Refining, United States Steel, and du Pont. Then came the decision on the Northern Securities Case in 1904, and the holding company lapsed into very little use for better than a decade.¹⁸ At first General Motors was organized on the holding company pattern but was shortly reorganized as an operating company. The passage of the Clayton Act, 1914, was of the greatest significance for it prohibited any corporation engaged in interstate business from acquiring stock interest in concerns for the purpose of lessening competition between the firms.

Current Industrial Use. In the industrial field the holding company is very important today despite the legislation of four decades ago. Per-

¹⁷ *Regulation of Stock Ownership in Railroads*, H.R. 2789, Part I, 71st Congress, pp. iii-liii.

¹⁸ Northern Securities Case, 228 U.S. 482, which held that the interests in Northern Pacific and Great Northern railroads must be sold since the two roads were competing lines.

haps the most complete survey of such relations exists in a study made under the auspices of the Securities and Exchange Commission for the year 1937.¹⁹ The findings reported that 98 per cent of the companies with assets over 50 million dollars had subsidiaries, and those which had 500 million dollars in assets showed an average of 73 subsidiaries each. The significance of this report cannot be judged from the figures alone.

The study of Bonbright and Means indicated, for a group of 97 concerns studied, that about 22 per cent were pure holding companies, about 4 per cent were operating companies alone, and the remaining 74 per cent covered a combination of interests though four-fifths were primarily operating companies.²⁰ There is some suggestion in current surveys that the pure holding companies are disappearing, indicating that they are an intermediate step to a complete ownership combination.

It is presumed by most writers that the reason for use by industrials of the holding company form is primarily as an administrative device, not a financial one. This is judged to be true since the variability of earnings in the field would make pyramiding very dangerous. Thus the benefits of decentralization into separate corporate units appear, to the more logical, to be reason enough for the existence of subsidiaries in large numbers.

Use by Utilities

Early Development. As in the case of the railroads, one of the earliest holding companies in the utility field was chartered by special legislative act in Pennsylvania. Now known as the Philadelphia Company, it was created in 1871 as the Empire Contract Company, changed its name several times, and, as the result of reincorporation, appeared as the currently known company in 1884. Another company in this field is the United Gas Improvement Company created in 1889 but succeeding to the charter originally granted by the Pennsylvania legislature in 1870 to a predecessor. The original and predecessor company of the American Telephone and Telegraph Company was chartered in Massachusetts in 1880.

The latter company has become today the largest firm in the country, with nearly 5 billion dollars and more than 700,000 stockholders, a greater number than any other firm. This firm is both an operating and a holding company, owing directly its long-distance toll lines but controlling the subsidiaries which supply local phone service and also the manufacturing of equipment as represented by the Western Electric Company. Many of the first utility holding companies, such as Standard Gas and Electric Company, specialized in acquiring interests over a large and varied area, while others, like New England Power Association, represented a group of interests in a contiguous geographic area.

Unusual Rise of the Holding Company. Had the early companies de-

¹⁹ Securities and Exchange Commission, *Statistics of American Listed Corporations*, Pt. I, p. 29.

²⁰ J. C. Bonbright and G. C. Means, *op. cit.*, p. 76.

veloped by moderate growth, so that management might have been seasoned both in public relations and in social responsibility, much of the subsequent history of utility holding companies might not have been written. The boom of the twenties for holding company operations in the utility field generated a lot of rank growth, like any fast-growing crop which cannot be well tended by the farmer. Because of the many irresponsible actions involved in this growth, there was a violent reaction in the depression of the 1930's. The abuses which had developed might be summarized as follows:

1. Unwieldy and non-integrated systems were created largely for the potential promoters' profits.
2. Gross overcapitalization resulted from excessive prices paid, frequently by passing the assets through a series of owners within the holding company's control.
3. Poor capital structures were created in which debt was top-heavy, with stocks classified as to voting so as to more easily concentrate control.
4. Intercompany transactions often included engineering and financial fees at exorbitant rates. Likewise intercompany loans and lending of securities were frequent practices.
5. Manipulation of subsidiaries and of accounts and security prices, including variable handling of depreciation and maintenance, were used to foster false transactions in the market and drive prices upward on the securities.

While the depression after 1930 did not bring wholesale bankruptcies to the utility field, including the holding companies, there was a lot of distress. Preferred stock dividends were passed in great numbers and the common stocks of the holding companies descended into fractional quotations. Investors in the latter case had to wait a decade to see anything like good values restored to most of these common stocks. Thus the reaction among a large group of the public was unfavorable.

The Public Utility Holding Company Act, 1935

General Terms of the Law. The many misdeeds, both in acts of bad faith and in errors of judgment, of the holding companies caught up with them by 1935, when the famous "death sentence" clause was made a part of the Holding Company Act of 1935. This law, it should be pointed out, applies only to utilities. The basic requirement of the law was the divestment of holding company interests in their subsidiaries. They were allowed to retain interests no more than one step removed in ownership of those properties which operated in a common geographic area. Since this matter of area has been interpreted in a limited way the shrinkage of the companies has been great. Originally the companies were required to act within two years, but there were long delays for legal proceedings. Though the S.E.C. moved steadily along, a few approvals on plans are still to be completed; and completion of all procedures will run well into the future.

The law might be briefly summarized as follows:

1. All electric and gas concerns with properties in more than a single state are required to register, giving full details of the system.
2. Future issues of securities by holding companies and subsidiaries must be submitted to the S.E.C. for approval. Securities which are unsecured, preferred stock, and stock with no-par or non-voting provisions are denied unless exempt by the commission.
3. All holding companies are to be examined and required to conform to the divestment regulations. (See statement above.)
4. Full control of intercompany transactions is vested in the commission.
5. Periodic accounting and other reports must be made to the commission.

Results in Finance. The application of the divestment proceedings and the requirements of the commission have led to a general strengthening of the capital structures throughout the utility industry. The commission has insisted on write-downs of assets to original cost figures, thereby taking out of the accounts the heavy write-ups. Inadequate depreciation reserves have been restored in order to gain the required approval. In some cases beyond the requirements for these purposes, the operating utilities have received further capital contributions to bring the equity investment into a safe proportion with the debt. By the conclusion of the divestment activities most concerns in this field will be major operating concerns, and whatever holding company interests remain will be for minor properties in the common geographic area but not yet integrated in the parent company. Much has been done to improve the terms of the issues, too, such as required sinking funds, minimum maintenance accounts before dividends, and open-end mortgage issues designed to finally eliminate a series of liens. The task has been a large one; but the good market period since 1940, when most of the securities have been brought to the market, has allowed quick and easy sale of many issues. Extensive exchange of securities of the holding company for those of the subsidiaries has been offered, thereby operating to reverse the holding companies' original acquisitions. Thus new market issues have not always been required to carry out the plans. An air of greater stability seems to have settled over the utility field, and its securities have earned strong investment support, as evidenced by the very low interest rates they now enjoy.²¹

COMPARISON WITH OTHER COMBINATIONS

The Trust

In many respects the holding company and the trust are alike; the chief difference rests in the difficulty of changing the management. Trustees are subject to removal by a court, not by the beneficiaries; whereas the holding company has the opportunity of annual approval of the directors. There is no personal liability for acting as a corporate officer beyond the duties of the office, but a trustee may be subjected to other claims such as claims for

²¹ A survey of the record experienced in the early part of the decade 1930-1940 is given by the Securities and Exchange Commission, *Tenth Annual Report*, 1945, p. 86.

the liabilities of the business operations. The choice is heavily weighted for the holding company.

The Lease

Both the holding company and the trust procedures allow old entities to remain, and thus separate legal liabilities may be insulated. The lease requires only the annual rental, whereas the holding company may have to make a capital outlay to acquire control, for an exchange of stock interest may not always be sufficient. Necessary legal consents to a lease are more difficult to obtain than control through a holding company interest. The lease rental constitutes a fixed charge which may not consistently be earned, and divestment of the interest is difficult without a total involvement of the company. It would appear that the holding company has many advantages.

Purchase

If a holding company desires to purchase properties from a subsidiary, the following points of comparison are usually involved: First, there is the initial capital outlay, which is much the larger for a purchase. Second, the burden of taxes may fall in varying degrees of weight depending on the extensive character of operations. Often a series of subsidiaries operating in several states are an advantage, though this is not true any longer for federal income tax. The separate legal entity does incur some special costs which the integrated unit would not have, but this price also brings the value of separate legal liability for the several units. Costs for financing would not vary a great deal. As for administration, purchase would allow the most direct line of control so it becomes largely a question of the degree to which the management desires to decentralize. No clear decision is possible but there is again an apparent balance of evidence for the holding company.

SUMMARY

Generally to conclude that the holding company is a good or a bad institution is to open wide the many arguments for and against the institution. Individual businesses are subject to the same abuses as are holding companies, and the ultimate judgment upon the holding company must take this cardinal fact into consideration. As a matter of fact, the holding company must be judged from several standpoints; at a given time it may be good from one point of view but equally bad from another. From the point of view of the parent company, the holding company is an excellent device for the accomplishment of a wide variety of ends without greatly increasing the degree of risk in its entire operations; it enables many things to be done which are utterly impossible without it, and it greatly facilitates the performance of many others. From the point of view of the security holders of the subsidiary concern, their position need be no different, in theory, from their position in an independent concern; but in actual practice, they

will usually suffer exactly in proportion to their inability or unwillingness to do anything about the abuses. From the point of view of the state as an instrument and agency of control in the light of social justice, the holding company should reduce the detail work of control, but, because of the greater resistance of the larger system to external interference, the enforcement of control is rendered much more difficult. There arises a question, too, of the justification of the extremely complex organizations which have resulted from the extensive utilization of the holding company principle; wheels within wheels, entanglement of already complex problems, and development of affiliated spheres of vested interests and rights can hardly be called a progressive step. From the standpoint of the public as consumers, the lessened competition is an undesirable condition, but is reported to be largely offset by the better methods of producing and distributing developed and practiced under the holding company. Labor, as a group, possibly finds more difficulty in dealing with the combine than with the units individually. But, curse or blessing, the holding company appears to be here to stay.

QUESTIONS

1. What factors make a company a holding company?
2. Outline the general reasons for proposing or creating a holding company.
3. Indicate briefly some of the abuses of the holding company structure. Do you regard these as inherent in the device?
4. In the statement that "holding companies have been one of the most effective methods of American business combination," what is involved—costs, profits, or management?
5. Outline the general use of the holding company in the industrial field, both historically and at present.
6. What do you regard as the cause for the passing of the Holding Company Act of 1935?
7. Outline what might be regarded as the general gains in finance resulting from holding company divestment in the utility field.
8. Contrast the holding company and other legal forms of business combination, particularly as to finance and management.

PROJECTS

1. Examine the structure of Standard Oil Company of New Jersey and report on the nature of the concern as a holding company, including extent of operation and variety of interests.
2. Analyze the Alleghany Corporation as a holding company, including extent of operation, types of interests, and any financing activities in which it has engaged.

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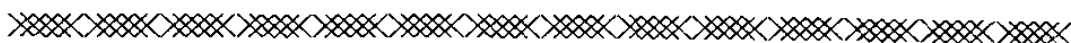
PART EIGHT



Corporate Reconstruction and Dissolution

CHAPTER XXXV

Capital Readjustments: Refinancing and Recapitalization



THE capital structures of corporations are anything but fixed. Analysis of them impresses one with their increasing variability.

From 1914 to 1919 prices rose with tremendous rapidity and great profits were easily made by many companies. Both the price changes and the large profits reacted upon capital structures. From 1919 to 1922 a period of readjustment brought capital structures back toward conservative forms. But from 1922 to 1927 new bond and stock issues were added here and there and gradually distorted many structures; from 1927 to 1930 consolidation, conversion, and refunding began a process of simplification; in the depression from 1930 to 1934 readjustments, recapitalizations, and the more serious rearrangements of financial structures under reorganizations and reconstructions were outstanding characteristics of corporate financial policy. In the period 1934 to 1940 conservative policies and structures were followed closely. The 1941-1945 period of war expansion produced large profits and increased capital needs. Since 1946 some concerns have been studying and proposing readjustments in their structures expanded under World War II. There has been an air of preparedness but there is the possibility that many concerns will not complete the effort before price changes sweep them into more drastic actions.

Voluntary changes initiated by management or the controlling security holders represent the mildest of changes. They are termed financial readjustments or recapitalizations. These changes bring the accounting more nearly into alignment with existing conditions, or prepare for a better arrangement of the capitalization.

Nature of Corporate Financial Adjustments and Recapitalizations

Financial adjustments and recapitalizations comprise a group of expedients and remedies applied to the milder financial embarrassments of corporations. It is quite as uncertain where this group of financial operations should begin as where it should end.¹

¹By some authors the distinction between what is here called corporate recapitalization and corporate reconstruction is maintained by the terms "voluntary" and "involuntary" reorganizations.

The actions involved here are those which attempt to deal with unbalanced financial structures, to reduce the fixed charges either by reducing the rate or by a shift in the type of securities outstanding, to obtain debt extensions, and to fund accumulated preferred dividends. They may involve, too, efforts to simplify a structure so as to reduce tax burdens, write off doubtful assets to "clear the decks," and segregate holdings for either better operation or possible financing plans of the future.

~ Economic Conditions Leading to Adjustment and Recapitalization

Between the corporation's financial fortunes and general business conditions exists a relatively high degree of correlation. With the rise and fall of trade and profit volume, speculative psychology swings from an overly optimistic to an unduly pessimistic point of view; accordingly, financing methods deviate from the otherwise normal types and amounts in the direction of easy stock financing at one time and toward difficult and expensive bond financing at another. For a time during prosperity, practically no one will critically examine the financial status or policy of a corporation; when depression comes along everyone will apply a financial microscope to discover even the slightest weakness or deviation from the straight and narrow path. There exists an apparent tendency to expand financial structures too much and to extend trading on the equity too much during the upswing of the cycle. A reverse tendency appears on the downturn, partly because of psychological factors and partly because of the fact that no surpluses of importance were created on the upswing. The profits cycle is essentially responsible for expansion and contraction in trading on the equity by corporate managements, while the price cycle appears responsible for the expansion and contraction of the corporation's financial size. The speculative cycle has two aspects: the qualitative and the quantitative. The former controls the type of financial structure and the financing which will be the most popular,² the latter pertains to the credit situation in general.³

If an industry is overextended it may be a good move simply to change the capital structure in conformance with the prospects of the company. The Murray Corporation in 1932 reduced its capital, among other reasons,

² Some recapitalizations of the simpler types, such as a change from par to no-par or from one stated value to another, have been primarily for the purpose of providing a satisfactory basis of new financing in a depressed security market. Thus when the American Type Founders Co. in 1932 changed its stock from \$100 par value to no-par, one of the reasons given was new financing. The New Jersey law prohibited the sale of stock at less than par, and the officials of the company were doubtful whether any new shares could be sold at or in excess of par for a long time to come. Other reasons were to write down fixed assets, receivables, and investments; to eliminate deficits already existent; to meet future losses; and "to conform to the practices of other corporations."

³ Serious economic disturbances of any kind may bring about wholesale recapitalizations of corporations. Such changes as those made by the United States Rubber Co. and Goodyear Tire and Rubber Co. in the 1930's are evidence of the economic pressures; and the United Dyewood Corp., with extensive properties in the war areas, went through important changes in 1942.

to reflect "changes in economic values due to the fact that present capacity of the automotive industry is in excess of anticipated needs."

The years 1930 to 1933 probably forced more corporations into recapitalization than any other similar period in the history of the country. Credit and capital inflation, accompanied by an era of paper prosperity, led to dangerously extended trading on the equity by the average corporation. The price decline commencing in 1929 and the disappearance of profits margins all but eliminated the shareholders as residual claimants to profits and assets. In a very real sense these recapitalizations were attempts to recover anything possible from the ruins of corporate financial fiascos. From 1935 forward there was a long gradual reclaiming of former values, and shaky structures were rebuilt. There was a special awareness of the possible dangers of serious price changes and overextended debt capitalizations.

Reasons for Reduction in Capitalizations

In adjusting their capital structures downward (mostly during depressions), corporations give many and varied reasons for the step, most of which can be classed under the following major headings: (1a) *Losses already accounted for or admitted*, whether appearing in the balance sheet or not, are the most frequent reason for corporate recapitalization. The process may be simply a transfer from the capital stock account to the surplus account, the total of the balance sheet not being affected by the recapitalization *per se*; or the transfer is made to surplus, and both surplus and deficit are then eliminated to reduce the totals of the balance sheet.⁴ (1b) *The losses may not have been realized*, but conditions of business may be such that their occurrence is imminent. (2) The second group of reasons is concerned with the reduction of charges since the *adequacy of future income* and the consequent ability either to meet fixed charges alone or to meet fixed charges and share dividends is questioned. Thus when assets are written down, depreciation charges are reduced, the effect of which, other things being equal, is an apparent increase in net revenue—at least, there is

⁴ The reduction in the capitalization of American Woolen Co. (1932) presented just this situation. "For several years the company has carried in its plant accounts numerous inactive mills and a large amount of miscellaneous real estate not needed in present operations nor likely to be required for future use. The book values of the active properties have been in many cases inconsistent to present-day valuations.

"After careful study . . . the company has taken two steps to remedy these situations. . . .

"The first step was the organization of the wholly owned subsidiary, Textile Realty Co. In it was segregated for liquidation the inactive mills and miscellaneous properties.

"As the company was without any substantial surplus at the time these book adjustments were made, this readjustment has the effect of creating a capital deficit. This is obviously undesirable and it is proposed that it be corrected by changing the present common stock, with a par value of \$100 per share, to capital stock without par value, with a stated value of \$5 per share. This involves no change in the number of shares of stock held by common shareholders, and no change in the actual value of the company's assets or the stockholder's proportional ownership therein." Quoted from *Com. and Fin. Chron.*, February 27, 1932, p. 1583.

an increase in the amount available to pay dividends. (3) The third group of reasons for the downward revision of capital structure rests upon the problem of funding and extensions to meet *existing financial requirements*. Though interest may not be involved, if the preferred stock is about to acquire voting control, and the state law prohibits the payment of dividends out of capital and money cannot be borrowed to stave off acquisition of control by the preferred, the common shares may wisely sacrifice a portion of their principal to retain control and to eliminate all questions of legality of dividend payments to the preferred. (4) The fourth reason is *the reduction of taxes* by readjustment of securities or corporate relations. (5) The fifth is *to conform with forced revaluations of properties by public utility or railroad commissions* where the valuations have been contrary to law or to the rulings of the commissions. This is a self-evident act and will not require further discussion in the chapter.

ADJUSTMENT OF VALUES—PRESENT OR PREDICTED LOSSES

Recapitalization Involving Share Exchanges

Share exchanges may operate in either of two directions. One may be a stock split, or the multiplication of the number of shares, the objective of this action being primarily to influence the extent of the possible market for the shares as discussed in Chapter IV. The reverse may be the undoing, so to speak, of the stock split, namely, the reduction of the number of shares or the reduction of par value of the shares held. This move is motivated largely by the desire to return values to the surplus account which at the moment are assigned to the stock account. The strengthening of the surplus account is for the purpose of being prepared for losses or making it possible to write out values believed to be unrealizable at the time.⁵

Unless the state law and the charter specifically permit, the capitalization cannot be altered by the management except in the matter of selling shares or other securities already authorized. When the recapitalization consists merely of treasury stock cancellation, the board of directors may have the power of cancellation, and submission to the vote of shareholders may not be required.⁶ But it is a wiser policy and a more ethical procedure to submit

⁵ In proposing the reclassification of common shares for the Electric Bond and Share Co. (1932), the president of the company, S. Z. Mitchell, stated: "The proposed reduction in the number of outstanding shares of common stock by two-thirds and the reduction of the capital represented by the outstanding common stock to \$5 per share will result in the transfer of approximately \$124,000,000 from capital to surplus. This offers a practical method of meeting the statutory question and thus removing the present doubt as to the rights of the directors to declare and permit the payment of dividends."

⁶ An allied problem arises where a corporation undertakes to buy shares in the open market to meet redemption requirements. The directors may or may not have the power to purchase treasury shares and/or retire them. In periods of depressed security prices considerable apparent surplus may be created in this manner. Of course, care should be exercised in making any such purchases, for a mistake or misjudgment of the market may prove costly. When the Virginia-Carolina Chemical Corp. offered

the question to the shareholders. It is customary to call a meeting of the shareholders, secure the proper majority, and then execute the mandate of the resolution. If a different par value, interest rate, or number of shares is to exist after the change, it is usually necessary to exchange the old certificates for new ones and to set a limited period for such an exchange. If the matter is a simple change the corporation may, in the interests of economy, elect to exchange the certificates as they are sold or transferred in the regular course of business.⁷ In order to speed up the exchange, a dividend is often declared payable on the new shares within a few days following the date set for the exchange, but no provision is made for payment of the dividend on fractional shares, or old shares.

Adjustments by Purchase of Securities

Instead of the exchange of new securities for old ones of such a nature that the capital structure would be changed, the corporation may elect to purchase shares in the open market, from private shareholders, or by tenders. This action is not motivated as a liquidation but as a step toward improvement in the proportions of the capital structure. If the corporation is in a strong cash position, or has a high ratio of working capital to total capital, the effects of such purchases may become significant to bondholders, to preferred shareholders, and to creditors.⁸ Where only common stock is purchased, the preferred shareholders and creditors may have a just cause for complaint, since the process both extends trading on the equity and takes up the liquid working capital. To protect the interests of the preferred, it is often provided that no dividends may be paid upon common shares unless ample assets remain in the company to protect the preferred shares.⁹

(1932) to buy 40,000 shares of its 7 per cent preferred stock at 75, a serious mistake was made. The invitation was for tenders of 40 per cent of the holdings of each preferred shareholder, but offerings in excess of the 40 per cent limit would be received and prorated until the total of 40,000 shares was obtained. On November 19, 1932, the day after the directors decided to make the offer, the shares were selling at 64, which would have meant a spread of eleven points between the offer and the market. The result was that a retirement of 40,000 shares would cost \$3,000,000, whereas, at the market, it would have cost the corporation only about \$2,500,000. By the end of the year the 7 per cent preferred was selling at 50. It would have been much better to have made the offer to buy at only one or two points above the market, or simply to have purchased the shares in the open market.

⁷When the United Gas Corp. (1932) reduced the stated value from \$14.91 to \$1 par, the shareholders were notified that it was unnecessary to seek an immediate exchange of certificates, and that the exchange would be effected as the shares were transferred from time to time. The same procedure was followed by the Memphis Natural Gas Co. (1932). With many thousands of certificates outstanding, substantial savings may arise from this simple arrangement.

⁸The substantial program of debt retirement executed in 1948 by the Illinois Central Railroad upon a call for tenders is a good example of a strengthening of capital structure. See p. 198.

⁹When the Aeolian Co. changed its capitalization in 1932 and redeemed one-half of its preferred with 6 per cent notes due in five years, it was provided that no dividends could be paid upon the common until after the notes were retired.

To permit the purchase of common shares, when the net assets available for the distributive satisfaction of the bonds and/or preferred shares are less than their contractual provisions, the common shares are given access to the assets before the preferred.

Whether preferred shareholders can recover any moneys so disbursed seems not to have been adjudicated. If the purchase is merely proposed, injunctions may prevent the redemption of one class of shares to the detriment of another.¹⁰ If a large proportion of the shares is to be retired and they are all of one class, no difficulty will be encountered.

Adjustments by Cancellation of Treasury Shares or Treasury-Held Bonds

Since a corporation will ordinarily not have any large proportion of its own securities in its treasury unless a deliberate policy of stock reduction or bond retirement has been followed for some time, the changes by the cancellation of treasury stock or owned bonds are likely to be small at any one time, though their persistent repetition may have a cumulative effect of no small importance. This type of change frequently arises where the corporation has been reacquiring its own shares to protect their market price; of late years, the item of the repurchase of shares sold to employees has been significant in many instances.

Relations between parent and subsidiary companies often involve what appears to be the equivalent of treasury securities. Thus the North American Light and Power, in its recapitalization of common stock from a value of \$23.59 to \$5 per share in 1932, voted to retire 108,339 shares of common stock and 8820 shares of preferred stock which had been purchased by a wholly owned subsidiary. The two items amounted to an adjustment of slightly more than \$2,000,000 in the common stock account and \$880,000 in the preferred stock account.¹¹

Accounting Effects of Recapitalization

Between the simple restatement of capital surplus, or increase or decrease in general surplus (which probably is not properly recapitalization), and the more or less complete overhauling of a dozen accounts in the balance

¹⁰ The point came up in Kidder Peabody Acceptance Corp. which had two classes of first preferred stock, A and B, both being subject to redemption at par, \$100. But Class B, at its own option, could ask to be redeemed at par on 18 months' notice. In November, 1931, the company was to redeem some of these shares, but certain Class A shareholders claimed it would be prejudicial to their interests to have liquidation under such a security market as existed at the time. The corporation in August, 1932, offered to purchase either A or B at \$40 per share in the ratio of the amount of the respective shares outstanding, or $1\frac{1}{2}$ shares of A to 1 share of B, so that the question of interclass prejudice would not be pertinent.

¹¹ Incident to a holding company simplification program the American Waterworks and Electric Co. in 1948 returned to West Penn Electric Co. the 52,411 shares of 7 per cent preferred, 300 shares of 6 per cent preferred, and all shares of Class B, and they were retired.

sheet, there are all sorts of variations. Adjustment of the common stock account is the most usual form.¹² If it is decreased, the difference will be first carried to surplus and then used as offsets for deficits, property revaluations, preferred dividends, or losses, either at once or in the future.¹³ The reduction in valuation of assets is further reflected in reduced depreciation, hence is carried to the income statement to alter the apparent income.¹⁴ If both common and preferred shares are altered by the recapitalization, the effects are amplified as far as the common is concerned. Depending upon the proportion of the decrease which is immediately transferable to surplus, the apparent income to the common shareholder is changed.

Discretion Given to Management

The recapitalization plan submitted for approval by the voting securities may be very specific in that it may provide in detail for the changes in the accounts of the company and in the control of future dividend policies, or it may be entirely general, giving every discretionary power to the manage-

¹² For this case see United States Rubber Co. action, 1938, in changing no-par shares to \$10 resulting in capital surplus of\$85,222,791
Against this figure was charged:

Write-off patents, good will	\$57,662,405	
1938 operation deficit	<u>19,678,455</u>	<u>77,340,860</u>
Balance, 1938, forward		\$ 7,881,931

¹³ The Kroger Grocery and Baking Co. provides an interesting example. In 1932, \$5,568,700 was charged off the assets as follows: (1) land and buildings, \$3,000,000; (2) leasehold improvements, \$1,568,700; (3) surplus and idle equipment, \$400,000; and (4) obsolescence on equipment, \$600,000. Of the amounts charged off, \$464,264 was taken from paid-in surplus and \$4,761,923 was taken from earned surplus. In this particular case the number of shares was not changed, all adjustments being made by the change in surplus accounts.

¹⁴ An example may clarify this proposition. Suppose a subsidiary corporation had a depreciation charge of \$200,000 per annum, was earning \$50,000 annually before preferred dividends were paid, and owned \$3,000,000 in assets, of which \$2,000,000 were fixed assets. The liability side of the balance sheet shows \$100,000 current liabilities, preferred stock of \$1,000,000, common stock of \$1,500,000, and surplus of \$400,000. Under the circumstances, the rate of earnings on the total assets would amount to 1.67 per cent; and if the preferred is entitled to a 6 per cent dividend, the company is earning only 5/6 of its preferred dividend. But let the concern be recapitalized, as many corporations were in 1932 and 1933, by reducing the common stock to \$500,000 and writing down the fixed assets from \$2,000,000 to \$1,000,000. With the same identical revenue, the depreciation charge being reduced proportionately to fixed assets from \$200,000 to \$100,000, the company now has a net income of \$150,000, which is sufficient to pay the \$60,000 preferred dividend and leave \$90,000 or 18 per cent earnings per annum on the common stock now outstanding. Moreover, the earnings now equal 7½ per cent on the total capital employed in the business, as compared to the 1.67 per cent previously earned. Thus a profitable subsidiary is made to exist where there was an unprofitable one before. The parent company could now withdraw \$90,000 per annum as "earnings" from the subsidiary concern. If the stock of the subsidiary is carried "at cost," the parent company may realize 6 per cent on its investment of \$1,500,000 originally in the common stock.

ment. Practically all recapitalization plans state the changes in the capital stock accounts proper, but beyond that permit more or less discretion. In favor of the wide discretion practice it is argued (1) that the uncertainties prevent the exact effects from being known at once; (2) that the causes are often anticipated, hence results cannot be accurately estimated; and (3) that discretion is needed to prevent further trouble. Opposed to the wide discretion are the arguments: (1) that the management can cover up all sorts of mistakes; (2) that past discretion has probably been abused; and (3) that it is not sound business to remove all control over the management.

Simple Adjustments to Surplus

Cases of simple adjustments to surplus extend from ordinary financial operations to financial adjustments arising from embarrassments. They are usually brought about by charging extraordinary write-downs against existing surplus which has arisen from paid-in investment, earnings, or past revaluations.¹⁵ The immediate effect is to reduce the common-share equity protection to prior liens; the ultimate effect may include material improvement in the apparent income of the company. Depreciation charges are at once reduced, and where these average 8 per cent or even more on the values written off, substantial income changes will result.

Adjustments Involving Common Shares and Surplus

Financial adjustments and recapitalizations involving only common shares are made so that management may utilize a write-down of the common shares to fortify itself for the future. Some of the values which are eliminated may materially improve the appearance of the income statement. When preferred shares or bonds are outstanding, the problem of control is always present, since defaults in interest and preferred share dividends will almost invariably result in a transfer of control.¹⁶

The extent to which the adjustment may affect the common shares varies with the individual case. Sometimes it is so drastic as practically to annihilate the common share capital equity; sometimes it is so slight that the results

¹⁵ Thus the Kroger Grocery and Baking Co. charged off \$5,568,700 in 1932 from earned and paid-in surplus to offset decreased asset values in land and buildings, leasehold improvements, and surplus and idle equipment, and to provide for obsolescence of equipment.

Other cases of considerable note are those of the American Smelting and Refining Co., a write-off of \$43,000,000 on intangibles in 1935; United States Steel Corp., a write-off of \$260,368,521 for the same account in 1938; and the write-off by United States Rubber Co. of \$57,622,445 in 1938.

¹⁶ Since only receivership or bankruptcy proceedings will remove control from the hands of the common stock when current creditors only seek an adjustment of affairs, discussion of this point comes in the chapters on reorganization and reconstruction. However, pressure by bankers and creditors not infrequently practically removes control from the common shares, or at least limits their control by means of having an official representative of the creditors installed somewhere in the corporation.

scarcely disturb the financial structure at all.¹⁷ Some companies have simply reversed previous stock dividends.¹⁸

The adjustments to the common stock account may be summarized as a reduction in the stated capital either by (1) reducing the par value, the number of shares remaining the same; (2) reducing the number of shares, the par value being unchanged; (3) replacing par value shares with no-par shares of a lower stated value; (4) restating the stated value of no-par shares; or (5) some combination of the first four methods.

Adjustments Involving Common and Preferred Shares

Adjustments to the capital structure involving both common and preferred shares are much less frequent than those involving only common shares.¹⁹ Moreover, the sacrifice which is made by the preferred shareholder in the average case is much less than that made by the common shareholder.²⁰ If the change is solely for the purposes of permitting the continua-

¹⁷ An example of a drastic write-down was the American Home Products Co. (1933), which wrote its common stock from \$17,832,923 to \$672,000, thus carrying to surplus \$17,160,000. Another drastic write-down was in the New York Shipbuilding Corp., which (1932) reduced its participating stock and founders' stock from \$12,135,298 to \$530,000, carrying \$11,605,298 to reserves which were to be used to adjust the book value of securities, to write down the value of fixed properties, and to lower depreciation charges.

¹⁸ Another reversal of stock dividends occurred in the Simmons Co. (1932), when capital was reduced from \$25,746,785 to \$5,666,180, "restoring to earned surplus the sums previously transferred from earned surplus account to capital account in connection with the issue of certain stock dividends in the nature of split-ups, and transferring the balance to capital surplus." It is difficult to understand how stock split-ups had been able to affect relations between the surplus accounts and the capital stock account.

¹⁹ Classified common stocks are included in the category of preferred if they are in a prior position with respect to earnings.

²⁰ Thus when the Autosales Corp. was recapitalized in 1932, the preferred was traded for common, share for share, while five of the old common shares were given for one share of the new common. The same situation obtained in the Agfa Ansco Corp. (1932) when each share of preferred received four shares of new common and each share of old common received one-eighth share of new common.

The National Cash Register Co. (1933) provides a very complex recapitalization plan which may be briefly summarized: (1) reduce stated value of Common A and Common B from \$42,213,335 to \$24,420,000; (2) create a surplus of \$17,793,335; (3) write off assets and operating deficit to leave an earned surplus of \$4,962,891 and a capital surplus of \$5,506,239; (4) issue a 20 per cent stock dividend of 238,000 shares to Class A shareholders; (5) exchange 400,000 shares of Class B stock for 200,000 shares of Class C common stock, a new stock created by the recapitalization; (6) when all Class B had been exchanged for Class C, both Class A and Class C were to become identical in every respect. Previously the Class B holders had held a right to elect a majority of directors except under specified conditions of default or low earnings. There was an arrearage of \$5,891,250 in back dividends on the Class A shares at the time. In this case the Common B sacrificed their ultimate rights to receive earnings to the extent of one-half and their controlling election powers for a right to receive dividends without having to wait until the arrearages on the Class A were made up. Since there

tion of cumulative preferred dividends, there may be no real sacrifice as far as the common is concerned, since the payments are a mere question of time and provision for them is a problem of the common shares retaining control. Control is sometimes exercised by very minute equities after the revaluation of the common, and the revaluation of the preferred may even matters up a bit.

In all cases, there is a compromise between present benefits and future safety. The limit to which stock and surplus reduction should occur without bonds and preferred having a moral, if not a contractual, right to be consulted may be determined by the extent to which in the past the shares have reinvested earnings which at the time could have been withdrawn. That is, past stock dividends plus present surplus comprise the measure of permissible deflation by a recapitalization of the proprietorship accounts.

For the most part, dissenters to a reclassification of preferred shares which alters their preferential rights are limited to the exercise of their voting power. In a few states, some rather indefinite statutes give them relief by the alternative of cash at an appraisal price. Since the statutes fail to define what constitutes alteration of their preferential rights and the courts have apparently deduced no general rules, the whole situation is most unsatisfactory.²¹

REDUCTION OF CHARGES

As a part of the movement in market rates on securities, especially on the downward side, or because some reduction is necessary to prevent an oncoming failure, many a corporation will seek to lower the charges of its capital structure. These changes may be constituted in interest charges or in prior dividend payments on the preferred stocks of the company.

Debts

Exchange offers may be made by corporations in the midst of a favorable market in order to reduce interest charges, the implication often being that unless the exchange is successful the issue will be refunded in the ordinary way by selling a new issue and redeeming the outstanding security. *Pacific Power and Light Company* and *Texas Power and Light Company* both

were no stipulations as to when and how the arrearages would be made up, it is probable that the Class A actually received a 20 per cent stock dividend for their past *accumulated dividends*.

²¹ Only three cases have come to the attention of the authors: *Dresser v. Donner Steel Co.*, 247 N.Y. 553 (1928); *In re International Superpower Corporation*, 236 N.Y. App. Div. 843 (1932); and *Silberkraus v. Schaffer Stores Co.*, 250 N.Y. 242 (1929). It seems that a mere change in the stated value of no-par shares will not result in an alteration of preference rights, but beyond this point there is only uncertainty. If the statutes of the state permit the payment of dividends from surplus created through a change in the stated value of no-par shares, it would appear that the payment of dividends from any such source would, in fact, alter the contractual position of the respective classes of outstanding securities.

proposed to their parent company, American Power and Light Company, to exchange its holdings of bonds in those companies for new issues of the subsidiaries. American Power and Light Company, holding \$4,900,000 of First Mortgage Bonds 4¾ Per Cent Series, due 1965, of Texas Power and Light Company, exchanged these bonds for a like principal amount of the new issue of First Mortgage Bonds, 2¾ Per Cent Series, due 1975, of the subsidiary. Pacific Power and Light Company allowed the parent company to exchange \$2,100,000 of 4½ per cent assumed debentures, due 1959, for a like principal amount of First Mortgage Bonds, 3¼ Per Cent Series, due 1977, of Pacific Power and Light Company.

Under the special provisions of Chapter XV of the Bankruptcy Act, re-adjustment proposals have been made by railroads, and upon the acceptance of 60 per cent of the affected claims the corporation may ask the court to order the plan effective as against all the holders of the claims.²² The adjustment may cover either rates of interest or maturity dates, or both. This procedure is not a fully voluntary one, but on the other hand is not a formal reorganization.²³

Preferred Stocks

In the favorable period of the 1945-1948 market, many corporations of all degrees of financial strength have reduced the dividend rates on their preferred stocks. A few of these changes are indicated in Table 76, which shows the extent of the shift involved and to what extent the corporation offered any inducement. In most instances, the cash represents the call premium of the old instrument. In only two of the cases did the companies ignore this potential value for the stockholder and offer the exchange as a

²² This provision is again effective in 1948, since its lapse in 1945, the Mahaffie Bill having been approved April 9, 1948. The Interstate Commerce Commission had this to say in its 1947 report on the particular matter:

"Observation and experience with equity and bankruptcy reorganizations have convinced us that lawful means for preventing their occurrence whenever possible should be provided by further legislation. Other students and observers concur in this view. Individual railroads will become insolvent in the future as a consequence of loss of traffic, because of the exhaustion of its resources or competition. . . . For such cases the equity and bankruptcy proceedings alone can apply the necessary thorough-going remedy. On the other hand, the approach of financial hardship may be anticipated by the management in many instances in advance of the time when litigation becomes necessary. In such circumstances, sound policy calls for procedure that will afford opportunity for free negotiation between the railroads and their security holders with a view to avoiding insolvency. We believe that the desired procedure may be prescribed by extending our authority over the issue, alteration and modification of obligations of railroads that are able to reach agreements with the holders of three-fourths or more in amount of obligations to be altered or modified. By such legislation the threat of impending financial crisis would be removed without litigation."—Interstate Commerce Commission *Annual Report*, 1947, p. 26.

²³ The Baltimore and Ohio Railroad and Lehigh Valley Railroad adjustments are two of the more important actions taken under this provision.

TABLE 76. ADJUSTMENTS OF PREFERRED STOCK DIVIDEND RATES

Company	Rate Old Stock	Rate New Stock	Ratio	Cash Payment
Carpenter Paper Company	6%	4½%	1 to 1	adjusted dividend
Cudahy Packing Company	6% } 7% }	4½%	1 to 1 1 to 1	\$ 3.00 \$ 8.50
General Cable Company	7%	4%	1 to 1	\$12.50
Kentucky Utilities Company				
\$100 Par	6% }	4¾%	1 to 1	\$10.00
\$ 50 Par-Jr. Pref.	7% }		2 to 1	\$ 5.00
Public Service Company of Colorado	7% } 6% } 5% }	4¼%	1 to 1 1 to 1 1 to 1	\$10.00 \$ 6.00 \$ 7.00
Seiberling Rubber Company	5%	4½%	2 to 1	\$ 5.48
Southwestern Public Service Company	4¾%	4.15%	1 to 1	adjusted dividend
Union Electric Company of Missouri	\$5.00	\$3.50	1 to 1	\$ 3.00
Westvaco Chlorine Products Corporation	\$4.50 } \$4.25 }	\$3.75	1 to 1.08 1 to 1.05	none

direct reduction of dividend rates. The most noticeable fact revealed by the material in Table 77 is the general sharp reduction of rates, the average saving amounting to better than 2 per cent.

FUNDING AND EXTENSIONS

Debts

The movement of short-term notes into long-term debt or stocks is usually a financial gain, not always in the rate of interest paid but in the certainty of a maturity sufficiently postponed so that earnings can meet it.²⁴ An example of these efforts to reshape capital plans is shown by the Florida Power and Light Company, which in 1947 issued 4½ per cent preferred stock for the purpose of paying off at par the company's promissory notes in the amount of \$4,750,000 and also to provide additional plant production. Other companies issuing preferred stock for similar purposes are Allied Stores Corporation, which issued 200,000 shares (1945) of 4½ per cent cumulative preferred stock to retire all funded debt and to redeem and re-

²⁴ The Lambert Co. shows a funding of its current notes in 1947 to a 5-year serial bank note, together with an additional amount for working capital, making a total of \$2,500,000.

tire all 5 per cent preferred stock outstanding; Tubize Rayon Corporation (1944), which issued 100,000 shares of $4\frac{1}{4}$ per cent cumulative preferred stock in order to retire \$2,450,000 of $3\frac{1}{2}$ per cent sinking fund debentures and to redeem all of the outstanding 7 per cent preferred stock; and Securities Acceptance Corporation (1945), which issued 5 per cent cumulative preferred stock, the net proceeds to be used for the retirement of 30,000 shares of 6 per cent preferred stock and for the reduction of obligations maturing within one year. Instances in which short-term notes have been replaced by long-term debt are illustrated by the Philadelphia Electric Company's $2\frac{3}{4}$ per cent first and refunding mortgage bonds issued for the purpose of retiring 18 million dollars of $1\frac{1}{2}$ per cent promissory notes and of financing new construction; and by the Central Maine Power Company's $3\frac{1}{4}$ per cent first and general mortgage bonds, Series P, the net proceeds of which were to be used to pay outstanding bank indebtedness.

In the 1945-1948 period this action has sometimes been reversed, where commercial banks have offered to take serial notes of five to ten years in maturity at very low interest rates. The corporations have in some instances called their bonds and replaced them with the bank notes.²⁵

TABLE 77. REFINANCING PROPOSALS FOR PREFERRED STOCKS

Company	Year	Previous Stock Interest		Exchange Offer	
		Rate	Cumulation	Stock	Cash
American Chain Company	1936	7%	\$22.75	$1\frac{1}{4}$ share 5%	.....
Bethlehem Steel Corporation	1936	7%	\$21.00	5% share for share	\$ 1.00
H. C. Bohack	1948	7%	\$32.50	1.4 share $5\frac{1}{2}$ %	
Booth Fisheries Corporation	1943	6%	\$32.00	1 share 6% preferred $\frac{1}{4}$ share common	\$23.50
Certain-teed Products Corporation	1936	7%	\$57.95	1.7% share prior pref. 6% or 1 share prior pref. and 5 common	.....
Goodyear Tire & Rubber Company	1937	7%	\$11.25	1 share 5% and $\frac{1}{3}$ share common prior cum. pref.	..... \$7.50
United Piece Dye Works	1948	$6\frac{1}{2}$ %	\$92.62	1 share $4\frac{1}{4}$ % pref. and 9 shares new common	.....

²⁵ See Curtiss Publishing Co. in the calling of its 3 per cent debentures and replacement of a portion with notes payable, banks, 1949-1952, as reported for 1947.

Electric Auto-lite replaced its $2\frac{1}{2}$ per cent debentures with notes payable in 1946, and increased the amount of the borrowing by \$18,000,000.

Preferred Stock

Many preferred stock issues with accumulations of dividends are a heavy weight upon a corporation, particularly in planning its future financial structure. So long as these accumulations are not cleared, the use of stocks as a source of additional capital is closed. Reliance upon debts is known to be dangerous yet can hardly be avoided in this situation. In Table 77 are listed a few of the refinancing proposals for preferred stocks which will indicate the typical pattern for action. In each instance the new preferred stock carries a lowered rate of dividend, and usually the cumulation is settled with an added stock interest. The relatively small number of cash payments coupled with the offerings is of interest in indicating how cooperative the stockholders seem to be. In about half of the cases an issue of common stock was offered for a portion of the original claim, this being the only way in which any participation in subsequent earnings may be secured if the adjustment is followed by great success. Without some grant of this form of stock the sacrifice of the preferred stock can only be recovered in the restoration of market values for the investment. This will not in every instance return the original investment and the earnings which have been foregone, especially if the stock was purchased at or near par.

REDUCTION OF TAXES

Some adjustments in the securities of a corporation may be motivated by the important influence they will have on the taxes paid. Most considerations of this type will arise from the federal income tax burden, but such matters as the capital stock taxes assessed by the states are worth attention.

Franchise and capital stock taxes are known to have been considerations in the action of the United Stores Corporation, which reduced its authorized shares to the amount outstanding.²⁶ Prior to listing its shares Royal Typewriter Company, Inc., changed its no-par to a \$1 par stock, and a number of corporations have been doing likewise in recent years.

Armour and Company of Delaware proposed in 1943 to exchange its 7 per cent preferred stock for a cumulative income debenture at 7 per cent, since the interest payment was deductible under the income tax stipulations but the preferred dividend was not. The instruments from the standpoint of the investor were almost identical as to the certainty of their payments. A move to take advantage of a similar factor was the exchange proposed by Western Union Telegraph in 1944 to give its bonds for the stocks of certain leased properties, thus having the interest on the bonds qualify as a reduction whereas the rentals were not so regarded. The motive was of this same character in the exchange of bonds by the Delaware, Lackawanna and Western Railroad for the stocks of the leased line roads, chiefly in the Morris and Essex group, which are a part of its system.

²⁶ For example, when the Central States Electric Corp. changed from no-par to \$1 par value (1932), the chief incentive was the reduction in franchise and transfer taxes. It must not be forgotten that other effects might have come from the change.

QUESTIONS

1. What are the principal objectives in undertaking a recapitalization for a business?
2. Outline the general methods which may be used for recapitalization.
3. Why does a recapitalization plan ever allow the management to determine the final adjustments? State your opinion on such a proposal where the stock is widely held.
4. Explain why many recapitalization proposals are made in the period of prosperity. Are such proposals induced by approaching insolvency or for other reasons?
5. Name some of the tax problems which arise from a severe write-down of assets and recapitalization. How may the company apparently find tax advantages in such a step?

PROJECTS

1. Examine the recapitalization proposals of Guantanamo Sugar Company, Globe-Warnicke, and Brown-Forman Company in 1948 and determine the change in (a) book values and (b) earnings per common share as the result of the proposals.
2. Prepare a two-year tabulation of recapitalization reduction proposals, one series at a cycle peak and the second series in the depression phase, as a test of the theory that prosperity should bring the greatest number of recapitalizations.

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CHAPTER XXXVI

Failure: Causes and Voluntary Reorganization



IT IS said that upwards of fifty thousand new corporations are chartered annually in the United States, and yet the total number of companies in existence from year to year shows a much smaller increase. The difference is represented by those corporations which fail in the economic struggle.

The Social Value of Analyzing Business Failures

The continued annual entrance and exit of thousands of businesses keeps the nation's economic structure in a state of dynamic flux. It provides the outward evidence of the workings of that inscrutable governor of economic activity, competition. The continued failure, year after year, of these thousands of businesses, some small and some large, causes no small amount of unemployment, makes for technological inefficiency in labor, and increases the uncertainty of a job for a large proportion of the laboring population. Purchasers of durable goods find the service life of their purchase reduced because of their inability to secure repairs and through lack of public good will toward the goods; resale values, if desired, are greatly reduced; liquidity is lowered.

Financial Difficulties of Corporations

Just as one may consider the disabilities of mankind from several points of view, so, too, may those of corporations be classified and studied in various ways. These financial difficulties may appear in a variety of forms, and may stem from a wide assortment of causes. The extensive character of the maladjustment is pictured in Table 6 (supra, p. 15), which reports the liabilities annually becoming involved in failures.¹ As a percentage of total investment in business, this showing indicates the ever present risk for business and its financial soundness.

From the accounting standpoint the financial ailments of corporations may be viewed as to the money value relations between assets and liabilities. Four stages of failing conditions are recognized: (1) *Financial embarrassment* arises when the cash and revenues, including current borrowing, are just barely able to meet the company's disbursement requirements. (2) *Financial insolvency* is but a step removed from financial embarrassment.

¹ Financial institutions are not included.

In this condition the corporation is unable to meet immediately maturing liabilities, either because of their size or because of the sudden depletion of the cash fund and an exhaustion of credit lines.² (3) *Total insolvency*, the third degree of financial debility, means that there is an excess of total debts over total assets. It may, and frequently does, happen that the company has sufficient funds to meet current requirements.³ (4) *Confirmed insolvency*, or *legally determined insolvency*, is a condition in which court authority has determined that total insolvency actually exists.

The Causes of Business Failure

In the gamut of business failures may be found every form of malpractice, crime, and economic error devisable by the human intellect. Some are rare and some are common. The discussion here will follow a modified form of the classical outline of business failures as given by Dun and Bradstreet's.⁴

²The term "insolvent" as applied to corporations has no well-defined and accurate meaning. Ordinarily one of two definitions will be used: (1) insufficient assets to meet liabilities or (2) inability to meet maturing liabilities. *C. Griffin v. State*, 142 Ga. 636 (1914); *Schmirz v. Wisconsin Soap Mfg. Co.*, 204 Wisc. 149 (1931).

The Railroad Reorganization Act (Sect. 77 of the Amendments to the Bankruptcy Act, 1933, and subsequently, Chapter X) specifically defines insolvency to mean inability to meet maturing obligations.

³Some critics averred that most of the insurance companies of the United States were actually insolvent during 1932 and 1933 when security prices were so severely depressed. Whatever the truth of the situation might have been in the individual company, there can be little doubt that the currently low prices of securities might have given an abnormal picture of the business.

⁴Probably the most widely known compilations of business failures and insolvencies are those of Dun and Bradstreet. They use the following outline of the causes of business failures:

A. External causes

1. Undue competition (unable to stand sudden or unscrupulous competition)
2. Specific conditions or unfavorable circumstances (floods, fires, unseasonable weather, trade depression)
3. Complication of indebtedness (owing to failure of apparent solvent debtor or endorsing for others)

B. Internal, non-culpable causes

1. Incompetence (lacking in judgment, consideration, tact, or general ability)
2. Inexperience (having possibly good qualifications, but without sufficient experience in the particular business engaged in to conduct it successfully)
3. Undertaking too much business for capital employed
4. Granting credits recklessly or without proper consideration

C. Internal, culpable causes

1. Personal extravagance
2. Neglect of business, doubtful habits
3. Speculation outside of legitimate business
4. Fraudulent disposition (protection of individual interests, without regard to rights of creditors)

The student of business failures should early try to differentiate between external and internal causes of failure.

As has been pointed out many times, to determine the specific cause which has precipitated the failure of the business may not be to determine the contributive forces.

The immediate cause of business failure may be quite different from the contributing causes. By definition, a business fails when it cannot pay its debts, so that the immediate cause of failure is almost always an insufficiency brought on by deflation of working funds. The real failure, that is, the conditions which inevitably would terminate in recognized failure, was predetermined long before, perhaps at the inception of the business. Unfavorable external forces are especially deceptive since they may be counterbalanced by internal efficiency for a number of years, for a business may continue for some time, apparently successful, though actually slowly disintegrating. Obversely, adverse external factors may uncover internal weakness much more quickly than it would otherwise be discovered. But extremely favorable external conditions, coupled with fortuitous economic conditions, may mislead many shareholders and even the management itself.

Competition

Higher costs, wastage, inefficiency, secret processes, patent controls, and substitute goods are common sources of financial trouble,⁵ and are usually covered by the general term "competition." Unscrupulous rivalry and destructive competition are occasionally encountered. Competition from foreign producers with lower wage standards is likely to prove particularly devastating since relief can be secured only through slow political operations of altering tariff rates. Abusive, unfair, and destructive competition is supposed to be relieved through appeal to the Federal Trade Commission. As an element in embarrassment and failure, competition is most commonly encountered in young businesses which are attempting to find their place in the world, and in businesses which have been operating successfully for a sufficient time to induce laxity in the management.

A business may be slowly undermined over a period of years through undue competition, though its specific cause of failure may be a flood.

There have been many analyses made of the failures in the railroad corporations. The following are mentioned: (1) Simon Sterne (1890 and 1894) thought railroad failures were due to: (a) too high fixed charges; (b) lack of maintenance; (c) slow development of country (applicable to early failures only); (d) poor management. (2) W. Z. Ripley, in 1915 and again in *Main Street and Wall Street* (1927), laid down the following factors as most important: (a) overcapitalization; (b) overexpansion; (c) internal dissension; (d) management manipulation; (e) lack of stockholder and bondholder interest in corporate affairs; and (f) improper accounting. Theodore Prince, writing in 1916 (19 *Moody's Magazine*, 409), gave a selective combination of the above. In the recent depression and resultant large and numerous railroad failures a slightly different set of causes was usually given, to wit: (1) competition from truck, auto, airplane, and boat; (2) over-bonded financial structures; (3) too low earnings and resultant surpluses in good times because of the *Transportation Act of 1920*; (4) falling off of total traffic volume; and (5) too high maintenance costs.

⁵ Among textbook writers a difference of opinion exists as to whether competition is a cause of failure or whether lack of ability to compete is the cause. Cf. H. E. Hoagland, *Corporation Finance*, 3rd ed., p. 722. The practical businessman regards inability to meet competition which develops or exists as a cause of failure irrespective of what textbook writers may say on the subject.

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It is usually conceded by students of business that, within limits, competition is a desirable condition, for it makes for higher efficiency, better service, better goods, and lower prices. But when competition becomes so keen that even the most efficient sell below cost, it negates its usefulness and destroys that which it would regulate.⁶ It must be recorded that severe competition may result in the combination of the competing concerns to eliminate the competition instead of the elimination of the weaker concerns by financial failure.

Complications Growing Out of Financial Relations

The more precisely the economic structure is poised and balanced, the more easily it is disturbed. As competition has become keener, the margins of operations have been narrowed, and the conservation of working capital has come to depend not only upon the conduct of the individual business but also upon the conduct of other businesses and whether they live up to their contracts. If a corporation depends upon one or two other corporations for an outlet for its services and products, the financial fortunes of that company will be inextricably bound up with the success or failure of the market companies. They may be apparently sound, but their failure is almost certain to mean failure of the original company. Likewise, where one company has guaranteed great quantities of bonds, notes, and shares of other corporations, the inability of those concerns to meet their own interest and capital requirements may seriously embarrass the guaranteeing company.

Unprofitable Expansion

Overly optimistic expansion more frequently leads to financial difficulties among American than among European corporations. Here the common worship of size, apparent wealth, and power which goes with such control has many times tempted the executives of our corporations into unprofitable expansion. The desire for acclaim, coupled with a confusion of gross and net revenues, and a traditional form of enterprise in which financial stability

⁶ The effects of competition upon various types of business are quite different; hence the degree to which one may attribute "business failure" to too much competition may be questioned on occasion. A business whose capital assets are irretrievably dedicated to a fixed operation will suffer *more than one whose assets are not so congealed*. Thus, a million dollars in a new hydroelectric dam will be more imperiled by new and more intense competition than the same million dollars in a portfolio of commercial paper. Irrespective of how much the owners or the management might desire to withdraw from the hydroelectric plant, they could not eliminate the discounted effects of their adverse competitive position; in the commercial paper company, they could liquidate with practically no loss. Most public service corporations would not be allowed to abandon service and liquidate, though where competition is the cause of financial embarrassment forced continuance by reason of "public convenience and necessity" could scarcely be argued. In either event, alertness on the part of the management will play an important role.

permits large borrowing capacity, is the will-o'-the-wisp which leads many astray from sound operations.⁷

Failure Due to Operation of the Law of Diminishing Returns and to Exhaustion of Resources

Operation of the law of diminishing returns is sometimes remarkably sudden in the way it affects a business. Extractive industries are often particularly affected in production costs, while in most industrial businesses *distribution expenses increase very rapidly as output increases*. Any business dependent upon a limited land area must give particular attention to the effects of this inexorable law.

The law of diminishing returns operates somewhat differently in the individual concern and in the *individual industry*. In the first instance, rising costs of production per unit of output operate gradually to eliminate any margin of profits and to destroy the power of the concern to compete. Whereas it may sometimes occur that relative prices are the element which eliminates the margins between cost and selling prices, it is more often that diminishing supplies of raw materials, the forced utilization of a poorer quality of raw materials, or the *added expense of procuring raw materials from a greater distance or from deeper in the earth* will be the primal conditions. The reason for the failure of an oil concern may not be management, capital, labor, or market, but simply the *exhaustion of the crude oil deposits*.

Directly stated, the law of diminishing returns is operating in any business as soon as the percentage return on the gross capital employed declines because of the increasing size of the enterprise. That is, if one year the business yields 8 per cent on \$1,000,000, and the next year, assuming general business conditions have remained the same, it yields a return of 7.5 per cent on \$1,500,000, the law of diminishing returns, as far as capital is concerned, is operating. This proposition or principle is always true, sooner or later, in every business, and in every industry as a whole. The way in which the return to capital is affected varies much; sometimes the rate of return declines precipitously; sometimes it decreases by almost imperceptible gradations.

Excess Fixed Charges

In heavily bonded structures, or those with high preferred stock ratios, fixed charges always present a problem because of the diminished earnings

⁷ Unprofitable expansion affects a business in two ways, depending somewhat upon how the expansion occurs. If it occurs by the acquisition of other corporations, i.e., through merger or consolidation, the danger arises from two causes: (1) the precision of accounting and the risk of *acquiring an unprofitable company* which appears to be profitable, and (2) the acquisition of a company known to be somewhat low in profits and which, owing to an erroneous estimate of the advantages of combination and new management, proves impossible to develop into a profitable unit. Where expansion occurs by growth or by lease acquisition, the danger arises from an extension into the area where the law of diminishing returns is operating.

in a depression. Even a moderately indebted company will encounter embarrassments because of a violently unstable business volume. In fact, the probable danger from excess capital charges is always a function of the stability index and the number of times (on the average) fixed charges are earned. See the discussion in Chapter XV on the policies of interest coverage for different types of companies.

Incompetence

Incompetence is a catchall, so to speak, for almost anything and everything pertaining to the management. It embraces those general conditions which are described as "psychological" in nature, though economic in effect. To simplify the discussion, the items included thereunder are divided into two groups: (1) incompetence in management in other departments than those concerned with finances; (2) incompetence in the financial departments.

Non-Financial Incompetence. Incompetence in the non-financial departments may mean inadequate revenues because of poor sales promotion and advertising, or inefficiency in the sales organization by reason of lack of leadership, incentives, controls, or organization. The effects of such conditions reverberate through the production departments, resulting in intermittent and irregular production, lack of coordination of production to sales quotas and plans, poor quality of product, irregularity of production, labor difficulties, poor raw materials, and a host of other conditions unfavorable to a smoothly operating production and distribution organization.

Financial Incompetence. The financial management may have encountered difficulties on several points. The first of these is *overcapitalization* arising from overly optimistic promotion. But poor financing by the sale of the wrong type of security or of securities for unprofitable expansion, or the poor timing of security offerings, can easily bring results equally bad. Though the social evils of *overcapitalization* be ignored, such a state in a corporation's capital structure imperils its success at all times. Bonds and preferred stocks in excess will mean too heavy a burden of fixed charges,⁸ but too many shares of common stock will also be a danger, for it will tempt those in charge of the dividend policy to pay too much in dividends and/or to try to maintain a dividend which should be suspended. Secondly, the financial management must usually accept the blame for *grotesque capital structures*. The promoter who begins the financial history of the company as often as not has laid down terms and conditions which ultimately define these structures. The financial management may have permitted an *excessive*

⁸ Despite the great periods of the reorganization of railroads in 1873 and 1893, in 1934 the capital structures of many transportation companies were as grotesquely awry with bonds, preferred stocks, and leases as ever. In fact, there is much evidence to the effect that railroad reorganizations have actually added to the lopsidedness of these financial structures. The usual situation in a reorganization is that previously outstanding securities make it impossible to sell anything but bonds.

floating or short-term debt to be built up. The use of short-term credit to acquire fixed assets is permissible if it is possible to refinance with stocks or bonds when the proper time comes. But there is always the chance that these matters may not turn out as planned; therefore, all such short-term financing should provide for or include a plan of refunding. Sometimes inertia regarding fixed financing is about the only excuse which can be offered. A poorly timed refunding campaign will sometimes create a similar situation.

In planning the financial expansion of the business, especially at a time of easy credit and good business, it is easy to forget the question of added working capital. For a time after the expansion it may be easy to secure added credit, but the least disturbance in financial and trade conditions will show the sensitivity of the business to such changes. A temporary lack of ample working capital in expansion may be overcome through higher turnover of existing working capital without current borrowing. However, a slight slowing of collections or a movement to increase the length of the credit term will quickly congeal so large a proportion of the relatively small supply of working capital that serious effects will be felt. Incompetence and carelessness in the credit department will work havoc upon a corporation which has expanded on a minimum of working capital, but will have only a mild effect upon a concern with ample working capital. The lack of ample banking facilities, especially in a depressed securities market, can result in the most serious financial embarrassment.¹⁰ An unusually high interest rate on currently borrowed working capital, or a generally high cost of working capital, may reasonably be expected to cause the management to reduce working capital to a minimum. But these measures of economy can prove to be the very cause of financial difficulty because of the dangerous effect of a small working capital fund.¹¹

Financial management may pursue an *unwise dividend policy*. Not only is

⁹ Professor A. S. Dewing (*Financial Policy of Corporations*, 4th ed., pp. 805-806) denies the validity of the argument of inadequate working capital as a cause of business failure. It would seem to the authors that he has imputed entirely too much to his four "fundamental" causes, and that he fails to recognize the imperative requirements of working capital as well as the perils to which it is exposed. It does appear that true working capital deficiency cannot be charged with the failure of any large percentage of big businesses, but among small enterprises and among new concerns its frequency is great.

¹⁰ In 1930-1933, when so many banks were closing their doors, corporations found themselves confronted with serious problems in some instances where there was no other bank available to supply working capital. Even if there was another bank, because of its lack of experience with the account it might reduce the credit line by a considerable percentage.

¹¹ It is to be observed that the relatively weak financial condition is not likely to remain a commercial secret. The reports on failures for 1931 showed that 94.5 per cent of the firms failing during the year had a very moderate or no credit rating, 4.8 per cent had a good credit standing, while but 0.7 per cent was rated as having a very good credit or a higher standing. When the liabilities are analyzed, much the same picture is found, for 87.4 per cent of the failures had capital of less than \$5000 and 75.5 per cent had total liabilities of less than \$20,000.

the form of the dividend important, but the amount of the dividends, both absolute and relative to earnings, is made a target for attack. When cash dividends only are paid for a number of years, the working capital fund will certainly be exhausted unless the net collected revenue covers them. Borrowing to meet cash dividends is proper only on condition that the future liquidity of working capital is assured. This exhaustion of working capital should be more probable in a corporation which has traded extensively on the equity of the shareholders, but such statistical evidence as is available seems not to indicate any generally greater difficulty because of unwise dividends when the shareholders supply practically all of the capital employed than when they are marginal owners only. The payment of unrealized profits in cash dividends is especially common.

The loss of working capital by inept management may produce another sort of problem. Working capital debility may arise from inadequacy, from depletion through loss on operations in which the income is less than direct expenses, through improper dividend charges, prolonged payment of interest without a net income, damage suits, court judgment, extraordinary repairs, or poor collections. As opposed to depletion, *per se*, the same material effects are often the result of the curtailment or withdrawal of bank or trade credit lines or of temporary financing through long-term borrowing. A third group of factors affecting the working capital is represented by those forces which lead to the transformation of working capital into fixed assets or fixed capital. Deficient fixed capital may exert so great a pressure to expand that the working capital transformation appears to be the sole solution; or, because of poor financial planning, insufficient fixed capital may have been obtained in the first place. Poor financial management usually employs the fixed capital at a low efficiency. Fixed capital probably offers more difficulties by reason of its redundancy than by reason of its inadequacy. As a result, slow turnover of total capital, low profits margins, and high ratios of fixed charges to earnings become dangerous, especially if the revenues are but fairly stable and competition is keen. Poor financing plans may place too many restrictions in the way of new financing, hence prevent accretions to fixed capital on the best terms when there arises need for expansion.

Financial management frequently makes *inadequate provision* for (1) *fixed asset maintenance* or (2) *fixed asset replacement through depreciation and obsolescence*. The first of these difficulties may come relatively soon after the injury to the company for the operating efficiency may be impaired. The second difficulty is more subtle and can be discovered only through the expensive process of reappraisal and evaluation at intervals, or by waiting until the exhaustion of the service life of the assets. Needless to add, the more uncertain the ability of anyone to check up on the financial management, the greater the probabilities that the method will be employed and its effects will remain undiscovered until irreparable damage to the financial structure has been done.

Closely related to depreciation and its related problems is the misapplication of values arising from appreciation. With rising prices the assets of the corporation are frequently written up; the write-up, instead of being placed in a special surplus account not available for dividends and interest, is put into the general surplus. Then stock dividends, cash dividends, bond interest, preferred dividends, sinking funds, and all sorts of charges are met therefrom. Operating losses may be charged against apparent increases in asset value, with the effect of keeping a dying business in operation at a real loss. When, a few years later, the price level returns to its former position, the company discovers no inconsiderable difficulty confronting it. The usual thing is to seek a common stock readjustment and then pay dividends all over again, the payments being derived from the surplus created by the readjustment.

Failures and the Business Cycle

The fortunes of business are inextricably interwoven with the sweep of the great economic tides which are characterized as business cycles. The disturbances set up by price undulations, by waves of trade volume, by wide swings in economic psychology from pessimism to insane disregard of even common sense, and by tides of credit, form a series of correlatives with business failures which demand the attention of every careful student.¹² But observation soon teaches that the business cycle is much more likely to uncover rotten management, incompetence, manipulative financing, poor organization, and the deeper, organic financial diseases than it is, in itself, to be a cause of failure. Inability to withstand the losses entailed in passing through a prolonged liquidation and slack business period will usually be more frequent in new than in older enterprises. If the business was begun

¹² It requires the wisdom of Solomon to determine just when, to what extent, and the manner in which creditors should push their claims against an insolvent corporation. It is comparatively simple to state that they should be guided by the relative amounts which can be recovered in the present and in the future. But to determine with any degree of precision what can be recovered at any time is far from a simple task. When the recovery of funds must be made from assets with a relatively good market, such as standard equipment and machinery, the question of timing action by the creditors will be essentially answered in terms of the price level and the general business cycle. Thus a small printing company's assets may consist largely of standard machinery, and realization may offer the simple problem of selecting the best market in which to dispose of it.

But some business assets are very specialized in nature; their value in liquidation may be small, except when accompanied by other special items such as peculiar ability of the management, a franchise, etc. In such cases much weight will be accorded the income position of the concern, for as long as the company is earning and paying more to the creditors (without bias) than a fair return on the reasonable value of the assets in liquidation, the creditors may wisely let matters alone. In general business, creditors are much more lenient than the student may be led to believe. After all, business is rather a matter of give and take; any management which gives no quarter will receive none. There are those who insist that a universally stricter policy would reduce business failures in the long run.

just at the end of the period of prosperity, it will have to withstand the hazard of business cycle losses plus organization losses, plus possible reorganization losses.

Specific Conditions or Events

In the story of business failures are to be found many instances of businesses being embarrassed or even ruined financially by specific occurrences. Accidental events, such as fires, floods,¹³ earthquakes, wars, crop failures, which cannot possibly be foreseen or have their effects forecast upon the individual business, represent some common causes. The hazard from these fortuitous events, or "acts of God," should be partially eliminated if the management has made use of insurance in its various forms wherever the risk is of sufficient proportions to be determinable. To these natural factors may be added the acts of organized society, for these occur with sufficient frequency to afford a noticeable risk to many businesses, especially those operating near the margin. An epidemic of disease or a great conflagration may completely eliminate an insurance company. A mine disaster may be of such proportions that the damages are more than the company can withstand. However, these accidents uncover financial weaknesses in the business more often than they supply the cause for the financial failure.

Symptoms of Oncoming Financial Embarrassment and Failure

As contrasted with the *causes* of financial embarrassment and failure, *symptoms* represent appearances, statements, actions, circumstances, and conditions by which it should be more or less evident that a corporation is approaching financial debility. These symptoms are often expressed in the actions of officers, the management, or its retinue of "insiders," who are cognizant of the impending difficulties far in advance of the public admission (commonly called an announcement) of the desirability of a receivership or a reorganization. From the interpretation of the symptoms speculators reap fortunes, for they are extremely quick to discover signs of financial weakness.

One of the most reliable external indications of impending financial difficulties is a prolonged, unexplained, and consistent decline in the securities of the company.

Internally, the facts and conditions are legion to warn the management, though the proportion of these items which can be discovered by one out-

¹³The disastrous flood of 1927 destroyed nearly one-fourth of the total mileage of the Central Vermont Railway. At the time it owed 20 million dollars in unsecured debts and had outstanding 12 million dollars in bonds. To rehabilitate the road, at least 3 million dollars new money was needed. The only solution was a receivership, under which 2 million dollars in receivership certificates were sold. Eventually a reorganization of the railroad was necessary to terminate the receivership. Cf. 158 I.C.C. 399-400.

side of the corporation is smaller. The ratio of current borrowing usually rises, though managements will struggle to maintain a high current ratio. The high current ratio may be secured by improper inventory valuations, by forgetting to charge off past accumulations of bad debts, or by controlling the value of investments. The cash position will almost always show a rather sharp decline as the crash approaches, but it is not always a dependable forecasting index for any length of time in advance of the public announcements. A marked weakening in the company's credit status will usually be known to bankers, to the trade, to the management, to credit bureaus, and to almost everybody except the security holders. Evidence of this may appear in the interest ratio. Unfavorable trends in operating ratios will probably appear. Frequently repairs will be foregone to conserve cash, but after a time this results in higher expenses of operation because of machine breakdowns, poor quality standards, and wasted materials. Depreciation allowances can always be checked; any substantial reductions should cause inquiry for this may be a device to make earnings appear favorable. Working capital turnover will possibly rise, principally because of its reduced quantity. The ratio of payables to inventories will often increase. These are all signs to be looked for by the alert observer.

FAILURE: VOLUNTARY RECONSTRUCTION

Whatever the history of the corporation when financial collapse is imminent, a choice must be made among three courses of action: (1) reconstruction of the corporate structure and the rehabilitation of its financial program; (2) reorganization of the concern and the subsequent transfer of its assets to a new concern; (3) outright liquidation of the enterprise and distribution of the firm's assets to the several interests according to their claims. The decision will be dependent, in part, upon the current stage of the business cycle, which affects not only the probable realizable value of the assets but also the speed with which a realization may be made on the sale.

The Technique of Voluntary Corporate Reconstruction

Very few corporate reconstructions are achieved in exactly the same manner; consequently for one to attempt any sort of classification of reconstructions is to invite criticism. The following tabulation is not intended to be exhaustive, nor are its categories mutually exclusive; it does provide a guide for the beginning student who seeks to find his way through the jungles of legal rulings and the maze of financial interrelationships connected with reconstruction.

Negotiated reconstruction carried on by corporate participants:

1. Initiation by management—usually leading to a recapitalization.
2. Initiation by creditors—either short- or long-term creditors—commonly leading to refinancing or recapitalization.
3. Initiation by shares—usually minorities who have not had control, or

majorities rebelling against organized minority control by the management.

4. Various combinations of these.

Sacrifices Usually Made by the Various Security Classes

Practically all reconstructions involve some sacrifices on the part of some or all security owners.¹⁴ These sacrifices fall into four major groups; (1) The assets, if any, which secure the various stock and bond issues may be reduced or their nature altered; (2) the amount and/or the preference of the par or stated value of the various classes of securities may be changed; (3) the amount and/or the precedence or preference of the various classes of securities with respect to the net income of the corporation may be altered; and (4) moratoriums or postponement of maturities or redemptions may be agreed upon. One or more of these is utilized in almost every reconstruction. General creditors will be considered as a class of unsecured creditors, and, unless they have acquired some preferred status during or prior to the reconstruction, they are likely to have to sacrifice more than the secured bondholders but less than the stockholders.

The common stockholders, normally required to make the greatest sacrifice, may accept a variety of restrictions on their shares rather than risk the losses which might fall upon them in a drastic reorganization or foreclosure sale. The more common forms of restrictions thus employed are: (1) transfer of voting power to the prior lien holders;¹⁵ (2) agreement not to declare and pay dividends upon the junior issues until the sacrifices asked of senior issues have been made up to them;¹⁶ (3) agreement not to employ the corporation's funds or its earnings either to retire or to purchase for the company's treasury the common shares, or other shares not having fixed charges or dividends provided in their contracts; and (4) outright transfer

¹⁴ A fairly good example is found in the various plans proposed for the reorganization of Foltis-Fischer, Inc. In this particular case the syndicate which was to provide the major proportion of the new capital was composed partly of merchandise creditors and partly of new interested parties desirous of gaining a substantial voting power in the new common shares. A portion of the new capital was to be raised through employee subscriptions.

¹⁵ The transfer is made in three ways: (1) by depositing all shares in a voting trust, with the representatives of the prior lien holders as trustees; (2) by giving proxies from year to year; or (3) by formulating and extending such voting powers to the prior liens as will automatically give them the balance of power in the board of directors. The first of these devices was employed by the American Steel Car Lines (1932). The third scheme was used in the reorganization plan of Booth Fisheries Co. under date of March 25, 1933. The directorate of the reorganized company was to be made up as follows: two members elected by bondholders' committee, four members by bank creditors' committee, one member by stockholders' committee, and two members by the reorganization committee.

¹⁶ See Baldwin Locomotive Works, which (1933) agreed that, as long as any of its consolidated mortgage bonds were outstanding, no stock dividends on the common and no cash dividends upon either common or preferred stocks would be declared.

by the equity shares to the prior lien securities, with a repurchase privilege agreement.¹⁷

Corporate Rehabilitation by Creditor Committees

In the United States the creditor committee system of corporate reconstruction was first extensively employed in the rehabilitation of financially embarrassed corporations following the panic of 1907.¹⁸ Creditor committees were very active during and immediately following the depression of 1920-1921 but have not been so active in the recent depressions.

Briefly stated, the creditor committee differs from both the protective committee and the reorganization committee only because of the leading role played by the creditors—usually unsecured, or collaterally secured. Commercial bankers and trade creditors as a rule dominate the whole situation, though occasionally an individual lender, or a corporate official who has made large advances, will be active.

The advantages of the creditor committee are obvious. It will, on account of future business relations, normally be *more interested* in rehabilitating than in liquidating the company at once to secure cash. It will have a *fairly good* knowledge of the past of the business as well as of the peculiar problems of the trade which will normally be known neither to an outside receiver nor to members of stock and bond groups who form protective committees. It will have only a fraction of the expenses which are attendant upon a receivership or even a voluntary reorganization. There is usually no publicity attached to the operations of the committee; hence there is no adverse reaction upon the business operations of the corporation. The creditor committee system prevents the formation of well-meaning but useless protective committees, as well as of privateer protective committees. The system *consequently eliminates* much of the intersecurity class conflict which proves the nemesis of ordinary negotiations for reconstruction. Even in normal times a relatively large number of business firms are helped by these informal devices; the teachings of such committees are hard lessons not soon forgotten.

There are strong arguments against the creditor committee system of meeting financial embarrassment and effecting corporate reconstruction. The committee has no legal standing; and its *only weapon* in dealing with interested parties is persuasion, a relatively non-potent device with hard-set

¹⁷ Cf. reorganization plan of Clyde Apartments (Evanston, Illinois). In this case both income and property proceeds were transferred to a holding trustee, with three managing trustees representing the bonds. The equity owners retained only a repurchase right. The abnormally depressed real estate values of 1932 and 1933 undoubtedly justified some of these arrangements. But they were always devices by which, if the properties came back, the stockholders would be likely to reap the benefits unless the agreement provided for a price considerably in excess of the bond values.

¹⁸ There are, however, many instances much earlier than this period. The "arrangement" system under the Bankruptcy Laws of England makes legal recognition of similar agencies as early as 1925.

businessmen, especially those who happen to be in a position to enforce their claims legally or to secure a preferential position. Recalcitrant minorities are almost impossible to handle; and if eventually the affairs of the business are dragged into the courts, there is likely to be all sorts of unpleasant publicity on the compromises effected by the committee in its efforts to resuscitate the business. The committee has to take all the blame, even for mistakes in management, during the period in which it operates, despite the fact that it usually tries to interfere as little as possible with operations and technical management. There are some circumstances under which the committee may become personally liable. The creditor committee system often results merely in deferring the evil day of liquidation, rather than in curing the financial debilities of the company, for the committees are prone to consider every business worthy of rehabilitation. In many instances these resuscitated companies continue, only to fail at a later date in a bigger way, with more losses and greater sensations. Owing to the myriad of intergroup and interbusiness relations which develop over a period of years, the creditor committee is often far from unbiased in its decision to rehabilitate the business instead of liquidating it.

Proportion of Securities Necessary to Make Plans Effective

The proportion of the several issues which must assent to a plan before it will be declared operative depends upon the circumstances of each particular case.¹⁹ If the reorganizers have no funds of their own and no means of borrowing them, a very high percentage may be required before the plan will be declared operative, for a high percentage assent will reduce the cash requisite for the discharge of dissenters' claims. But if those in charge of the reorganization plan have access to funds, or if the controlling securities are so held that a substantial profit, obtained by paying off dissenters, may be realized, then the proportion requisite for declaring the plan operative may be relatively low.

Treatment of Dissenters to Reconstruction Plans

Since a reconstruction plan is supposed to be entirely voluntary, a company can do relatively little to enforce it irrespective of its manifest fairness. Provisions in state laws relating to the reconstruction of the company may have been inserted in the by-laws or charter of the corporation. If the requisite majorities have approved, they may, under some state laws, force the reconstruction, leaving only the usual rights of conversion and fraud to the dissenters. But if the state laws do not thus permit a reconstruction, buying off the individuals who feel the plan to be unfair is the only solution.

¹⁹ The authors have tabulated over one hundred plans but do not feel able to deduce any definite conclusions. The lowest ratio requisite for making the plan operative was 66⅔ per cent; the highest, 100 per cent. It seems that 75 per cent or lower would be considered as a low assent ratio, and that 95 per cent or more would be a high ratio. The average ratio required, when stated, was just slightly less than 90 per cent.

This purchase plan procedure has resulted in a few dissenters to almost every plan that is suggested. A third method, the state law permitting, is a declaratory judgment by a court so empowered.²⁰ This remedy could be applied by trade groups to save much of the expense incident to many trade disputes.

Voting Trusts in Reconstructions

Voting trusts have obvious advantages over committees in that they represent stranger unions which can exercise absolute control without fear of dissension or suits. In corporate reorganizations, they perform these functions: (1) unite scattered security holders into a potentially powerful unit; (2) provide for continuity of management both during and after the reorganization, often saving much of the expense of a receiver during a period of financial embarrassment when reorganization could be attained only with some difficulty;²¹ (3) provide a scheme by which bankers and underwriters, who actually carry most of the risks attendant upon big reorganizations involving substantial quantities of cash, can maintain a control over the business during its convalescence and thereby prevent the recurrence of the pathology which precipitated the financial difficulties; (4) speed up reorganization, when entered upon, by reason of the greater degree of unison found in the various classes of securities; and (5) permit retention of control by reorganized holding companies, though the securities of the subsidiaries are distributed to shareholders of the holding company.²²

Assessments in Reconstructions

Strictly speaking, the reconstruction assessment does not involve the issue of new securities; it represents a sum to be paid by the shareholder or the creditor to retain unimpaired title to securities already held or to existing liens. Every class of security, even unsecured creditors, has been assessed on occasion. If the reconstruction involves a change in the amount of capitalization, the assessment may be imposed before or after the capitalization changes, though as a general rule the assessment is more effective as a condition to participation in the reconstruction plan than as an afterthought.

²⁰ This plan may be used in Delaware. The Supreme Court of the United States has consistently denied the constitutionality of declaratory judgments, but there is a field in which they could serve a useful purpose. If opened freely, however, the courts would become the place to which every disagreement might be taken.

²¹ The reorganization of the Central West Public Service Co. resulted in the proposal for a voting trust. The trust was to contain all voting shares allotted to bondholders, noteholders, debentures holders, and Class A stockholders which were issued in the reorganization of the company. This particular trust was to continue for five years unless terminated sooner by the certificate holders.

²² This device was employed (1933) by North American Aviation, Inc., when the shares of its subsidiary, Sperry Corp., were deposited in a ten-year voting trust. The control of the voting trust continued with North American Aviation; the voting trust certificates were distributed to the holders of North American Aviation shares.

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Failure of the assessed party to pay an assessment will usually result in the forfeit of the assessed securities, which may then be offered for sale by the corporation or its duly authorized agent, or in the creation of a lien against unsecured creditors' claims.

QUESTIONS

1. Name some of the most important causes of failure. Do the companies' finances reflect these various causes of failure in a common pattern of financial condition? Explain your position.
2. Discuss the problem of working capital in relation to the situation that probably exists when the firm is declared to have failed.
3. Outline some of the signs of oncoming failure in a business concern. Does failure usually come with great suddenness?
4. Exactly how does the voluntary reorganization procedure vary from a court reorganization procedure?
5. Indicate the necessary elements of a reorganization plan designed primarily to deal with dissenters. Why is there no legal compulsion at this point?
6. Outline the advantages and disadvantages of reconstruction by creditors' committees.
7. How may voting trusts be employed in the reorganization plan?

PROJECTS

1. Examine the recapitalization proposal in 1948 for Marion Power Shovel Company, and express your opinion on the company's original structure and the resulting one.
2. Report upon the working capital position in four of the railroad companies which entered receivership after 1930. Indicate the extent of a common pattern.

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CHAPTER XXXVII

Failure: Corporate Reorganizations



FREQUENTLY corporate financial embarrassments are so complex and involved that their elimination practically requires the creation of a new company to succeed the old one. This chapter will consider the nature of these drastic financial changes, the methods employed, and the results obtained. The discussion is divided into two parts: the first takes up some of the general characteristics of equity receivership reorganizations; the second deals with reorganizations conducted under the supervision or auspices of a federal bankruptcy court by special processes provided by Section 77 amendments, now Chapter X of the Bankruptcy Act.

GENERAL NATURE OF REORGANIZATIONS

Diverse Effects of Reorganizations

The effect of the news that such and such a corporation is to be reorganized varies from industry to industry. At one extreme are the railroads and other public service corporations in which, it being understood by everyone that the services of the corporations will be continued irrespective of the reorganization, there will be practically no effect upon the volume of business or competitive position. At the other extreme are financial corporations, in which even a rumor of financial embarrassment has serious effects upon business operations.

In any event, if management has not foreseen the problems and moved to meet them with some proposals for voluntary action or security holders do not move for a creditors' committee to act, a reorganization will be the next step. If the situation seems hopeless, an alternative might be liquidation.

Today the creditor may consider two different courses of receivership reorganization. One course is equity receivership culminating in the sale of the debtor's property, which brings a reorganized company into being as the buyer of those assets. The second course is reorganization under Chapter X of the Federal Bankruptcy Act which culminates in a reorganized corporate structure, created by a judicial decree requiring all holders to comply with the approved "fair plan."

The aims of reorganization vary from industry to industry and from company to company. In public service corporations the problem of reduc-

ing fixed charges stands paramount; in financial corporations, the replacement or elimination of impaired asset value, or liquidity, will most often constitute the aim of a reorganization. Among ordinary business corporations the problems of working capital replenishment and expansion seem most common.

EQUITY RECEIVERSHIP

The Nature of Equity Reorganization

Legally the term "reorganization" means "formation anew";¹ practically such a meaning is expressed by the formation of a new corporation with a name so like that of the old concern that the difference serves only as a legal expedient.² The reorganization of a single corporation unit is, in itself, a relatively simple problem compared to the complex interrelationships and conflicting interests which are created in the reorganization of interlocking systems of many subsidiaries. While reorganization need not contemplate the dissolution of the company and is not the equivalent thereof, probably a majority of the corporations are legalistically liquidated and dissolved in the processes of reorganization³ because in most cases the property will be sold for the debts of the old corporation. The assets will be acquired ordinarily by a new corporation formed by the security holders with a new financial structure. Old security holders will acquire their new interests by giving up their old claims and sometimes adding cash payments.

As we come to the crisis of a business life, two definite lines of action are needed to function as complements to each other. First, the corporate or business assets must be held intact and conserved. Second, the security holders must find a channel for consultation and representation of their interests. Any other steps would only lead to individual claimants' instituting suits and executing judgments in protection of their claims, thus creating a swift disintegration of the business enterprise.

We have already discussed the possibility that if the business is only approaching financial problems it could reach a compromise with its security holders so as to readjust or recapitalize, thereby avoiding any court action. But where there is evidence that the company cannot meet its obligations as they come due, more drastic action will be needed.

The original approach to a crisis in the financial life of a company was for an action to foreclose a lien, actually in default. As an incident to this move, a request for an equity receiver to take over and conserve the assets

¹Combinations, consolidations, and mergers should be sharply differentiated from reorganizations, since they arise usually between financially sound corporations, while reorganizations normally are products of unsound financial conditions.

²It is common to change the arrangement of the words in the name of the corporation, substitute corporation for company, or vice versa, or railroad for railway, etc. Thus the Tennessee and North Carolina Railroad became the "Railway."

³But see W. M. Fletcher, *Cyclopedia of the Law of Private Corporations*, Vol. XV, Sec. 7202, in which a supposedly logical and valid difference between liquidation and dissolution, and reorganization is rather poorly maintained.

might be made;⁴ if not, the foreclosure would lead on to a bankruptcy and complete liquidation. In the case of small enterprises, individual farm mortgages, or local manufacturing plants, either of the courses was possible. But liquidation was early recognized by creditors as an undesirable sacrifice of values; thus the request for receivership developed.

Essentially the request for an equity receivership is a request that the assets be taken into custody of the court, with operations to continue as a necessary step to maintain values and to hold the assets until a final disposition could be determined by the interested parties.⁵ This effort to prevent waste is the basic ground upon which an equity court acts in the exercise of its special power. The effect of this move is virtually to isolate the business from its normal financial responsibilities and to hold them all in suspension until a complete program for their disposition is set up. It is true that the major objective of this procedure is on behalf of the creditors; the position of the company ultimately is an incident to whatever move the creditors feel will secure their position. Essentially the process would still be to "foreclose," not primarily to rehabilitate.

Appointment

The appointment of a receiver may come upon the motion of a "friendly creditor,"⁶ who has consulted with the management about the move, or a creditor determined to force a judicial handling of the situation. The parties in any event will file a petition for the appointment of the receiver, and make nominations for this office. The court may act entirely within its discretion, but the petitioner is likely to have a good chance of having his nominees accepted. This is the chief motive of a "friendly receivership" petition.⁷

Those who may be considered proper receivers will often be one or more of the present operating officials and other favorably known business or financial men. Frequently, where the properties are large and involve widespread operations, the court may appoint several as co-receivers, so that duties may be divided, but usually not more than three.

Parties who are involved, other than the petitioner, may object to the nominees and suggest others at the hearing before the court. Unless real

⁴ See Florence deHaas Dembitz, "Progress and Delay in Railroad Reorganizations Since 1933," *Law and Contemporary Problems*, Summer, 1940, pp. 402-407.

⁵ A receivership in bankruptcy is to be distinguished, for such an office holds the property for liquidation after the approval of claims by the referee.

⁶ If he is a creditor with a claim of \$3000 or over and a resident of another state, the petition will probably be in federal court so as to eliminate conflict of jurisdiction if properties are in more than one state. See also Warner Fuller, "Background and Techniques of Railroad Reorganization," *Law and Contemporary Problems*, Summer, 1940, pp. 379-380.

⁷ Consent receiverships are severely criticized by some writers as allowing a continuation of the old management. In some instances of rank inefficiency, this could prove unfortunate.

objections can be made apparent, the operating officials are very likely to be appointed for they do know much of the immediate problem.

Powers

Under the court decree admitting the property to receivership, the custody of the corporate assets will be vested in the receiver. Subsequent handling of these properties will all be upon court order, initiated directly by the court or upon request of the receiver and sometimes the investors. The original decree may be drawn very generally as a statement of powers or with great care as to detail of such powers. The ordinary powers of the receiver will consist of an extensive variety of management decisions, many which the ordinary management could not make for itself.

Manage and Operate the Assets. The essence of the receivership is continued operation of the enterprise. The general operating officials will usually be retained and the receiver will assume the role of chief executive. As he usually finds a business which has failed devoid of sufficient working capital, this deficiency will become one of the first problems. It is important that this factor should not be allowed to keep any part of the organization from functioning; for if there is a serious interruption in the firm's output, customers will soon drop away, except in the case of utilities.

Very often a firm which has come to the critical stage of solvency has also neglected current efficiency in operation. This would be a matter both of psychology for the workers and of adequacy of the plant, and should be explored by the receiver at an early date, so as to increase operating efficiency. This will in itself conserve working capital.

Raise Additional Capital. An immediate injection of new funds into the working capital is not an unlikely requirement. The cash position has often deteriorated in the few weeks just preceding the application for receivership, and probably all current credit possibilities have been exhausted. In that case, ordinary lines of credit are closed, and the step now available under the extraordinary powers of the court is the request for the issue and sale of receiver's certificates. These will have a market, at even moderate rates of interest, because the court is in the position to order their payment ahead of all existing liens. This will allow the working capital position to be restored quickly in what otherwise would be a hopeless situation. A more complete discussion of these certificates appeared in Chapter IX.

While the usual purpose of a sale of receiver's certificates is confined to improvement of current working capital, it need not be held to this purpose. After inspection of the properties, the receiver may move the court to allow further sale for the purchase of new equipment. This may be shown to the court to be necessary to operate competitively as well as actually a measure of economy. Ultimately, the use of credit in this way will cheapen costs and allow the difference to be used for repayment of the certificates.

Postponement of Claims. With the assets in the custody of the court, a creditor cannot pursue his normal remedy of executing judgments against

the property, or even of suing to establish the contractual claims in a money judgment. These claims may be submitted to the receiver, and upon proper court hearings a determination will be made as to which claims validly exist against the debtor. Satisfaction will have to await the general plan for settlement of all claims, which delay releases the debtor in a single act to the position of an operating concern. This power is one of the most important acts of conservation, for otherwise the pulling and hauling of litigants would shortly wreck the debtor's estate in the costs of defense.

Examination of Contracts. The receiver in his search for conserving values and restoring them will review the many contracts which the debtor has made. Some of them may be long-term leases of property, some term commitments for material purchases, and others may be guarantees upon securities of subsidiaries or affiliates. The cost of performing these may be far beyond any gain flowing to the debtor; and if the receiver is convinced that this is true, he is empowered to ask the court to allow their cancellation. This termination of outstanding but burdensome contracts can be made without full legal liability to the debtor, an act which the old firm could never have performed to free itself. For any provable damages the claim may be included in the reorganization plan.

The exercise of this unusual power is explained by the fact that many of these agreements are historical in their creation and represent little real value for current operations. Since the receiver is trying to restore all current positions to their highest level, the avoidance of these old yet expensive contracts is one of the most obvious moves to restore the operating profits of the enterprise.

Report on the Condition of the Debtor. The receiver is expected to prepare a full report of his findings after surveying the debtor's condition. Upon the basis of this report, much of the evidence will be available to guide the court as to the various actions the receiver proposes for handling the assets of the enterprise. It should be pointed out, however, that the receiver is not expected to make any recommendations for reorganizing the company. As a conservator of the assets, his duties do not include determining the pattern which will enable the creditors and other investors to approve the surrender of the assets to the management again.

This failure to have any responsibility assigned by the court for the process of reorganization is one of the criticisms which has been leveled against equity receiverships. Because no one had a definite responsibility for moving the reorganization plan along, delays could continue indefinitely. This was the record of some cases, as illustrated by the Chicago Street Railway receivership, which was established in 1921 and terminated in 1947.

Termination

The termination of receivership will depend upon the preparation of a reorganization plan. Unless this plan is accepted voluntarily by the creditors and security holders, the property will be sold under equity foreclosure.

The purchaser will be a new corporation formed by the old security holders who have joined the reorganization plan. The few who refuse to agree to the plan will be paid out of the equity value received at the foreclosure sale.

PREPARING THE REORGANIZATION PLAN

Though a creditor may have moved to place a corporation in an equity receivership, this act will do nothing to bring a reorganization plan into existence. The plan must be prepared by the interested parties and submitted to the court for acceptance, after which a foreclosure sale may be held for disposition of the assets.

The Committee System of Representation

As soon as it becomes known that a corporation is financially embarrassed, numerous *committees* are set up. These self-appointed or self-nominated committees will, like a group of political office seekers, announce their intentions in very general terms and then seek deposits (as a politician would votes) upon such terms as they think best to offer.⁸ If properly constituted, these committees perform some fairly well-defined functions in the reconstruction of corporations. They often effectively organize small holders and make them important in a reconstruction when, without the committees, the scattered holders would have no influence; the committees often include in their personnel some of the most able legal talent in the field and are therefore able to derive the maximum benefits at a minimum expense; their members are frequently rather well informed regarding the operations and the finances of the business, hence bring a fund of practical knowledge to bear upon the solution of the corporation's financial problems. The committees fall into two groups, each of which is more or less specialized: (1) *protective committees*, which represent the interests of individual classes of claimants or securities, and (2) *general reorganization committees*, which are presumed to represent all classes of securities and claimants seeking to prepare a general plan of reorganization.

Protective Committees

In contrast to general reorganization committees, protective committees are formed for the special purpose of protecting the particular interests of their respective constituents. These committees do not have the fiduciary responsibilities usually ascribed to reorganization committees which sup-

⁸ Some of these committees are nothing but commercial privateers interested solely in collecting a deposit fee from luckless security holders. They then find it convenient, "if no protest is received," to combine with other groups. If possible, they may attempt to collect funds from other committees before relinquishing the shares controlled by them. But see the discussion of the 1934 Federal Reorganization Amendment to the Bankruptcy Act near the end of this chapter. For a discussion of railroad reorganization committees see W. G. Fennell, "The Representation of Security-Holders' Interests Under Section 77," *Law and Contemporary Problems*, Summer, 1940, pp. 474-485.

posedly represent generally the interests of all parties concerned.⁹ The members of a protective committee may not, however, obtain for themselves secret profits, hence do have some elements of a fiduciary.

Personnel. Since the members of a protective committee represent but a portion of the claims against the corporation, an officer or director, who is supposed to represent all alike, cannot ethically become a member. The membership of protective committees is not restricted to those having interests in the corporation, though the members are usually owners of securities of the class which the committee protects. Persons of considerable wealth, business experience, and prestige on the committee aid in securing the deposit of securities to add further to the committee's power.

Creation of the Committee. Originally these committees were composed of the largest and most active bondholders, elected at the first meeting of the holders of defaulted bonds. They may represent stocks, notes, debentures, creditors, or other interested groups. They derive their effective powers from the deposits of securities pursuant to a deposit agreement. It is only of relatively late years that the use of a separate depository has become the common practice. In a good many instances the original underwriters become members of the committee.¹⁰

The Deposit Agreement. The outline of the contents of a typical deposit agreement with a protective committee includes a broad range of terms covering deposit, vesting of powers in the committee, provisions for expenses, conditions of withdrawal and termination.¹¹

⁹ The number of protective committees which may appear in any given reconstruction or reorganization is limited only by the number of points of contention. Majority committees, minority committees, bankers' committees, management committees, independent committees, foreign committees, and so on, may be created for every security issue or combination of issues. For this reason, those who are experienced in protective committee work go to much trouble to prevent major differences and disagreements from becoming known until a large proportion of the securities affected have been deposited. A charge for the withdrawal of deposited securities further curbs the creation and growth of additional committees. If the plan has any obvious weakness, however, dissenting committees will quickly develop and the whole problem may have to be worked over again.

¹⁰ A relatively new development is that of excluding the original underwriters from protective committees, but permitting them on reorganization committees. The members of the protective committee carefully explain that no one of them had any connection with the underwriting or original distribution of the issue as a form of criticism (1) against the original underwriting of the particular issue, (2) against the attempts of underwriters to cover up their mistakes when they are members of such committees, and (3) against control of the committee by persons other than current owners of securities. In fact, the so-called "independent" committee which is frequently organized to oppose proposed reorganization plans often goes to much trouble to impress security holders that its members have no connection "with any groups concerned with the initial offering of these bonds" (or shares). See also Warner Fuller, "Background and Techniques of Railroad Reorganization," *Law and Contemporary Problems*, Summer, 1940, pp. 380-382.

¹¹ The following is a sample outline:

1. Name of the committee

The general status of the committee is that of a trustee for the class of securities represented, though there are so many exceptions that critics are inclined to construe it as more nearly that of an agent or an attorney in fact.¹²

The Operation of the Committee. The committee begins its work as soon as it has been constituted and has received a deposit of sufficient securities, or succeeds in securing deposits with the depository if a separate depository is

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2. Provisions to have the committee constituted as such
 3. Provisions for the deposit of securities
 - a. Names of depositories and addresses
 - b. Powers and duties of the depositories
 - c. Liabilities of the depositories
 4. Special covenants of the depositors
 - a. No power of independent action
 - b. Conditions and procedure for dissent to the actions of the committee
 - c. Withdrawal powers and conditions
 5. Terms and conditions of making deposits
 6. Special provisions relative to the powers and duties of the committee
 - a. To give notice of their acts to the depositors
 - b. To make and enforce their own rules of conduct
 - c. To receive compensation (usually determined by themselves)
 - d. To employ counsel: legal, financial, accounting, engineering, etc.
 - e. To dispose of the deposited securities
 - (1) To compensate themselves for expenses
 - (2) To compensate others for services
 - (3) To complete a plan which the committee has sanctioned
 - f. To sue and to defend suits
 - g. To interpret the terms of the deposit agreement
 - h. To amend the agreement (usually with the consent of a stated proportion of the deposited securities)
 - i. To act on behalf of the depositors in any way necessary to carry out the intent of the agreement
 7. Provisions for exculpatory protection of the committeemen
 8. Disclaimer of obligation to non-depositors
 9. Provisions for an accounting
 10. Provisions for the termination or the extension of the agreement

¹²Some of these agreements of deposit are palpably crude cases of mailed-fist practices. Under them the committee is endowed with every power, even to altering the agreement, fixing its own fees, selling the bonds, and borrowing money upon the bonds as collateral, for under the contract the depositor "sells, assigns, and transfers all legal and equitable right, title and interest" to the committee. Commenting upon one of these agreements, one judge said: "The agreement is one which enables a few persons of financial acumen and means to draw to their management and, if necessary, to themselves, all the values which have been vested in this product, and all chances of its prosperity. It empowers agents who are authorized to sell the property to buy it for themselves, or either of themselves, at public or private sale. It usurps all the powers of those courts, the agents of that established justice which the constitution provides. There have been many such schemes in the past. . . . They have never had and will not have any encouragement from this court." *Lowenthal v. Georgia Coast & P.R. Co.*, 233 Fed. 1016, 1021 (1916). A recital of the powers of the particular committee of the case just cited would fill many pages.

used, to endow its negotiatory power with some potency.¹³ Its position is one of bargaining to secure the most possible for its own constituents. As the work progresses, the committee will notify its depositors of the status of affairs. Once a plan has been agreed upon among the several groups, usually through mutual concessions, it will be necessary for the committee to notify its depositors prior to entering into the agreement, since the depositors are entitled to withdraw if they do not wish to enter.¹⁴

General Reorganization Committees

The diverse interests of the protective committees for the various security groups must be drawn together, with compromises, in order to create a plan of reorganization to be submitted to the court. After hearings upon the plan the court must order the completion of the proposal, by sale of the property, and the consenting security holders must exchange their old securities for those of the new company created by the reorganization.

Persomel. A common form of the general committee consists of the president of the corporation, perhaps one or two other important officials or directors, one or two investment bankers, and a representative of each of the classes of securities or other claimants. If there are conflicting factions among some of the security groups, a representative of each faction may be admitted, though more commonly the reorganization committee would refuse to recognize either faction until the intragroup struggles were largely settled. If the corporation is in receivership, a representative of the court will almost invariably be a member of the committee, for the plan will have to be approved by the court and it will speed up matters to have the receiver or another party represent the court throughout the proceedings. Large corporate holders, investment bankers, trust companies whose trust accounts are affected, and insurance companies often are represented by their most astute men.¹⁵

¹³ A good many deposit agreements prohibit a withdrawal of deposited securities until after a reorganization plan has been submitted. The provision materially reduces the choice by the bondholder, for he has no way of discovering what sort of plan may ultimately be submitted by the committee representing his deposit. His only chance of protection then rests upon a dissension and withdrawal after the plan has been submitted, an act which will leave him proportionately liable for the expenses of the protective committee up to the date of his withdrawal. The bargaining power of the committee formed first will be increased by the device, for the average security holder will not read the agreement.

When securities are deposited with protective and reorganization committees, it is customary to issue receipts for them. These receipts are in negotiable form and are bought and sold much as the securities themselves are.

¹⁴ Even when securities are not deposited, a "letter of authorization" is often sought from non-depositors. Thus the Protective Committee of the bondholders of Fonda, Johnstown and Gloversville Railroad (1933) sought authorization "to represent them in subsequent proceedings before the court and otherwise. The letter is revocable at any time and does not subject the bondholder to liability for the expense of the committee."

¹⁵ For an interesting though somewhat exaggerated picture of the work of banker interests in reorganizing the Chicago, Milwaukee and St. Paul Railway Co., see Max

Formation of the Committee. The nucleus of the committee is self-nominated, though additional members will usually be admitted on the grounds that (properly endorsed) they represent the various groups. If the committee calls for direct deposits of the securities, instead of receiving an elected representative of the different security classes, its strength may be determined by the amount of the securities deposited with it, as opposed to those represented through protective committee representations.¹⁶

Agreements Under Which Reorganization Committees Operate. There are four basic contracts or agreements under which reorganization committees operate: the deposit agreement under which the committee receives its powers, if any; the deposit certificates or receipts for the securities; the reorganization plan; and the ratification agreement. The *deposit agreement* merely contains the terms under which securities are deposited with the designated depositor, and which securities constitute a "vote of confidence" in the committee. *Deposit receipts or certificates* are the complementary agreements acknowledging receipt of the securities by the depository. These certificates are negotiable in form and are bought and sold much as the securities themselves are. Ordinarily a depositor may withdraw his securities by making a small payment to compensate the expenses. The *plan* is a description of the reorganized company, its capital structure, and the terms under which the securities of the old company may be exchanged for those of the new company. If new funds are to be raised, a description of how this is to be accomplished will be included. Sometimes these plans are quite simple; sometimes they are long, complex, legally worded documents.¹⁷ The *ratification* agreement is the contract under which the holder of securities or claims, or deposit certificates representing the same, agrees to the plan and authorizes the reconstruction or reorganization committee to act for him according to the plan, in the formation of the reconstruction or reorganization. Sometimes the plan, the deposit, and the reorganization are combined into a single agreement. Once an interested party has agreed to the ratification, he usually may not withdraw.

The Work of the Committee. In a way the work of a reorganization or reconstruction committee is parallel to that of the incorporators who first create the company, hence will be likely to be done with the help or guidance

Lowenthal, *The Investor Pays*. A good critical summary will be found in *Yale L. J.*, December, 1933, pp. 352 ff. Life insurance interests are discussed in "A Problem of Railroad Reorganization," Sen. Report No. 25, Part 2, 76th Congress, 1st Sess., February 6, 1939.

¹⁶ In the reorganization of large corporations it is common to find half a dozen larger or smaller protective committees and, perhaps, more than one reorganization committee. In fact, in a good many cases it is almost impossible to determine just when a given committee is one or the other, for as the various proposals are bandied back and forth first one committee and then another will appear in the ascendancy.

¹⁷ Reference to *Standard and Poor's* or *Moody's Manuals on Railroads, Public Utilities, or Industrials* will be certain to provide numerous examples. The student should analyze a few of these plans for their completeness, their adequacy, and their justification.

of an investment banker. The major difference lies in the fact that in the reorganization certain contracts already in existence must be considered in deciding on capitalization structure.¹⁸ As a matter of fact, the committee normally does the real work of reorganizing or of reconstructing the corporation prior to the time that the agreement or ratification is sent to the security holders. The various holders may have received notice that such a reorganization committee was being formed, or that it was in existence, or that a plan had actually been formulated for the reconstruction or reorganization of the company. The ratification agreement is merely a consenting arrangement by which the individual shareholder may consent to the plan. If there should be two or more plans, considerable confusion might arise; hence any recalcitrant group will probably have to be considered before, rather than after, submission of the plan for ratification.

If the problem is one of reconstruction only, the committee will seek the exchange of the securities of the old capitalization for those of the new. If a reorganization is to be concluded, the committee may technically issue to itself the capitalization of the new company, and then exchange it for the assets of the old corporation and distribute the securities, according to a predetermined scheme, to the holders of the old corporation's securities.

The Upset Price and Its Importance

When it is clear that a sale of the assets of a corporation under foreclosure must be made, the court will often determine what will be accepted by it as a minimum fair price.¹⁹ The court may set the price according to an appraisal at "forced sale," often a small fraction of its true worth. This price is called the "upset price," and usually must be substantially met in cash or securities at the time of the sale. If the corporation has several properties, they may have independent, or alternate, upset prices; if the company is a small one, all properties are likely to be lumped under a single upset price.

The functions of the upset price are (1) to furnish a basis by which assenters' and dissenters' positions are equalized in a reorganization; (2) to equalize between security holders who are paid in property and those who are paid in cash; (3) to provide an index of the conditions under which secured creditors who fail to receive complete satisfaction under a foreclosure may participate with unsecured creditors in the funds realized from

¹⁸ Allocation of new securities for old is thoroughly discussed by H. G. Guthmann, "Absolute Priority in Reorganization," 45 *Col. L. Rev.* 739-754 (September, 1945).

¹⁹ It is not compulsory that an upset price be stated in advance. Often the court waits until it has received a bid and, when confirming or refusing the bid, will at that time set the upset price. When the Fisk Rubber Co. was sold in 1932, there were two bidders—the General Tire and Rubber Co. and the reorganization committee. The book-valued assets of \$23,000,000 were sold to the committee for \$3,030,000. Sometimes the price has to be changed as there may be no bidders at the first upset price. In the case of the sale of the Wabash in 1915, the first upset price was \$6,000,000. No bidders were forthcoming, and the upset price was reduced to \$3,000,000 (238 Fed. 83, 87).

the free assets of the company; (4) to provide a basis upon which unsatisfied secured creditors may proceed against guilty parties, shareholders, or guarantors of the bonds²⁰ for recovery.

The amount of the upset price usually determines the amount necessary to satisfy dissenting liens, and, accordingly, the maximum amount of cash which, after expenses have been met, the committee bidding in the properties at the foreclosure sale must have available. Thus if the properties of a corporation have an upset price of \$1,200,000, and there exist \$800,000 first mortgage bonds, \$1,000,000 preferred stock and \$1,000,000 common stock, it is clear that if contractual provisions are strictly considered, the common stock will probably receive nothing and the preferred shares may expect only a portion of their stated preference after the expenses are paid. Having this in mind, the court may decree that, in bidding for the properties, the bonds will be received in lieu of cash at the rate of 80 cents on the dollar, the preferred stock will be received at the rate of 20 cents on the dollar, and the common stock at 5 cents on the dollar, the balance between the equity of redemption value and the acceptance value being needed in cash to meet organization expenses and counsel costs. Under such a condition a committee with \$700,000 in bonds, \$600,000 in preferred stock, and \$800,000 in common stock could bid the property in and have to raise but \$380,000 in cash; while a second committee with \$100,000 in bonds, \$400,000 in preferred stock, and \$200,000 in common stock would have to raise \$1,030,000 in cash to make the same bid on the property. The result of this arrangement is that the upset price is barely a bid, and sometimes even this price must be lowered to secure a bid.²¹ The court may refuse to

²⁰ Guarantors are placed in a most undesirable position. They must make good in cash to the dissenting holders, and presumably to the assenting holders, for the upset price has been set as a fair value, and the court could not recognize one value to a majority and another value to the minority. It may be obvious that the "business worth" of the assets received by the reorganization committee for the assenting holders is far in excess of the par value plus accrued interest plus expenses and the cash outlay to the dissenting holders, yet the court will use the value set under the upset price as the basis upon which to allow claims for unsettled balances due to the holders of guaranteed liens.

A very interesting case involving guarantees is that of the Western Pacific Railway. In 1903-1905, \$47,000,000 of bonds had been issued by the Western Pacific Railway Co. which were guaranteed by two other companies, Rio Grande and Western Railway Co., and Denver and Rio Grande Railway Co. (old company), which were later consolidated into the Denver and Rio Grande Railway Co. (new company). In 1915 the Western Pacific defaulted on the interest; the balance was not made up by the Denver and Rio Grande. Foreclosure was begun and the Western Pacific was sold in December, 1915, to a reorganization committee of the bondholders for \$18,000,000, the upset price. The court rendered a deficiency judgment for \$32,272,274.45 plus interest and costs, or about \$38,000,000. Execution of the judgment forced the Denver and Rio Grande into a reorganization. See *Equitable Trust Co. v. Western Pacific Railway Co.*, 244 Fed. 485 (1917).

²¹ It is usually understood that the prime function of the reorganization and protective committees is to bid in the properties of the corporation at the most advantageous

recognize the sale²² and order another, but eventually be forced to take a mere fraction of the worth of the assets simply because there are no bidders other than the committee holding the largest block of biddable securities.²³

Treatment of Dissenters in Reorganizations

Reorganizations usually proceed from the acts of minority holdings; the plans are usually controlled by minority groups, and dissension is the rule rather than the exception. Whether they are creditors or shareholders, dissenters are usually accorded one of two remedies by means of an alternative action: (1) suit to set aside the reorganization plan or (2) suit for judgment for the value of their interests at the time of conversion.²⁴ In arriving at fair value for purposes of settling the claims of dissenters, no enhancement because of the reorganization is permitted; therefore, book values, property appraisals, past earnings, and past market quotations on the securities must be used as the basis of valuation. To permit future earnings or future good will to be included in such valuations would be to pass to the dissenters a portion of the benefits of the reorganization from which they are dissenting.

There has been some variation in the apparent power of the dissenting creditors and shareholders with respect to forcing a sale of the corporate

price possible. The committees, however, are usually under no obligation to bid unless in their opinion such bidding would be for the best interests of their constituents. Cf. agreement of reorganization committee of Ohio-Kentucky Gas Co. (1932).

²² On December 2, 1932, the court rejected all bids offered for the Buffalo and Erie Railway. The representatives of the bondholders and of the receivers were agreed with the court that the offer of less than \$100,000 for the 90-mile line between Buffalo, New York, and Erie, Pennsylvania, was entirely inadequate. Even if there is agreement by the receiver and the bondholders, the court can still refuse to recognize the sale.

²³ Even though the general creditors, the preferred stockholders, and the common stockholders have no real and legitimate claims, they must be taken into consideration. There are three reasons: (1) It may be cheaper to give them something than to defend the innumerable suits they can bring; (2) reduction in litigation will almost invariably result in speeding up the settlement, hence reduce the costs and accelerate the time when the company will begin to earn money; (3) the shareholders should really bear the brunt of the expenses and provide new cash; hence, to offer them assessed shares is a logical step.

A relatively new system of politely assessing the old shareholders, conditional upon the future success of the reorganized concern, is the stock purchase warrant which was discussed earlier in this chapter. Cf. National Radiator Corporation reorganization in February, 1931.

²⁴ The most famous case involving the rights of dissenters to recover is that of *Northern Pacific Railway v. Boyd* (228 U.S. 482, decided April 28, 1913). In this case an unsecured creditor who had not agreed to the reorganization plan secured a satisfaction on his claims more than ten years after the reorganization. The decision, characterized by some as a "perpetual spectre . . . materialized into a veritable demon incarnate standing across the path of the reorganizers"; but others thought that as demons the bankers, lawyers, and insiders had been reasonably domesticated. The important rule was that if shareholders were permitted to receive anything of value in the reorganization, then creditors would have to be paid in full. See Warner Fuller, "The Background and Techniques of Equity and Bankruptcy Railroad Reorganizations," *Law and Contemporary Problems*, Summer, 1940, pp. 382-383.

properties. Secured creditors may usually force a sale through their power of foreclosure; unsecured creditors apparently may be forced to accept securities without a public sale of the properties; dissenting shareholders seem to be in a position to force the sale method of determining the cash value of their shares and then to demand cash therefor. While numerous instances are to be found in which both creditor and shareholder dissenters have forced the sale of the corporation's properties for purposes of determining their value, so foolish a proceeding has been abandoned in some cases. To hope or strive for any mathematical precision is both impossible and unnecessary, first, because the relative positions of these classes could not be ascertained before the reorganization, and second, because they are incommensurable afterward. But a reasonable and prudently equitable relationship can be attained. The creation of a sound financial structure is achieved through the consideration of economic factors rather than legal rights. Earning power, asset values, stability of income, and prospective competition appear to be basic. There can arise serious questions as to the validity of all these tests if the reorganization grows out of mismanagement by some one class of security holders, by officers, or by reason of a judicial decree. However, these tests are useful practically.

Underwriting the Cash Requirements

Probably three-quarters of all reorganizations require some cash to meet reorganization expense, to pay off dissenters, to provide new working capital, and/or to provide for expansion. While it has been indicated that alternative sources are available for these funds, it is by no means certain that those from whom it was proposed to secure the funds will universally be in accord with the plan. The success of any reorganization plan depends largely upon the completeness of its execution and, if cash is needed, the certainty of its receipt. Much in the same way that underwriting operations are employed to assure the sale of securities in the ordinary financial operations, underwriters are used to assure the success of the cash-raising program in reorganization. If new bonds are to be sold, either to old security holders or to the public, underwriters will assume the risks; if assessments are levied on old shareholders, the underwriting group may agree to pay the assessments, if the owner fails, and thus acquire any right or benefits which would have gone to the old holder. If warrants or rights are used, the non-exercise of these options will commonly forfeit all rights and they will be transferred to underwriters who agree to exercise them. Underwriters are usually willing to do this with the hope of building up good will and being favored by the reorganized company in its future financing.

In a few instances the underwriters have assumed important banking functions either by extending loans to meet interest on underlying issues to be left undisturbed by the reorganization, by furnishing funds for general corporate purposes until new cash can be obtained, or by lending money upon corporations.

What Constitutes a Fair and Equitable Plan of Reorganization

In financial embarrassments the general tendency is for all interested parties, provided there exists a business opportunity, to favor reorganization of the business rather than liquidation, chiefly on the grounds that everyone will be benefited thereby.²⁵ But what constitutes a fair and equitable plan of reorganization is often a bitterly contested question. No mere examination of the strict contractual rights under the law can be accepted as the criterion, because such rights, so interpreted, must be based exclusively upon established, existing facts. Time precludes the legal determination of the future status of the business, which often constitutes the sole source from which shareholders can recover anything. If, in the present, courts could easily determine the conditions which would obtain over the succeeding decade, they might be willing to formulate and enforce more equitable plans for the reorganization of business. At one extreme, denying any consideration of future values, stand the creditors and bondholders with their proposals of liquidation, or reorganization under such plans as to annihilate the shareholders; at the other extreme, desirous of including every discountable future value, stand the shareholders with their reorganization plans under which they hope to recover a share of their investment from the future prosperity of the company. Sometimes the positions may be altered slightly one way or another, depending upon the probabilities of sacrifice in the reorganization.

Summary of Problems

The process of equity receivership provoked extensive criticism. The defects of this procedure may be summarized as follows:

1. Long periods of time were consumed in getting the plans of reorganization prepared and accepted.
2. The security committees had no official status or public control, thus costs and fees were excessive and were parasitic.
3. Delay and inability to get sufficient means to treat with dissenters destroyed values of many helpless investors.
4. Costs of the receivership process were great, particularly when subordinate or ancillary receiverships were necessary.
5. No definite responsibility was levied upon any public official to see that a plan was prepared.
6. No agency of government was directly concerned with the examination

²⁵ The courts generally favor reorganization rather than liquidation (1) because public interest is benefited, (2) because "going concern" value is conserved, (3) because better morale ordinarily results from reorganization, and (4) because there will be less arbitrary treatment of the equity interests. Perhaps the courts are loath to eliminate any one class of security holders and accept the responsibility therefor; under a reorganization plan, they usually give something, however small, to each class of security holders.

of the plans (except the advisory requirements of the I.C.C. reports), yet many involved a general public interest.

Against this background the hopeful plans of new methods took shape. In the effort to remedy these situations the amendments to the federal bankruptcy statutes were prepared. The chief innovations were expected to relieve the several points of criticism.

BANKRUPTCY REORGANIZATION

New Procedures

The basic process under the new procedure is not substantially changed in its application for the court to assume charge, in the operation of the committees for protecting interests and formulating the reorganization plan, and in the general procedure for operation of the properties under court order while awaiting the reorganization plan. Major changes were offered upon the following points which it was thought would prove to be very significant:

1. The court officer, the trustee (same as receiver), was charged with filing a report outlining a reorganization plan or an explanation as to why one could not be formulated.
2. The expenses of committees were to be submitted, inspected, and allowed by the court.
3. Ancillary federal receiverships became unnecessary.
4. The sale of the property at a foreclosure sale would be made unnecessary; instead the court decree, after consent of two-thirds of each class of securities had been given, would bind all holders to the plan.
5. The court was to hold hearings on a "fair plan" and was always to have, for its consideration in forming its decree, the report of the I.C.C. on all railroad plans or the report of the S.E.C. on all other plans involving more than 3 million dollars.

The results have not been startlingly different from those in previous practice.²⁶ The plan reported by the trustee fails to speed up the procedure because it has still to be approved by security holders, and probably the most effective way to gain that approval is by their production of the plan. This is the only way they can test the give and take of the various groups and know just how far the elements of the plan have the probability of protective committee approval.

Studies on the expenses of the process do not as yet indicate any great difference in cost. Wherever duplication is avoided there may be some gain, but the time consumed has in some instances been lengthened, thus substituting the additional period of ordinary fees. Legal fees and court costs show no decrease for the same type of service involved, consequently any

²⁶ See Attorney General's Committee on Bankruptcy Administration, Report of 1940, *Administration of the Bankruptcy Act*, 47 *Harv. L. Rev.*, 18-58; 19 *Va. L. Rev.* 317, "Corporate Reorganization. . . . A Symposium."

large saving in cost does not appear too likely in practice. Without doubt "shyster" committees and their expense allowances have been curbed, which is a welcome result.

The foreclosure process is abandoned, but there is substituted instead the lengthy process of a series of hearings to establish whatever the court is willing to rule is a "fair plan." This ruling assumes unusual importance in the process because, by the determination of this fact, the court must also rule those securities which have an equity left in the plan and those which do not possess equity. As only those securities left with equity in the plan must give the two-thirds consent, this creates the condition upon which the court may decree the forced compliance of the dissenters.

In many of the early reorganizations under the new procedure, the courts accepted plans in which all security holders were allowed to participate, the court failing to make a finding as to the extent of the equity. Until the doctrine of lien priorities was reasserted by the United States Supreme Court, this step allowed the inclusion of many securities without real values at the expense of those with the superior liens. After the decision the requirement that the court find the interests with no value left in their securities made this point of decision a most hotly contested one. As it stands, the time to be saved has been consumed in prolonged and heated hearings as to what is a "fair plan."

Without doubt the reports of the I.C.C. and the S.E.C. have given the courts expert opinion, apart from the partisan views of the security holders, by which the courts might test the question of what is a "fair plan." This is an all-important step. It is to be noted, however, that the courts have this decision to make, the commission reports being advisory only.

FINANCIAL PLAN FOR REORGANIZATION

Basic Objectives

The usual conditions found in a company faced with reorganization are a shortage of working capital, neglected maintenance and repairs, and a series of fixed charges which have outrun the average earning capacity. The correction of these things requires the following:

1. Restore the working capital to sufficient volume.
2. Reduce the fixed charges to an amount assured of coverage by the experienced average earnings. Ordinarily lowering the rate of interest would be employed and this may be accompanied with a decrease in principal sum of debt.
3. Require the maintenance of proper charges for repairs and creation of "capital" funds.
4. Make charges for a substantial portion of the capital structure contingent upon earnings, thus relieving pressure in poor earning periods.

Plans will not be cut from the identical pattern but they will attempt to meet these conditions so far as security holders can be persuaded to "go

along" in the effort.²⁷ The importance of the dominant holders of securities may have a very large bearing upon the shape of the plan, for they may veto that which is proposed by others or by their consent indicate what in their judgment is probably wise for the small holder. Holdings by insurance companies, trust accounts, and other financial institutions are influential beyond the size of security values.

TREATMENT OF CREDITORS

General Principles

The nature of the sacrifices expected under a reorganization plan will grade approximately with the rank and security of the lien owned. This statement indicates, of course, that the stockholder must take the severest treatment considered necessary to make the plan feasible. Likewise it suggests that any cash required for the plan which is to come from the old holders will be raised primarily from the equity holders, those who will be attempting to save something from the original investment.

Some of the best secured liens will often be left undisturbed, for examination of the earnings record will probably show that the charges on such securities are being earned.²⁸ Thus where earnings indicate a variability which makes interest charges the possible cause of future default, the plan should ask for an adjustment to avoid the future contingency. This may be most applicable to the junior lien holders and the unsecured debts. The preferred stocks have no legally enforceable claim on default, but the accumulations unpaid destroy the marketability of the stock and prevent future stock issues. It is apparent that a plan would reduce the proposed charges includ-

²⁷ The cases listed may be examined as illustrations. The following represent typical relatively simple reorganization plans:

Name of Company Reorganized	Year of Reorganization	Year Effective
Raytheon Manufacturing Company	1933	1933
Chicago Mill and Lumber Company	1933	1936

For examples of complex reorganizations the following cases are typical:

Name of Company Reorganized	Year of Reorganization	Year Effective
Chicago, Milwaukee and St. Paul Railway	1935	1947
St. Louis-San Francisco Railway Company	1933	1947
Missouri Pacific Railway Company	1933	not complete
Booth Fisheries Company	1933	1933

Typical cases of compound reorganizations would include:

Name of Company Reorganized	Year of Reorganization	Year Effective
Mid-West States Utilities System	1931	1936
Radio-Keith-Orpheum Group	1933	1940
Paramount Publix Corporation	1932	1935

²⁸ In the New York, New Haven and Hartford reorganization a total of 50.9 million dollars of such liens were undisturbed, together with 14.9 million dollars in equipment trusts.

ing preferred dividends to a level that makes their prospective payment reasonably certain.

In general the group considering the reorganization plan may proceed along the following lines of security changes:

1. Reduction of the rate of interest.
2. Reduction of the principal sum of the debts.
3. Extension of the maturities of debts.
4. Subordination of existing liens for a new issue by which to gain new money or allow for refunding of junior liens.
5. Exchange of a debt with fixed charges for one with contingent interest; exchange of a debt for a preferred stock; exchange of a preferred stock for common stock. Any of these exchanges may be at less than par for par, thus cutting total obligations.
6. Insertion of sinking fund requirements and capital fund reserves prior to interest charges of contingent type, and the preferred stock dividends.
7. Assessment of a "cash" requirement to an exchange of old for new securities.
8. Future participation by exercise of warrants granted for the old securities owned.
9. Elimination of security position.

Prior to the examination of plans for court reports, made by either the Interstate Commerce Commission or the Securities and Exchange Commission, the tendency in preparation of reorganization plans was to reduce the immediate fixed charges but not the total capitalization.²⁹ In fact, many of the railroad reorganizations, 1910-1915, showed a total increase in the capitalizations, the exchanges being chiefly in the nature of debts into stocks at premiums of more than par in stocks for the bonds surrendered. While the large fixed charges may have been reduced, the ability to pay dividends was so questionable that sale of such securities for future needs was found impossible. As a result the reorganized concerns found themselves forced to borrow for any new needs, and the increase of the debt structure again created the cause of a subsequent failure.

Priorities in Treatment

The difference between secured and unsecured debts will offer a substantial reason for differences in the proposals made for their treatment in the reorganization plan. The secured debt, of course, has the mortgage lien which may be pursued to foreclosure; and for that reason there is a leverage for this group of security holders which will be superior to that of unsecured indebtedness. The general legal principles affirmed by the courts require that

²⁹ See the reorganization, 1915, of the Missouri Pacific Railroad, in which case the securities may be outlined as follows:

	Prior	After
Funded debt	\$214 million	\$227 million
Preferred stock	.....	76 million
Common stock	83 million	82 million

sacrifices of the liens shall not be made in order to transfer the values to inferior claims.

Many of the first liens will go undisturbed in reorganizations. This accomplishes two things: it reaffirms the strength of these positions as to future sale of like securities, and it eliminates controversy in the reorganization proposal as to these holders. Sometimes these senior liens are disturbed to the extent of a consolidation of the liens so as to simplify the structure, but in such a case no change in interest is made except to provide for a common rate which may necessitate a cash adjustment or a slightly increased allotment of the new issue.

The secondary liens will be put in the class requiring some sacrifice by way of reduction of the interest rate, or perhaps an exchange of the debt for an income bond with its interest made partially or wholly contingent upon earnings. Often the poorer secondary liens will be offered an exchange into preferred stock. The exchanges very often, too, are not direct exchanges of type for type of instrument but rather for a portion of several types of different new securities.³⁰ The simple plan of exchange might be illustrated as follows:

1. 4 Per Cent First Mortgage \$1000	Undisturbed
2. 5 Per Cent Second Mortgage \$1000	\$800 4%: \$200 4% contingent
3. 6 Per cent Debenture Bond \$1000	\$500 4% contingent: \$500 new preferred stock
4. 5 Per Cent Preferred Stock	Each share exchangeable for ½ share of new preferred and 1 common share
5. Common Stock	Each 10 shares exchangeable for 1 share

In the case of divisional liens a difference must be made as to the strength of the earning power and importance of the property to the system's earning power. Sometimes divisional obligations will be upon properties so essential to operation that no disturbance is allowed, and the receiver or

³⁰ The plan of the Chicago, Milwaukee, St. Paul and Pacific is summarized:

Undisturbed (millions) Eq. Cert. \$18.4	New 1st 4's 1989	Gen. Inc. 4½'s A	Conv. Inc. 4½'s B	Preferred Stock 5%	Common Stock
Gen. Mortgage					
A—4's	276.67	378.33	221.33	221.33	
B—3½'s	273.33	382.67	218.67	218.67	
C—4½'s } E—4½'s }	280.00	392.00	224.00	224.00	
F—4¾'s	281.67	394.33	225.33	225.33	
Mil. & No. RR. 4½—1937	700.00	300.00			
conv. 4½'s	262.19	367.06	209.75	209.75	
Chi., M. & Gary Ry. 5—1948				8.9 sh.	2.97 sh.
Chi., M., St. P. & Pac. 5—1975			179.38	717.50	2.99 sh.
Chi., M., St. P. & Pac. conv. 5—2000					9.78 sh.
Unsecured					.7 sh.

trustee is prompt to propose the current payment of interest.³¹ Equipment obligations are debts of this type, as was pointed out in the discussion of their use; consequently only in the most rare instances are these instruments ever disturbed.³² In the period pending reorganization their interest, which is really a rental payment, is made currently upon motion of the receiver or trustee.

Adjustment of Lease and Rental Contracts

It was mentioned earlier that the receiver, or trustee in bankruptcy actions, may recommend to the court the abandonment of certain long-time contracts, such as leases and rental agreements. Originally it was also true that the unpaid installments of such leases which had been canceled were not effective as claims against the receiver. The present act allows industrial and utility lessors to file the unpaid rents as claims in the bankruptcy procedure, as may be done for railroad situations. Under the new bankruptcy provisions, a limit for claim of damages is set at three years' rent on the rejected lease.

Guarantees are treated in the same way, depending largely for the decision on the value of the subsidiary property to the parent concern's operations. The guarantees may be given to cover the charges for debt and/or dividends for stocks, but they would be treated alike if the property were an important one to be retained.

Security Types Employed

To avoid the fixed charges, a default of which may produce another financial crisis, most of the reorganization plans have typically used the income or adjustment bond. This security often has the old mortgaged security of the junior liens, but its interest payment is wholly contingent upon the earnings. As indicated earlier in the discussion of these instruments, the interest may be made cumulative or non-cumulative. The practice of recent plans has been to make non-cumulative or cumulative to the extent earned, but with the common limitation of no more than three years' accruals to be carried forward. This practice leaves the security holder with an instrument possessed of some priority by lien instead of merely a stock, and it also permits the company to claim the interest payments when made as deductions for the purpose of tax calculations.

As a psychological device for the winning of approval of the security holders, the proposal of the income bond is far superior to a preferred stock. In some of the recent reorganizations the income bonds have been

³¹ See the Harlem River and Port Chester lien of the New York, New Haven and Hartford system. But see the "Omaha division 3½'s" of the Wabash system, which were offered under the accepted plan \$1002.37 in preferred stock, \$111.38 of income bonds, B, 4¼ per cent, and \$3.50 cash for each \$1000 bond and defaulted interest.

³² In the six reorganization plans of Chicago, Milwaukee, St. Paul and Pacific; Chicago and Eastern Illinois; Erie; New York, New Haven and Hartford; Seaboard Airline; and Wabash, all equipment trusts and trustee certificates are undisturbed.

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TABLE 78. CAPITALIZATION CHANGES UNDER REORGANIZATION PLANS³³
(Selected Railroads)
As of September 30, 1945

Plans Approved by I.C.C.	Capitalization Before Reorganization (in million \$)			Capitalization Approved or Recommended (in million \$)			Changes in Capitalization (in million \$)	
	Long- term debt ^a	Stock	Total	Long- term debt	Stock	Total	Long- term Debt	Stock
Chicago & North Western	371	181	552	222	107 1 ^b	329 1 ^b	-149	-74 +1 ^b
Chicago, Mil., St. P. & P. ^c	489	119 1 ^b	608 1 ^b	209	111 2 ^b	320 2 ^b	-280	-8 +1 ^b
Chicago, Rock Isl. & Pac. ^c	318	129	447	129	75 2 ^b	204 2 ^b	-189	-54 +2 ^b
Denver & Rio Gr. West. ^c	145	17	162	87	68	155	-58	+51
Erie (incl. Chicago & Erie)	281 ^c	215	496	191	39 3 ^b	230 3 ^b	-90	-176 +3 ^b
Florida East Coast	58	38	96	21	- .2 ^b	21 .2 ^b	-37	-38 ^b +2 ^b
Minneap., St. P. & S. S. M.	131	38	169	33	- 1 ^b	33 1 ^b	-98	-38 +1 ^b
Missouri Pacific ^c	492	152	644	352	58 2 ^b	410 2 ^b	-140	-94 +2 ^b
N.Y., N.H. & Hartford ^c	346	218	564	233 ^d	146 ^d	379 ^d	-113	-72
St. Louis-San Francisco ^c	272	115	387	124	62 1 ^b	186 1 ^b	-148	-53 +1 ^b
St. Louis South- western ^c	69	37	106	38	37	75	-31	-
Western Pacific	78	76	154	34	32 .3 ^b	66 .3 ^b	-44	-44 +3 ^b
Total	3050	1335 1 ^b	4385 1 ^b	1673	735 13 ^b	2408 13 ^b	-1377	-600 12 ^b

^a Includes the principal amount of certain notes and bonds which before reorganization were classified in the balance sheet as current liabilities. Does not include unpaid interest.

^b No-par stock in millions of shares.

^c Excludes securities of Nypano. The plan provided that the latter company be reorganized separately.

^d Includes the following to be issued in acquisition of Boston & Providence and Old Colony properties: *Bos. & Prov.*—\$3 million fixed-interest bonds, \$1 million income bonds, and \$1 million pfd. stk.; *Old Colony*—\$4 million fixed-interest bonds, \$2 million income bonds, \$.5 million pfd. stk., and \$4 million common stock.

^e Includes obligations of subsidiary companies, as shown in the plan approved or recommended.

³³ Source: *Moody's Manual of Steam Railroads*, 1947, p. 248.

created in several series with varying features, such as priority in interest payments, inclusion of conversions, and different rates of interest.³⁴ Thus the avoidance of stock in the exchange offer is possible while yet adjusting the burden of charges to the prospects of the company's future.

Preferred stocks are extensively used in the recent reorganization plans as offerings to the unsecured creditors and partially for the old stockholders. It is to be noted that recent plans have shown a tendency to offer varying amounts in a series of new securities for the old security. This is an effort to spread the sharing of the sacrifice, although the adjustment of amounts offered in each group of the new securities is used to acknowledge the various priorities of claim.

From the standpoint of taxation the use of preferred stocks may well be discouraged, for these payments are not deductible in income calculation for tax purposes. With the current level of tax rates this is not a small or unimportant consideration. But the use of such stock instruments does leave the reorganized concern freer to employ its earnings for improvements or capital additions. In the case of contingent interests there will be more pressure upon the directors to make the declaration of the interest than there would be on behalf of the dividend payment.

A summary of the changes affected in some of the more important railroad reorganizations appears in Table 78. It is interesting to note that the total of all plans has reduced the debt in the amount of nearly twice that of the reduction in the stock group.

Use of Improvement Funds and Sinking Funds

Under the guidance of the Interstate Commerce Commission in the formulation of railroad plans a consistent pattern of provision for sinking funds has appeared. These may be applied to the first liens or to both the fixed and contingent payment bonds designed to build up the equity of the subordinate securities. Since the long-run position of security holders is improved by a sinking fund provision, this becomes an important point in obtaining the consent of holders to exchange for these equity securities.³⁵

³⁴ See the income bonds, Series A and B, of the Chicago, Milwaukee, St. Paul and Pacific or of the Wabash Railroad.

³⁵ See the summary of the Seaboard Airline plan as follows:

SEABOARD AIRLINE		
	Capitalization (in millions)	Charges
Rentals		\$ 110,000
Undisturbed receivers' cert.	\$ 11.8	336,000
First mortgage—4 per cent	32.5	1,300,000
	\$ 44.3	
Capital fund (minimum)		1,625,000
Sinking fund—1st mtg.—1 per cent		325,000
Income bonds—4½ per cent	52.5	2,362,500
Sinking funds—Inc. bd.		262,500*
Preferred Stock—5 per cent	15.0	750,000
Common stock	.8	
Totals	\$112.6	\$6,808,500

* None paid until first mortgage retired

This is, of course, completely contrary to the practices prior to 1930. In other fields than the railroads the practice appears too, and the Securities and Exchange Commission has encouraged its use in plans which it has approved.

In addition to the retirement of debt, the recent plans recognize the consistent need for long-term capital improvement programs which will maintain the investment and property of the company. Only in this way can the earnings be maintained, from the standpoint both of *efficient operating* costs and of technical and competitive equipment changes. There is a developing practice of insisting upon such funds' being inserted as charges in the sequence of deductions after fixed interest payments but ahead of all other payments.³⁶ This seems a proper emphasis of the relative importance of the purposes involved. Contingent interest should be subordinated, for otherwise the properties may be operating at high expense ratios or failing to maintain good technical standards. Earnings in the long run will be certain to disappear in such a case, and the ability to earn for the contingent charges and dividends will become seriously uncertain.

TREATMENT OF STOCKHOLDERS

Since the basic procedure requires the prior debt securities to receive their claim in adjustment under a reorganization plan, it is apparent that stock claims ordinarily have little possibility of being met. Stockholders have little bargaining position left. In most cases there will be a substantial total reduction of the shares offered in exchange, for the original issues. The preferred stocks may not be entirely eliminated but will usually be reduced to common stockholdings. The common stock may be completely omitted.³⁷ Sometimes these stockholders are offered warrants for purchase of the new stock as a last concession to them of the slight value in their equity interest.³⁸

ILLUSTRATION OF REORGANIZATION PLAN

The pattern of development toward failure in financial affairs may be mirrored in a sample case, such as the Chicago and North Western Railway. This road at the turn of the present century was not a large system but compared well with the other operating roads. In Table 79 is a survey of the gross revenues, operating ratio, and coverage of interest charges. Until 1920 the operating ratios were good, charges were not too heavy, and no immediate problem seemed near. The road, however, had been busy acquiring or building small lines and had finally launched upon the program of westward expansion by the "Omaha road" ultimately built to Casper,

³⁶ *Ibid.*

³⁷ See the plans of the Chicago, Milwaukee, St. Paul and Pacific, which excluded all stockholders, or of the Erie, which included both stocks at the rate of five old for one new share of common stock.

³⁸ See the Erie plan with warrants for 1/4 shares at \$37.17.

TABLE 79. FINANCIAL RECORD, CHICAGO AND NORTH WESTERN RAILWAY³⁹
(in millions)

	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945
Gross revenue	\$43.4	\$55.7	\$74.2	\$80.8	\$165.0	\$148.5	\$130.0	\$77.3	\$92.8	\$170.6
Operating expense	26.4	36.6	52.2	56.4	153.2	115.6	101.1	65.3	73.2	138.6
Net operating revenue	\$17.0	\$19.1	\$22.0	\$24.4	\$11.8	\$32.9	\$28.9	\$12.0	\$19.6	\$32.0
Operating ratio	61.0%	65.7%	70.3%	69.8%	93.8%	77.8%	77.7%	84.5%	78.8%	81.2%
Earnings available for fixed charges	\$15.8	\$16.9	\$21.5	\$22.6	\$6.0	\$21.1	\$17.4	\$5.9	\$11.2	\$21.9
Interest charges	\$8.6	\$8.1	\$9.2	\$10.7	\$13.5	\$12.4	\$16.3	\$17.0	\$16.4	\$2.8
Interest ratio of coverage	1.8	2.0	2.3	2.1	.4	1.7	1.1	.3	.7	7.8

³⁹ Source: *Moody's Manuals of Steam Railroads, and Statistics of Railways in the United States.*

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TABLE 80. CAPITAL STRUCTURE, CHICAGO AND NORTH WESTERN RAILWAY⁴⁰
(in millions)

	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945
Current liabilities ^a	\$ 9	\$ 10	\$ 15	\$ 11	\$ 26	\$ 14	\$ 12	\$ 54	\$ 102	\$ 39
Funded debt	145	163	173	215	318	262	352	339	366	170
Preferred stock	22	22	22	22	22	22	22	22	22	91
Common stock	42	51	133	131	145	145	158	158	158	82
Surplus	7	17	39	40	63	64	78	14	448	108
Reserves										(3)
Unearned surplus			(7)	(4)	(2)	(2)	(3)	(3)	(3)	(29)
Appropriated surplus			(32)	(36)	(61)	(62)	(75)	(11)	(451)	(51)
Profit and loss	(7)	(17)								(25)
Total	\$225	\$263	\$382	\$419	\$574	\$507	\$622	\$587	\$600	\$490
Debt to capitalization	64%	62%	45%	52%	55%	52%	57%	58%	61%	35%
Capital turnover ^b	.19	.21	.19	.19	.29	.29	.21	.13	.15	.35

d = deficit

^a Until 1945, this includes any matured interest in default.^b Capital turnover = $\frac{\text{Gross revenue}}{\text{Total capital}}$ ⁴⁰ Source: *Moody's Manuals of Steam Railroads, and Statistics of Railways in the United States.*

Wyoming. At first, the company made investment advances to this road and the parent company had no primary obligation, but in 1925 purchased all its stock for the purpose of consolidation.

The general picture of change in capital structure is shown in Table 80. The constant growth was financed with a steady increase of funded debt. While the course of the road's financial life went undisturbed past 1920, the small surplus which had been built up is worthy of note. This was subsequently added to but was soon dissipated in the crush of the traffic collapse in the period after 1930. As a short-line road the system suffered more than the usual loss of gross revenues in this period and expenses did not fall rapidly enough. But the ultimate decision rested in the gradual loss of working capital because earnings would not cover heavy fixed charges, and as a consequence there was a slow depletion of the treasury. These charges had been made ruinous by the sudden decision of the company to guarantee the "Omaha road" bonds in the course of a refunding. This portion of the system became one of the poorest earnings mileage properties in the country. At the point of failure the company had an extremely poor working capital with a fractional current ratio, which the concern had attempted to bolster with R.F.C. loans; fixed charges were double the earnings for a consistent period of years, and credit was being rapidly exhausted.

A reorganization plan based on realism could not avoid appraising first of all the record of earnings. If these are surveyed over a period of ten years, 1925-1935, so as to include some of the peaks and valleys of the cycle movements, an average earnings of 16 million dollars does not seem an unfair sum. Half of this sum might be employed for fixed charges, but no more in view of the fact that since 1920 the operating ratio has been consistently at a higher level than in the first twenty years of the century. This is a reflection of its short-haul business and its burden of rising labor costs in proportion to traffic. In view of this conclusion, interest might reasonably amount to 8 million dollars.

The actual plan approved in the case was as follows:

TOTAL NEW SECURITIES SUBSTITUTED FOR OLD OBLIGATIONS		
Division bonds 4s		\$ 7,481
1st and general mortgage bonds 2½s (1½ cont.)		58,709
2nd mortgage income bonds, series A, 4½s		96,556
Special notes		
Secured notes 4s	\$ 663	
Serial notes 2½s-4s	3,296	
Secured notes 2½s	25,000	28,959
Preferred stock, Series A, 5%		95,229
Common stock, no par		921 shares

The contrast of the capital charges under the original plan and the reorganization may be compared as follows:

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	Reorganization	Original
Fixed interest	\$4,000,000	\$16,549,000
Capital fund	3,000,000	none
Contingent interest	4,700,000	none
Sinking fund	526,000	none
Preferred stock	5,394,000	1,500,000

The plan has proposed, therefore, an absolute payment charge of 4 million dollars, a sum covered regularly. The combined charges, prior to preferred stock, amount to 12 million dollars, which is covered by the average sum reasonably available for the payment. The added sum of over 5 million dollars necessary to pay preferred stock dividends brings the total possible needs to over 17 million dollars. On the basis of the record, this is earned with a margin in five years. The weakness of the plan, therefore, rests in the possible inability to maintain a good record on the preferred stock and thus keep this channel open for future capital needs.

SUMMARY

A failed business is offered two avenues for a court reorganization: (1) through equity foreclosure or (2) through the proceedings as provided by the Chandler Act. In both cases the work of protective and general reorganization committees will be extremely important. The final disposition of the property under foreclosure sale or under court decree covering a "fair plan" will conclude the efforts to reorganize, other than the exchange of securities and the paying of costs with the remaining values. The work of rehabilitating the corporate property under the direction of the receiver may easily develop into one of the most important events of this whole process. The costs and time consumed do not seem to differ greatly whichever route the reorganization takes.

QUESTIONS

1. Explain the basic proposition of taking a property into receivership. Indicate the power for future management which is thereby created.
2. Outline the powers of the receiver who is appointed by the court.
3. Why may a receivership exist for a long period of years? Why is the court not empowered to terminate the case at will?
4. Outline the nature and creation of creditor committees. Do these committees operate under court order as the receiver does?
5. Describe the work of the general reorganization committee, its creation and personnel.
6. Discuss the nature and importance of the deposit agreement used by the security committee.
7. Explain carefully the nature of the "upset price," as both a legal and an economic concept.
8. What happens to the dissenter in an equity receivership for reorganization? How may abuses enter?

9. Discuss the alleged defects of the "equity" procedure and show how the Chandler Act procedure was supposed to have improved upon it.
10. Outline the prime financial objectives of a reorganization plan. Do these differ as between the "equity" and Chandler Act procedure?
11. Explain the importance of the policy of maintaining lien priority among the creditors in preparing the reorganization plan.
12. Outline some of the important typical practices adopted in recent reorganization plans.

PROJECTS

1. Trace the story of the creditors' committees that operated in the Missouri Pacific Railroad reorganization after 1934.
2. Examine the Erie reorganization. Why do you think it was completed in such a short period?

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CHAPTER XXXVIII

Failure: Termination and Dissolution



CORPORATIONS, in spite of their theoretical longevity, are quite mortal. In the finances of the corporation, termination and dissolution represent the final steps in the corporate life history.

Some Terms Differentiated

Dissolution of a corporation means the extinguishment of its franchise to be a corporation; it is the destruction of all rights, powers, duties, and privileges enjoyed as a legal entity, together with the termination of its corporate existence.

Liquidation, which has a somewhat uniformly accepted interpretation at law, means "to gather in the assets, convert them into cash, and distribute them according to the legal rights of the parties interested."¹ The statutes of the various states providing for the dissolution of corporations imply, if they do not state, that liquidation must be arranged for in theory, if not be an accomplished fact, prior to the dissolution of the corporation.

Dissolution through merger and consolidation will be automatic under most statutes governing mergers and consolidation.² The old corporation

¹ *Browne v. Hammett*, 133 S.C. 446, 454 (1925). In amplifying the meaning here given, the court extended liquidation rights to include the right: (1) to possess the assets, (2) to collect debts, (3) to sell and convey the property, (4) to pay debts, (5) to distribute the net proceeds, (6) to conduct the process of liquidation generally.

² A typical statute, that of California, reads: "Upon the merger or consolidation, as provided herein, the separate existence of the constituent corporations shall cease, except that of the surviving corporation in case of merger, and the consolidated or surviving corporation shall succeed, without other transfer, to all the rights and property of each of the constituent corporations, and shall be subject to all the debts, liabilities, and duties of each, in the same manner as if the surviving or consolidated corporation had itself incurred them.

"All rights of creditors and all liens upon the property of each of said former corporations shall be preserved unimpaired, limited in lien to the property affected by such liens immediately prior to the time of the consolidation or merger.

"Any action or proceeding pending by or against any such constituent corporation may be prosecuted to judgment which shall bind the new or surviving corporation, or the new or surviving corporation may be proceeded against or substituted in their place." *Amendments* to the California Corporation Laws, 1931, chap. xiii, Sect. 361 (7).

may exist for a time for specific purposes,³ though the statutes and all court decisions on the subject contemplate the ultimate dissolution of the merged or consolidated corporation. The general creditors of the corporation dissolved by merger or consolidation may look to the new company or, at their option, to the shareholders of the dissolved corporation, for corporations do not entirely cease to exist in the event of mergers or consolidation;⁴ the financial liabilities extend beyond the apparent life of the old corporations.⁵ However, the "dissolved" company which has merged or consolidated cannot create new liabilities or continue or renew the conduct of business in any form. Corporations which sell their assets, *in toto*, to other corporations are not dissolved except by acts other than the sale; they may acquire new assets and proceed to do business.

There exists a legal difference between corporations which are dissolved⁶ and corporations which are reorganized. In termination and dissolution proper, the business affairs of the old company are wound up and its business operations cease along with its legal existence. In the reorganization, as in the merger and consolidation, only the old corporate legal entity is terminated; the business operations are maintained, and a new corporation is substituted for the old. One corporation is sometimes said to "succeed" the other.

Mere passage of time may terminate the corporation if a limit has been set for its existence. Or its charter could be dependent upon some event described therein, such as the forfeiture of the charter unless the corporation begins to do business within a certain interval after it is granted. In a few states insolvency automatically forfeits the charter of a corporation.

By far the larger proportion of corporate terminations arises directly from the forces leading to business failure. Incompetence and inexperience account for roughly two-fifths of all business failures and lack of capital for about one-third more, so that these three causes normally account for almost 75 per cent of all business failures. Of late years fraud, speculation, extravagance, and neglect have shown a slight tendency to increase, but, surprisingly, they constitute a minor cause of business failure. Overexpansion, excessive fixed charges, and the diversion of working capital appear most frequently

³ The Delaware laws provide for the continuance of the corporate rights for a period of three years; the statutes of Nebraska provide for a period of five years. The Illinois statutes provide for continuance until all debts are paid or the assets have been fully liquidated.

⁴ A specific statute may eliminate suit against the new corporation or against the old.

⁵ The same is true of corporations which are voluntarily dissolved; e.g., the New York laws provide that in voluntary dissolution "such corporation shall continue for the purpose of paying, satisfying and discharging any existing liabilities or obligations, collecting and distributing its assets and doing all other acts required to adjust and wind up its business and affairs and may sue and be sued in its corporate name."

⁶ A corporation will not be permitted to be dissolved where the act is contrary to public interest, an argument whereby public service corporations are often restrained from dissolving. Nor is it possible to dissolve a corporation for the sole purpose of getting rid of dissenting holders to a consolidation.

among the purely financial causes of failure. A sudden shift in product demand, and new inventions or discoveries claim their toll of victims annually. Periodically the seemingly inexorable tides of the business cycle add a few names to the list of those who have been.

TERMINATION WITHOUT FAILURE

Voluntary Dissolution

It will not infrequently happen that a corporation, though not insolvent, will end or complete the purpose for which it was formed; or the shareholders or management may decide that the business which it is doing no longer presents a reasonable business opportunity, or that for some other reason it is wise to dispose of the assets of the company. If the owners of the corporation desire to remain in some form of business, two lines of action are open: (1) A new and different business may be started, using the old corporation, or (2) the old company may be dissolved and a new one formed for some other purpose. If a new business is to be based on the old company, the limitations on the charter of the old company must be reviewed. If too strict, they may be amended; or the company may be reincorporated, perhaps in another state. If it is not possible to carry on the new business under the old charter or amendments thereto, there is no solution but liquidation and dissolution.

The procedure in voluntary dissolution varies from state to state. There are two general approaches which may be called (1) the trustee plan and (2) the self-liquidation plan. The trustee plan is by far the more common and can be illustrated by the system provided under the law of Delaware.⁷

1. Two-thirds of the shares vote to dissolve the corporation at a meeting called for the purpose.
2. Sworn copies of the resolution are filed with the secretary of state, who issues a certificate of dissolution.
3. The directors are constituted trustees with full power to settle the affairs, to collect outstanding debts, to sell and convey property, and to distribute the proceeds to the stockholders after paying the corporate debts and providing for liabilities.

There appears to be no particular advantage to either plan. As soon as the vote of dissolution is taken under the latter, a fiduciary relationship is set up and the shareholders may look to those in charge for protection from any negligence.⁸ Creditors probably have a somewhat better chance under the

⁷ Similar plans are provided for in Nebraska where the local district court is given power to appoint the directors as either trustees or receivers. The Illinois statutes provide that the corporation powers shall continue for the period necessary to pay all debts or liquidate the assets, which makes the directors serve as trustees unless the court is asked to appoint a receiver. The Michigan statutes provide that the directors shall act as trustees, as does the Idaho statute unless there is a request to the court to appoint other persons.

⁸ See *Sprague-Bremmer Mfg. Co. v. M. J. Murphy Furnishing Goods Co.*, 26 Fed. 572; *Windmuller v. Spirits Distributing Co.*, 83 N.J. Eq. 6, 90 At. 249.

trustee system. Between the extremes here illustrated there are almost as many intermediate practices as there are states.

Rights of Preferred Shares in Dissolution

The contracts of most preferred shares provide for a preference to the assets in the event of voluntary or involuntary dissolution.⁹ It is relatively uncommon for a corporation to enter voluntary dissolution unless the assets have already been so depleted that there is little equity remaining for any shareholder. If merely a blanket provision exists to the effect that the preferred shares shall be permitted to receive a stated amount including accrued dividends where the preferred stock is cumulative, and is silent as to whether they may further participate in the assets, the courts will usually hold that no further participation is to be allowed.¹⁰ If the contract provides for preference for cumulated dividends, these also will be paid,¹¹ but, unless it is specifically so provided, the preferred shares will not be permitted a preference on the cumulated dividend.¹² If the cumulation rights are with respect to earnings and there have been no earnings, the cumulation will not be allowed.

Dissolution Under Holding Company Act

A number of companies have had to make voluntary dispositions of their corporation interests under the terms of the Holding Company Act of 1935.¹³ The terms of these dissolutions, all of which had to be with the approval of the Securities and Exchange Commission, have been in several different patterns. In some cases the assets have been sold and distributions

⁹ Some contracts may be interesting in this respect. The 6 per cent cumulative preferred stock of S. H. Kress and Co. is entitled to par value (\$10 and accrued dividends), but no more, in the event of either voluntary or involuntary dissolution or liquidation. The New York Shipbuilding Corp. has outstanding two kinds of stock: (1) participating and (2) founder's. All assets are divided, 65 per cent to the participating stock (which is non-voting) and 35 per cent to the founder's stock (which has sole right of vote). Where classified stocks are used, there may or may not be a preference given to one of them, though it is probably the more common practice to give one a preference, usually the "A" shares. Thus the Class A shares of Forbes and Wallace, Inc., are entitled to \$55 per share before Class B receives anything. All remaining assets go to Class B.

¹⁰ But state statutes may interfere where no statement is made as to the manner of distribution between preferred and common shares. *Maxwell v. Eddy Paper Co.*, 232 Mich. 356 (1925). The question of conflicts between the provisions in the share certificates and the articles of incorporation and by-laws has been decided both ways.

¹¹ See *Penington v. Commonwealth Hotel Const. Corp.* (Del., 1931), 155 Atl. 514. However, a contrary discussion will be found in 34 *Harv. L. Rev.* 282, 304, and 78 *Univ. of Penna. L. Rev.* 87, 89.

¹² Either common or preferred shares may bring an action against the other or against those in charge of winding up the affairs of the corporation, to have their claims adjudicated. *Geiger v. American Seeding Machine Co.*, 124 Ohio 222 (1931).

¹³ For progress in these proceedings see *Moody's Public Utility Manual*, 1946, pp. 916-926; *Annual Report*, Securities and Exchange Commission, last issue.

made to security holders; in others, sufficient assets have been sold to pay creditors, and the stockholders have received distributions of stock in the various subsidiaries.¹⁴

In these cases, where distributions on bonds and preferred stocks have been made, the question as to the amount of their priority has arisen, whether the sum due was at par or at the premium named for the privilege of call by the corporation. The Securities and Exchange Commission allowed only par, and these rulings have been upheld in court decisions.¹⁵

Under these plans, bonds have sometimes been retired under a call for tenders, thus allowing the concern to retire indebtedness with cash sums not fully capable of paying all debt at face values. In other situations the absolute priority doctrine has not been maintained, as when the commission has allowed some common stock interest to survive though valuation indicated less assets than a full payment on the preferred stock and its accumulations.¹⁶ This has been pursued as a policy in view of the law otherwise forcing an extensive sacrifice of values by common stock in the concerns required by the law to dissolve.

On other occasions the holding companies have disposed of stocks held as assets to the stockholders at less than current market, whereupon the holding company has used the cash to retire senior indebtedness or stocks.¹⁷

Liquidation in Limited Degree

Not in every instance does it follow that a corporation which undertakes a reduction of its assets and retirement of a portion of its securities is about to fail. At times, however, when the securities of the corporation sell at very low levels and if there is adequate working capital, any excess may be used to purchase the securities in the open market.¹⁸ Such buying should be directed first of all toward the purchase of debt instruments.¹⁹ An important reason for taking this step may be the desire to reduce the total capitalization and investment in the enterprise.

After full debt retirement, or, to a very small amount, with still adequate working capital available, the corporation may consider purchasing its preferred stock for retirement. This program ordinarily has two important effects. The buying aids the market price stabilization by creating substantial bidding, and in addition it obtains for the company the instruments

¹⁴ See National Power and Light Co. and United Light and Power Co.

¹⁵ See Laclede Gas and Light Co., Holding Co. Act Release No. 5062; but see also American Power and Light Co., Holding Co. Act Release No. 6176, and American Light and Traction Co., Release No. 6603.

¹⁶ See distinction on whether a liquidation or a recapitalization is involved: *Otis & Co. v. S.E.C. et al.*, 323 U.S. 624, and 8 S.E.C. Decisions and Reports 894 (1941).

¹⁷ As in the case of the North American Co., Holding Co. Act Release No. 7273.

¹⁸ See the debt reduction procedure of the Joint-Stock Land banks after 1933 and the program of the Southern Pacific Railroad, 1939-1947.

¹⁹ Check the retirement on tenders by American Agricultural Chemical Co., 1934, of its common stock; Pullman, Inc., 1941, of its common stock; Illinois Central Railroad, 1948, of its funded debt.

valued least by the owners. Thus the purchases make the cash expended go a long ways in improving the position of the company's securities.

If the program involves a large expenditure and is to be undertaken but once in the year, it will be more equitable for the company to put the security holders upon notice by calling for the tenders.²⁰ This procedure will prevent criticism of the management as having taken unfair advantage of the holders.²¹

FAILURE: SETTLEMENTS IN DISSOLUTION

Involuntary Dissolution

What is technically known as the "involuntary dissolution" of corporations may arise where claims cannot be met, but some agreement may be effected for a non-judicial program of dissolution. Efforts to reach an agreement with the creditors and stockholders for an orderly liquidation will ordinarily save a great deal more of the values for distribution. Such private settlements will save the costs of litigation and sale of the assets under forced conditions and under dispute of various liens. Bankruptcy brings all of these disadvantages, as many creditors know; therefore they are willing to cooperate in a more inexpensive procedure, which will probably yield better values from the properties.

Friendly Liquidation

The creditors of a company will sometimes agree to a *friendly liquidation* under which, instead of the assets being assigned to an assignee, the corporation retains control and liquidates the assets itself. This plan has the advantage of retaining the knowledge and experience of the management in selling the assets, and of reducing the expenses of liquidation.²² Naturally it does not put upon some creditors any unusual responsibility of an unwelcome task with which the creditors may not be familiar. All creditors must agree to the plan, and the liquidating corporation must be careful not to commit an act of bankruptcy for it may be thrown into bankruptcy proper by some disgruntled creditor.

Assignment

An assignment is an arrangement under which, the creditors willing, all the assets, or an agreed proportion of them, are transferred by the corporation, as assignor, to an agreed-upon party, called the assignee, for the benefit of third parties, the creditors. The assignees sell the assets, distribute the net proceeds among the creditors, and, if there is more than enough to pay claims, repay the surplus to the assignor. The assignment, since no time

²⁰ See Rule X-10B-5 in Securities Exchange Act Release No. 3230.

²¹ An interesting study entitled "Some Aspects of Reacquired Stock" appears in *Harvard Business Review*, July, 1943, pp. 505-510.

²² This arrangement sometimes presents difficulties where rental and lease contracts are involved.

limit is set, has the advantage of permitting an orderly liquidation instead of a forced sale as under bankruptcy; expenses are less, so that the net realization is greater; there is less publicity than in bankruptcy, since the assignment is a private matter between the assignees and the creditors. However, the assignment device is weak because of its uncertainty; any creditor can throw the whole matter into the bankruptcy court under the federal laws, for the making of an assignment constitutes an "act of bankruptcy." The device is used for the most part by small businesses.²³ Mercantile credit associations, credit bureaus, and similar organizations have acted quite frequently as assignees for small stores, factories, etc., where only local creditors are concerned.²⁴

FAILURE: SETTLEMENT BY BANKRUPTCY

Bankruptcy

Bankruptcy, the third form of liquidation, merits special distinction for, with its origin presumed to be found in the Bible,²⁵ the procedure has been widely used and poorly controlled for many years.²⁶ With the spread of the corporation form to the smaller business, it is to be expected that bankruptcy

²³ The following item is typical of the operation of assignments under these local associations:

"The assets of the corporation [Worth Corp.] conducting a women's specialty shop at 43 West 34th St., New York City, were taken over on May 17, under an assignment to creditors, by Maxwell Copelof, executive director of the Merchants' Ladies Garment Association.

"At a meeting of 300 general creditors at the Hotel New Yorker, a creditors' committee was appointed, headed by J. Frumkes of the Monarch Garment Co. The meeting voted confidence in the efforts of Mr. Copelof to conserve the assets for the benefit of the creditors.

"Tentative figures, prepared by counsel for the assignee and submitted at the creditors' meeting, indicated assets of \$65,000 with liabilities of \$170,000.

"The Worth Corporation was organized in March, 1931, to purchase Worth, Inc., which went into receivership on December 11, 1930. It is capitalized at \$1,243,125, represented by 65,000 Class A stock and 95,000 common no-par shares.

"Motion for the appointment of a receiver in bankruptcy for the corporation was denied May 19 by Federal Judge Caffey on the ground that a receivership was not necessary, since the corporation's assets had been taken over under an assignment to creditors."

²⁴ The assignment, while it operates to prevent unusually vindictive creditors from securing an advantage through suits and judgments resulting therefrom, is dangerous, for making an assignment constitutes an act of bankruptcy, and creditors can always force the matter into the bankruptcy court.

²⁵ It is supposed to be found in Deuteronomy 15:1, 2, which reads: "At the end of every seven years, thou shalt make a release. And this is the manner of the release: every creditor that lendeth aught unto his neighbor shall release it; he shall not exact it of his neighbor, or of his brother; because it is called the Lord's release."

²⁶ Some of the comments on the bankruptcy law will be found in 33 *Monthly Labor Rev.* 550-552; 41 *Yale L. Rev.* 329; 42 *Yale L. Rev.* 591; 30 *Col. L. Rev.* 25; *J. Crim. L. & Criminol.*, March-April, 1933, p. 1073; 19 *Am. Bar Assoc. J.* 7-10.

will become an increasingly important problem in corporation finance.²⁷ The bankruptcy law is a federal statute; hence all actions fall into federal courts.²⁸ Under the law the bankruptcy courts have increasingly become dumping groups for commercial wreckage, a sort of sanctuary where debtors are forgiven their debts irrespective of the wastage of property. Bankruptcy is an exceedingly expensive manner of settling the financial affairs of a corporation, yet it is the only way where there has been fraud or where transfer or concealment of assets might prevent recovery under the usual assignment or liquidation proceedings.

There are two types of bankruptcy, voluntary and involuntary. A corporation, other than a railroad, a moneyed,²⁹ or a municipal corporation, may become a voluntary bankrupt by filing a petition to be so declared; once a voluntary bankrupt has been so adjudicated, the proceedings are identical to those in involuntary bankruptcy. To be declared an involuntary bankrupt,³⁰ at least three creditors aggregating claims of \$500 need petition. In either event the creditor must show: (1) that the corporation has debts of at least \$1000, (2) that it is totally insolvent,³¹ and (3) that an "act of bankruptcy" has been committed within four months. An individual or a corporation is said to commit an act of bankruptcy if, within a period of four months prior to the filing of the petition, it does any one of the following while in a state of actual insolvency: (1) makes an admission in writing of its inability to pay all debts; (2) permits individual creditors to obtain a preferred legal position to the disadvantage of other creditors; (3) makes a transfer to creditors so as to give a preference; (4) transfers or conceals assets with intent to defraud or to give preferences; or (5) makes an assignment for the benefit of creditors.

The older bankruptcy laws were extremely unsatisfactory from many angles. By various devices the stockholders of corporations managed to hang

²⁷ Statistics show that more than nine-tenths of the cases of bankruptcy involve assets of less than \$5000.

²⁸ The sole jurisdiction of the bankruptcy law is confined to the United States District Court. In the District of Columbia, the Supreme Court (of the district) and the District Courts of the several territories are constituted courts of bankruptcy.

²⁹ Moneyed corporations are banks, trust companies, and insurance companies. Public service corporations are included in the exemptions under the existing statutes.

³⁰ What are known as "voluntary involuntary" bankruptcies have been common. Such arrangement or procedure consists of getting a group, or even a single creditor who is friendly to the corporation, to file a petition for bankruptcy. The fact that the petition is filed by a creditor legally characterizes the action as involuntary bankruptcy. The corporation then accepts the service, admits the condition, and makes no move to prevent the adjudication. This gives the appearance of working harmoniously with the creditors to maximize their realization. Moreover, an involuntary bankrupt may go through another bankruptcy within six years and be discharged from his debts, whereas a voluntary bankrupt may not be discharged from his debts in a second bankruptcy within six years of any other voluntary proceedings.

³¹ A concern is totally insolvent, not when it is unable to meet its maturing debts, but when the total of its debts, whether due or not, exceeds the total of its resources. See the federal bankruptcy law, Sec. 1 (15).

on until not only their equity had been used up, but also a large percentage of the capital obtained from creditors had been dissipated.³² Because of the futile position of creditors, they often opposed bankruptcy proceedings until the last resort, a practice which only further amplified their inability to collect under the bankruptcy proceedings.³³ Even when a corporation went or was thrown into bankruptcy, the expense was so great that such assets as were entered into the trust estate were largely consumed.³⁴ Creditors naturally became very careless about filing their claims under such circumstances; this carelessness created added difficulty because of disagreements, litigation, and ill will. The creditors plot, scheme, and connive to gain advantages over one another on the theory that there probably won't be enough to pay everyone. While legally the device of corporate bankruptcy may not be used as a device for defrauding creditors,³⁵ it would be untruthful to say that it had never been so used and proved successful because of the absence of discovery.³⁶ A second general weakness of the

³² No recent study is available to indicate the exact recovery made by the creditors of bankrupt estates; but in 1928 a report showed that 66 million dollars was recovered out of total claims of 830 million dollars, and in 1931 a sum of 66 million dollars was recovered out of total claims of 1 billion dollars.

³³ The average assets of 221 bankruptcies investigated in Boston in 1930 was \$219, against which the average claims were \$3524. Allowing nothing for expenses, the realization would be about 6 per cent.

³⁴ The following table shows something of the situation discovered by the study made by the Yale School of Law and the Department of Commerce:

Size of Bankrupt Estates	Percentage Consumed by Expenses
\$ 1-\$ 100	85
101- 250	73
251- 500	63
501- 1500	49
1501- 5000	32

The futility of the creditor's position is apparent when one realizes that the assets will average only about 6 or 7 per cent of their claims, and that expenses will probably consume half of that.

³⁵ If two or more corporations are used to avoid the liabilities of one of them, the courts will disregard the corporate fiction to prevent loss to creditors. *Booth v. Bunce*, 33 N.Y. 139 (1865); *Hibernia Insurance Co. v. St. Louis & New Orleans Trans. Co.*, 13 Fed. 516 (1882); and *In re Rieger, Kapner & Altmark*, 157 Fed. 609 (1907).

³⁶ The bankruptcy racket is an old one. There are organized rings, for it is quite difficult for a single individual to succeed in it. A typical example is described:

"This was in connection with the bankruptcy of the H. J. Sherman Company of New York City. For more than two and one-half years this group of professional criminals engineered eight fraudulent bankruptcies in New York and vicinity. They succeeded in mulcting packers, wholesale grocers, and affiliated merchants of merchandise the retail value of which is estimated at three-quarters of a million dollars. The investigation by the special agents of the bureau extended over a period of one year. The ringleader was found to be one Minor K. Ziongas. He was assisted by his brother Pericles, Elkan B. Marks, Theodore D. Berman, and Sidney T. Dobles. A deliberate scheme was concocted by these individuals to obtain control of certain companies, in order that, having obtained such control, they would be better able to defraud the creditors. The firms involved in all instances were those possessing a good credit rating. The first

existing system of bankruptcy lies in the theory of its application, namely, that the problem is one of law and not of business and economics. Referees are usually lawyers rather than businessmen; trustees are lawyers rather than financial or manufacturing experts or merchandising managers.³⁷

Immediately after the petition for bankruptcy is filed, the court will appoint a *receiver*. His duty is concerned with the preservation of the assets of the company, usually only until a *trustee* has been appointed by the court or elected by the creditors. It is relatively common to have the receiver continued as trustee. Receivers are usually appointed when there is danger of immediate decline in the value of the assets through deterioration, waste, fraud, neglect, or any other cause. Ordinarily, if a *composition* is ultimately to be effected, the skill with which the receiver conducts his work will be most important.

At the same time that the receiver is appointed, the court will also appoint a *referee*, who becomes its administrative arm for the case. Referees are appointed for two-year terms, but are removable at the pleasure of the court. It is the duty of the referee to examine all lists of property given in by the

operation contemplated the further building up of this credit by prompt cash payment for purchases, until creditors were lulled into a complete sense of security. When this was accomplished, extremely large orders for any kind of merchandise whatever would be placed on credit. As soon as the merchandise was received, it would be diverted to certain of the conspirators who distributed it among dealers in such a manner as to obtain cash therefor at a considerable discount from cost price. The money was then hidden. By the time the creditors realized that payments were not being made, the firms were thrown into bankruptcy and the conspirators proceeded to a new location for a further trial of the same or a similar scheme. The names of the firms used in the course of this scheme will give an idea of its extent. These were the Long Island Paper & Grocery Company, which went into bankruptcy in 1929; the Interstate Sales Co.; The Puritan Products Co.; the Mercer Merchandise Company, Inc.; the Tri-County Grocery Company, Inc.; the Euro-American Corporation, and the H. J. Sherman Company. Fictitious names were used by the conspirators, and it was with considerable difficulty that their connections with the individual bankruptcies were proved. Elkan B. Marks was not apprehended until April 26, 1932. Notwithstanding the Pericles Ziongas and Theodore D. Berman had been arrested in the latter part of 1930, they continued their activities while at liberty under bail awaiting trial, in connection with other conspirators in bringing about other fraudulent bankruptcies." J. Edgar Hoover, "Bankruptcy Frauds," 23 *J. Crim. L. & Criminol.* 1073, 1076.

³⁷ In response to agitation in New York, the Irving Trust Co. in 1929 was appointed receiver for all bankrupt estates in the Southern District of New York. The company had a special department for receiverships. An official auctioneer was also appointed for the district. The investigation of Colonel W. J. Donovan in 1930 brought out these abuses: Work was concentrated among a few lawyers; fee-splitting was prevalent; attorneys were acting for both creditors and trustee; creditors objecting were bought off on the side; both receivers and trustees were often delinquent in their accounts; and many receivers were mere figureheads. This investigation recommended: (1) the creation of a permanent Federal Bankruptcy Commissioner, (2) licensing and supervising all trustees in bankruptcy, (3) immediate reference to referee and trustee to eliminate interim receiver, (4) inspectors, elected by creditors, with whose consent court could settle matters, (5) restriction of attorneys to legal matters only, and (6) a single report to be filed by the trustee at the conclusion of the case.

bankrupt; to give notices to creditors of meetings, etc., which they may be entitled to attend; to examine claims filed by creditors; to make any changes which time may necessitate in either the assets or the claims; to act as a clearing house of information for all concerned; to keep and compile records of all proceedings relative to the cases under him; to declare dividends to the creditors, and to inform the trustee of all such dividend declarations and supply him with a list of those to whom the dividend is payable. If cases of conflict arising among creditors or between the creditors and the trustee, the referee decides the questions.

The first step taken by the referee after his appointment is to call a meeting of the creditors, at which time the bankrupt is examined, the claims are proved, and the creditors elect a trustee to succeed the receiver previously appointed by the court. Should the creditors not elect a trustee,³⁸ the court will appoint one. The trustee is then vested with title to all assets of the bankrupt estate, including books and records. In effect, he legally succeeds the bankrupt corporation in every property right possessed by it. It is his duty to collect the assets, to liquidate them into cash, to pay dividends as they may be declared by the referee, and to render an accounting to the creditors. In paying claims when settling a bankrupt estate, a specified sequence of claims must be recognized: taxes, expenses of bankruptcy administration, wages (some limitations), preferred creditors, creditors without preferences, and shareholders or owners.

Sometimes what are known as *compositions*³⁹ are reached, under which the bankrupt corporation makes a compromise with its creditors, agreeing to give them a certain percentage of their claims in return for their agreement permitting it to secure an immediate release or discharge from further payments on the debts. Two-thirds of the creditors must approve the composition, whereupon it becomes binding upon the balance of the creditors at the approval of the court. Under a composition, fraud, deceit, or neglect may be proved within a limited time and will cause the courts to set the agreement aside. The composition arrangement is designed to save the expenses of bankruptcy administration, to avoid the forced sale of assets, to permit a fixed and certain value of debts to be determined at once, and to give a debtor every opportunity to secure a maximum realization from the assets. Such an arrangement speeds up the settlement, often enabling the bankrupt to earn sufficient income from some new venture partly to pay the composition debts. Composition of debts may be reached outside of the court of bankruptcy, but in such cases it is binding only upon the creditors who signed the composition agreement.

³⁸ Three trustees may be elected instead of one if the creditors so desire.

³⁹ In *Anderman v. Meier*, 91 Minn. 413 (1904), a composition is defined as "an arrangement between a debtor and his creditors, the latter agreeing with the debtor, and mutually among themselves, to receive and the debtor to pay, a certain part or portion of the demands in full payment and discharge of the debt." Cf. also *Reynolds v. Pennsylvania Oil Co.*, 150 Cal. 629 (1907); *Henry v. Patterson*, 57 Pa. 346 (1868); and *Crawford v. Krueger*, 201 Pa. 348 (1902).

SUMMARY

Once a firm has determined its inability to proceed in a normal business operation it is not easy to dissolve and liquidate. Creditors must be paid so far as the assets are sufficient. Voluntary liquidations and assignments may save some expenses but are exposed to the activities of the dissenter. Surrendering the properties to a bankruptcy court may make a final disposition of the claims but it will sacrifice a good many values for the expenses of this process have regularly been large. Efforts to relieve this burden of expense are not very successful.

QUESTIONS

1. Does dissolution always take place through liquidation? Why or why not?
2. Explain how an assignment to creditors works for the liquidation of a business. What are the advantages?
3. Indicate the two ways in which bankruptcy may be requested. Are these the alternatives in all cases? What is the act of bankruptcy?
4. Explain the function of the receiver, trustee, and referee in bankruptcy cases.
5. Why do the liquidating values available to the creditors and stockholders in a bankruptcy prove so small in most cases?
6. Explain how a "racket" may develop in bankruptcy procedure.

PROJECTS

1. Prepare a report on bankruptcies in relation to the period of the business cycle, the quantity of liabilities compared to new securities, and the liabilities compared to total profits in the period.
2. Describe the bankruptcy of a local firm and contrast it with the general pattern.

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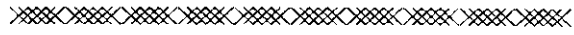
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PART NINE



Social Aspects of Finance

CHAPTER XXXIX

Social Aspects of Corporate Financial Policy

THE more multitudinous, complex, and specialized the institutions composing and activating an economic society, the greater the extent to which that society, in effecting the creation and exchange of goods and services, must depend upon the uninterrupted functioning of every element in its system. Specialization has progressed further in the United States than in any other nation; consequently, in the United States even relatively slight derangements or inefficiencies in the economic mechanism may be of great significance. In the past we have devoted much time and energy to the creation of our economic machinery; in the future, instead of trying to create additional mechanism, we shall probably find it more to our advantage to create ways and means of utilizing properly and efficiently the economic machinery we already possess.

As the conduct of private business has been increasingly assumed by the corporation, the opportunity for participation in business through other than corporate forms has declined.¹ The public has slowly been forced to exchange its annual capital savings fund for corporation securities which, in turn, represent rights, duties, and responsibilities between the corporation and the society which fosters it. (As the corporation becomes the sole source through which the savings of society are applied to the technology of production, exchange, and distribution, the axioms of social and political justice will require that the policies and principles of corporate operations be tempered, that public interest dominate private interest, and that general welfare supplant private acquisition.) And as the corporation assumes the role of sole user of society's savings and controller of industry, society will be increasingly alert to maintain a control in its own interest.

DOMINANCE OF LARGE-SCALE CORPORATE ENTERPRISE

The many advantages brought to present-day society by the modern corporation, with its ability to attract large sums of capital, to divide the

¹ If the rate of growth of the corporate form continues another half-century as it has in the past half-century, over 90 per cent of the wealth of the nation will be under corporate ownership.

management and ownership responsibilities, to permit large-unit mechanical production methods, and to subdivide the many functions among experts of all kinds, have grown beyond their originally conceived boundaries. By the large size required to obtain these advantages from the corporate enterprise, we have created a new problem—the economic dominance of the business life of the country.

In Chapter III it was pointed out that the corporate units employed on the average more than 80 per cent of all persons engaged in manufacturing and in wholesaling. In these same fields the value of the product shows that the corporate enterprise controls 70-90 per cent of this value. It was pointed out, too, that the profit of all industries flowing through the channels of the corporate enterprise ranged from 45-55 per cent. Certainly "big" business has come to America in the financial field by the route of the corporation.

Senator J. C. O'Mahoney in his final statement of the Temporary National Economic Committee stated dramatically "Let me present here a table which compares the total assessed valuation of all the property in each state—as of 1937—with the total reported assets of the 30 billion-dollar corporations of 1935. It will be observed that *there are only 10 sovereign States which have within their respective borders property valued at more than the assets of either the Metropolitan Life Insurance Co., or the American Telephone and Telegraph Co. . . .* It was estimated, for example by Dr. Willard L. Thorp of the Bureau of Foreign and Domestic Commerce, that corporations now do from 60 to 65 per cent of the total volume of business in the United States."

And the senator adds, "Few of these [corporations], of course, are to be classed with the billion-dollar giants, but the fact that they do so large a proportion of the business of the country is conclusive demonstration of the all important fact that we have passed from an individual economy to a corporate economy." The summation included in the report points out that 248 corporations out of the 477,833 in the year 1937 reported 40 per cent of the total net income for all corporations, and that 394 corporations out of the whole number held 45 per cent of the total assets. Finally the statement at this point concludes, "The great and powerful business organizations which dominate the economic scene are owned by a numerically insignificant proportion of the total population."

But some analysis of the dramatics also suggests several questions. First, it is not explained by these observers whether they would exchange the productivity of such economic operations for something less productive. Second, ownership statements make only a direct calculation of the stockholders while the indirect interests of the millions of life insurance policyholders and savings banks depositors are given no significance. Third, it is not explained very adequately how this widespread interest with indirect rights of choice and control is different from a political democracy, which likewise has many points of powerful concentration.

There is certainly a problem in these large-scale units, but that problem is not solved by merely pointing them out, or by the bland assumption that a government operation or control might do better. Those points still in doubt and the questions we are testing constitute the very dynamics of corporate practice and usages.

CONTROL OF THE CORPORATION

The Position of the Security Holder

Ownership of corporate securities has grown apace in this century in the United States. Beginning the century with fewer than an estimated 500,000 security holders, it is reported that by 1930 the total had reached nearly 24,000,000. Many of these interests are very small in number of shares held per person, but it is true that such small holdings frequently comprise the vast majority of the total holdings. The 1947 annual report of the United States Steel Corporation shows that about 165,000 individuals, personally or as trustees, held about 6,000,000 common shares of the 8,700,000 total shares issued. The annual report of Eastman Kodak Company for 1947 shows 51.1 per cent of the stock in the hands of individuals, 16.7 per cent held by trusts and estates, and less than 5 per cent in the hands of insurance companies. Other financial institutions hold better than 24 per cent. The Borden Company report for 1947 comments on the stockholders' position in the company to the effect that no individual owns as much as 1 per cent of the total, and that a study of 2500 holders shows the largest number of holders to fall in the following classes: housewives, professional workers, retired people, managers, storekeepers, and office workers, in the order stated.

The very spread of these holdings over large areas and into the small holders' ownership does provoke a keen problem as to their effectiveness for control of the corporation. They lack much information and understanding for choosing the directors and making decisions. But this seems something of the counterpart of themselves as voters in the American democracy too.

Change in Property Ownership Relations. Our economic life is rapidly becoming "corporationalized," a basic change which will necessitate a critical evaluation of some of the fundamental conceptions of private property and its rights. For direct ownership of the instruments of production, indirect ownership has been substituted.² Neither the powers nor the responsibilities of direct ownership (of ordinary private property) are incident to the indirect ownership brought about by the acquisition of securities of corporations which directly or indirectly own property. With the substitution of indirect for direct ownership, all the magic of property which turns sand into gold has been destroyed. The indirect property owner

²The whole problem of the corporation in its economic setting is much in need of a thorough study. The work of A. A. Berle and Gardiner Means, *The Modern Corporation and Private Property*, is excellent from some points of view, but it is entirely legalistic, and the economic theory is antiquated by a consideration of a traditional logic of property and profits which is scarcely justified.

finds, in the bonds and stocks of his corporate wealth, no extension of his own personality comparable to that in his grandfather's business wherein romantic tales of struggles, privations, defeats, and triumphs wove together, like warp and weft, the life and soul of the individual and his business. In the values of the indirectly owned wealth there is no reflection of the ability or the character of the indirect owner; there is no correlation between the efficiency of the owner and the value of the securities, for the latter varies independently of the owner's efforts.

The individual owner of securities, if they are listed on organized exchanges or are active in over-the-counter markets, finds, however, an advantage in indirect ownership in that he may daily observe the totality of the forces of valuation as they affect his holdings. Whether he is in London, Rio, Timbuktu, or his home town, he can keep abreast of the generalized value of his properties by observing market quotations. Likewise, the indirect owner of property, under the corporate system, finds his ownership incidences are both highly liquid and in a form which he can use much more freely financially than if he owned property directly; i.e., he can ordinarily realize on or liquidate his ownership without a forced-sale loss, such as often occurred when large properties were owned directly.

The Concentration of Corporate Control. Since on those who supply the entrepreneurial interests in a corporation fall the hazards of the enterprise, it has been accepted as the inalienable privilege of the entrepreneur to control the enterprise. The last decades have seen a considerable modification of this time-honored scheme of parallelism in ownership and control. The alienation process has proceeded along two quite different and contrasting lines: (1) the breaking down of "closed" corporations and (2) the difficulty of widely held stocks' gaining effective control participation for all shareholders.³ The defense of the concentration of corporate control normally proceeds along one or more of the following lines: (1) When ownership is generally diffused among persons of greatly varying degrees of business ability and over wide geographic areas, there cannot be developed any strong responsibility for management of the enterprise. (2) Stockholders provide no exception to the general tendency for men to follow more or less self-nominated leaders who happen to possess initiative.

Minority vs. Majority Interests. Of late years there has been an increasing tendency to extend trading on the equity, until probably not more than one-tenth of the larger and better-known corporations have a pure "net worth" capital structure.⁴ A definite correlation exists between the purpose of using the corporate form of enterprise and the nature of the structure. Where the sole purpose of the corporation is that of making use of the

³ The extent to which these non-voting securities were used to concentrate control in some corporations was alarming. The I.C.C. and S.E.C. in administering the Holding Company Act have both declared non-voting stock would not be approved.

⁴ That is, solely composed of voting common stocks. If a more liberal interpretation of proprietorship is made to include preferred shares, the percentage may be more.

limited liability principle, little trading on the equity has resulted, but where the major aim was to secure additional profits for those who control the company, trading on the equity is more common. The majority-minority conflict develops about these classes of investors: (1) Some supply capital and do not expect to participate directly and normally in the affairs of the concern. This group includes bondholders, noteholders, and, under ordinary conditions, preferred stockholders. In all cases it will include non-voting stocks and may include voting stocks held by trust funds, etc., where the aim is investment, not control or appreciation. (2) Some investors who supply capital have an interest as well as a desire to participate in the affairs of the corporation but are disorganized and not well enough informed on business affairs to be able to do this. This group will include voting preferreds and commons when, as, and if they are held under the terms described. (3) Some investors participate as an organized minority voting group, usually owning only voting common stock. This group is normally well informed regarding the business and its policies, past, present, and future.

Of the three groups, the last supplies the smallest proportion of the capital, often less than 1 per cent of the total, yet they direct the whole.⁵ It is clear, then, that the problem resolves itself into a job of protecting the majority—the investing, trusting, non-knowing public—from an organized, controlling, informed, exploitative, profit-seeking minority. Whether this should be achieved by a control over voting power or by some other stimulus to action on the part of inert and careless stockholders is a debatable question.⁶ A possible philosophical argument is that minority capital sources should be protected by majority capital sources, instead of the reverse, as is done at the present time.

The Protection of Diffused, Unorganized, and Dispersed Ownership. As the corporation grows in importance and spreads in its inclusion of all wealth and economic activity, it is reasonable to expect the average holdings of the average investor in individual companies to decline in their percentage ratio to the total worth of the corporation in which he participates. That

⁵ Cf. A. A. Berle and G. C. Means, *op. cit.*, chap. v, in which the general problem of control is discussed in conjunction with a critical analysis of the control of the 200 largest corporations in the United States. The gist of the matter was that 11 per cent of the largest corporations were controlled by private ownership and majority ownership combined, while 79 per cent were known or thought to be controlled by minority ownership, management, or through some legal device without any important ownership. The 200 companies represented about one-fourth of the wealth of the country, but about one-half the total corporate wealth. Though these compilations of Professors Berle and Means are spectacular, they may easily lead to false conclusions. The corporation problems of the day still rest largely with the average corporation.

⁶ The use of voting powers of a different nature for the different holders of the same class of common stock has been held to be legal in the case of closed corporations. *Clausen v. Leary*, 113 N.J. Eq. 324 (1933). The extension of this principle to all corporations might be somewhat difficult, however.

is, his holdings will become smaller relatively, though absolutely they may grow larger. As the relative size of his holdings declines, there is a corresponding destruction of the power of the individual shareholder to participate effectively in the affairs of the corporation. Even though the average shareholder recognizes his inability to influence the course of the corporate destiny, as long as he receives dividends and the price of his shares does not go down he is utterly indifferent to the whole problem.⁷ To organize these widely distributed security owners effectively when occasion arises, or to create some form of continuing organization which will protect their interests from the usual oligarchical control of the average corporation, constitutes a central problem in the social evaluation of the corporate mechanism. At the moment there are available at least three agencies for the accomplishment of these ends, each of which merits brief comment. (1) *The proxy committee* arrangement is a device useful only during relatively short periods, for the proxy cannot be used beyond the time limits set by the state statutes or the common law (usually one year). The promise of the proxy committee device rests chiefly upon its flexibility, the speed of its formation, and the lack of any requirements of complicated, uncertain legal documents. (2) *The protective committee* provides a somewhat more permanent form of organization for the cumulative representation of minority holdings. It will usually last a specified length of time, though normally not more than five years; it will have more power than merely that of casting a vote; it will be able to institute and defend suits in the interest of the deposited securities; it can and does raise funds; and it is ordinarily not so seriously affected by withdrawals, though it cannot bind absolutely the depositing security holders.⁸ (3) *The voting trust* is fairly well established at law and provides a relatively permanent plan of controlling corporate affairs within the limits imposed by the amount of deposited shares.⁹ The voting trust, however, may result in merely another alienation of the small holder's rights, since he cannot legally exercise any power over the trustees or their decisions without assuming unlimited personal liability therefor. This device is more commonly used as a means of achieving minority con-

⁷ See *Autobiography of Lincoln Steffens*, p. 533; I. M. Wormser, *Frankenstein, Incorporated*, pp. 156 ff.

⁸ Some protective committees derive their powers through proxies, and when their power is so held, they are no better than proxy committees. Much more common is the deposit arrangement under which the committee is constituted an attorney in fact, hence can continue to vote deposited securities until they are withdrawn from deposit.

⁹ In its earlier years there was much opposition to the voting trust on the ground that the voting power of a share of stock could not be divorced from its ownership. However, at the present time voting trusts have been legalized in most states, though only for limited periods of time. One thing is certain in the voting trust—everyone knows who are the trustees and therefore who are responsible for the control of the company, whether the voting trust represents majority or minority ownership and investment. Such precise determination of the seat of control is not so easy under many devices employed to control corporations.

trol than as a protective measure for small holders.¹⁰ It usually permits withdrawal of deposited shares only upon a very restricted basis, if at all.

All of these devices are, however, available primarily to meet specific problems; they do not offer a very effective means of evaluating situations for a minority and giving expressions quickly on proposed corporate actions. Perhaps a much more encouraging sign is the practice inaugurated by a major life insurance company and by a large industrial firm. These corporations have sent annual reports especially prepared for general information to the stockholders and then announced area meetings at central cities with the stockholders and a committee of directors and officers in attendance. The official meetings cannot be split into these area meetings. But here the reports can be discussed, questions can be asked, and a general sense of trusteeship between management and stockholders can be created. Such moves show alert management with not only a sense of public relations but also an awareness of the current problem of the proper exercise of stockholder control. Further developments along this line are to be encouraged for they emphasize the doctrine of cooperation, and that is certainly the political principle under which we seek to operate. It may be equally applicable on an increasing scale to financial and economic operations.

Position of Public Control

Before any material progress in the control of an economic institution can be successful, some sort of criteria have to be developed. Utilitarianism may provide a grand intellectual ideal, but its application encounters many difficulties. Shall all or only some corporations be controlled? If only a few, which ones? If all, why? Shall corporations be controlled in favor of consumers? In favor of capital? In favor of the management? Or shall control be in favor of the stockholders as specific persons or as groups? If we ignore the management, will the quality of management fail? If so, can other, new management be found? Or can an incentive to management other than personal aggrandizement be found? If not, what can be used as the basis of determining fair and reasonable remuneration to the management? If profits are used as a basis of regulation and control, what constitutes a reasonable and fair profit? Shall this reasonable and fair profit be thought of as including the return on invested capital? If so, does it not approach

¹⁰ Holding companies and investment corporations have been the most frequent users of the voting trust; it has therefore been mostly a device for assuring control without any permanent ownership of or investment in the securities of the controlled corporation. Thus corporation A acquires the majority of the shares of corporation B. These shares are deposited in a voting trust under which the directors of A are the trustees, and an equal number of voting trust certificates are issued to the corporation. The voting trust certificates are then sold to the public to recover the original investment for corporation A. It is clear that no investment, except the expenses of the creation of the voting trust, has been made by A.

The voting trust has been very effectively employed as a means of solidifying the shareholders in the case of reorganizations and reconstructions. Its merits are open to some question from a social point of view.

zero when there is a plethora of capital and credit? If profits are limited in good times, should not deficits be made up to the company during bad years? If so, where is the money to come from? Or should profits be left entirely alone, and only dividend and bonus disbursements be controlled so that the deficits of bad years can be made up from surpluses of good years? What can be done with the surplus in the meantime? Should the point of control begin at incorporation, by the prevention of incorporation where there is little or no chance of success? Should a weak personnel ever be permitted to begin a business? What rules and hypotheses can be applied to distinguish a real from an unreal business opportunity? What objective or subjective standards can be set up, and by whom applied, to distinguish between good and bad management? The criteria of business and corporate regulation and control remain, as yet, hidden in the veiled future.

Technique of Control. Both direct and indirect control of corporate financial policy, by state and by federal government, have been proposed and are being practiced at the present time. Which of the forms will ultimately prove to be the best must wait for the cumulation of considerable historical experience. At the moment, state control and indirect methods appear to be less employed, for direct, positive, federal control is distinctly in the ascendancy.

The Conflict of Legal Jurisdictions. Unless a corporation conducts its entire corporate activities within a state jurisdiction, it must become a creature of two sovereignties.¹¹ The conflict may be between states or between the federal government and the states.

As between the several states, the legends and traditions of interstate comity provide the base from which spring the conflicts. If a corporation had no rights and was not recognized outside the state in which it was chartered, there could be no conflict. But when each state admits corporations of all other states (usually for operative purposes, less commonly for financing purposes) upon no special requirements other than those imposed upon its own corporations, difficulties are certain to arise. As long as there is disagreement as to the extent to which, and the manner in which, regulation should be imposed, just that long will interstate conflict be present. The existing conflict seems to be along the lines of jurisdiction, of basic policy, of methods employed, and of rules of judicial interpretation.

Between the states and the federal government there occurs some conflict over jurisdiction, but much more over basic policy and judicial inconsistency. Thus, in regulating banking corporations some receive charters from the national authority and are responsible only to it; some receive state charters but, because they have become members of the Federal Reserve, are subject to certain federal statutes; still other state banks are subject only to state law. Since they compete one with another, the conditions are sometimes advantageous to national banks, sometimes to state banks, and some-

¹¹ Even though its activities lie wholly within a state, conflicts may arise between the state and the federal government.

times to neither. Life insurance companies possibly represent another case. If a federal statute prohibits a corporation from doing some particular thing, should a state law permit another corporation to do it? And, vice versa, should a corporation with a federal charter be permitted to do things a state would not permit its own chartered corporations to do? In its broadest aspects the question is whether the federal government should undertake actually to supervise, or only to license, all corporations, or only some of them.

The Problem of Regulatory Policy. As yet, there is by no means a generally accepted philosophy of business and social regulatory policy. And in no phase of business is the absence of an accepted policy more conspicuous than in the financial. If it may be charged that the government of the seventies and eighties was a creature of the trusts, it may be more safely argued that in the last decades financial interests have tipped the scales of political, social, and economic justice. We have today two definitely different schools of thought on the matter of financial regulation: (1) that which says it is best to maintain a hands-off policy, and to give attention solely to the education and protection of investors, workers, and consumers; (2) that which maintains that the financial affairs of the corporation (i.e., business) must be properly regulated.

The end to be attained is also open to question. The earlier attitude in the United States was one of fear of large-scale enterprise; hence every effort was used to break up financial growth, irrespective of the manner in which the growth occurred or the activities fostered by the growth. Specifically, the problem of size seems intermingled with the element of fear, the loss of opportunity to compete by the individual, and something of the inherent conception of the equality of man. But there is neither a definite nor an accepted standard of regulation.

Uniformity of State Laws. While it may be a forlorn hope ever to expect uniform laws in all the states, some achievements may be said to have been made during the past two decades. The Uniform Stock Transfer Law is probably the most important, though it is of practically no significance from the point of view of corporation finance. A model corporation law has been suggested, but thus far little progress has been made. The most important points upon which it is desirable that state uniformity be accomplished are taxation, the sale and issue of securities, reorganization, incorporation and promotion, capital structure, and management responsibility.

The Public Interest Theory of the Segregation of Corporations for Regulation. In a good many textbooks, and in a great many court decisions, some industries are set off in a special category as being "affected with a public interest." The distinction is not only artificial and incomplete; it is logically indefensible and constitutes a form of hypostatization behind which lurks some of the vaguest thinking and most fruitless generalization in modern economic investigations. It is to our public interest that the economic system function as a unit; any substantial element in that system

may interfere with its operation and therefore affect the public interest. Thus the monopolistic theory of public interest breaks down. Nor may individual dependency be used as the index of public interest, for one is quite as dependent upon the great copper companies for copper as upon the local gas company for heat, as dependent upon the automobile manufacturer for transportation as upon the local streetcar, and as dependent upon the textile manufacturer for clothing as upon the local electric company for light. True, some of these needs have greater immediate priority. Trade and employment dependency are quite as valid as a basis for determining what is affected by a public interest as is the idea of one's inability to generate electric current for light; so, too, is the opportunity for capital investment, since an individual may discover non-corporate investments only with great difficulty.

The Problem of Banker Control. A derivative of the separation of corporate ownership from corporate control in American business has been the development of banker control, or a degree of banker influence approaching control. The investment banker and the commercial banker are the channels through which the tiny rills of savings come together to form the great rivers of capital funds which have fed and nurtured American business expansion. In periods of prosperity these streams of capital become raging torrents, and at their flood stages they exert much pressure upon banks; they may overflow, literally flooding the country with funds which freely flow into the most preposterous promotional schemes. In periods of economic depression the savings are shut off and the floods of capital subside. It has been rather conclusively demonstrated that interlocking directorates result in the control of business in the interests of the bankers rather than in those of the stockholders or the public. In recapitalizations, bond and creditor reorganizations, and new promotions, the investment bankers have frequently achieved control. As one writer puts it: "The whole seat of ultimate power has been shifted from those who have supplied the capital funds for an enterprise to those who have simply assisted in the process of marketing the securities exchanged for those indispensable funds."¹² It is the strategic position occupied by the banking interests which permits such a condition: investors have no other outlet for their funds; corporations have no other mode of securing funds.

But banker control is not without its defendants. The banker, especially he who engages to raise money for corporations on long-term credit or ownership participation, says he will be held morally, if not economically, liable for the fortunes of the corporation and its securities. If the company prospers, he receives no particular thanks nor added remuneration; but if it meets financial embarrassment, he is fervidly condemned. To protect himself further, the banker argues that his close identification with the corporation enables him to gauge the financial policy more accurately and to prevent the management from making serious financial blunders.

¹² Paul M. O'Leary, *Corporate Enterprise in Modern Economic Life*, p. 45.

The Reorganization Problem. Some of the most debated questions of corporation finance are to be found in the problems of reorganization. The equitable solution of business embarrassment, while keeping the business intact, is difficult. Being both the death of one business and the beginning of another, it is endowed with a double task. In its adjudication the courts have been forced to work on an economic problem of which they know little and which they have taken to themselves with no small reluctance. There have been questions of jurisdiction; some find in the equity courts a sufficient remedy; others think the problem lies outside of law—that it is for economists, accountants, engineers, and financial technicians. Criteria have yet to be erected to determine in whose interest the reorganization shall be controlled: that of the consumers, the stockholders, the creditors, the management, or cliques thereof. Even though the reorganization has been equitably planned, how to enforce it remains to plague those who find the solution.

Directorial Responsibility. In the search for solution of the problems of corporate finances and their social control, the inefficiency and irresponsibility of some corporate directorates have raised questions. Naïvely the reformists have struck at the great industrial corporate empires, where a hit was easy and a blow spectacular, forgetting that the hundreds of thousands of small corporations provide the vestibule schools in which the directors of large corporations serve their apprenticeship and are educated in the ways of aggrandized finance. When enacted, regulations have been identical for both large and small companies, an impossible condition. Adequate reform, it has been suggested, should provide ways to (1) bring the board of directors closer to the actual affairs of the business; (2) focus the attention of directors upon the problems of determining general policy, leaving to the management the execution thereof; (3) revise the standards of conduct (legal, economic, and financial) for directors and lawyers as a protection of the scattered security owners; (4) mobilize scattered and disorganized investors to the end that they may both determine the status of the company independently and become effective in the "patrol of the field of finance"; (5) create definite spheres of action within which corporate directors shall be exclusively responsible; and (6) provide for the classification of directors according to the function they serve in the corporation. These measures are worthy of consideration but no one can rest assured that they are cures, not palliatives.

CONTROL OF FISCAL POLICIES

Exercise of public control over general fiscal policies of the corporation has not been extensive. The law has incorporated such rules as these: (1) Profits must be created before dividends in the usual course can be paid; (2) the corporation may not mortgage its property for debt beyond a stated percentage. In general these controls have not gone deeply into broad questions of policy.

Capital Structure

Capital structure presents two definite relations: (1) between corporations where structural stratification occurs and (2) within the corporation in which capital structure is primarily considered.

Whether corporations should be allowed to trade on the equity to any extent is essentially an economic question. When they are permitted to do so, the result is a tendency for the profits or returns on the residual claimant securities to fluctuate more violently. This fluctuation will be still more accentuated when stratification occurs. Hence as the public encourages or discourages trading on the equity, it will automatically affect stock price fluctuations, assuming profits do fluctuate. A good argument could be made that no corporation other than a purely operative concern should be permitted to borrow above a certain fraction of its capital.

It is a moot question as to how capital structures can best be controlled. To define by law the possible situations which can develop would be beyond reason, cumbersome, and without justice in many instances. Yet to lay the entire matter open to administrative law, although at once supplying a much desired flexibility, is to invite all sorts of other difficulties. In a democratic government such as ours, trouble would appear by reason of undue influence. Moreover, much of the theory is sufficiently vague to be difficult of enforcement even if public officials with the highest of ideals and best training were given absolute control. A tentative investigation of the principles and practices of corporation commissioners shows that much yet remains to be accomplished.

The control exercised by the *Interstate Commerce Commission* goes deeply into railroad capital structure. The importance of the work with reorganization plans has carried this power further than ever before. The *Securities and Exchange Commission* is charged with the administration of the *Holding Company Act of 1935*, and it has ruled that the law requires S.E.C. approval of the capital structure type for all securities issued under the dissolution plans. This power the commission has used; and it appears to show a shaping into a definite pattern of decisions on extensiveness of debt, on powers to vote, and on valuation of the assets.

Financial Statements

The problem of financial statements is one of the most acute in corporate finance. To give full and complete statements to each investor would be dangerous; for a competitor, upon the acquisition of a single share of stock, could obtain complete information on the affairs of the company. Even the slightest weakness in a concern could be magnified and used to destroy it. Yet not to require such statements forces the investor to place his money in the concern on faith. Both the *Federal Securities Act of 1933* and the *Securities Exchange Act of 1934* seek to force adequate information to be given out through financial statements. Others change the form of report from time

to time so that comparative trends are destroyed. One year inventories are written down to lose money; another time they are increased to provide profits. Assets are reappraised according to current values, depending upon whether a corporate advantage (to those in power) will result therefrom; depreciation rates are raised or lowered upon the principle of expediency. Just as long as these practices are possible, individuals will be persuaded to make unwise investments.

The problem is not solved by rules, however. Since the commission requirements are primarily for information, it cannot force upon the concerns a uniformity of practice in accounting. Moreover, the regulations will touch only those concerns with public issues sold to the public; there will be many exempt small concerns not included. *Solution is difficult, and it is a matter which plagues not only business accounting but likewise the reports of government itself. This is a complex world after all; and it is not likely the citizen will find someone capable of seeing all and knowing all for him, unless he wishes to revert to slavery. Perhaps the best protection is to educate people to understand that an accounting statement is not a finality but a statement of opinion. If the bases of such opinion are stated, thereafter each individual must act upon his own judgment.*

The Problem of Management Remuneration

The widening gap between management and stockholders leaves a very important question as to the proper remuneration for the management. Within the past three decades a consistent pattern has evolved in the larger corporations toward large salaries, benefits other than salaries, and pension rights. Just what is the corporate management worth? That is one of the hardest questions to answer in all corporate relations. Time and again it has been proved that business concerns, taken from the control of one management group and passed to another group, have definitely changed. Sometimes these changes have been for the worse; then again, they have led to revivals which have caused companies to rise from the ranks of mediocrity to the status of leading corporations. Management has been largely responsible in these cases. What should be paid for these services?

Apart from salaries the management officials have often been allotted special bonus payments as a percentage of the profits over a stated allowance upon the stock. Frequently the managers have been given special stock purchase options at very attractive prices. These stock privileges are not a direct payment; for without success, and so appraised in the market, the privilege may actually return very little. On the other hand, if the right to purchase is extensive, the returns may be in millions of dollars.

A study of five firms chosen at random which provide pension privileges shows the firms paying an average salary of \$47,060 to officers and at least \$20,000 to directors.¹³ The average pension payment on retirement guaran-

¹³ The range here is from \$19,100 to \$63,000.

tees a retirement sum of \$13,400 per year to these same persons.¹⁴ The total of management remuneration as a percentage of net income available after taxes indicates a range from 2 up to 12 per cent; or in terms of earnings per share these payments ranged from 10 cents per share to 19 cents per share in the year 1947. In terms of total claim the figures probably are not large in proportion to the size of the firms; the question which may still remain is whether the officials deserve a guaranteed future at the expense of the stockholders who have no such thing as certainty in the future dividend policy. It should be pointed out that many of these pensions were the product of the war period, a time when they could be installed and the charges deducted before income tax calculations; consequently this seemed to make the direct cost very light. So far as taxes are already reduced and might be reduced within the next two decades, the pension burden will fall increasingly upon the stockholders. Worse still, it must continue through good and bad times alike; there is no assurance of this in dividends.

FUNDS FOR INVESTMENT

Interest Rates

Rates of interest for credit employed in business have normally been those of a market price determined by the willingness and judgment of users and suppliers. The characteristic most important in the determination of rates today is the action of the federal government through its various financial agencies. Chief of these agencies is the Federal Reserve Board and the several Federal Reserve banks.

The Federal Reserve System is now in the position to influence both money rates for short-term credit and interest rates for capital loans through the investment market. This latter control, of course, has a direct relation to stock financing so far as a differential between stock yields and bond yields tends to exist. The policy of artificially lowered money rates and capital rates was installed in the effort to break the depression in 1934. This program was consistently followed, and because of World War II fiscal requirements it became even more necessary to keep rates low if the large sums borrowed were to be carried in normal times. All efforts bent to this end have, of course, carried rates of alternate uses in the same direction. A reversal of trend was effected in 1947, but the change is not anticipated to be large so long as the Federal Reserve System supports the government bond market at par values for the long-term issues.

The danger of such low rates is in the invitation to business to use credit in an unusual amount since it is so cheap by comparison to previous periods and the probable future rates. Business on the whole seems to have been restrained from overuse of credit, for the retention of earnings has risen heavily in the present period. This has indicated a desire to finance from within and avoid incurring interest charges. Perhaps the same cannot be

¹⁴ Pension payments ranged from \$7700 to \$23,700 per year, and the largest pension went with the smallest salary.

said for some of the attractive bank loans for five- and ten-year serial payment agreements. Since the rates were made even lower than the capital market offered, a shift from long-term debts into bank loans has been noticed. Most of these loans represent refundings in large amounts; only a small amount is in new capital growth, which makes the procedure probably less objectionable than it would otherwise be.

The announced policy of the government to prepare plans for establishing large public works in a depression stage of the cycle represents another injection of government policy into the investment market. Such projects will be financed, it is anticipated, with government debt; and, as a consequence, a large peacetime use of investment funds will be made, though not by private industry. Probably little competition for funds would exist at such times for the private industry, and this type of debt would make available investments for the savings and insurance institutions when private offerings decreased. The tendency of such operations is to tie the savings and insurance institutions more closely to the government by their possession of still more securities directly issued by the government or by government loan agencies. This factor will work for even more of an interest in government control or adjustment of interest rates.

Accessibility of Bank Credit

The ease of access to bank credit by business upon reasonable charges, both in short- and in long-term loans, has been the question of much discussion since the 1930's. Dealing with the apparent concentration of economic power in industry provoked some examination of this question. It became particularly important that small units should gain reasonable access to the banks, or the effort by private enterprise to deal with concentrated business units would be futile. The Treasury produced a study on this general question but without clear-cut conclusions either as to the conditions or as to the future methods of operation.

To meet the emergencies of the 1930's, the government created a series of loan agencies to assist firms to obtain credit and remain free of insolvency, the most famous of which is the Reconstruction Finance Corporation. Basically, loans granted by it were to tide over the economic chasm. Subsequently came a series of operations to finance new promotions, such as the aluminum industrial operations under the Reynolds management.

At that time provisions were made also allowing the Federal Reserve banks to make direct industrial loans if the applicant could not get access to credit in a local institution. Such loans were for new business primarily. All these efforts were made as acknowledgment that some defect operated in the fiscal system which prevented such concerns from being financed as potential competitors of the existing business firms.

There are several reasons why many new firms or small firms, hoping to expand and not finding the extensive credit they desire, usually cluster around points common to the business process. First, most firms denied

credit did not have sufficient equities; they did not appear to the local banker to justify the risk involved. In view of the known incidence of failure in commercial and industrial enterprise, this is not surprising. Second, the unit bank system usually requires that the bank loan no more than 10 per cent of its capital and surplus account on any one loan. Frequently this was the very type of case which went to the Reconstruction Finance Corporation or the Federal Reserve Bank. While the local banks might have combined on such a loan if meritorious, there is no easy way for them to combine; and they have not been prone to act in such unison.

Third, standards of commercial bank examination would usually not approve the type of loan which is under discussion here. For this reason the banker, who was convinced of the moral soundness of his risk, would often not be permitted to carry the loan to its conclusion but would be made to eliminate it from the bank. Thus the banker was discouraged by another arm of the government from making any real effort to meet the problems suggested. For a long time capital loans of any kind were held to be bad commercial banking practice. Modifications of today recognize the fact that real estate loans of certain high standards and with a ten-year maturity limitation are desirable investments for small portions of the total loan account.

In the field of general capital needs the investment banking system is not geared to small operations. Commissions and costs where the capital issues are handled may easily run to over 10 per cent, or several times the cost to the large firm for its capital flotations. This has prevented small firms from moving into the market to strengthen their equity investment, which action might then earn them a better credit rating for local bank loans. In connection with these problems it has been suggested that area banks be created which could assist financing both in stocks and in bonds for the small concerns.¹⁵ Less formal than this would be local syndicate operations. Very little has been accomplished along these lines as yet, though in some communities greater progress has been made than in others. The American Bankers' Association has stressed the development of the small loan departments of local banks, the expansion of correspondent bank connections so the smaller bank could cultivate the sources for the small local business, and the use of term loans. All will hold in some degree; but basically business which is small or just beginning needs invested capital, not borrowed capital, to make it a sound enterprise.

Risk Capital Availability

As was indicated in the preceding discussion the basic need of small business is equity investment. Large business needs some of this too, though where the unit is a successful enterprise much of this need can be supplied from retained earnings. The difficulties of investigation and administra-

¹⁵ See the pamphlet, *Meeting the Special Problems of Small Business*, Research and Policy Committee of the Committee for Economic Development.

tion in the case of small businesses offer a special challenge, but at the moment create special costs which hinder risk capital's being made available. Apart from cost as a deterrent, however, the basic tax policy of the federal government operates as a handicap. The progressively higher surtax has now so burdened the large income with deductions that it is not even profitable to risk equity investment which might return unusual dividends. In fact, the large investor is driven to tax-exempt securities which will return a good income with little management attention and comparatively no risk. Two philosophies have brought the economic process to this impasse. First is the suggestion that large incomes are antisocial, that as a result the large investor should be heavily taxed. The fact that such incomes may be the source of large portions of risk capital is apparently weighted very lightly. In contrast the mounting portion of investment made for the nation through the avenues of savings and insurance institutions forces the use of debt; equity instruments are largely prohibited to such institutions. Hence we have two divergent trends making the matter of equity or risk capital accessibility an ever more pressing one for business, and especially for small business.

Second is the philosophy that large profits are antisocial. In certain situations this might very well be true, but the use of a generic rule has led us to omit all distinction as to what inducement is required to cause one to take an extraordinary capital risk in a dynamic system. There is not the slightest intent in any of our social proposals to pay the losses of those who try to promote or operate a new business. But against such risks the individual must have the potential gain of large profits. The position that all large profits are bad brings us, however, to the point of discouraging the investment of funds in risk capital under such conditions. A debt seems much the more reasonable avenue for the employment of investment.

GOVERNMENT CREDIT OPERATIONS

Most of the state and local governments since the days of the founding of the country have not been prone to extend public credit to private persons, or to operate such credit institutions. Recently the federal government has set up enterprises in this field on a very large scale. Some government credit agencies were initiated in response to emergency situations. During the depression of the thirties, for instance, the government came to the rescue when private credit was exhausted. In some cases, however, operations which were initiated as emergency measures developed into powerful permanent arms of the federal government, extending credit in direct competition with private financial establishments, as we shall see.

The Farm Loan System

In 1916 the federal government moved to make facilities more available for farm credit by the creation of a system of twelve regional land banks. These banks were created with an initial investment by the federal government, and were left to sell their own securities in the public market. By

1932 the system had made loans on which repayments of one billion dollars had been made. But the farmers still did not use the system fully, because the rates seemed high competitively, and the mortgage requirements seemed very strict.

For temporary credits on equipment and livestock the Agricultural Credits Act of 1923 was passed, setting up twelve regional intermediate credit banks. Loans could be made or notes discounted from other banks or from cooperative marketing associations. In 1933 the Farm Credit Administration was created as the agency to administer all forms of farm credits. The next year the Federal Farm Mortgage Corporation was added with an initial 200-million-dollar capital and power to borrow 2 billion dollars on the guarantee of the federal government.

Pressures developed in the depression thirties brought interest rate reductions which were quite substantial, and for relief situations the low rate was below actual cost, thus amounting to a subsidy. This was an invitation to the use of credit. The net result has been the approximate doubling of

TABLE 81. LOANS OUTSTANDING MADE BY FARM CREDIT ADMINISTRATION¹⁶
(in millions)

	1933	1939	1943
Federal land banks	\$1232	\$1904	\$1357
Federal farm mortgage	70	690	406
Federal intermediate banks	15	1	2
Banks for cooperatives	18	76	235
Production credit association	73	309	506
Private banks	60	33	35
Regional agriculture Credit Corp.	144	8	32
Emergency crop, etc.	90	168	147
Totals	\$1702	\$3189	\$2720

total credits outstanding for the Farm Credit System between 1933 and 1939, when the obligations held totaled over 3 billion dollars. At the end of 1943 the credit extensions were still over 2.7 billion dollars. The distribution of outstanding loans appears in Table 81.

The Home Loan System

The homeowner also found himself burdened with mortgage difficulties in the depression of the 1930's. The response was the Federal Home Loan Bank, created in 1932 and followed in 1933 by the Home Owners' Loan Act. The first law created and provided for the administration of a system patterned after the regional Federal Reserve banks, making loans to member bank and loan associations. The second act allowed the refinancing of outstanding loans by a separate and newly created corporation, the Home

¹⁶ Source: *Statistical Abstract of the United States*, United States Department of Commerce, 1945, p. 371.

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Owners' Loan Corporation. Also the act provided for federal savings and loan associations and cooperative building associations which could obtain investment of government funds in their shares. Accounts in these associations were insured up to \$5000 by a still separate corporation, the Federal Savings and Loan Insurance Corporation.

The Home Owners' Loan Corporation was terminated in 1936 after over 3 billion dollars in advance had been made. It was followed by the Federal Housing Administration, which was authorized to operate a loan-insurance system for new home construction or improvements. Local credit institutions make and hold the loans, which are insured up to 80 to 90 per cent

TABLE 82. LOAN SUMMARY, FEDERAL HOUSING ADMINISTRATION¹⁷
(in millions)

	Total	Title I	Title II		Title VI	
		Proposed Improvement	Sec. 203 Home Maintenance	Sec. 207 Rental	Sec. 603 War House	Sec. 608 War Rental
Net insurance outstanding	\$4360	160	3235	101	763	101
Amount amortized	2033	1569	438	7	19	...
Face amount	\$6393	1729	3673	108	782	101
Insurance terminated	947	48	848	36	15	...
Face amount written	\$7340	1777	4521	144	797	101

of the amount of the loan by the government. Through this credit device the federal government had added another 6-billion-dollar extension to individual borrowers up to the year 1944. The general classification of credits extended is shown in Table 82.

The Reconstruction Finance Corporation

Prior to 1932, when the Reconstruction Finance Corporation was created, the federal government had not engaged in recent decades in granting credits for general business. The credit system for the farm loans had been inaugurated during World War I, but elsewhere in the credit system the federal government was not a competitor to the private lender. The R.F.C. started originally with 500 million dollars in stock subscribed by the Treasury, and with the capacity to borrow three times the stock sum. By the end of the year the borrowing power of the corporation had been made 3.3 billions. The lending powers of the R.F.C., which were originally conceived to aid where the shock of the 1929-1930 period had slowed private credits, went on steadily expanding until 1947. The list is long but worth reviewing briefly to picture how deeply involved the operations of the R.F.C. became in the whole credit of the country. At first loans were made

¹⁷ Source: *Ibid.*, p. 369.

to banks and lending companies. Then followed the power to invest in their capital securities, to make loans to the railroads, to make loans to the states for relief, to make loans to the cities for self-liquidating projects, to subscribe to the stock of the Federal Farm Loan banks, the Home Owners' Loan associations, and other credit agencies of the government. Additional powers were granted to lend to agricultural associations and cooperatives, and to make loans directly or collaterally to industrial business where no other loans were available. In 1940 power was granted to aid in the national defense program. But in 1947, although the charter was renewed, lending powers were curtailed by act of Congress.

The operations of the corporation, 1932 to 1944, are summarized in Table 83, which gives a good impression of the magnitude of the credits extended

TABLE 83. CREDIT EXTENSIONS BY CLASS AND AMOUNT, RECONSTRUCTION FINANCE CORPORATION, 1932-1944¹⁸
(in millions)

	Disbursed	Repaid	Balance
Banks and trust companies	\$ 3,365	\$ 3,008	\$ 356
Agricultural financial institutions	1,452	1,451	...
Building and loan companies	140	138	3
Insurance companies	137	105	33
Mortgage loan companies	245	233	12
Government loan companies	516	340	178
Railroads	850	478	371
Business	294	259	34
National Defense	14,550	6,801	7,749
Self-liquidating projects	616	579	37
Other	835	486	349
Government agencies	3,953	3,464	489
Totals	\$26,953	\$17,342	\$9,611

and the principal outlets. The largest amounts lent in the business field, of course, were to the banks and trust companies and to the agricultural groups. It is the banking field which in 1944 still had the largest outstanding credit. The progress on the railroad loans was slow because many of the operating companies were in reorganization.

Federal Credit Summary

At the end of 1944 the federal government corporations and credit agencies had assets of 56 billion dollars involved in all their operations—a huge amount to be controlled by a single authority. The various agencies and the amount employed by each are shown in Table 84. A comparison of this governmental enterprise with the commercial banking assets controlled by the many private credit organizations in the banking business may be extremely significant. At the end of 1944 the total commercial

¹⁸ Source: *Ibid.*, p. 378.

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TABLE 84. GOVERNMENT CORPORATIONS AND CREDIT AGENCIES¹⁹
December 31, 1944
(in millions)

	Assets	Liabilities	Capital	
			U.S.	Private
Export-Import Bank	\$ 274	\$ 74	\$ 200	
Smaller War Plants Corp.	134	...	134	
War Shipping Admin.	6,400	860	5,540	
Bank for Cooperatives	283	69	207	7
Federal Intermediate Credit	372	281	91	
Federal Land Bank	1,441	981	242	217
Production Credit Corp.	125	...	125	
Federal Farm Mortgage Corp.	434	286	148	
Rural Electrification Admin.	380	239	141	
Commodity Credit Corp.	2,498	3,191	d. 693	
Farm Security Admin.	599	189	410	
Reconstruction Finance Corp.	10,665	9,919	1,446	
R.F.C. Mortgage Co.	118	91	27	
Federal Deposit Insurance Co.	806	517	150	139
War Public Works	124	...	124	
Federal Home Loan Bank	303	97	124	82
Federal Savings & Loan Insurance Co.	156	56	100	
Home Owners' Loan Corp.	1,310	1,229	81	
Federal Housing Admin.	143	40	45	58
Federal Public Housing Auth.	559	407	52	
Defense Homes Corp.	71	59	12	
Tennessee Valley Auth.	729	74	655	
U.S. Maritime Comm.	4,294	326	3,968	
All other	23,884	12,219	11,665	
Totals	\$56,105	\$31,106	\$24,495	\$504

d=deficit.

banking assets of the country were 129 billion dollars, or about 69 per cent of the total credit assets employed. The assets of federal government credit agencies, therefore, represented at that time about 30 per cent of all assets available for credit.²⁰

SELF-REGULATION IN FINANCE

Rapid social and economic development, coupled with the economic postulates of rugged individualism and relatively unsatisfactory ethical standards, not only impeded associative, but made inexpedient individual, self-regulation of financial affairs for corporations. Under existing conditions in the United States it is hopeful, in the field of finance, that corporate self-control can be developed beyond an indifferent success. The development of permanent, alert, and positively assertive organizations of stockholders and bondholders could be quite effective in individual corporations. It cannot

¹⁹ Source: *Ibid.*, p. 380.

²⁰ *Ibid.*, p. 380; *Federal Reserve Bulletin*, December, 1945, pp. 1218-1219.

be denied that some corporation managements have sincerely felt they were affected with a public interest, that they have assumed the responsibilities concomitant to this position, and that they have conducted themselves with due decorum.

In a few instances it is possible to detect forces within the private and quasi-private corporate structural system which are promising, though they still represent small voices in a wilderness. *Private and individual bankers*, critics to the contrary notwithstanding, have done much to improve corporate financial structures and practices. Regardless of all the condemnation heaped upon the New York Stock Exchange by the critics of our corporate system, that institution has been of substantial influence in the past in improving public relations of the corporations whose securities it has listed. The bankers can, and probably will, do more in the future under a more or less complete segregation of commercial and investment banking operations. The Federal Reserve System, through its rediscount operations, has had some influence on the working capital practices and, through its collateral loans, upon the long-term debt and general capital structure. The Railroad Credit Corporation and the Reconstruction Finance Corporation have been of aid. Under able administration, the Federal Securities Act of 1933 has become most important. Where banks, trust companies, and insurance companies invest large proportions of their funds in corporate securities, it would be expected that their choice of securities, directed by the financial analyses of the proposed purchases, would lead toward better financial practices. Probably upwards of three or four billions of dollars are each year invested on the advice of these three groups of institutions, but even their record is not all that it could have been.

If organized and directed, the fifteen or sixteen million people in the United States who directly own the stocks and bonds of our three-quarters of a million corporations could be a titanic power in controlling corporate financial policy. But they show little willingness to be organized, and they will not be directed. In the case of individual corporations the self-nominated reconstruction and reorganization committees often develop internal dissension; but even though no dissension or discord arises, they must often fall before the combination of a battery of high-powered attorneys and organized management minorities.

In the same group as the public are the public accountants who are presumed to see to it that the corporate books are properly kept and that the actual condition of the company is accurately portrayed by the published financial statements. Concerted action by all public accountants, or by all corporation lawyers, or by economists is not to be expected.

SUMMARY

The problems of controlling the tenuous fabric of our corporate system, preserving its virtues in financing and organization, and yet rendering innocuous its inconsistencies, are neither simple nor easy of direct solution.

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Uniform state codes would accomplish much, though variations in court interpretations might create obstacles of a sort and raise problems of jurisdictional conflict for a time. A federal law of incorporation would be much better, though exceptions for small corporations would be necessary to prevent the federal courts from becoming so cluttered up as to defer decisions beyond all hope. The creation of special courts to handle cases involving corporations might aid. Or one might go a step in the opposite direction and require the business conducted in each state to be done solely by a corporation organized within and fully subject to the laws of that state, and then permit nation-wide holding or investment companies with unrestricted liability except as provided for the subsidiaries in the individual states. In reorganizations, reconstructions, mergers, etc., there could be an extension of equity court powers with a corresponding improvement in the rehabilitated corporations.

Probably the most promising of events, however, is to be found in the revival and extension of the trust fund doctrine, and the trusteeship of the officers, directors, bankers, and management of the company. At present, through other controlled corporations, they do not deal at arm's length with the company—neither do they always deal with the stockholders as their fiduciary position would demand.

As to just what can be done about public accountants who prepare the financial statements of corporations, no one seems to be certain. But there is little debate that certified public accountants prepare statements ostensibly, not incidentally, for purposes of public consumption.

Finally, something needs to be done to extend the judicial rules regarding the idea of corporate fiction. Certainly when it is used for the express purpose of evading reasonable liability, it should be disregarded for it amounts to shifting a portion of the risks incident to the conduct of business upon those not cognizant thereof.

QUESTIONS

1. Outline the dangers believed to exist in the dominance of the large business unit in the economy.
2. Explain how, with our large number of security holders, it is possible easily to concentrate the control of the concerns.
3. To what extent are the courts disposed to protect a minority group of stockholders? Wherein do you regard this as inadequate?
4. Discuss the difficulties encountered in the financial control of business concerns without a uniform and integrated policy.
5. In what way do you regard the stockholders' power to appoint the auditors as important in control? How might it fail to be significant?
6. Discuss the degree to which public regulation has sought to control general financial policies. Indicate at least three fields in which there might be concern.
7. In reference to the rates for capital, what has the government policy been? How may it be a danger to private financial policy?

8. Evaluate the accessibility of business to bank credit and capital funds. Be sure to cover both large and small enterprises.
9. Outline how the federal government has become a competitor in the field of credit and capital operations.
10. Evaluate the entry of government into the general capital field, not only in terms, rates, and amounts but as an economic force for capital direction and capital formation.

PROJECTS

1. Prepare a report on investments in general business, agriculture, and regulated industries at ten-year intervals since 1910, and state what you consider significant facts.
2. Prepare a report on stockholding interests since 1925 in American Telephone and Telegraph and General Motors, including the extent of total holdings of officers.

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