

FINANCIAL ASPECTS OF
CORPORATE NET WORTH.

By

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UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

VOL. XXXII

APRIL 30, 1935

No. 35

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

BUREAU OF BUSINESS RESEARCH
COLLEGE OF COMMERCE AND BUSINESS
ADMINISTRATION

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BULLETIN No. 50

PUBLISHED BY THE UNIVERSITY OF ILLINOIS, URBANA
1935

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1700-4-35-7627-S

UNIVERSITY
OF ILLINOIS
PRESS II

PREFACE

The business and financial practices of modern corporations are dynamic and constantly change under the pressure of statutes, court rulings, economic conditions, and entrepreneurial decisions. One significant phase of these changes in practice is that many of them have centered in, or involved, the net worth of corporations. In general, the liabilities have not been affected except indirectly. The assets have occupied an intermediate position, some of the changes therein affecting the net worth, and others not.

This bulletin is confined to a study of net worth data from corporation balance sheets. It is true that net worth and the remainder of the financial structure are interdependent, but any attempt to bring in these interrelationships would immediately open up a range of possibilities far beyond the scope of this investigation. Consequently, the data and analyses, with but few exceptions, are strictly confined to net worth.

Moreover, net worth itself is not studied exhaustively; only a few of its many financial aspects are surveyed. The analysis and discussion are concerned mainly with the size of net worth and of its component parts of stocks and surplus. These details are studied to discover changes in recent years, variations accompanying different sizes of enterprise, and the extent to which common and preferred stocks, as well as par and no-par stocks, are employed. Other parts of the study analyze these same factors as related to type of industry, intangible values on the financial statements, and treasury stock. Other equally important topics, such as arrangement and classification of items in the net worth section, meaning and correctness of presentation, compliance with law and accounting, terminology used, and the like, are not dealt with in this analysis. To enter into these phases would carry the study beyond the present limits.

The dominant role played by corporations in modern economic and social life has been generally recognized in the past few years. Changes in corporate practices, however, have been rapid, and difficult of discernment. The purpose of the present study is to present some factual data in regard to net worth, and so to analyze them as to give a fair picture of some of the present-day corporate practices and policies.

Some of the data in this study were originally assembled as an FERA project under the supervision of Dr. Clive F. Dunham, formerly of the Bureau Staff. Acknowledgment is also made to Professor A. C. Littleton for valuable suggestions and criticism during the study.

ARTHUR H. WINAKOR

April, 1935

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I. INTRODUCTION

The net worth of corporations serves several closely related functions. It represents the residual capital of the enterprise: that is, the investment which assumes the greatest risk and secures the greatest gain from the operations of the business. It is the first capital to bear losses, and conversely, it is the last to receive compensation for its use. In addition, it measures the margin of creditor protection, for the size of net worth roughly indicates the extent of the investment which stands between creditors and losses from unsuccessful operations. Net worth may therefore be said to serve as one of the indicators of conservatism or lack of conservatism in corporate financing.

An additional group of functions belonging to net worth pertain to dividends and their payment. Net worth contains several items which bear upon the dividends. The capital stock accounts indicate the sums to which the dividend rates apply and at the same time represent limitations upon the freedom of directors to distribute assets as dividends. Net worth also contains, in the surplus, a quantitative measure of the assets ordinarily available for legal dividends and, in surplus reserves, an indication of past surplus made unavailable for distribution. Debt and other contracts also place restrictions on net worth by clauses relating to dividend payments, accumulations of reserves out of surplus, and the separate statement of paid-in surplus, capital surplus, and earned surplus. All these restrictions of net worth set limitations upon the use or disposition of the assets.

The net worth of corporations is not, however, so simple in its significance and use as was formerly the case. In recent years it has become increasingly difficult to present a picture of net worth in terms of simple and straight forward principles of finance and accounting. The common use of no-par shares, among other things, has greatly complicated the problem of making this section of the balance sheet clearly and accurately portray its component parts. The real meaning of net worth is occasionally lost sight of. As just mentioned, it represents limitations upon the employment and disposal of capital or assets. In a broad sense, it represents stockholders' claims; but these are subject to many restrictions which nullify the simple picture the term "claims" implies. Every accounting or financial principle of valuation that is applied to an asset has some bearing upon the net worth. The choice of one depreciation policy instead of another may materially increase or decrease the net worth from what it would otherwise have been. Borrowing upon some new type of debt may force the stockholders to accept additional limitations upon their freedom to deal with their capital; and these new limitations may or may not be dis-

closed in the net worth section. In fact, they may not be disclosed anywhere in the financial statements. Most of the provisions and limitations of this type do not appear in statements, but are buried in the terms of the contracts.

The foregoing comments are illustrative of some of the many purposes and meanings which are to be read into net worth. Although these are all interrelated and essential to an adequate understanding of the value and meaning of net worth, this short study cannot examine very many of them.

A picture of the size of net worth in comparison with total assets is presented. These data are analyzed by years and by industrial groups, and the relationship between size of enterprise and net worth is also examined. Not only is the net worth portrayed in total, but also its composition is broken down according to each of the foregoing categories. More detailed analyses of the data are made in order to glean some insight into the classes of securities employed in the net worth, and also the relative surplus items. A partial answer is provided as to whether there is any relationship between the composition and type of net worth and the nature of the industry.

Some additional facts are presented showing the frequency and size of intangible items. These are likewise compared with the types of net worth; an examination is made of the status of such items in enterprises employing par or no-par stocks, the usual presumption being that use of no-par stocks obviates the need for fictitious intangible values. Intangibles are also analyzed in a number of other categories.

The purpose of this study is to portray net worth conditions as they were found: that is, no elaborate refinements were made of the data either by way of classification and standardization or by way of statistical computations. Statements were taken from what was believed to be a reliable source in each instance, including individual annual corporation reports, stock exchange listing reports, *The Commercial and Financial Chronicle*, and the *Moody Manuals and Supplements*.

Only reasonably adequate statements were used. For the analysis of changes by years, statements were secured for 145 companies for each year from 1926 to 1932. A more satisfactory sample—424 companies—provided the data for detailed analyses by industrial groups, and by other categories in which the time element was secondary. The 145 companies selected for the year-to-year analysis were contained within the larger sample. Since the text tables indicate the types, sizes, and classes of companies fairly well, no further explanation of the data need be undertaken here.

For the most part the data are analyzed by means of classification and the employment of aggregate values. Simple averages and percentages or ratios provide the main bases for drawing inferences. It

is recognized that in many instances such procedures cannot be expected to give a typical picture of results. They do, however, enable one to grasp indications of change and provide, with some qualifications, a reasonable basis for noting basic differences among various categories of data.

A number of facts of more than passing interest were noted in the study. Some of these are briefly mentioned here. There was a steady and substantial increase in the net worth relative to total assets from 1926 to 1932 for the companies surveyed. A moderate decline, however, was found in the proportion of surplus reserves and unrestricted surplus to total assets. Net worth as a whole was distinctly larger relative to total assets in small than large companies. Likewise stocks, and capital and revaluation surplus, declined in relative importance with increased size of enterprise, but unrestricted surplus and surplus reserves showed a condition just the reverse. When the figures for common stock were combined with surplus reserves and unrestricted surplus, large corporations were found to have about as large a common stock equity in their total assets as smaller enterprises.

Reclassification of the data did not reveal anything like a common pattern of net worth for various industries. The proportions of preferred stock, common stock, and surplus held little in common with the size of net worth from one industry to another.

Among the 402 companies thus analyzed, 36 per cent used no-par common and par preferred stock. An additional 31 per cent employed only no-par common stock. Among corporations grouped into sixteen industries, either a plurality or majority of companies employed no-par common and par preferred stocks in eight of the groups. Five other industries showed a plurality or majority of companies choosing only no-par common stock.

The facts indicated that intangibles occupied a larger role in conjunction with no-par stock than with the par value securities. Likewise capital and appraisal surplus items appeared more important, in frequency and size, for companies using no-par instead of par value stocks. Intangible values seem to be diminishing in size relative to total assets and common stock, and there appears to be a tendency, especially among the smaller companies, to state intangibles at a nominal value.

II. THE AMOUNTS AND COMPOSITION OF NET WORTH

Any analysis which seeks to provide a basis for generalization should rest on the classification of data according to their common characteristics. Careful classifications of strictly homogeneous data, however, are found to only a limited degree in corporation reports. This is particularly true of the net worth sections of financial statements, since the net worth is often a mixture of the results of conflicting and loosely related bases of asset valuation and of contractual or voluntary limitations on the disposition of assets.

Year-to-Year Changes

A general picture of net worth, with only a few details included, is provided by Table I, which shows aggregate figures for 1926, and for 1928 to 1932. Since net worth is compared with total assets, some attention is given to the latter. These data represent 145 companies for which comparable statements were found for each year analyzed. They include a fairly large sample of American industry as measured by total assets. They furthermore represent quite a large cross section of the important industrial enterprises of the country. The total assets of these 145 companies amounted to \$12,391,000,000 in 1926, and apparently reached a peak in 1929, when the figure was \$15,823,000,000, an increase of 22.3 per cent.¹

In this same period their net worth increased more rapidly than their total assets, from 80.4 per cent in 1926 to 81.3 per cent of total assets in 1929. The dollar amounts of net worth (not shown in Table I)

TABLE I
PERCENTAGE OF NET WORTH ITEMS TO TOTAL ASSETS OF 145 IDENTICAL INDUSTRIAL COMPANIES; 1926, AND 1928 TO 1932

Year	Aggregate Total Assets (000,000 omitted)	Percentage of Item Named to Total Assets				
		Net Worth*	Common Stock	Preferred Stock	"Surplus"	Capital and Revaluation Surplus
1926	\$12,391	80.35	36.88	13.08	26.11	3.65
1928	14,068	80.71	36.26	12.04	26.39	5.25
1929	15,823	81.32	38.68	9.80	27.47	4.90
1930	15,774	82.00	40.73	10.29	25.71	4.36
1931	14,846	83.77	42.28	11.49	24.86	4.74
1932	13,431	86.67	44.71	12.58	24.60	4.38

*Since the percentages for minority interests are omitted from the table, the sum of the separate items is not equal to the net worth.

¹Total assets were those reported by the companies. Hence they include intangibles.

were \$9,956,000,000 in 1926, \$11,354,000,000 in 1928, and \$12,867,000,000 in 1929. Although stockholders' capital was thus increasing, and the percentage of net worth to total assets also increased, these changes did not mean a decline in dollar amounts of total debt. The total debts increased from \$2,435,000,000 in 1926 to \$2,955,000,000 in 1929. The borrowed capital, however, did not increase at the same rate as the stockholder capital.

The year 1930 showed a decline in total assets from the previous year of .3 per cent. From 1930 to 1931 the decline was 5.9 per cent; and from 1931 to 1932, the substantial figure of 9.5 per cent. Large "write-downs" of properties made in 1931 and 1932 probably account in part for the large declines. Liquidation of current debts also was an important explanation. The percentages of net worth to total assets continued the same trend indicated in the earlier years, and although total assets declined, net worth increased relative thereto. By 1932 net worth accounted for 86.7 per cent of total assets. Although total assets and total debt reached their peak in 1929, the former at \$15,823,000,000 and the latter at \$2,955,000,000, net worth reached its peak in 1930 at \$12,935,000,000. Both liabilities and total assets declined more rapidly than net worth from 1930 on. By 1932 total debt had declined to \$1,790,000,000, and the figure for net worth stood at \$11,640,000,000.

Some of the details which enter into the net worth are also shown in Table I. Common stock was equal to 36.9 per cent of total assets in 1926. After a slight decline to 36.3 per cent in 1928, it showed a rather steady increase to 44.7 per cent in 1932, which was the highest proportion recorded. The dollar values, however, reached their peak in 1930 at \$6,425,000,000 and then declined, although less rapidly than total assets.

Changes in preferred stock were quite clear on a percentage basis. The percentage of total assets represented by preferred stock declined from the peak of 13.1 in 1926 to 9.8 in 1929, and then steadily increased to 12.6 per cent in 1932. This latter figure brought the preferred stock back almost to the relative position it held in 1926 as a source of capital. It is significant that the dollar amounts represented by preferred securities reached their peak of \$1,705,000,000 in 1931, two years after the maximum figure reached by total assets and one year subsequent to the maximum of common stocks.

Changes were taking place both in the amounts of aggregate preferred stock and also in the number of companies employing such securities. Not all companies had preference stocks. Sixty-four per cent reported such securities in 1929 and sixty-one per cent in 1932. This decline represented a slight decrease in number of companies having preferred stocks, but there was an actual increase in the relative amount of the capital thus provided. For those companies which employed both common stocks and preferred stocks, the percentage

of the latter to total assets was much higher than the figures in Table I would indicate. A rough approximation of the percentage of preferred stock to total assets is obtained as follows: the average of total assets for the 145 companies in 1932 was \$92,626,000 and the average of preferred stock for the 88 companies showing this item was \$19,199,000. The percentage of the latter to the former is 21.²

An even more striking picture of the role played by stocks in corporate financing is provided by a combination of common and preferred securities. In 1926 the two together accounted for 50.0 per cent of total assets. This declined moderately to 48.3 per cent by 1928. From 1928 on, the figures suggest a steady increase in total stock, which reached 57.3 per cent of total assets in 1932. Total stocks increased in dollar amounts more rapidly than total assets in 1929; in 1930 they increased when total assets declined; and in the following years they declined less rapidly than total assets.

The items of surplus have been classified into two groups in Table I. The first of these, which is designated merely "surplus," contains three main elements, which have been thus grouped from expediency in an effort to approach the most meaningful figure. The three elements which constitute the "surplus" are: real reserves for contingencies and the like, those items designated as "earned surplus," and those designated merely as "surplus." The second group, here called "capital and revaluation surplus," represents amounts not available for ordinary surplus uses. It contains two classes of items—namely, those designated on the financial statements as "capital surplus" or as "revaluation surplus."

The items designated as "surplus" were the equivalent of 26.1 per cent of total assets in 1926 and distinctly more than two thirds the size of common stock. A peak was reached by the surplus figure in 1929, at 27.5 per cent of total assets. From then on the figures in Table I show declines in surplus relative to total assets and to common stock, surplus equalling 24.6 per cent of the total assets in 1932, the lowest for the period and somewhat over half of common stock. Clearly, these changes indicate a decline in surplus only moderately more rapid than in total assets but much more rapid than in common stock.

The first of the three types of surplus grouped into the single item designated as surplus—namely, surplus appropriated for real reserves—reflects some interesting changes. In 1928 it stood at 4.0 per cent of total assets. In 1928 to 1931 it was approximately 3 per cent. By 1932 it had reached 4.8 per cent of total assets, indicating that earnings and

²This method of computation is only approximately correct. The companies with preferred stock were larger than those not so financed. (See page 15.)

capital funds set aside for future losses, contingencies, and the like were increasing. When this item is taken out of the figures given in the preceding paragraph, they show that the surplus (other than that appropriated for reserves) had declined to 19.8 per cent of total assets compared with the peak of 24.4 in 1929, a decline equivalent to about 5 per cent of total assets.

The items for capital surplus and revaluation surplus did not move far from 4 to 5 per cent of total assets. From 3.7 per cent in 1926 they jumped to 5.3 per cent in 1928, and then declined to 4.4 per cent in 1930. After an increase in 1931 the figure again stood at 4.4 per cent in 1932.

All the surplus items combined present a more regular trend. From 29.8 per cent of total assets they increased to 32.4 per cent in 1929, and then declined to 29.0 per cent in 1932. The decline of the entire surplus relative to total assets from 1930 to 1932 was quite moderate as compared with that of the preceding year. When all surplus items and common stock are combined, it is found that the common stock equity in 1932 on a relative basis stood at its peak for the period surveyed. In this year these items constituted 73.7 per cent of total assets compared with 70.8 in 1930, 67.9 in 1928, and 66.6 in 1926. When it is considered that this common stock equity is the shock absorber, and presumably the item first to suffer from losses, dividend payments (when unearned), devaluations of assets and consequent reductions in surplus or common stock, or both, this actual improvement is indeed illuminating.

A number of factors account for this showing. Three may be mentioned here as being the most important. There was first the building up of net worth in the years prior to 1930. Then there were the conservative dividend policies in the years subsequent to 1929, when earnings were meager. And also, the rapid decline of debts, especially short term debt, accounts in part for the relatively favorable showing of net worth.

Relationship to Size

A larger sample of data was employed for the study of net worth in relation to size of companies. This latter sample contained 402 statements of industrials for 1932. These 402 companies had aggregate assets of more than \$26,000,000,000. A comparison of the total data as given in Table II with the data for 1932 as given in Table I discloses some of their similarities and dissimilarities. Each of the 145 companies contained in Table I was also included in the data of Table II. The average size of company in the group of 402 was smaller than the average size in the group of 145. This difference in average size and some variance in the relative proportions of the industries

TABLE II
 PERCENTAGE OF NET WORTH ITEMS TO TOTAL ASSETS OF 402 INDUSTRIAL COMPANIES
 CLASSIFIED ACCORDING TO SIZE, 1932

Amount of Total Assets	Number of Companies	Aggregate Total Assets (000,000 omitted)	Percentage of Item Named to Total Assets				
			Net Worth*	Common Stock	Preferred Stock	"Surplus"	Capital and Revaluation Surplus
Total.....	402	\$26,396	78.86	39.82	12.56	20.90	5.27
Less than \$10,000,000..	118	688	87.47	44.58	14.20	18.55	9.89
\$10,000,000 to 50,000,000.....	184	4,754	83.17	40.72	14.96	19.75	7.48
\$50,000,000 or more....	100	20,954	77.59	39.46	11.96	21.24	4.61

*Since the percentages for minority interests are omitted from the table, the sum of the separate items is not equal to the net worth.

included account for the smaller net worth figure in Table II than in Table I.³ Some variations in the relative percentage distribution of the items composing net worth may also be noted.

The 402 industrial companies whose data are contained in Table II were divided into three groups according to amount of total assets, as follows: those with less than 10 million dollars, those with 10 millions to 50 millions, and those with 50 millions or more. There were 118 companies in the first group; they constituted 29.4 per cent of the 402 companies but accounted for only 2.9 per cent of the aggregate total assets. The middle-sized group contained 184 companies, or 45.7 per cent of the entire number, but represented only 18.4 per cent of the aggregate assets. The third group of 100 companies, each with total assets in excess of 50 millions, constituted slightly less than one fourth of the 402 companies—namely, 24.9 per cent—but controlled 78.7 per cent of the total assets. It is evident that the total figures in this table, as well as the data contained in Table I, are materially influenced by the large companies, which are a minority of the cases.

In so far as three groups can indicate trends, there is a definite tendency for net worth to decline relative to total assets as the size of enterprise increases, and obversely, an increase in total debt as size of company increases. Since short term debt declines relatively in larger companies, there is clearly an increase in fixed interest debt with

³Another explanation of material importance accounting for some of these variations is to be found in the figures used for total assets or the base for most of the percentage computations. For the data in Table I, valuation reserves were deducted from total assets, whereas these were included in total assets for the 402 companies where thus reported. In neither case were they included in net worth. Separate analysis disclosed that such valuation reserves amounted to less than 5 per cent of total assets before their deduction.

size.⁴ There is, however, the possibility that these apparent trends are due in part to types and distribution of companies. In some industries large enterprises are the common situation; in others, the reverse is true. The addition of several companies of a specific industry might weigh the data in their direction. A separation of the data by industries and by types of financing within industries, which is undertaken later, will shed further light on this problem.

The total net worth of the companies with less than 10 millions of assets was equal to 87.5 per cent of their assets. The percentage of net worth to total assets of companies with 10 to 50 millions of assets was 83.2. For companies with assets in excess of 50 million dollars, the net worth was 77.6 per cent of assets. In spite of the relatively smaller total net worth, there is a definite tendency of one important item to run counter to the trend. This is the item of "surplus."

The percentage of common stock to total assets was definitely larger in small than in large enterprises, declining from 44.6 for the group of smallest companies to 39.5 for the largest group. The picture for preferred stock was less definite. Although the large companies—that is, those with assets of 50 millions or more—had a distinctly smaller ratio (.12) of preferred stock to total assets than the two smaller groups of companies, those companies with 10 to 50 millions of assets had a larger ratio (.15) than the group of smallest companies with a ratio of .14. If the common stocks and preferred stocks are combined, however, it is found that there is a clear tendency for total stock to decline relative to total assets as size of enterprise increases.

Not all companies used preferred stock. Fifty-six per cent of the 402 statements showed preference securities. They were used more frequently by large than by small companies. Only 44 per cent of the small companies, as contrasted with 60 and 64 per cent of the medium-sized and large companies, respectively, financed with such obligations. By employing averages, it is readily found that preferred stock constituted a materially larger proportion of total assets for the 227 companies which had preferred stock than for the 402 companies. Since the average size of all companies was \$65,663,000, and the average amount of preferred stock amounted to \$14,603,000, the percentage of the latter to the former was 22, which is much higher than the figure given in Table II.⁵ Then, too, there may have been some tendency for common stock and total debt to be smaller for these 227 companies than for the others, thereby counterbalancing to a limited extent the

⁴Clark, Evans, *The Internal Debt of the United States*, Macmillan, N. Y., 1933, p. 193.

⁵This figure is about the same as the corresponding figure given on page 12 in the year-to-year analysis. Some variation is to be explained by the inclusion of smaller companies in the larger sample. This is clearly shown in the tabulation on page 16.

preference stocks. Similar comparisons by size of company disclose the following:

	<i>Less than 10 Millions</i>	<i>10 to 50 Millions</i>	<i>50 Millions or More</i>
Average Total Assets (all companies) . . .	\$5,831,000	\$25,839,000	\$209,540,000
Average Preferred Stock (only those employing preferred stock)	1,880,000	6,408,000	39,153,000
Percentage of Preferred Stock to Total Assets	32%	25%	19%

These figures, based upon averages, indicate a pronounced decline in relative size of preferred stock as size of company increases.

Surplus as a whole—that is, all types of surplus together—shows the same kind of relationship to size of company that was noticed for stocks. The percentage of total surplus varied from 28.4 for small companies to 27.2 and 25.9 for the medium-sized and large-sized groups, respectively. But these figures obscure the tendency of “surplus” (exclusive of revaluation and capital surplus) to increase and the very marked trend of revaluation and capital surplus to decline, as size of company increases. Thus the surplus available for appropriation, or set aside as true reserves, increased moderately with size of company although not enough to offset the rapid decline in other net worth items. It is evident, furthermore, that “surplus” becomes an increasing proportion of the net worth as companies increase in size.

A further subdivision of the surplus item discloses that the aggregate “real reserves” for contingencies and the like increased with size of enterprise. The surplus which had been set aside for real reserves and contingencies was 3.4, 3.9, and 5.2 per cent of total assets in progression from the groups of small to large companies. The remainder of surplus increased relative to total assets along with increases in size of company, but not pronouncedly.

More careful scrutiny of the data, however, discloses additional illuminating facts regarding the appropriated surplus and real reserves. Although the amount of these items in the aggregate increased as size of company increased, the average amount for those companies having such items on their statements (eliminating those not having such items) shows an almost constant relationship to total assets irrespective of size. For these companies the figure averages close to 5 per cent. But a significant difference may be disclosed as between the policies of large and small companies in another way. There is more of a tendency for the large companies to set aside a part of their surplus as appropriated for specific purposes than for small companies.⁶

⁶It is possible that the small companies did set aside reserves for contingencies more frequently than was evident but did not disclose these as separate items on their balance sheets. It appears, however, that at least part of the showing must be attributed to difference in policy rather than disclosure of the item.

Whereas 67 per cent of the companies with total assets of less than 10 millions had such items on their statements, the figure stood at 88 per cent for the 184 companies in the middle group, and the practice was almost universal for the 100 companies with assets of 50 millions or more, as disclosed by the percentage of 97.

Of course many factors enter into the determination of how much of the assets shall be represented by stock, how much by surplus, and how much by debts. One of these factors which should be mentioned at this point is the use of par or no-par stocks. The employment of these types of security is discussed in later pages, but it must also be kept in mind in surveying the data here, since it appears to be of some value in the interpretation of the next item—namely, capital and revaluation surplus. The broad discretion allowed boards of directors in designating part of the sum paid in for shares as capital stock and part as surplus should be reflected in this item.

The combined capital and revaluation surplus showed a marked tendency to decline in relative importance as one progresses from small to large companies. The percentages of this item to total assets were 9.9 for the small companies, 7.5 for the medium-sized, and 4.6 for the large companies. Since the employment of no-par stocks is more frequently associated with small than with large companies, there is some basis for imputing this showing to the types and choices of securities of the companies in the three size groups.⁷ In fact, of the two elements contained in this item, revaluation surplus was quite insignificant in amount and frequency of appearance, most of the statements not separating it adequately or else not showing such an item at all. The figures given in the table may thus be accepted as indicating the relative size of capital surplus with little reservation.

The size of these figures, however, does not give an adequate picture of the importance of capital surplus in most companies. Of the 402 companies, 35 per cent reported such items. The group of smallest companies recorded such items more frequently than the two groups of larger companies. Forty per cent of the small companies reported capital surplus. For this 40 per cent of small companies, the average capital surplus equalled 25 per cent of the average total assets. In the two groups with 10 to 50, and 50 millions of assets or more, 33 and 32 per cent, respectively, of the cases had capital surplus.

There was a material variation in the size of capital surplus as among the three groups of companies. The comparison of average capital surplus with average total assets indicated that the former was 21 per cent of the latter in companies with 10 to 50 millions of total

⁷These facts are also related to intangible values. Some of these relationships are discussed on page 27 ff.

assets, whereas for those companies with total assets of 50 millions or more the percentage stood at 14. As mentioned, for the group of smallest companies the comparable figure was 25 per cent.

A final view of the net worth by size of company may be obtained by combining common stock and the surplus items, which sum gives what is practically the common stock equity. This procedure shows that the common stock equity constituted 73.0, 68.0, and 65.3 per cent of total assets for small, medium-sized, and large companies, respectively. A somewhat more homogeneous showing is obtained when the capital and revaluation surplus is omitted. The figures then become 63.1, 60.5, and 60.7 per cent of total assets, for small, medium-sized, and large companies, respectively. From these latter figures, it appears that relative to total assets the large companies have about as large an equity as the small. In view of the fact that surplus is a relatively larger portion of this common stock equity in large companies than in small, one might conclude that the large company makes a better showing than the small company.

Variations Among Industrial Groups

Altogether there were some 36 distinct industries represented in the 424 companies analyzed. The utility group, composed of 22 companies, was omitted from the tables and discussion in the preceding section, but is included here by way of comparison. The number of companies in the specific industries ranged from 1 to 28. Attention is now given to the variations in net worth items as disclosed for the 16 industrial groups which had 10 or more cases each.

It must be recognized at the outset that there is no one type of financial plan for each industry. It is true, of course, that the amount and nature of the assets of an enterprise, the size and regularity of its earnings, and like factors, will condition the financial plan and the net worth. But these conditioning factors are merely broad guide posts to, and limitations upon, the actual type of financing. Conservative enterprises, although well able to borrow on bonds, may refuse to do so; others who are perhaps less able may risk borrowing capital. Some may employ preferred stocks; others, not.

It still remains a fact, however, that some industries have characteristic problems. In some, such as mining and petroleum production and refining, the assets are very highly specialized and immobile. Earnings in some industries vary widely. It seems reasonable to expect some similarity, therefore, in plans of financing among companies in specific industries. Significant variations among industries may be attributed, in part, at least, to inherent differences in the nature of their operations.

For the sixteen groups for which data are given in Table III, the smallest proportion of net worth to total assets is found in the utility group with a ratio of 55.4. Among the industrials the lowest figure is for copper mining companies with net worth equal to 69.8 per cent of total assets. The largest net worth to total assets figure appears in the railway equipment concerns, which had a percentage of 91.7.

More detailed survey of the data in Table III reveals significant variations in the composition of net worth. The common stock when taken by itself was a larger part of total assets (55 per cent) for railway equipment companies than for any other group. Next in proportion of common stock to total assets were building and construction companies, auto and aviation accessories, and machinery and tools manufacturing companies with 49, 50, and 48 per cent, respectively. At the opposite end were textile and apparel, utility, household supplies, and chemical and fertilizer companies with common stock of 26, 27, 32, and 33 per cent of total assets, respectively.

Although the building and construction companies did not have the largest common stock to total assets ratio, they do appear to have had the largest common stock to net worth ratio of the 16 groups analyzed. Since their net worth was only 76 per cent of total assets, whereas their common stock was 49 per cent of total assets, common stock was large relative to net worth, constituting 64 per cent of the latter.

TABLE III
PERCENTAGE OF NET WORTH ITEMS TO TOTAL ASSETS OF
SIXTEEN GROUPS OF COMPANIES, 1932

Industry	Number of Companies	Aggregate Total Assets (000,000 omitted)	Percentage of Item Named to Total Assets				
			Net Worth*	Common Stock	Preferred Stock	"Surplus"	Capital and Revaluation Surplus
1. Automobiles and Trucks	15	\$ 1,749	90.05	41.53	13.46	32.28	2.50
2. Auto and Aviation Accessories	27	359	89.96	49.68	4.58	26.39	8.63
3. Building and Construction	21	721	76.22	49.05	9.89	12.87	3.87
4. Chemicals and Fertilizers	16	1,649	78.96	32.82	10.97	34.32	.76
5. Bread, Biscuit, Miscellaneous	16	822	87.64	45.45	19.01	20.72	2.43
6. Household Supplies	16	515	82.33	32.41	22.21	21.32	6.19
7. Machinery and Tools	21	491	88.09	48.26	16.80	20.25	2.75
8. Copper Mining	15	1,973	69.78	43.30	9.48	11.93	4.54
9. Petroleum Products	22	4,490	78.08	45.24	5.68	16.24	10.64
10. Railway Equipment	13	710	91.67	55.46	11.80	23.39	.16
11. Department Stores	11	288	86.19	42.35	13.49	25.19	2.29
12. Chain Stores	16	738	87.55	44.46	10.22	30.64	1.98
13. Steel and Iron	28	4,426	82.94	39.82	15.36	23.32	4.43
14. Textiles and Apparel	25	282	91.41	25.98	39.45	21.89	3.74
15. Tobacco	14	745	88.19	39.68	15.79	31.39	1.30
16. Utilities	22	15,926	55.40	27.38	5.64	10.14	1.19

*Since the percentages for minority interests are omitted from the table, the sum of the separate items is not equal to the net worth.

Copper mining and petroleum companies also had large common stock to net worth ratios of .62 and .58. At the opposite extreme were the companies manufacturing textiles and apparel, household supplies, and chemicals and fertilizers with ratios of .28, .39, and .42, respectively.

Wide variations are apparent in the relationship of the preferred stock to total assets. In some industries, preferred stock was quite important, constituting as much as 39 per cent of total assets for textile and apparel companies and 22 per cent for household supplies. In others it was relatively unimportant, amounting to less than 5 per cent of total assets for auto and aviation accessories, and less than 6 per cent of total assets for petroleum products. Nor are the groups with large preferred issues necessarily the ones with large net worth, or vice versa. The auto and aviation accessory companies had a large net worth, composed mostly of common stock and surplus. On the other hand, the textile and apparel companies also had a large net worth, but for them preferred stock exceeded common stock. Copper mining companies had a rather small net worth and a small preferred stock. Railway equipment companies had a large net worth of 92 per cent of total assets, but only 12 per cent of total assets was ascribable to preferred stock. There was neither any apparent tendency for a small stock equity to be accompanied by large preference equities, nor vice versa.

There was considerable variation in the frequency with which preferred stock appeared on the statements of companies in various groups. Six of the groups showed preferred stock in less than fifty per cent of their companies. These were automobiles and trucks, (33%); auto and aviation accessories, (26%); chemicals and fertilizers, (44%); copper mining, (27%); petroleum products, (41%); and railway equipment, (46%). All the other groups showed preferred stock in at least 60 per cent of their companies. Only five, however, exceeded 70 per cent, these being household supplies (75%); department stores (73%); steel and iron (71%); textiles and apparel (72%); and tobacco (79%). These last five groups also had a percentage of preferred stock to total assets well above the general average for all groups.

The items of "surplus" ranged from 10 per cent of total assets for utility companies to 34 per cent for chemical and fertilizer companies. The total net worths of these two industries, however, were small. Although there is apparently some tendency for large net worth to contain a large surplus, the relationship is neither close nor significant. There seems to be little relationship between size of common stock and size of surplus.

Perhaps as significant as the variations of surplus from industry to industry was the size of surplus. With but two exceptions, the surplus items for each group exceeded the preferred stock. For twelve groups

of the sixteen, surplus exceeded 20 per cent of total assets. In other words, one fifth or more of the assets was attributed to surplus other than capital and revaluation surplus. In six groups surplus exceeded 25 per cent, and in four it exceeded 30 per cent of total assets. In general, these sums represent capital legally distributable at the discretion of directors. Even though some of it is composed of true reserves and contingency reserves, these are largely discretionary and not entirely beyond the control of the directors. Although these large sums are for the most part legally and contractually available for distribution or appropriation by the directors, practically and financially they are only partially available. To a large extent they represent "sunk" investments.

In addition to the foregoing surplus items, there were also revaluation and capital surplus items. The chemical and fertilizer companies, which had the largest surplus, had next to the smallest capital and revaluation surplus. The railway equipment companies, with the largest net worth to total assets ratio, had the smallest capital and revaluation surplus, only .16 of total assets. The largest capital and revaluation surplus figure, 10.6 per cent, was that for petroleum products companies; they had the fourth smallest net worth to total assets ratio. Large capital and revaluation surplus items were found for auto and aviation accessories, household supplies, and petroleum products. Small items were found among chemical and fertilizer, railway equipment, tobacco, and utility companies.

Par and No-Par Stocks

One aspect of net worth which has not received an adequate share of study in finance and accounting is the relative use of par and no-par stocks. Accordingly, one of the classifications chosen for analysis of net worth was designed to bring out some facts on such types of financing. Of course, only a brief picture of the entire problem can be given here.

A clear-cut separation was made of the 402 companies (after excluding the utility group) into (1) those which had only par value common stock in their net worth, (2) those with both par value common and par value preferred, (3) those with par value common and no-par value preferred, (4) those with no-par value common and par value preferred, (5) those with both no-par value common and no-par value preferred, and finally (6) those which employed only no-par common stock in their net worth.⁸ With this basic classification, analyses were made of these items in conjunction with the surplus items,

⁸There were a few statements which had other combinations of stocks, but these were arbitrarily classed in the above groups. Class A, Class B, and such stocks were grouped in accordance with the nature of their contractual characteristics and preferences.

TABLE IV
COMPOSITION OF THE NET WORTH OF 402 INDUSTRIAL COMPANIES CLASSIFIED
ACCORDING TO PLAN OF FINANCING NET WORTH, 1932

Item	Total	Distribution According to Plan of Financing					
		Par Com- mon Only	Com- mon and Preferred Both Par	Par Com- mon and No-Par Preferred	No-Par Com- mon and Par Pre- ferred	Com- mon and Pre- ferred Both No-Par	No-Par Com- mon Only
Number of Companies.....	402	52	53	7	146	20	124
Amount of Total Assets (000,000 omitted).....	\$26,396	4,437	5,806	1,226	9,344	687	4,896
Average Total Assets (000 omitted).....	\$65,663	85,330	109,546	175,204	64,001	34,351	39,482
Percentage of Total Companies.....	100.00	12.94	13.18	1.74	36.31	4.98	30.85
Percentage of Total Assets.....	100.00	16.81	22.00	4.65	35.39	2.60	18.55
Percentage of Each Item to Total Assets							
Net Worth*	78.86	79.85	88.47	93.54	70.52	64.88	80.69
Par Common Stock.....	18.75	50.93	38.35	37.70	.....	.....	.....
Par Preferred Stock.....	11.09	.....	18.88	.....	19.60	.....	.....
No Par Common.....	21.07	.....	.....	.....	32.35	14.86	49.77
No Par Preferred.....	1.47	.....	.....	18.28	.....	.....	23.77
Total Stocks.....	52.38	50.93	57.23	55.98	51.95	38.63	49.77
Total Surplus.....	26.17	28.63	31.19	37.36	18.31	23.75	30.48
"Surplus".....	20.90	20.25	27.20	37.20	15.80	8.87	21.33
Capital and Revaluation Surplus.....	5.27	8.38	3.99	.16	2.51	14.88	9.15

*Since the percentages for minority interests are omitted from the table, the sum of the separate items is not equal to the net worth.

and in comparison with total assets. Summaries of the basic data are contained in Table IV.

The first row in the table gives the number of companies and shows how they were distributed according to their choice of plan of financing. Of the 402 companies, 52, or 12.9 per cent, employed par value common stocks and no others. They accounted for 17 per cent of the aggregate total assets of \$26,396,000,000. Their average size was \$85,330,000, which was larger than the general average of \$65,663,000.⁹

There were 53 companies, or 13.2 per cent of the entire number, which employed both par common and par preferred. Their average size was \$109,546,000—somewhat larger than that of the preceding group. They contributed 22 per cent of aggregate total assets.

The next group, those employing par common and no-par preferred, was found to contain only seven companies, too few to be significant. It is well to point out, however, the difficulty of recon-

⁹Separate tabulations of numbers of companies of each size group, i.e., less than 10 millions, 10 to 50 millions, and 50 millions or more, according to each classification of stocks which is discussed in these paragraphs showed a picture of sizes which substantially agreed with the averages presented. Thus, with some qualification, the variations in the average of aggregate total assets were due to variations in the sizes of companies rather than to a few extreme cases.

ciling this combination of stocks with sound finance. No-par preferred stocks are somewhat of an anomaly. Unless such a preference security has practically all the characteristics of common equities, it is a questionable type. It is not easy to understand why the preference stock should be no-par, and the common stock have par value. Certainly the common stock, rather than the preference stock, represents an aliquot part of residual assets and earnings. That the preference stock could represent a proportional participation in the equity and its earnings, and the common stock not do so, is difficult to conceive under ordinary circumstances. If a security is entitled to a definite return, then it lacks an essential characteristic of a residual equity. And since the great majority of preference securities issued in recent years have definitely been of this type, no-par preferred securities are not readily justified.¹⁰ Moreover, no-par securities have had their growth during the same period in which preferred stocks have tended to assume characteristics usually ascribed to debts rather than to equities.

The seven companies which reported this combination of securities were scattered among six industries. If one large company is eliminated from the figures, the average size of the remaining six is found to be decidedly less than that of any of the other five groups contained in Table IV.

The most widely employed combination of securities was no-par common and par preferred. This is probably the soundest and most theoretically justifiable combination of par and no-par stocks if one has preference over the other. Slightly more than one third—namely, 35 percent—of the 402 companies chose these types. Their average size closely approximated the general average. Consequently the percentage of total resources was almost the same as the percentage of companies.

The fifth combination—that is, no-par common and no-par preferred—was also not important numerically, comprising only 5 per cent of the companies and furnishing less than 3 per cent of total assets. The average size of these companies was about half of the general average. This combination of stock is justifiable under those circumstances in which no-par stock has the characteristics of an equity rather than those of a creditor or bondholder.

The final group, which had only no-par common equities, was the second largest numerically, composed of 124 companies, or 31 per cent of the total cases. Evidently this style of financing was found most suitable to the smaller establishments, since the average size of this group was only \$39,482,000, somewhat more than half of the general average. They contributed 19 per cent of total assets.

¹⁰An indication that preferred stocks issued in recent years have had some of the characteristics of the creditor rather than the owner is to be found on page 141 of *Financial Organization and Management*, Revised Edition, by C. W. Gerstenberg, Prentice-Hall, Inc., New York, 1934.

If the group for no-par common only and that for no-par common and par preferred are added, it is found that they accounted for 67 per cent of the companies, but only 54 per cent of total assets. The two groups which employed par value stock exclusively had 26 per cent of the companies and 39 per cent of total assets. Another picture of the choices of securities may be obtained by dividing them between those employing one type of security and those employing a combination. Companies without preferred stock—that is, those employing only common stock, either par or no-par—amounted to 44 per cent of the total companies and owned 35 per cent of total assets. The remaining 56 per cent of the companies, with their 65 per cent of the total assets, were financed by some combination of common stock and preferred stock.

Some details as to the relative sizes of common and preferred stocks and surplus items are contained in the lower half of Table IV. Since the groups employing par common with no-par preferred and no-par common with no-par preferred contained few cases, less attention is given to them although complete data are shown in the table.

For the 402 companies, net worth contributed 78.9 per cent of aggregate assets. Companies with only par common stocks had net worth figures close to this general figure, as did likewise the companies with only no-par common stocks. The 53 companies with par common and par preferred stocks attributed 88.5 per cent of their total assets to net worth. Distinctly smaller than the average was the net worth to total assets ratio of the no-par common and par preferred group, with a percentage of 70.5.

A substantial similarity of net worth items is shown for the two groups with common stocks only, although, as previously pointed out, a significant variation appears in the average size of company in each. The common stock accounted for 50.9 per cent of total assets for the par group as compared with 49.8 per cent for the no-par group. Likewise their surplus items were in about the same proportions, the totals being 28.6 per cent of total assets and 30.5 per cent, respectively. In both the total surplus was large, being approximately 60 per cent of total common stock. When the surplus was divided into capital and revaluation surplus on one hand, and all other surplus items on the other hand, the two groups were still substantially alike in their proportions. After eliminating capital and revaluation surplus, the remainder of surplus still equalled about 40 per cent of the common stock. For both groups the capital and revaluation surplus was quite large.

Since no-par stock has come in for much criticism, and perhaps rightly so, it is given some passing attention. One of the criticisms revolves about the freedom of directors to apportion the issue price of no-par stocks as between stated capital stock and surplus. Although sound accounting practice would dictate that any portion of such

paid-in capital should appear in either a stated capital account or some capital surplus account, this is frequently not done in practice.

The evidence reviewed above seems to indicate that no-par common stocks were apparently very much like par common stocks. This inference may be questioned. When the capitalization is relatively simple, consisting primarily of common stock and in addition containing substantial earned surplus, there is little incentive to manipulate capital accounts. Furthermore, the increasing tendency to employ common stock of low par value and to reduce capital by transfers to surplus or to capital surplus has tended to bring this type of security down to practically the same plane as no-par stocks. It appears, therefore, that the standards and safeguards of par value common stocks have been lowered to approximate those of no-par stocks, rather than that the no-par practices have been raised to what was formerly (and still is) sound practice for equities, and for par common stock in particular. The par value stocks have become less rigid, with no adequate compensating change in no-par stocks.

This quantitative similarity of par and no-par common stock is open to question for another reason. A few companies in the petroleum industry had a distorting influence on the capital and revaluation surplus items. If these are eliminated, it is found that the capital and revaluation surplus is 4.8 per cent of total assets for companies employing par common stocks only, and 6.8 per cent for those companies employing no-par common stocks only. Since the revaluation surplus was a very small part of the total, the capital surplus may be attributed in large measure to the exercise of directors' authority to indicate the disposition of no-par share issue price.

The capital surplus and revaluation surplus item was not found in all companies. For both the companies with par value and those with no-par stock it was found in slightly less than half the companies. For those companies which had this item it would be a materially larger proportion of their total assets.

The group of companies which employed both par common and par preferred stock had the largest net worth to total assets percentage for any of the four major groups. For these companies common stock amounted to 38.4 per cent of total assets and preferred stock contributed 18.9 per cent, or a total of 57.3 per cent for the two. Total surplus amounted to 31.2 per cent of assets and was not far from equalling the common stock. Capital and revaluation surplus was 4.0 per cent of total assets and approximately one tenth of common stock. Approximately 40 per cent of these companies reported capital and revaluation surplus items, most of these being capital surplus.

The group which had the largest number of companies, and which chose no-par common stocks in combination with par value preferred, had the smallest relative net worth and the largest ratio of preferred

stock to total assets of the four major groups. The net worth was 70.5 per cent of total assets and the preferred was 19.6 per cent of total assets. This last figure, however, is only slightly above the corresponding figure in those companies employing par preferred in conjunction with par common.

It is in the case of the common stock, and more particularly of the surplus items, that a major difference appears. Both these items are smaller relative to total assets than the corresponding items for any of the other three major groups of companies. The common stock constituted 32.4 per cent of total assets. When the common stock and preferred stock are combined, it is found that their percentage to total assets compares favorably with the figures of the other groups. In fact, it exceeds the percentages of the two groups employing only common stocks.

The total surplus was equal to 18.3 per cent of total assets. Of this, 2.5 per cent represented capital and revaluation surplus, and the balance of 15.8 per cent was surplus available for distribution, appropriated for real reserves, and the like. Although small relative to total assets the total surplus makes a favorable showing when compared with common stock. A similar comparison shows that capital and revaluation surplus was equal to about 8 per cent of common stock. As was the situation in the other groups, capital or revaluation surplus items were not found on all the statements in this group. About 40 per cent of the 146 companies reported such items. Consequently, it is readily deducible that the percentage of capital and revaluation surplus was much larger compared with the total assets of those companies which had such items.

A few additional facts were analyzed in order to show the various plans of financing net worth. The companies in the sixteen industrial groups (see Table III for list) which had ten or more companies each were separated into the six combinations of par and no-par stocks previously discussed. Either a plurality or a majority of the companies in eight of the sixteen groups indicated the use of no-par common stock in conjunction with par value preferred stock. No-par common only was used by a plurality or a majority of companies in the five groups of companies manufacturing automobiles and trucks, auto and aviation accessories, chemicals and fertilizers, bread and biscuits, and railway equipment. On this same basis only two groups showed a preference for par common only, these being the extractive groups for petroleum and for copper mining. One group only, the utilities, indicated a preference for no-par common and no-par preferred stock. Par common with par preferred was not the first choice of a single group.

On the basis of first and second choices (as indicated by the number of companies in each industry employing a given combination of

stocks) no-par common with par preferred was preferred 13 times. This same preference showed also for no-par common stock only. These two plans accounted for 26 of the 32 combinations. These facts, when taken in conjunction with the distribution of the 402 companies given in Table IV, indicate the great predominance of no-par stocks over par value stocks among these large industrial enterprises. Not only is this preference indicated by the types of financing of large companies in general, but it is found in most industrial groups. A brief supplementary survey of 14 additional industrial groups which had less than ten companies in each group indicated conditions substantially in agreement with those just presented.

MISCELLANEOUS RELATIONSHIPS TO NET WORTH

A few additional facts are presented in this section which are partially dependent upon the foregoing analysis as well as of interest in themselves. The topics to be dealt with are intangibles, treasury stock, and stated value of par stocks.

Intangibles

Justification for a survey of intangibles in conjunction with net worth is to be found in their frequent interrelation. In some instances intangibles represent merely a contra entry for stock or surplus, especially for the former. The value of intangibles is problematical. Many companies with vast intangibles, such as going-concern values, patents, trade-marks, and the like, show no such items in their statements. Others with little real value to justify the showing of intangible values nevertheless carry such items on the balance sheets; in such cases intangibles are merely offsets to net worth, contributing nothing to earnings and justifiable neither by the economics of the situation nor by sound accounting practice.

One of the arguments which have been advanced in favor of no-par stocks is that they make unnecessary the use of arbitrary and sometimes unjustifiable intangible assets. The theory is that each no-par common share represents an aliquot part of assets and earnings, and since no fixed figure of \$100 or other arbitrary amount needs to be set up for stock, no reason arises to resort to subterfuge or capricious procedures to issue and sell stock. Under such conditions questionable and intangible values may be omitted or at least reduced in size and frequency of use.

No denial is made of the theoretical advantages of no-par common stock; it seems incorrect, however, to say that no-par stock can or even should eliminate intangible values. If the balance sheet is looked upon as a picture of financial condition, there is an under-statement of values if legitimate intangibles are not reflected therein. This would, of course, be true irrespective of whether the common stock was of

par or no par value. Contrariwise, with the use of par value stocks of \$1, \$5, \$10, or \$25, there is no longer the urge and need for establishing arbitrary intangible values to offset shares of common stock issued for promotional expense and the like. Overvaluation, expressed in unwarranted intangibles on the balance sheet, is just as wrong in a company using no-par stock as in one using par stock. The same statement holds true for undervaluation of assets. Furthermore, par common stocks with small stated values provide many of the "advantages," either real or apparent, that are found in no-par stocks.

A survey of the data of 145 companies from 1926 to 1932 suggests that intangibles are declining relative to total assets. The figures for 1929 to 1932 are smaller than for 1926 or 1928. The sum of intangibles averaged about 3 per cent of total assets. In 1926 the figure was 3.7 and in 1932 it was 3.4.

Intangibles were equal to 10.1 per cent of common stock in 1926 and 7.6 per cent in 1932. This decline was due to an absolute increase in the amount of common stock and an absolute decline in the amount of intangibles.

Employing sample years, it was found that 77 companies showed intangibles on the financial statements in 1926; in the years 1929 and 1932, 81 and 83 companies, respectively. Since 145 companies were analyzed for each year, it is evident that somewhat more than half of them showed intangibles. Consequently, for those companies which had intangibles the proportion was much larger than the preceding percentage figures would indicate.

Another approach, however, indicates a distinctly different situation. There seems to have been a growing tendency for companies to insert a nominal value in their balance sheets to represent intangibles. Thus one frequently finds intangible items of \$1, \$5, and the like. In this fashion companies with "conservative" policies indicate that they possess such assets, but avoid some of the serious problems which would be encountered in valuing them for the financial statement.

It is in connection with such items that one finds a significant trend in regard to intangibles. In 1926, there were 22 companies of the 145 which reported intangible items of nominal amount. By 1929 and 1932, the number had increased to 32 and 39, respectively. Thus the number of companies with intangibles of nominal value increased from 28.6 per cent of the companies with intangibles of any kind in 1926 to 39.5 per cent in 1929, and 47.0 per cent in 1932.

In view of the facts that about half of the companies had no intangibles at all and approximately a third to a half of those that did have intangibles used nominal values, it is clear that the item of intangibles was a materially larger percentage of total assets or common stock, in those companies showing them at other than nominal value, than the foregoing paragraphs indicate.

Interesting variations were found in connection with size of company. Employing the same classification of companies by size as presented in Table II, the tabulation of results follows:

<i>Size of Companies as Measured by Total Assets</i>	<i>Percentage of Intangibles to Total Assets Common Stock</i>	
Less than \$10,000,000.....	4.9	11.0
\$10,000,000 to \$50,000,000.....	5.1	12.5
\$50,000,000 or more.....	2.1	5.3
Total.....	2.7	6.8

For the 402 industrial companies, intangibles aggregated 2.7 per cent of total assets. The 118 companies with less than \$10,000,000 of assets reported 4.9 per cent contributed by intangible values, and the 184 companies with \$10,000,000 to \$50,000,000 of assets reported intangibles equal to 5.1 per cent of assets. A distinctly smaller figure, 2.1 per cent, was found for the 100 companies with total assets of \$50,000,000 or more. When compared with common stock, intangibles amounted to 11 per cent, 12.5 per cent, and 6.8 per cent for small, medium-, and large-sized companies. The pictures are similar on both bases, that is, in relation to total assets and to common stock. Two hundred and eight of the 402 companies, or 51.7 per cent, reported intangibles in their balance sheets in 1932. About half of the 208, or 106, reported nominal intangible items. These figures agree fairly well with the 1932 data for the smaller sample of 145 companies in the preceding paragraphs.

There was a distinct tendency for the small companies to show intangibles more frequently than the large companies. Of the 118 companies with less than \$10,000,000 of total assets, 71, or 60.2 per cent, reported intangibles. On the same basis of comparison, 55.4 per cent of the 184 companies in the \$10,000,000 to \$50,000,000 group reported intangibles; whereas only 35.0 per cent of the 100 companies in the \$50,000,000 or more group had intangibles.

Just the opposite situation is found, however, with respect to the valuation of intangibles. Among those companies with intangibles the percentage of nominal intangible items to the total number of intangible items declined as size of company increased. Thus the large companies employed intangibles less frequently than small companies, but this showing was counterbalanced in part by the more frequent use of nominal intangible items by small than by large companies. Of the 71 companies with assets of less than \$10,000,000 which reported intangibles, 42, or 59.2 per cent, showed nominal items. Similar comparisons for companies with \$10,000,000 to \$50,000,000, and those with \$50,000,000 or more of total assets disclose percentages of 50.0 and 37.1, respectively, of nominal items to total intangible items.

From the data contained in Table V, it is possible to appraise some aspects of the relationship between types of financing and intangible

TABLE V
FREQUENCY AND SIZE OF INTANGIBLES IN RELATION TO TOTAL ASSETS AND COMMON
STOCK OF 402 INDUSTRIAL COMPANIES CLASSIFIED ACCORDING TO
PLAN OF FINANCING NET WORTH, 1932

Item	Distribution According to Plan of Financing					
	Par Common Only	Common and Pre- ferred Both Par	Par Com- mon and No-Par Preferred	No-Par Common and Par Preferred	Common and Pre- ferred Both No-Par	No-Par Common Only
Number of Companies.....	52	53	7	146	20	124
Number of Companies With Intangibles.....	22	23	4	80	15	64
Amount of Total Assets (000- 000 omitted).....	\$ 4,437	\$ 5,806	\$ 1,226	\$ 9,344	\$ 687	\$ 4,896
Amount of Total Intangibles (000 omitted).....	\$41,562	\$12,034	\$51,978	\$242,393	\$67,992	\$189,891
Percentage of: Companies with Intangibles to Total Companies...	42.31	43.40	57.14	54.79	75.00	51.61
Nominal Items to Total Intangible Items.....	60.00	33.33	50.00	50.60	37.50	49.25
Intangibles to Total Assets	1.07	1.93	4.24	2.59	9.90	3.88
Intangibles to Common Stock.....	2.10	5.03	11.24	8.01	66.61	7.79

items. Contrary to the situation found for other classifications, the par common and no-par common show some distinct variations. Intangibles amounted to 1.1 per cent and 3.9 per cent of total assets, and to 2.1 per cent and 7.8 per cent of common stock, for the companies with par value common and no-par value common stocks, respectively.

Approximately half of the 176 companies in these two groups reported intangibles in their financial statements. In the case of the companies financed with par common, however, somewhat more than half (60 per cent) of the intangibles were of nominal value, whereas for the companies financed with no-par common, less than half (49.3 per cent) of the intangibles were of nominal value.¹¹ In all respects intangibles were more prominent in conjunction with no-par stocks than with par value stocks. They were more numerous, constituted larger percentages of common stock and total assets, and were less frequently listed at nominal value in the no-par group than in the par value group of companies.

A fairly "conservative" showing was made by companies employing par value common and preferred stocks. About 45 per cent of the companies in this group reported intangibles; of these a third were nominal items. Total intangibles aggregated less than 2 per cent of total assets and 5 per cent of common stock.

¹¹Any intangible of \$10 or less was classed as of "nominal" value.

The least "conservative" condition was found in the companies using both no-par common and no-par preferred stocks. Here 75 per cent of the companies had intangibles, 38 per cent of which were of nominal value. Intangibles aggregated 10 per cent and 67 per cent of total assets and common stock, respectively. This group was small, and the data were in part distorted by two large companies which reported relatively more intangibles than most of the others.

The largest group of companies, the 146 financing with no-par common and par preferred stock, reported intangibles in 80 cases, or 55 per cent of the total. More than half of the 80 companies showed items ranging from \$1 to \$10 each. For this group, aggregate intangibles amounted to 2.6 per cent of total assets and to 8.0 per cent of aggregate common stock.

From this survey it is impossible to conclude that no-par stocks have tended to reduce or avoid intangible values—in fact, the opposite conclusion is suggested. Perhaps the situation may be accounted for by the conversion of par into no-par stocks. Under these circumstances, a company with intangibles would be unlikely to eliminate them, although it changed to no-par stocks. On the other hand, there is ample evidence to indicate that new companies or consolidations which chose to employ no-par stocks also reported intangible values, and hence were not essentially different in this respect from old companies. The inference from these data is that no-par stocks are probably more conducive to the employment of intangible values than are par value stocks.

Table VI shows some of the data regarding intangibles in 1932 for those industrial groups with ten or more cases in each. Except for

TABLE VI
FREQUENCY AND SIZE OF INTANGIBLES IN RELATION TO TOTAL ASSETS AND COMMON STOCK OF FIFTEEN INDUSTRIAL GROUPS, 1932

Industry	Percentage of Companies With Intangibles	Percentage of Intangibles to Total Assets	Percentage of Intangibles to Common Stock
1. Automobiles and Trucks.....	66.7	5.2	12.4
2. Auto and Aviation Accessories.....	70.4	3.2	6.5
3. Building and Construction.....	38.1	.9	1.8
4. Chemicals and Fertilizers.....	56.3	3.4	10.3
5. Bread, Biscuit, Miscellaneous.....	50.0	3.5	7.7
6. Household Supplies.....	75.0	2.6	8.1
7. Machinery and Tools.....	52.4	3.5	7.2
8. Copper Mining.....	13.3	(*)	(*)
9. Petroleum Products.....	13.6	(*)	(*)
10. Railway Equipment.....	53.9	2.9	5.2
11. Department Stores.....	90.9	9.6	22.6
12. Chain Stores.....	56.3	1.4	3.1
13. Steel and Iron.....	32.1	.2	.5
14. Textiles and Apparel.....	60.0	5.6	21.4
15. Tobacco.....	64.3	11.7	29.4

*Less than one tenth of one per cent.

four industries, intangibles were reported in at least half of the companies in each of the fifteen groups. The actual size of intangibles when compared with total assets or common stock was generally small, because intangibles were frequently reported at a nominal value. Approximately half (or more) of the intangible items in each industry were stated at nominal values; the only groups materially below 50 per cent were petroleum products, railroad equipment, and steel and iron.

When compared with total assets, intangibles aggregated less than four per cent in each group, except in the automobiles and trucks, department stores, textiles and apparel, and tobacco groups. In these four the percentages were 5.2, 9.6, 5.6, and 11.7, respectively. In comparison with common stock, the intangibles, of course, loomed relatively larger. The largest figures were found for department stores with 22.6 per cent, textiles and apparel with 21.4 per cent, and tobacco companies with intangibles equal to 29.4 per cent of common stock. When it is recalled that many of the companies had no intangibles, and furthermore, that many intangibles were of nominal value, these percentages are seen to be fairly high.

Treasury Stock

Among the 145 companies which were surveyed over a period of years, 1926 to 1932, only 11 clearly designated items of treasury stock in 1926. This was 7.6 per cent of the companies. By 1929, there were 20 companies, or 13.8 per cent of the entire number, with treasury stock; and in 1932, 42 companies, or 29.0 per cent. The aggregate treasury stock increased from .03 per cent of total assets in 1926 to .60 per cent in 1929 and declined to .58 per cent in 1932. Stock in the treasury, according to the values indicated in the financial statements, amounted to .06 per cent, 1.2 per cent, and 1.0 per cent of outstanding stocks in 1926, 1929, and 1932, respectively.

It is evident that treasury stock, as reflected by the above figures, was small in the aggregate, although it did loom large for some specific enterprises and in certain industries. The figures, however, suggest increasing frequency of reacquirement of stock from 1926 to 1932. It is quite probable that the years 1929 to 1932 represented the peak of this movement. Even then reacquired stocks amounted to barely 1 per cent of the entire issued and outstanding stock (including the treasury stock).

By employing the larger sample of 402 companies for 1932 and classifying them by amount of total assets, it was found that the aggregate value of treasury stock amounted to .82, .69, and .36 of one per cent of total assets for the small, medium-, and large-sized companies in the order presented. In proportion to total stock, the treas-

ury stock amounted to 1.40, 1.24, and .69 of one per cent in the same order of size from small to large companies.

Although the data become rather meager when divided into further detailed classifications, a few additional facts were suggested as to the relationships of preferred and common treasury stocks. A survey of the cases of treasury stock indicates that the frequency of reacquiring common stock was greater for small than for large companies, and conversely, the reacquirement of preferred treasury stock was relatively greater for cases of large than small companies. This is shown below:

Size (total assets)	Cases of		Percentages which were:	
	Treasury Stock	Common	Preferred	
Less than \$10,000,000.....	35	74	20	
\$10,000,000 to \$50,000,000.....	47	62	28	
\$50,000,000 or more.....	35	57	34	
Total.....	117	64	27	

The 74 per cent of the 35 cases of common treasury and the 20 per cent with preferred treasury stock amount to only 94 per cent, the remaining 6 per cent either being combined and not separable. Although these data are only suggestive, they are nevertheless significant. Furthermore, this showing cannot be attributed to a more frequent use of preferred than of common stock by large companies, as this is not the case (see Table II and accompanying text).

The aggregate percentages of preferred treasury stock to total assets were .54, .49, and .13 of one per cent for small, medium, and large companies, respectively.¹² The percentages of common treasury stock to total assets were .21, .17, and .15 in the same order. The comparisons of treasury stock of each kind to the outstanding stock of each indicated less regular relationships. Common treasury stock was 1.21, 1.20, and .32 per cent of common stock, whereas preferred treasury stock was 1.47, 1.15, and 1.23 of preferred stock for the small, medium-sized, and large companies in the order given. The much smaller amount of outstanding preferred stock is a factor in accounting for the showing here in contrast to the comparison with total assets.

Stated Value of Par Stocks

The difficulty of ascertaining stated values for no-par stock confined this section to a statement of stated value among par value securities. The trends in recent years toward no-par stocks were accompanied by the use of par value stocks of small stated value. In this way some of the "advantages" of no-par stock were secured while still retaining par value. The last two years have further accentuated this trend toward par stocks of low stated value.

¹²As mentioned, in a few cases common and preferred treasury stock could not be separated. Therefore the figures here presented are understated.

This part of the data is analyzed only for 1932. The analysis disclosed no essential variation in the stated value of par stocks when employed in conjunction with no-par stock or other par value stock. Hence detailed groupings of this kind are omitted. The groupings of par value common and par value preferred stocks according to stated value were as follows:

	<i>Amount of Stated Values</i>				
	<i>\$1</i>	<i>\$2-10</i>	<i>\$11-25</i>	<i>\$26-99</i>	<i>\$100</i>
Common Stock (par).....	9	41	38	9	21
Preferred Stock (par).....	0	7	9	14	198
Totals.....	9	48	47	23	219

Of the 118 par common issues, only 21 had a stated value of \$100. The great majority, 88, or 75 per cent, had stated values of \$25 or less, and more than half the 88 were \$10 or less. This distribution may be taken as a fair indication that the stated value of par common stock is not essentially unlike that of no-par common stock. In fact, many no-par stocks are simply "split-ups" of former par value stocks with no decrease of total stated value other than division into more shares. The same condition is true of par value shares of small stated value; many of them represent merely a reduction of stated capital by division into more shares than formerly, with no transfers to surplus accounts.

Preferred stocks have apparently been subject to such changes to a far less extent. Of the 228 preference issues, 198, or 87 per cent, indicated a par value of \$100. Only 7 issues with a stated value of \$10 or less were found among the 228. This showing seems to be in accordance with the increasing recognition of preference stock as having the characteristics of a creditor, rather than a proprietor, interest. Nominal values or no-par values for preference stocks are not compatible with a creditor status.

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