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THE FINANCIAL POLICIES AND  
PRACTICES OF AUTOMOBILE  
FINANCE COMPANIES

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## PREFACE

This study is an analysis of the financial and operating practices of automobile finance companies. Such companies usually perform a variety of credit operations which include financing the retail and wholesale purchases of automobiles, discounting receivables, financing the purchase of household and factory equipment. Some even make small loans, but these are incidental to the major activity. Consequently these companies could well be designated as intermediate banking companies; they perform essential banking functions in a field which the ordinary commercial banks have been reluctant to enter. Through the operation of these finance companies as intermediaries, wholesale credit is converted into retail credit. Borrowing most of their loanable funds from the commercial banks, they advance these funds to retail purchasers and retail dealers. The bank loans to the intermediate companies are rendered secure by the collateral provided by these companies, the notes and lien contracts. They are further secured against loss by the capital and surplus supplied by the finance companies, which therefore stand as a buffer between the banks and the ultimate borrowers. Thus loans which in themselves would not be suitable for commercial banking are made acceptable to the bank.

There are two major reasons for undertaking the study at the present time. First, there have been sharp variations in the policies of the companies and in the economic and social importance of this class of credit; second, there is a deficiency of quantitative data relating to these companies and their practices. The purpose here is to show recent changes as well as current practices of these companies in so far as the study, which has been limited to the financial statements and policies of the companies, makes this possible.

A number of persons have been helpful in the preparation of this bulletin. Mr. Milan V. Ayres, of the National Association of Sales Finance Companies, has been kind enough to read and criticize the manuscript, in addition to lending assistance in the collection of data. Most of the work of assembling data and making preliminary analyses was done by John R. Taylor of the Bureau staff. Acknowledgments are also due to the various other members of the Bureau staff for their help with the many details of the study.

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## I. INTRODUCTION

Like all social institutions, those of money, credit, and finance have a definite evolution. Old institutions are modified to fit new needs; uneconomical institutions pass out of existence; new economic-financial structures are built to serve modern conditions. An illustration of this development is furnished by the evolution of institutions equipped to serve the short-term consumer credit requirements of society.

One early form of bank credit was the cash credits of the Scottish banks, later used by the English and Canadian banks, and still retained as a feature of these banking systems. These were in the nature of overdrafts on which the bank protected itself by the signature of one or more sound persons other than the borrower. Although these cash credits were intended primarily for business capital, they also provided a source of funds for household consumption needs, because of the frequent combination of the household and business operations of the borrowers, particularly of agricultural borrowers.

Direct loans on single or two-name paper have also played a very important role in banking, particularly in the United States. Although these loans have been available for consumers as well as for traders, manufacturers, and other types of producers, the use of such credit has generally been rather closely circumscribed and has been restricted to production purposes. In fact, for years bank loans that were not for "productive" or "commercial" purposes were frowned upon.

Although it has not been considered wise for commercial banks to loan money to consumers for household and luxury purchases, seldom has a question been raised regarding loans to companies that carried large accounts receivable from consumers, provided that the condition of the company justified such loans. Thus banks have indirectly financed consumer accounts of department and other retail stores, and the like, without making direct loans to consumers.

Aside from the aversion to consumer loans because they are not "productive," banks have largely refrained from this type of loan for a number of other reasons. One reason is the small size of most of the accounts that must be handled. The average consumer cannot safely borrow a very large sum at one time. Furthermore, his ability to repay is limited, and payment must be accepted in small, frequent installments, which necessitate high costs and do not provide an attractive investment for bank funds.

There are a number of other reasons why banks have refrained from entering the consumer credit market. The cost of credit investigation for small loans adds considerably to their cost. Small borrowers cannot provide as consistent, dependable, and useful credit statements as can business men. If a bank engages in this business, it must either select its risks carefully, or its rate of discount must be sufficiently high to cover credit losses on the poorer risks. When interest rates are high enough to cover risks, carrying charges, collection expense, and the like, they may be so out of line with usual bank charges as to seem exorbitant and disturbing to banking tradition.

For another reason banks have refrained from entering the consumer credit market. They frequently lack the personnel required to operate such a business successfully. The type of management for such departments is substantially different from that required for overseeing ordinary commercial loans.

For the reasons mentioned, there has been in the past, and still remains, a reluctance on the part of most banks to enter into direct competition for the business of financing consumer purchases. Various lines of merchandise, particularly furniture, have been sold on installment on a large scale for a number of years. And for some time there have been finance companies that discounted such receivables or loaned on their security.

The mass production of consumers' goods, notably automobiles, has finally brought finance companies on a large scale into the field of short-term advances to individual buyers of consumption goods. Other products that have contributed in an important way are pianos, mechanical refrigerators, radios, and washing machines. With the growth in sales of these products, there grew up an intermediate financial institution that filled the gap between the banks and individual buyers.

Some contributing factors leading to this development are to be found in the attitude of manufacturers and in the changed status of the individual consumers. The manufacturers, who formerly carried dealers' accounts, while the latter in turn carried consumers' accounts, soon found it expedient to relieve themselves of this burden. Manufacturers' sales were limited because of the restricted capital of retailers and their consequent inability to finance consumers. Thus a satisfactory solution was provided by the finance companies, which assumed these burdens.

During the past two or three decades there has been a change in

the financial and credit status of individuals that has made it more common and necessary for them to make use of credit facilities. The increasing importance of durable goods in the customary standard of living—e.g., automobiles, radios, electric refrigerators, washing machines, etc.—has changed the buying habits of individuals and families. This change in the nature of the goods desired, together with a change in the prevailing attitude toward the use of credit, has resulted in an expansion in the purchase of goods for credit rather than for cash.

There have also been a growing realization of the importance of the family as a unit for credit and an increase in the number of workers on a regular income. This change in the attitude toward the use of personal short-term credit has led to a greatly increased demand for credit of this type. This demand was not readily accommodated by the established banking institutions, nor could this type of credit be successfully handled by the use of standard banking devices or methods.

To meet the situation there came into existence a number of new quasi-banking institutions to supply the credit requirements of individuals and families. An expansion of older types of these institutions also occurred. In general these institutions offer their services on two plans: (1) the discounting of receivables, and (2) the making of direct loans.

Those firms discounting receivables operate through intermediary agencies. The goods are sold to the customers by retailers and other sellers on credit terms. The payment for the goods is made partly in cash and partly in credit. Such credit is generally repayable on installment terms. The "paper" received by the seller is discounted with the credit agency, which then collects from the purchaser.

Examples of agencies of this type are: automobile finance companies, companies buying accounts receivable, companies financing equipment installations, factors, and the like.

In the making of direct loans the borrower conducts the loan negotiations directly with the lender and receives a cash advance. Although the purpose of loans made by either method is often the same—namely, the purchase of some durable commodity of high unit-cost—the direct method is not so closely connected with a sale and the borrower retains considerable freedom in the disposition of the proceeds of the advance.

Agencies operating thus directly are illustrated by small loan or personal loan companies, Morris Plan banks, and credit unions.

Although commercial banks do not participate actively in these financial arrangements, they are none the less involved, because the funds being loaned by these various lending agencies are, in considerable part, supplied by banks.

Other studies of these newer financial institutions have been made that emphasize a description of their operating methods or attempt to analyze their economic effects. Little attention has been given to their financial structure, the sources of their capital funds, and their internal financial set-up. The present study therefore concentrates attention upon questions of the financial structure of the finance institutions, the sources from which they secure their funds, the borrowing policies they follow, the nature and extent of the adjustments they make in response to changing economic conditions, and the differences in company operations brought about by differences in size of territory served.

The number and variety of these agencies and the wide differences in their organization and operations made it desirable at the outset to narrow the scope of the study. It has, therefore, been confined to a consideration of the institutions that discount receivables, and this classification has been further limited to those discounting agencies that have as their chief interest the discounting of receivables arising out of the retail sale of automobiles. This restriction concentrates attention upon the agencies currently called "finance companies," "automobile finance companies," or "sales finance companies."

Since these companies obviously came into existence and are operated to make profits rather than to confine their operations to some carefully delimited field of activity, it is but natural that their operations have been extended into some other types of financing that hold forth the promise of profits. They have consequently used various methods in their operations, selecting for use the method or methods which were best adapted to the major purpose. Accordingly, the companies studied do not represent institutions exclusively engaged in the discounting of paper originating from the retail sales of automobiles. They do, however, represent companies whose major activity is in this field of finance.

To secure data for the study, a group of 18 companies publishing financial information was analyzed for a period of ten years.<sup>1</sup> To supplement these data and to secure information concerning the smaller companies that do not publish financial statements, data were solicited from all companies that are members of the National Association of

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<sup>1</sup>This group of companies practically exhausted the possibilities of information available from investment manuals and other similar sources.



Sales Finance Companies.<sup>2</sup> From replies received from this source additional, and in some respects more complete, information was obtained for a four-year period.

The analysis of the factual material was made by two main methods. The first of these, and the one that is given the greater emphasis, is the use of means of individual company ratios. For example, the ratios of each company for such items as cash to total assets, interest cost to gross income, and other similar items were computed. The arithmetic average of these ratios was then computed and used in the text matter. This method has the advantage of giving each company an equal weight in the average used, but a disadvantage in that extreme ratios for any one company may somewhat influence the ratio computed as an average of them all. This disadvantage was avoided in a few cases by the elimination of very extreme ratios.

In addition to the use of the mean of the ratios, the aggregate values were ascertained in some cases and the means based upon these have been used. These aggregate values give an idea as to the total amount of the funds involved. The mean based upon them represents more of a cross section of the industry, as if all the companies were put together into one large firm. Such a figure is unduly influenced by the large companies, which dominate the aggregate values.

The data have been classified into two main categories. The first of these is an analysis by years or periods. In this first division the mean of the ratios for all the companies was computed for each year. In addition, however, the years were grouped into periods to reflect more clearly the changes in business conditions. For example, the years 1926 to 1929 were chosen as the first period, which represents a time of expansion and development, as well as prosperity, for the finance companies. The second period, from 1930 to 1932, represents the business depression, which brought with it problems of adjustment and a slowing down in the growth of the finance companies. The third period, from 1933 to 1936, represents the expansion and post-depression growth. In obtaining the mean ratio for these periods, the individual ratios for each company were included for each of the years within the period. Thus a company in providing statements for 1926, 1927, 1928, and 1929 would have four items for each ratio in that period.

A second division of the data is based upon the territory served

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<sup>2</sup>This inquiry was aided by the cooperation of the Association, secured through Mr. Milan V. Ayres, Analyst. The cooperation of the only other trade association, The American Finance Conference, could not be obtained, hence no similar inquiry was addressed to the members of that association.

**TABLE I**  
**CHANGES IN TOTAL ASSETS AND TOTAL VOLUME OF BUSINESS OF IDENTICAL**  
**FINANCE COMPANIES, 1928 TO 1936**

Year	Total Assets for 11 Companies	Total Assets for 3 Companies	Total Volume of Business for 3 Companies	Total Volume Re- ported by National Association of Sales Finance Companies
A. Dollar Figures (000,000 omitted)				
1936.....	\$1,348	\$1,246	\$3,353	\$3,420
1935.....	939	864	2,622	2,561
1934.....	690	635	1,948	1,801
1933.....	521	471	1,193	1,127
1932.....	427	380	872	866
1931.....	676	613	1,393	1,504
1930.....	799	720	1,634	1,889
1929.....	958	859	2,065	2,295
1928.....	739	666	1,525	.....
B. Relatives, 1929 = 100				
1936.....	141	145	162	149
1935.....	98	101	127	112
1934.....	72	74	94	78
1933.....	54	55	58	49
1932.....	45	44	42	38
1931.....	71	71	67	66
1930.....	83	84	79	82
1929.....	100	100	100	100
1928.....	77	78	74	.....

by the various companies. The classification depends on the number of states in which they purchased paper.

Since there were two groups of companies, one of which provided data for the ten-year period, and the other for which data were available for only the four-year period, a separate exhibit of these two was sometimes made, so that in some cases it is possible to follow through the larger group of companies over the ten years as well as to observe a contrast between the larger group and the smaller companies during the four-year period from 1933 to 1936 inclusive.

In order to make valid comparisons on the basis of dollar figures the individual companies composing a group should remain the same throughout the period. The selection of companies according to this requirement considerably reduced the number of available cases, since omission of information for but a single year forced the exclusion of that company from the tabulation. Because of the scanty number of cases available for the earlier years when these exclusions were made, two separate tabulations were made, one for a nine-year period and another for a four-year period.

During the nine-year period covered by the data shown in Table I, there were very wide fluctuations both in total assets employed by

**TABLE II**  
**CHANGES IN TOTAL ASSETS AND TOTAL VOLUME OF BUSINESS OF IDENTICAL**  
**FINANCE COMPANIES CLASSIFIED ACCORDING TO SIZE OF**  
**TOTAL ASSETS, 1933 TO 1936**

Year	Total Assets		Total Volume		
	Less Than \$5,000,000	More Than \$5,000,000	Less Than \$5,000,000	More Than \$5,000,000	Reported by National Association of Sales Finance Companies
A. Dollar Figures (000,000 omitted)					
1936.....	\$27	\$1,350	\$31	\$3,383	\$3,420
1935.....	21	943	28	2,638	2,561
1934.....	15	692	17	1,962	1,801
1933.....	13	522	11	1,204	1,127
B. Relatives, 1933 = 100					
1936.....	210	259	285	281	303
1935.....	157	181	253	219	227
1934.....	115	133	159	163	160
1933.....	100	100	100	100	100

the companies and in the total volume of business handled. On the basis of a *priori* reasoning one would expect that during a period of declining business the volume of business done would decrease by a greater proportion than would the total assets employed, and that during a period of rising business the reverse would be the case. The figures show this to have been true. The total assets decreased 56 per cent of the 1929 figure, and the volume fell 58 per cent. This low point was reached in 1932. In the following years, until 1936, the increase of volume in each year was greater relative to the base year than was that of total assets.

This same conclusion is supported by the evidence in Table II for the years 1933 to 1936. The volume recovered faster than the total assets employed up to 1936. In this table the separation of the companies into two groups, those under \$5,000,000 and those over this figure, gives an opportunity to compare the operations of the larger and smaller companies. The total assets of the larger companies increased more over the base period than did the total assets of the smaller companies, whereas the volume of business done by the smaller companies increased at a slightly greater rate than was the case for the larger companies. There is not, however, a very marked difference between the showing made by this group of companies and the evidence of the group taken over the longer period.

It is to be noted that in 1936 the companies employed more assets and did a larger volume of business than in 1929. The greater relative increase in assets than in volume in 1936 is indicative of the policy of the management and its results in bringing the assets into a more normal proportion to the volume of business being done.

In view of the wide fluctuations in both assets and volume of business, the relative stability of the proportions of the assets and liabilities is all the more remarkable, and seems to indicate a high degree of flexibility in the financial structure of the companies, which is made possible by the large proportion of current items in both the assets and the liabilities. The nature of the adjustments of assets and liabilities and net worth is discussed at greater length in a later section, where the proportions of each of these items are considered for groups of companies and for different years.

The companies also displayed considerable stability in earnings. This stability was maintained even during the years when extreme changes were taking place in the assets employed and the volume of business handled. These items are also discussed more fully later.

## II. ADJUSTMENT OF FINANCIAL STRUCTURE TO ECONOMIC CONDITIONS

Great changes in business conditions occurred in the years covered by this study. It was therefore thought desirable to examine the structure of the entire group of companies through this period of time. In order to summarize the results, the period was divided into the three following groups of years:<sup>3</sup>

First: 1926 to 1929. These years were prior to the general business depression; they furnish a sort of bench mark or point of departure. The analysis of this period will serve to illustrate the practices that prevailed at that time.<sup>4</sup>

Second: 1930 to 1932. This period covers the years of retrenchment and shows the adjustments made by the companies in conforming to a greatly reduced scale of operations and to depression conditions.

Third: 1933 to 1936. This period covers the years of recovery and should show any modifications that have taken place, and the trend for the immediate future.

Using these three periods as the basis for division of the ratios, the first step in the analysis of the financial structure of the companies was the examination of the manner in which they invested their available resources. It is generally recognized that the distribution of the assets of any company tends to conform to the general practice in the industry, and that the manner of allocation depends largely upon the functions that the enterprises in the industry seek to perform. Thus the figures presented in Table III, which are means of individual company ratios, suggest characteristics of these companies and of the industry of which they are members.

It will be noted that the companies maintained a cash position which may be characterized as consistently high. This favorable cash position made it possible for the companies to use this asset to protect themselves against unusual demands of both customers and creditors. Dealers' unusual cash demands could be readily met without strain,

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<sup>3</sup>Reference to the data in Tables I and II showing the changes in total assets and dollar volume of business will show that these periods coincide with the actual facts of the situation as shown by dollar changes.

<sup>4</sup>By 1926, the finance companies had been in operation for a period sufficiently long for their financial structure to become, to some extent, stabilized. The period of rapid growth and experimentation was past, and their operations and practices had become standardized. The financial structure during these years may be considered as established.

TABLE III  
AVERAGE RATIOS OF SELECTED ASSET ITEMS TO TOTAL ASSETS

	1933-1936	1930-1932	1926-1929
Current Assets			
Cash	.1021	.1225	.1139
Total Receivables	.8233	.8066	.8333*
Notes Receivable	.8057	.7913	.8335*
Repossessions	.0029	.0068	.0056
Total Current Assets	.9402	.9383	.9529
Non-Current Assets:			
Investment in subsidiary, real estate, furniture and fixtures	.0499	.0460	.0331
Deferred Charges	.0095	.0084	.0123

\*The paradox that total receivables are smaller than notes receivable is explained by the fact that some companies did not report notes receivable as a separate item, and therefore the averages are for different companies making up the respective groups.

and the companies were able to comply with the request of any creditor who desired the payment of their obligation to him. This asset, cash, was employed actively rather than invested in secondary-reserve type securities according to the practice of many other types of companies. Furthermore, there was a distinct tendency for the cash position to be strengthened during the depression period. Following that period, cash reverted to a point below the level maintained during the pre-depression period. This adjustment is even more evident from the year-to-year figures. Obviously this was a sound adjustment to the conditions of the time.

It is probably more than a coincidence that the cash position is maintained at a level of about 20 per cent of the current debt.<sup>5</sup> This proportion may be attributed partly to the minimum balance requirements of the banks, but it also seems reasonable that such an amount of cash would normally be required to provide adequately for unpredictable dealer requirements, and as a reserve for payment of obligations.

The fact that most of the statements are for the year-end makes it necessary to comment also upon the fact that an unusually strong cash position might have been shown at that time in the desire to present a favorable state of affairs.

At no time did the average proportion of total assets invested in receivables fall below 80 per cent. This is a high proportion of the total assets to be kept earning. Although the proportion decreased with the decline in business, falling from 83.33 per cent in the pre-depression period to 80.66 per cent in the depression years, it rose once

<sup>5</sup>For the current debt proportions see Table IV.

more to 82.33 per cent in the last period. This stability in the proportion of earning assets is particularly noteworthy in view of the large drop in business volume which took place. The figures for the changes in business volume and total assets were shown in Tables I and II, pages 12 and 13. Although the total amounts were declining by more than 55 per cent, the companies were able to make internal adjustments with sufficient rapidity to keep the proportion of earning assets at very nearly the usual level.

With so large a proportion of the total assets invested in receivables, there was naturally an unusually large proportion in the form of current assets. In fact, this proportion becomes so large that the non-current assets could almost be ignored. The averages for all the companies in the respective periods are: 95.29 per cent from 1926 to 1929, 93.83 per cent from 1930 to 1932, and 94.02 per cent from 1933 to 1936. Although there was some slight decline in current position, it was of little significance and is probably to be explained by the decrease in total volume and operations, accompanied by an inability to liquidate fixed assets correspondingly. Among the individual companies there was also very little variation in this percentage, and the group tended to concentrate rather closely about the average.

The item among the current assets that shows the greatest relative fluctuation is repossessions. This item, as shown in Table III, is extremely small, amounting to only a fraction of 1 per cent in each of the periods.<sup>6</sup> Because of the smallness of this item, changes in it are best indicated by some device which will magnify them. This can be done by showing the amount of repossessions in each of the other periods as a percentage of the first period figure. For the years 1930 to 1932, repossessions were 121 per cent of the 1926 to 1929 base, and during 1933 to 1936 they averaged only 52 per cent of those in the first period. This showing of repossessions is particularly noteworthy as indicating both the comparatively moderate increase during the depression period and the soundness of the credit expansion during the recovery.

The obvious comment to be made regarding the non-current items concerns their comparative insignificance. For the group as a whole, they are so small as to be almost negligible. This is also rather gener-

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<sup>6</sup>This item does not show the ratio of repossessions over a period of time, but only those on hand at statement time. Naturally this is an item that the management would be anxious to have as low as possible, and there is probably considerable pressure to reduce it to a minimum at such times. The ratio does, however, show that a very small proportion of the total assets is invested in these potential loss producers.

**TABLE IV**  
**AVERAGE RATIOS OF LIABILITIES AND NET WORTH ITEMS TO TOTAL ASSETS**

Ratio	1933-1936	1930-1932	1926-1929
Current liabilities.....	.5223	.4720	.5641
Dealers' reserves.....	.0474	.0415	.0211
Fixed liabilities.....	.1020	.1232	.1507
Unearned income.....	.0431	.0329	.0321
Preferred stock.....	.1933	.2626	.2169
Common stock.....	.1163	.1332	.0711
Surplus.....	.0963	.1003	.0674
Net worth.....	.3773	.4230	.3163

ally true for the individual companies, although for some few the item of investment in subsidiaries is considerably larger than the average. Some of the individual companies in certain years had investments in subsidiaries which were in excess of 10 per cent of their total assets. There is some indication that the investments have grown in size during the years studied.

Another important aspect of the financial structure of the companies has to do with the sources from which they obtain the funds to be invested in the form of assets employed in the business. This part of their policy is revealed by a study of both liabilities and net worth. Here also there is an evident adjustment to the conditions of the business and the functions to be performed, and to the standards more or less generally recognized as being sound for the industry.

The most significant change to note in connection with the current liabilities (see Table IV) is their decrease during the depression years, when they fell from 56.41 per cent to 47.20 per cent of total assets, rising again to 52.23 per cent in the latest period. This is a greater change than that which occurred in receivables or in current assets. It was an adjustment in the direction of increased liquidity. The reduction was almost entirely brought about by a change in the net worth, which during the same period increased from 31.63 per cent to 42.30 per cent, and fell again to 37.73 per cent, almost an equal number of points' change being observable in the two items of current liabilities and net worth. This thickening of the owners' equity was a sound adjustment to decreased volume and to depression conditions.

Current liabilities provide approximately half of the funds employed in the business and are substantially more important than any other single source of funds. Fixed liabilities, during all three of the periods, were a much less important source of funds, and during the depression years showed an even greater relative decrease than current



liabilities. This decrease, contrary to the trend of the current liabilities, continued to manifest itself during the recovery period, indicating a change in the financing policy and a shift from long-term securities. This trend had not been reversed by 1936, although there were some indications pointing toward a change in 1937.

The item of dealers' reserves, which are not primarily to be regarded as a source of funds, shows a continuous increase in importance.<sup>7</sup> The increase is probably to be explained by a greater use of this device in company operations rather than by a conscious desire to make greater use of such reserves as a source of operating capital.

The unearned income account represents that part of the discount on notes paid by the debtor but not yet taken into current earnings by the finance companies. The amount of the item itself is not large, and the increase in it is not great, but is rather consistent. Since this item is important in stabilizing earnings rather than as a source of operating capital, it will be further discussed later. At this point, however, the question may be raised whether the increase in this ratio is to be explained by a difference in the accounting practices of the companies or by a larger proportion of long-term paper in their receivables. It seems more probable that the increase is to be attributed to the increased purchase of longer term paper rather than to changed accounting methods.

In the middle of the period of time under review, there was a distinct increase in the proportion of preferred stock. It should also be noticed that preferred stock is the most important of the net worth items, exceeding in all but the last period the sum of the common

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<sup>7</sup>Dealers' reserves are made up of funds held temporarily by the finance company. These are to be refunded to the dealers upon the satisfactory liquidation of the dealers' paper. The retention of these funds is a part of the condition under which the paper is purchased from the dealers, and they are supposed to be the means of reimbursing the dealers for losses incurred in repurchasing repossessed cars under the terms of the repurchase agreement. This retention of funds may also be considered as a form of rebate to the dealers, which is paid to them by the finance buyer. It becomes a rebate to the individual dealers to the extent that the reserve credited to them by the finance company exceeds the losses suffered by the dealers on their financed sales. To this extent the buyer is penalized more than should be the case.

Of course, the retention of these funds by the finance company also gives added security against the default of the dealer, a protection that may be highly desirable. Thus its advantage as a source of funds is only incidental to its other purposes. Its importance as a security against dealer defaults makes the 5 per cent retained bulk rather large when compared with the total receivables, for it provides a bad-debt loss reserve equal to about 6 per cent of the outstanding notes receivable.

TABLE V  
AVERAGE RATIOS OF INCOME ITEMS TO GROSS INCOME AND OF DIVIDENDS TO NET PROFIT

Ratio	1933-1936	1930-1932	1926-1929
Interest to gross income.....	.1660	.2489	.2741
Other expenses to gross income.....	.5099	.4938	.3796
Operating profit to gross income.....	.3181	.2854	.3124
Net profit to gross income.....	.2634	.2253	.2658
Dividends to net profit.....	.7011	1.1354	.6851

stock and surplus items. It seems that the major burden of furnishing owner capital was turned over to the holders of preferred stock. In fact, the significant thing about the common stock ratio is its small size. Although the net worth item as a whole is sufficiently large to be satisfactory, the common stock investment is very small. In the period from 1926 to 1929, it amounted to only 7.11 per cent of total assets. This proportion was increased during the depression, but in the last period again declined. It is also significant that the surplus item was almost as large as the common stock item.

Whether or not the proportioning of the liabilities to assets and to owner investment is adequate for safety and sound financing is a question that will be discussed in greater detail later.

Although they are not directly a part thereof, both income and volume of business must be taken into consideration in examining the financial structure of the companies. In one sense of the word, income represents the end result of the financial structure and it is certainly a test of the effectiveness of economic organization.

As shown by the figures in Table V, there was a marked decrease in the proportion of the gross income absorbed by interest and other money costs. It is also evident that this decrease was much larger than could be explained by the changes in proportion of owner investment previously referred to. The reductions in interest rates and the conditions of a favorable money market were evidently used to advantage by the companies. These advantages were greatest during the period following the depression.

Indicative of the trends in interest rates is the following summary of rates paid by finance companies for different types of loans.

	1936		1935		1934		1933	
	High	Low	High	Low	High	Low	High	Low
Bank loans secured.....	6	2½	7	3	7	3½	7	4¾
Bank loans unsecured.....	6	1¾	6	1¾	7	1¾	7	1¾
Collateral trust notes.....	5	1½	4	1½	7	2	5	5
Long-term loans.....	5½	3	5½	5	5½	5	5½	5

For short-term loans the trend during this four-year period was definitely downward, reaching a very low point for some concerns. The long-term loan rates did not decrease in a similar fashion. This fact may explain why there was a decrease in the use of long-term loans in favor of short-term borrowing.

The other operating expenses followed an opposite trend. They increased greatly during the depression years, as might have been expected under the pressure of greater collection difficulty and a reduced volume. This, however, could not have been the whole explanation, for they continued to increase during the recovery years. Since the favorable money market is not likely to be a permanent factor, it is interesting to speculate upon the effect of advancing money rates upon net profit possibilities. It seems that the companies have changed their methods of operation, have permitted other expenses to increase, or the reduction in discount charges has been sufficient to make the less flexible operating costs increase in proportion to gross revenues. Whatever the cause, or causes, for this condition, it will result in sharply lowered profits when the advantages of cheap money are no longer present, unless discount charges are increased sufficiently to counteract that effect.

The proportion of the gross income retained as operating profit shows a high degree of stability, varying over the three periods by only a little over three points. This stability of operating profits resulted from the ability of the companies to reduce their interest costs. The net profit—that is, the profit remaining after payment of federal taxes and other miscellaneous expenses and income adjustments—was also quite stable. Although not so consistent as the operating profit, it did not fluctuate greatly. The fact that these proportions remained as constant as they did in spite of the great changes in volume that occurred in this period is evidence of the ability of the business to adjust operations to fluctuations. This flexibility is greatly aided by the absence of heavy fixed charges on fixed investment and the ability to cut expenses to a rate not seriously disproportionate to reductions in operations.

The practice of the companies relative to dividends is shown by the proportion of net profit paid out in dividends. This was 68.51 per cent in 1926 to 1929, and 70.11 per cent in 1933 to 1936. During the depression period, when dividends were paid out in excess of current earnings, it rose to 113.54 per cent. It seems that during periods of good business the companies retain about 30 per cent of their earnings and should therefore be able to grow rather rapidly from earnings.

TABLE VI  
AVERAGE TURNOVER AND INCOME RATIOS

Ratio	1933-1936	1930-1932	1926-1929
Volume to total assets .....	2.1309	1.9855	2.2133
Volume to receivables .....	2.5689	2.4610	2.6461
Volume to net worth .....	6.7291	4.9254	9.2348
Gross income to volume .....	.0687	.0721	.0489
Net profit to volume .....	.0185	.0185	.0145

Some information on the operations of the companies may be obtained by comparing volume of business with assets and with income. These comparisons are shown in Table VI.

The ratio of volume to total assets is indicative of the activity of the total assets employed in the business. This turnover rate does not vary greatly in the three periods. Because of the very high proportion of the total assets represented by receivables, this ratio is fairly significant for this type of company. The turnover of total assets merely shows a rather high degree of activity and liquidity of total assets. The turnover of receivables shows the results obtained from the employment of the principal asset item. If during each of the periods the term of the receivables were the same, it would also be a test of the collection efficiency of the company. This item does not, however, remain the same in its constituent parts. Thus a larger proportion of long-term paper held in the receivables would tend to slow down their rate of turn, even though past-due items were in the same proportion. A larger proportion of wholesale paper, because of its shorter maturity dates, would tend to speed up the rate of turn. This ratio then merely reflects the rate at which receivables are liquidated and does not indicate the internal affairs of the companies. Expressed in days taken to turn, the receivables in the period 1926 to 1929 were collected in about 138 days; in the period 1930 to 1932, it took 148 days; in the period 1933 to 1936 they were collected in 142 days. Thus by the last period the companies had almost returned to the condition existing in the earlier period. It seems that the increase of short-term wholesale paper largely offset the increase in terms of maturity for the retail paper.

The volume to net worth ratio is indicative of the efficiency with which net worth is employed in securing business. A more rapid rate of turnover would indicate greater efficiency in the use of net worth. The major explanation for the fluctuations in this ratio seems to be the increased use of net worth as a source of funds during the depression years. With the reduction of volume in these same years, the

orth was not employed so effectively as in either the earlier or later period.

The ratio of gross income to volume shows the gross income retained by the companies out of each dollar of volume handled. The ratio of net profit to volume shows the net income retained by the companies out of each dollar of volume handled. During the depression period the gross income to volume ratio increased rather sharply, so sharply in fact that, despite the rise in operating expenses, the net profit to volume ratio also increased. It seems that either rates were increased or, if no actual rate increase was put into effect, low-rate paper was purchased to a smaller degree and the purchase of high-rate paper was considerably increased. During the last period the ratio of gross income to volume decreased, but the net profit ratio kept at the same level.

The high degree of liquidity maintained by the companies and the comparative stability of earnings throughout these years indicate that their extensive borrowing was not without justification.

### **III. RELATIONSHIP OF FINANCIAL STRUCTURE TO AREA SERVED**

For the purpose of this section of the study the various items were classified and analyzed on the basis of the number of states in which the companies operated and the size of the companies in terms of their total assets. It was found, however, that these two classifications of the data tended to show approximately the same information. In general, the larger companies are also the concerns that operate over several states; for the small companies the area served is small. Because of the marked similarity of these two classifications of the data, only divisions on the bases of states served have been employed here.

The data and tables in this section of the study are arranged according to balance sheet ratios, operating statement ratios, and some of the inter-related ratios. The details present the composition of the assets and liabilities and some of the inter-relationships between various items, followed by analyses of the volume of business, the operating statement, and the relations of dividends to profits.

#### **DISTRIBUTION OF ASSETS**

##### **Cash to Total Assets**

Variations among the groups of companies based upon the proportions of their assets in the form of cash are not especially significant. During recent years there seems to have been a tendency for the companies serving twenty or more states to keep more cash on hand relative to their total assets than either of the other two groups of companies.

There was a rather definite increase in cash for all groups of companies during the years of business strain in 1931 and 1932. In 1932 the average cash item ranged from 12 to 18 per cent of total assets, and throughout the period of strain the percentage of cash to total assets for the companies serving large geographical areas was usually maintained at a higher level than was the case for either of the other groups. As business has improved and volume has increased in recent years, the cash holdings have returned to proportions common in 1928 and 1929. Approximately 10 per cent of total assets in the form of cash seems to be normal for these companies.

### **Receivables to Total Assets**

Since notes and accounts receivable are the stock in trade of finance companies, it is natural to expect that these items will constitute by far the greater portion of their total assets. As Table VII indicates, it is apparently their normal status to hold 80 to 85 per cent of their total assets in the form of receivables. During the depression years, receivables of most of the companies declined to approximately 75 per cent of their total assets. But this condition did not last long. By 1934 each of the groups had in excess of 80 per cent of its total assets in the form of receivables.

### **Current Assets to Total Assets**

If the cash and notes and accounts receivable are combined, a fairly clear indication is obtained of the extent to which the assets of these companies are current. Table VII contains the figures for the current assets to total assets ratio on the basis of the number of states served by each of the companies. Outstanding is the fact that, with a few exceptions, current assets are in excess of 90 per cent of the total assets. Perhaps of equal importance is the fact that current assets of the companies serving a limited number of states, that is, less than five, are consistently below the corresponding figures for the companies serving larger areas. This difference in the proportion of current assets to total assets among the various groups has ranged from 5 to 10 per cent in recent years. There is not so great a difference between the companies serving from five to nineteen states and those serving twenty or more states as there is between the smallest group and the other two groups. This was particularly noticeable in recent years. During the depression there was some tendency for the percentage of current assets to total assets to decline for each group of companies. The companies serving four or fewer states, however, seem to have made a sharper curtailment in their current assets ratio than the other groups of companies.

### **Fixed Assets to Total Assets**

Since the current assets of all companies constitute a very large percentage of their total assets, it is natural to find that the fixed assets are a small percentage of the total. For the two groups of companies serving five to nineteen, and twenty or more states, the fixed assets have quite consistently amounted to less than 5 per cent of total assets. In fact, during recent years they have approximated 2

TABLE VII  
RATIOS OF SELECTED ASSET ITEMS TO TOTAL ASSETS, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936

Year	Cash to Total Assets			Receivables to Total Assets			Current Assets to Total Assets			Fixed Assets to Total Assets			Repossessions to Total Assets		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936.....	.1033	.1173	.1070	.8566	.8605	.8676	.9861	.9823	.9306	.0069	.0094	.0615	.0004	.0064	.0030
1935.....	.1149	.0789	.0888	.8577	.8860	.8394	.9946	.9698	.9384	.0004	.0153	.0532	.0007	.0062	.0023
1934.....	.1451	.0773	.0991	.8120	.8601	.8000	.9843	.9424	.9126	.0084	.0242	.0817	.0006	.0049	.0019
1933.....	.1614	.0808	.0921	.7781	.8697	.7595	.9744	.9578	.8781	.0140	.0323	.1126	.0005	.0055	.0032
1932.....	.1526	.1840	.1220	.8109	.7587	.7553	.9685	.9581	.8879	.0127	.0320	.0961	.0018	.0119	.0063
1931.....	.1119	.1258	.1007	.8375	.7871	.8230	.9536	.9276	.9297	.0115	.0496	.0643	.0011	.0125	.0057
1930.....	.0989	.1230	.1178	.8836	.7934	.8152	.9885	.9460	.9368	.0063	.0364	.0550	.....	.0132	.0037
1929.....	.1092	.1181	.1018	.8675	.8379	.8365	.9809	.9627	.9411	.0106	.0226	.0505	.....	.0042	.0032
1928.....	.1230	.1257	.1039	.8456	.8270	.8485	.9717	.9615	.9555	.0165	.0183	.0346	.0008	.0032	.0042



per cent or less of the total assets. This is in rather sharp contrast to companies serving from one to four states, in which fixed assets have ranged between 3 and 12 per cent of total assets, with the figure not far from 5 per cent in the last two years. For this ratio there is a rather definite inverse relationship between the size of the fixed assets to total assets ratio and the number of states which the company serves. The ratio is smaller for the companies serving larger numbers of states. These differences in proportion of assets are probably not based on definite policies; they are the natural result of varying size. A minimum amount of office and other equipment of a fixed nature, including automobiles and buildings, is essential for operation. In the smaller units, these items usually constitute a larger percentage of the total.

### **Repossessions to Total Assets**

Although the item of repossessions is consistently a small one, as shown in Table VII, it is, nevertheless, important and significant. It indicates the proportion of the total investment which has been given over to unproductive assets and notes that have proved delinquent or otherwise unsatisfactory. For the companies operating in the smallest areas—that is, one to four states—and for those operating in twenty or more states, the repossessions shown on the balance sheet are indeed small—at no time equaling, and in practically every case being well below, 1 per cent. The companies serving five to nineteen states reported the largest items of repossessions, which in recent years have approximated six-tenths of 1 per cent. Although there was a marked increase in the proportion of repossessions to total assets during the depression years for each of the groups of companies, it was still very small when compared with total assets. For the companies serving from five to nineteen states, the increase in the ratio in terms of its own size was as much as 400 per cent, but even at the highest figure for 1930 it did not exceed 1.3 per cent of the total assets.

In only three of the twenty-five instances shown in the table did it reach as much as 1 per cent of total assets. Evidently this item was at no time large enough to interfere appreciably with the liquidity of the company. The highest item for an individual company could not be regarded as seriously interfering with its operations. Among the companies serving twenty or more states, the highest ratio found was .23 of 1 per cent. For the companies serving from five to nineteen states, the highest was 2.40 per cent, and for the companies serving from one to four states the highest ratio was 1.83 per cent.

TABLE VIII  
RATIOS OF SELECTED LIABILITY ITEMS TO TOTAL ASSETS, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936

Year	Current Liabilities to Total Assets			Fixed Liabilities to Total Assets			Dealers' Reserves to Total Assets			Reserves to Total Assets			Unearned Income to Total Assets		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936.....	.6187	.6020	.5340	.1672	....	.1122	.0496	.0524	.0552	.0152	.0247	.0354	.0473	.0430	.0499
1935.....	.6334	.6069	.5492	....	....	.0401	.0562	.0647	.0366	.0212	.0271	.0474	.0437	.0403	.0461
1934.....	.5517	.5250	.4722	.0512	....	.0409	.0546	.0534	.0386	.0222	.0379	.0507	.0447	.0336	.0381
1933.....	.4951	.4211	.4381	.0680	.2508	.0376	.0583	.0403	.0343	.0266	.0328	.0431	.0376	.0338	.0470
1932.....	.3373	.4294	.4054	.1593	....	.0921	.0710	.0148	.0397	.0241	.0359	.0140	.0302	.0256	.0350
1931.....	.5060	.4242	.5338	.1259	.1994	.0681	.0537	.0166	.0268	.0146	.0695	.0200	.0337	.0286	.0329
1930.....	.4974	.4434	.5713	.1490	.2186	.0812	.0561	.0156	.0349	.0184	.0165	.0143	.0309	.0398	.0365
1929.....	.5334	.5325	.6255	.1951	.1882	.0689	.0197	.0194	.0491	.0140	.0147	.0243	.0336	.0336	.0365
1928.....	.6013	.5687	.5965	.1782	.1472	.0790	.0138	.0196	.0376	.0220	.0139	.0240	.0306	.0366	.0290

It is only fair to point out that these percentages indicate the repossessions on hand at the end of the year. If statements were available for other seasons of the year, they might show a considerably larger number of repossessions, which would be disposed of in the normal course of business. If there is a sufficient turnover of these assets without loss or with only a small loss, they cannot be a handicap to the companies. Naturally it is the desire of the management to make a favorable showing for the purpose of the statement, and there is frequently a strenuous effort to liquidate such assets at this time. There is, however, no reason to believe that this practice seriously distorts the picture given, or impairs the comparisons of one company or one group of companies with others.

### DISTRIBUTION OF LIABILITIES

#### Current Liabilities to Total Assets

Perhaps one of the best indications of the condition of finance companies is the ratio of current liabilities to total assets. Because they have relied heavily in the past on this source of funds to supply working capital needs, the changes in this proportion become significant. Table VIII shows that in all three groups there was the same tendency for the current liabilities to decline relative to the total assets during the years of business curtailment, namely, 1930, 1931, and 1932, after which each group has shown increases in the ratio of current liabilities to total assets until 1935. The figures for the year 1936 have brought their borrowing to approximately the same proportion that it held in earlier years. Perhaps the only exception to this statement is found in the companies operating in from one to four states, in which the current liabilities are still somewhat lower than they were in the pre-depression years. Apparently from 50 to 60 per cent constitutes the general range within which the ratio of current liabilities to total assets normally fluctuates. The companies serving the largest number of states showed the most rapid and the largest adjustment of their current liabilities to changes in business conditions. The low point for this group of companies was in 1932 when the ratio fell to 33.73 per cent—almost half of what it was at the peak figure of 1935, when the ratio was 63.34 per cent. A sharp difference is discernible in policies among companies operating in different numbers of states. Companies operating in the largest number of states have the largest proportion of funds provided by current liabilities. Although the companies serving from one to four states had a larger proportion of current

liabilities to total assets in the years preceding 1932 than the companies serving from five to nineteen states, since that year companies serving fewer states have rather consistently had the smaller ratio. Since 1932, with one exception, the size of the ratios of current liabilities to total assets has been in direct relationship to the number of states which the companies served.

### **Fixed Liabilities to Total Assets**

On the basis of the available data, the companies operating in five to nineteen states were relatively the most extensive users of fixed debt as a source of funds. The data upon this point, however, are so scanty that figures for a few companies influence the averages considerably. During the years from 1930 to 1935 there was an irregular tendency for all companies to retire their fixed debt. Companies operating in the largest number of states reduced fixed obligations from 14.90 per cent of total assets in 1929, to 5.12 per cent in 1934, increasing to 16.72 per cent in 1936. The ratio for companies in the one to four group moved from 8.12 per cent in 1930 to 4.01 per cent in 1935, and rose to 11.22 per cent in 1936. It is, of course, apparent that the companies were taking advantage of favorable money-market conditions to retire their fixed liabilities bearing rather high interest and replace them with lower cost short-term borrowings. In 1935 and 1936 this policy was changed by some of the companies, which marketed more permanent types of securities in order to assure themselves of low-cost money for a number of years in the future. This resulted in increased fixed liabilities.

### **Dealers' Reserves to Total Assets**

The item of dealers' reserves represents an account serving several functions for the dealer and the finance company. To the finance company it represents, in part, an amount rebated to the dealer, but not until the contracts sold by the dealer to the finance company are paid, or until the reserve is large enough to protect the finance company against losses on bad contracts or dealer failure. It thus acts as an additional bad-debts reserve. To the dealer it is a potential source of income and a protection against bad debts on contracts sold to the finance company.

It is interesting to note the increase in this item during the entire period, and especially the rather sudden increase in the use of this device after the year 1929. It should also be observed that prior to 1929 the companies operating in one to four states had the largest

proportion of dealers' reserves, whereas after 1930 the companies operating in twenty or more states were usually the largest users of this plan, although all groups show an increased use of dealers' reserves. The companies operating in five to nineteen states were the last ones to make use of extensive amounts in this form.

Although in recent years these reserves have ranged from 4 to 7 per cent of total assets, this might not be thought of as being a significant amount. It should, however, be noted that this is equivalent to about 10 per cent of the current liabilities, so that it is a rather important source of funds. Moreover it amounts to more than 6 per cent of receivables. Since these dealers' reserves are rather generally available for liquidation of the dealer's obligations, it can be seen that they are adequate to furnish substantial protection against loss on the receivables held. As a specific rather than a general reserve, they should furnish even more protection than this average would indicate; for, as a matter of policy, the retention in dealers' reserves should be greater for weaker dealer accounts than for stronger dealer accounts.

#### **Reserves to Total Assets**

For most of the companies the dealers' reserves are larger than the other reserves, the one to four group being the only one which carried larger general reserves than dealers' reserves and this for only some of the years. This same group also shows the largest proportion carried in reserve accounts. There is apparently some tendency to increase reserves; even during the depression years they showed no downward trend.

#### **Unearned Income to Total Assets**

This account is indicative of the earnings on contracts paid in advance of the benefits received. The finance companies defer these earnings until the appropriate time in proportion to the life of the contract. These deferred incomes fluctuate in accordance with the volume of notes purchased and their length of term.

There is a noticeable tendency for this item to increase for all three groups of companies. This, of course, would be natural when the volume handled is increasing faster than the total investment. Further explanation for the increase may be afforded by the larger proportion of long-term paper held by the companies during recent years. Although the unearned income is less than 5 per cent of the total assets, it is about 25 to 33 per cent of the gross income, and about 60 to 75 per cent of the net profit.

TABLE IX  
RATIOS OF NET WORTH ITEMS TO TOTAL ASSETS, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936

Year	Net Worth to Total Assets			Preferred Stock to Total Assets			Common Stock to Total Assets			Surplus to Total Assets		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936	.2185	.3174	.3653	.0330	.1971	.1600	.1192	.0716	.0903	.0926	.0486	.1130
1935	.2935	.2486	.3592	.1239	.1619	.1713	.1114	.0644	.0972	.1157	.0546	.0915
1934	.3609	.3257	.4436	.1243	.2018	.2233	.1567	.0982	.1268	.1442	.0661	.1066
1933	.4051	.4455	.4839	.1554	.2445	.2776	.1811	.1836	.1583	.1524	.0664	.0910
1932	.5176	.4906	.5162	.2608	.2771	.3574	.2411	.1903	.1120	.1698	.1292	.0741
1931	.3731	.3851	.3948	.1937	.2345	.2811	.1761	.1315	.0873	.1132	.0887	.0648
1930	.3676	.4051	.3588	.1600	.1986	.2466	.1688	.1246	.0839	.1021	.1618	.0632
1929	.3250	.3372	.2945	.2097	.1696	.1954	.0828	.0956	.0633	.0954	.1406	.0459
1928	.2626	.3199	.3171	.1173	.2106	.2112	.0803	.1018	.0409	.0784	.0757	.0482

**TABLE IX-a**  
**DOLLAR FIGURES AND RELATIVES FOR NET WORTH AND CURRENT LIABILITIES,**  
**1928 TO 1936**

Year	Net Worth		Current Liabilities	
	Dollar Figures (000,000 omitted)	Relatives 1929 = 100	Dollar Figures (000,000 omitted)	Relatives 1929 = 100
1936 .....	285	102	758	150
1935 .....	263	94	601	119
1934 .....	234	84	392	78
1933 .....	216	78	239	48
1932 .....	224	80	107	21
1931 .....	235	84	312	62
1930 .....	270	97	374	74
1929 .....	279	100	504	100
1928 .....	164	59	428	85

With so large a proportion of the income deferred, there is consequently a considerable back-log of income available for earnings when the companies enter a period of declining volume. This tends to stabilize earnings, both by using deferred income to maintain the profit of years of declining volume and by postponing the earnings during years of rising volume. This is normally the case, irrespective of the accounting practices followed by the companies so long as these involve deferring of income. Of course, the more conservative the accounting followed, the greater the stabilizing influence.

### DISTRIBUTION OF NET WORTH

#### Net Worth to Total Assets

A picture of the total funds supplied which are attributable to stockholders' investments is provided by the ratios of net worth to total assets shown in Table IX. Later sections examine the component parts of this net worth.

During most of the recent years for which data were available, the largest net worth ratios are found among the companies operating in the smallest group of states, namely, one to four. Since 1930, this group has had the largest owners' equity in five out of six years. Although each of the two groups operating in larger areas has had low net worth to total assets ratios in three of the last six years, when earlier years are considered it seems that the largest companies, operating in twenty or more states, have generally had the lowest net worth.

Certain common trends are indicated for all groups of companies. Each group greatly increased the proportion of owner participation

during the depression years. This was due in greater degree to shrinkage of borrowed money and total assets than to changes in net worth itself.

Table IX-a shows a comparison of the changes in net worth and its current liabilities for the period studied. These figures may be compared with the figures for total assets and total volume of business shown in Tables I and II and discussed in the section on volume figure pages 12ff.

From this comparison it is evident that the dollar figure for net worth changed less than did the dollar figure for liabilities, total assets or total volume of business. Although there was a substantial change in the proportion of net worth, it was brought about by only moderate changes in the actual amount of invested capital, accompanied by even greater changes in the actual amounts of the other items.

The change in the proportion of owner participation started in 1930. The high point for all three groups occurred in 1932, followed by a decline in the following year. The normal proportion sought by the companies seems to be one wherein from \$2 to \$3 of their assets is supplied by creditors for every \$1 of their assets supplied by the owners. These proportions are apparently indicated by the ratios for 1928 and 1929, and were again reached in 1935 and 1936.

The individual companies within these groups have exhibited marked variations from the averages. Among companies serving the largest area the lowest individual net worth to total assets ratio was recorded in 1929 at .1623. The highest ratio was .6735 in 1932. Among companies serving five to nineteen states the low ratio was .1074 in 1935, and the high ratio was .7468 for 1932. The smallest companies in terms of states served had the lowest low ratio of .0565 in 1929 and the highest high ratio of .8813 in the year 1933. The extremes of high and low ratios were greatest for the one to four group of companies and least for the twenty or over companies. The 1936 low ratios for individual companies were: one to four states, .1946, five to nineteen states, .2101, and twenty or more states, .1630. These were all well above earlier lows, and were in direct relationship to the sizes of areas served by these companies.

### **Preferred Stock to Total Assets**

When the net worth is analyzed into its component parts, it is found that the companies operating in one to four states are the most liberal users of preferred stock. They have the largest proportion of preferred stock to total assets of the three groups in six of the last



seven years. The companies operating in five to nineteen states had the largest proportion in only one of the last seven years, and the companies operating in twenty or more states were low in each of the last seven years and, with but one exception, had the smallest relative preferred stock in years prior to 1930. Each group of companies showed a tendency to reduce the use of preferred stock beginning with 1932. Companies in the twenty and over group reduced their combined preferred stock to the lowest figure of the entire period in 1936, namely, 3.30 per cent of total assets.

In part these rapid shifts in the relative size and importance of net worth items may be attributed to changes in total assets and in current liabilities. But the changes within the net worth have also been important in influencing the ratios. The preferred stock issues have generally had provisions making them callable, thus making possible the retirement of these items when desired by the companies. Thus adjustment of the capital structure was made possible by retirement of the preferred stock.

### **Common Stock to Total Assets**

There are two general characteristics of the common stock. The first of these is the smallness of this part of the equity for all groups in all years. The second concerns the tendency of the size of the common stock to total assets ratio to increase as the area served increases.

The high point of the common stock for companies operating in twenty or more states was 24.11 per cent in 1932; the five to nineteen group reached a peak of 19.03 per cent in the same year; and the one to four group attained a peak of 15.83 per cent a year later.

In line with other tendencies previously commented upon, there was an increase in the common stock proportion after 1929 that continued through 1932. A large part of the explanation for this tendency is probably to be found in the decline in volume because of which there was less need for funds. The obvious thing to do with these excess funds was to retire debts, both current and fixed, and then to retire preferred stock.<sup>8</sup> In most of the years, and especially for the five to nineteen and one to four groups, the proportion of the assets furnished by preferred stockholders was greater than that furnished by the common stockholders. Although the stability of earnings noted and the comparison of earnings with preferred dividends preclude criticizing this amount of preferred as excessive, it is perti-

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<sup>8</sup>Refer to Table IX-a for a comparison of the dollar figures for net worth and current liabilities.

ment to raise the question as to whether this is a sound division of risk, control, and profits from the criterion of corporation finance. In other words, are the common stockholders justified in thinning their equity to the extent to which they have done this, or are they expecting the preferred stockholders to assume an undue proportion of the risk relative to the control and profits shared with them? Part of the answer to such a question is to be found in the analysis of the surplus.

As has been mentioned, the common stock to total assets ratio showed a tendency to increase with area served. The reverse was true of the preferred stock to total assets ratio. If the ratios of these two items are added for each group, the combined ratio shows that the differences among the groups are less marked, since in most instances a small common stock is counterbalanced by a large preferred stock, and vice versa. An exceptional figure is the sum of 3.30 per cent for preferred stock, and 11.92 per cent for the common stock in the year 1936 for companies operating in twenty or more states. This total of 15.22 per cent is one of the smallest recorded.

### **Surplus to Total Assets**

The ratio of surplus to total assets is almost as large an item as that for the common stock, but fluctuates within a smaller range as indicated by the fact that its highs and lows are closer together.

Two of the three groups—namely, the smallest and largest in terms of states served—showed steady and marked increases in their surplus relative to total assets throughout the depression until 1933. The companies operating in five to nineteen states had irregular changes in surplus. By 1936 only the smallest, namely, companies operating in less than five states, had surplus to total assets ratios higher than in any earlier year shown in Table IX. For the other groups the recent ratios were well below their prior figures.

### **SUNDRY BALANCE SHEET RATIOS**

Three ratios that do not fall into either of the two preceding groups are shown in Table X. They represent relationships of items within the balance sheet. These ratios are (1) current assets to current liabilities, (2) net worth to total debt, and (3) working capital to total assets.

### **Current Assets to Current Liabilities**

Although the current ratio has been relegated to an increasingly less important role in the analysis of statements, it still needs careful

TABLE X  
SUNDRY BALANCE SHEET RATIOS, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936

Year	Current Assets to Current Liabilities			Net Worth to Total Debt			Working Capital to Total Assets		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936	1.6255	1.6599	2.3595	.3673	.6011	.8784	.3674	.3803	.3967
1935	1.5992	1.6622	2.1274	.5559	.4309	1.8299	.3612	.3629	.3892
1934	1.8202	1.9436	2.9256	.8485	.7015	1.0651	.4326	.4174	.4403
1933	2.0463	3.4666	2.6779	1.0967	1.9761	3.0406	.4793	.5368	.4400
1932	4.1239	7.0485	2.6777	2.3577	2.1885	1.7504	.6312	.5287	.4825
1931	2.1132	2.8905	1.8664	.8598	1.0259	.8663	.4477	.5034	.3959
1930	2.8101	2.6552	1.7019	.9182	1.0266	.6914	.4910	.5025	.3656
1929	2.2194	1.9717	1.5209	.6558	.6286	.5152	.4475	.4302	.3156
1928	1.6359	1.7413	1.7215	.4240	.5333	.6919	.3705	.3928	.3591

consideration. It is of significance to finance companies because of their relatively large current assets, which generally provide the security for substantial short-term borrowing.

The groups of companies as a whole disclose a characteristic strengthening of position in response to the depression conditions and a reversal of this process with business recovery. This strengthening started in 1929 and continued to 1932, after which the ratio fell until 1935. It seems now to have returned to nearly the 1927 to 1928 level.<sup>9</sup>

When the behavior of the various groups is examined, it is seen that the companies operating in one to four states were rather slow to strengthen their current ratio, no especial improvement occurring until 1932, whereas the other companies had shown some improvement in 1929 and this became marked as early as 1930. The group operating in one to four states, after once starting on the upward trend, continued it after the other groups had reversed their trends, and for the years 1934, 1935, and 1936 had the highest ratios of the three. This is accounted for partly by the thickening of equity which they followed, and partly by their more conservative borrowing.

### Net Worth to Total Debt

This ratio reflects the contribution of capital by owners in relation to the contribution of capital made by creditors. It is, therefore, indicative of the extent to which the companies traded with borrowed

<sup>9</sup>The high ratio for the year 1932 in the five to nineteen group is explained by the fact that one company in this group jumped to a ratio of 22.86 while the other companies stayed about the same. Because of the influence of this one company in the comparatively small group, the average is abnormally high.

money on the equity of stockholders. Until 1929 there was a tendency to have creditors supply about \$2 out of every \$3. Starting in 1929 the owners increased their contribution, and by 1931 they were providing capital in about a one-to-one ratio. For both the twenty or more group and the five to nineteen group, 1932 was the high point of owner participation, with owners supplying over \$2 for every \$1 put in by the creditors. The one to four group reached its peak of owner participation in 1933, at which time owners were supplying \$3 for every \$1 supplied by creditors.

After 1932 and 1933 there were marked increases in borrowed money without commensurate expansion of stockholders' capital. By 1936 the stockholders contributed about \$1 for each \$3 of creditors' capital among large companies. Smaller companies did not borrow so heavily, the proportion of owner to creditor money being as two to three for companies serving five to nineteen states, and almost one to one for the companies in the one to four states group. For the last four years the one to four group has kept the most substantial proportion of owner investment, and in three out of these four years has supplied more of its funds from ownership sources than from creditor sources.

The question which naturally arises in connection with this ratio is whether the owner participation is adequate. There is, unfortunately, no simple rule whereby adequacy can be determined. This seems to be a question which each creditor must answer for himself on the basis of his analysis of the situation prevailing in the particular concern that is currently considered. A general principle that is sometimes cited as giving guidance to this policy is that smaller owner participation is justified when earnings are stable and when risks are slight. Owner participation should increase as earnings become more unstable and risks increase, in order to furnish more insurance to creditors against probable vicissitudes. More light upon this policy will accordingly be furnished after some examination of the earning records.

Another factor of more than passing significance brought out by these ratios as well as by some of the others, is the rapidity and apparent ease with which these companies have been able to make adjustments in their capital structure, borrowing policies, and short-term debts in response to economic conditions, changing volumes of business, and conditions of financial markets.

### **Working Capital to Total Assets**

This ratio is really a net working capital ratio and accordingly shows the excess of current assets over current liabilities in compari-

son with total assets. Naturally an increase in the ratio shows greater safety. The ratio is a device which reflects the combination of debt policy and the liquidity situation.

It is rather noteworthy that in this test the three groups are very similar. Here also we notice the improvement in position since 1929, and also that prior to 1933 the one to four group was in the poorest position, whereas after that year it was the strongest. This is in accordance with the showing of this group of companies on the net worth to total debt ratio.

### VOLUME OF BUSINESS

In the ordinary mercantile or manufacturing concern the volume of business is measured in terms of sales. Finance companies measure their volume in terms of the notes that they purchase, or, in other words, the amount that will be repaid to them for financing installment purchases. As in any business, a large volume relative to the investment is desirable as likely to prove profitable, provided it does not stretch the company credit too far and endanger it. As between individual companies there is a material difference in the types of installment paper purchased. One of these differences concerns wholesale and retail notes. The wholesale note is of shorter maturity and lower return than the retail note. Thus differences in the proportions in which wholesale and retail paper is purchased cause marked changes in volume of business, turnover rates, and profits. A company buying a larger proportion of wholesale than of retail paper handles a large volume of business relative to its total assets and capital invested and should show a rapid turnover and low ratios of gross and net profit to volume. The company handling a larger proportion of retail notes is likely to have an inefficient showing on the basis of volume relative to total assets, capital, and turnover, although showing high ratios of gross and net profit to volume.

Unfortunately the data submitted by most companies did not lend itself to the division between wholesale and retail notes, and little allowance has been made for this factor, beyond certain general statements and inferences where they seem applicable. In fact, the entire volume analysis is limited because of insufficient cases in earlier years.

#### Volume to Total Assets

An indication of the total volume of notes purchased in relation to the investment in terms of total assets is given by the data in

**TABLE XI**  
**VOLUME OF BUSINESS RATIOS, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936**

Year	Volume of Business to Total Assets			Volume of Business to Receivables			Volume of Business to Net Worth		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936	2.1427	1.5655	2.1634	2.5002	1.7527	2.4671	10.2146	4.6233	6.7238
1935	2.3468	1.6773	2.7489	2.7626	1.8770	3.1663	8.3672	8.4819	8.3610
1934	2.5724	1.5614	2.5033	3.2490	1.7766	3.0953	7.5514	5.6679	6.0631
1933	1.8466	1.2823	2.0334	2.3808	1.3821	2.7691	4.5254	4.0271	5.2091
1932	1.9976	.....	1.8405	2.5305	.....	2.5606	3.6646	.....	3.5578
1931	2.0253	.....	1.9357	2.4524	.....	2.4820	5.8180	.....	4.5785
1930	2.1114	.....	1.8317	2.4109	.....	2.3986	6.4498	.....	4.5833
1929	2.4143	.....	.....	2.8079	.....	.....	8.9994	.....	.....
1928	2.1693	.....	.....	2.5980	.....	.....	9.9146	.....	.....

Table XI. Total receivable contracts purchased have changed with business conditions, and this change is reflected in the ratios. For companies operating in twenty or more states, total volume was 2.4143 times total assets in 1929. It declined steadily to a low of 1.8466 in 1933, recovered sharply, but again declined to 2.1427 in 1936. For the last three years the turnover of total assets compares very favorably with that in earlier years. Except in three years, the companies operating in one to four states had a slower turnover of total assets than the largest group. Significant for this group is the marked increase in rate of turnover, with but one minor interruption from 1929 to 1935. Ratios in the five to nineteen group are based on too small a number of cases to be significant. The largest group recovered its volume relative to total assets of pre-depression years; the smallest group exceeded its turnover of prior years.

### Volume to Receivables

This ratio should show the liquidity of the receivables. Increases in the ratio are indicative of a more rapid conversion of receivables into cash, and decreases suggest a slower conversion rate. The twenty or more group held relatively steady from 1930 to 1933 at about two and one-half turns of receivables per year. This was followed by a sharp rise in 1934 and a return to 2.5002 by 1936. This decline since 1934 may be explained by larger purchases of long-term paper. It should be remembered, however, that the available data do not permit the consideration of another factor that has a distinct bearing upon

this ratio. The volume of business includes both retail and wholesale automobile notes and other paper purchased, and the receivables include these same items. The wholesale paper is repaid in a much shorter time than the retail. Consequently, in those years when wholesale purchases constitute a more important part of the business handled, the ratio is increased by this addition to volume without a corresponding addition to receivables on hand at the end of the period. Since the available data do not permit a separation of the volume and receivables into these respective classes, the exact influence of greater or lesser purchases of wholesale notes cannot be ascertained.

The one to four group shows a steady improvement until 1935, and then a sharp retrogression. It vies with the 20 or over group as being more liquid in four of the seven years covered by comparative figures. The five to nineteen group shows the lowest conversion rate in all four of the years for which records for this group are available. This lower conversion rate is rather strongly marked and perhaps indicates that these companies handled considerably less wholesale paper, engaged in more extensive purchases of other slow-turn paper, bought much more long-term and sub-standard paper than either of the other two groups, or had considerably higher delinquencies. These inferences seem warranted, in part, in view of the fact that this group had also the poorest showing in respect to repossessions.

Indicative of the turnover rate or speed of conversion is the statement of days needed to collect receivables fully for each of the groups in the year 1936. The twenty or more group collected its receivables once every 146 days, the five to nineteen, once every 208 days, and the one to four, once every 148 days.

### **Volume to Net Worth**

This comparison shows the efficiency in the use of net worth in respect to the volume of business that it can command. These figures show the characteristic depression decline and recovery to proportions comparable with those found in the years before the depression. Generally in the years examined, the companies operating in twenty or more states have had a substantially larger volume relative to the size of their net worth than either of the other two groups. The companies operating in one to four states seem to have been more efficient in this respect than those companies operating in five to nineteen states.

TABLE XII  
RATIOS SHOWING DISTRIBUTION OF GROSS INCOME, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936

Year	Interest and Other Money Costs to Gross Income			Interest and Other Money Costs to Total Debt			Other Expenses to Gross Income			Operating Profit to Gross Income			Net Profit to Gross Income			Gross Income to Volume of Business		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936	.0936	.1663	.1680	.0128	.0363	.0460	.4238	.4807	.5248	.4827	.3071	.2989	.3732	.2377	.2359	.0512	.0709	.0746
1935	.0831	.2281	.2001	.0147	.0422	.0547	.4258	.4815	.5398	.4818	.2462	.2865	.4093	.2539	.2185	.0499	.0693	.0624
1934	.0992	.2066	.1812	.0213	.0441	.0619	.4201	.5680	.5327	.4735	.2094	.2921	.3997	.1984	.2387	.0550	.0764	.0757
1933	.1413	.2984	.1653	.0261	.0730	.0628	.4801	.5694	.5770	.3801	.1323	.2555	.3440	.1786	.2221	.0639	.0996	.0816
1932	.2148	.....	.2460	.0798	.....	.1237	.4520	.....	.6004	.3644	.....	.1481	.2488	.2241	.0825	.0816	.....	.0853
1931	.2016	.....	.2804	.0460	.....	.0909	.4290	.....	.5263	.4231	.....	.2273	.3860	.....	.1734	.0517	.....	.0803
1930	.2273	.....	.2991	.0645	.....	.0719	.4322	.....	.4577	.4069	.....	.2533	.3532	.....	.2030	.0556	.....	.....
1929	.....	.....	.2630	.0747	.....	.0600	.....	.....	.3610	.2813	.....	.3160	.2533	.....	.2584	.0419	.....	.....
1928	.....	.....	.2076	.0805	.....	.0554	.....	.....	.3680	.2719	.....	.3446	.2506	.....	.2995	.0519	.....	.....



### DISPOSITION OF INCOME

In this section of the study the gross income is analyzed in order to ascertain what proportions of the total have gone for payment of money costs and other operating expenses, and what balance has been retained as profits for the stockholders. Each of the comparisons employs the gross income as the base. The ratios are presented in Table XII.

#### Interest and Other Money Costs to Gross Income

The companies in all three groups apparently used about the same proportion of their gross income for interest and other money costs through 1932. After 1932 there was a pronounced drop in the proportion of gross income taken by this item for the twenty or more companies, with only moderate declines in money costs for the other two groups. It seems that the one to four companies and the five to nineteen group are in about the same position in respect to this item. Whereas formerly about \$1 of each \$4 of gross income went for costs of money borrowed, in 1936 about \$1 of each \$6 has been required for companies in less than twenty states, and as low as \$1 of each \$10 for companies in the twenty or more states group.

An even more exact comparison of the item of interest is secured by comparing interest and other money costs with total debt. In interpreting these figures caution must be exercised, because of the fact that the total debt as shown by year-end statements may be lower than normal, and thus may not be representative of the total borrowings during the year. Thus a company that had reduced its debt considerably below normal at statement time would have an abnormally high proportion for this item, whereas a company that was increasing its total debt at statement time would have an unusually low proportion. Part of the decline in this ratio during the recovery period may be explained by the fact that during these years the debt was increasing, so that at statement time a large debt was shown, but interest costs were shown for a smaller average of outstanding debt. A reverse condition would help to explain the rise in these costs in the year 1932. Because of this condition, only the most general conclusions will be attempted. It may, however, be said that these figures rather definitely confirm the previous statement that interest costs have been decreasing. This is true of companies in all three groups, and the drop was especially marked following 1932. These figures also indicate that prior to 1932 the difference between the companies was much less noteworthy than it has now become. The companies operating in twenty or more states

had the least burdensome interest costs, as their average money costs have ranged from 1.28 to 2.61 per cent of outstanding debt in recent years. The average rate of cost for the five to nineteen group has ranged from 3.63 to 7.30 per cent, and that of the one to four group, from 4.60 to 6.28 per cent. In each case the year 1936 shows the lowest figure in the range of the averages.

### **Other Expenses to Gross Income**

As to their other expenses, the companies operating in twenty or more states also have an advantage, which has increased in the six years from 1931 to 1936; in each of these years they had to provide a smaller proportion of the gross income to pay for other expenses than the other groups of companies. Beginning with 1931 these largest companies have consistently had the lowest operating expenses to gross income.

Apparently the companies operating in twenty or more states are of such a size that they can take advantage of the economies that come from large-scale operations. The companies operating in from five to nineteen states are not operating upon a scale sufficiently large to take advantage of the economies of large size and yet are too large to benefit greatly from the savings accompanying small size.

### **Operating Profit to Gross Income**

As might be expected, the combination of lower cost of money and lower operating expenses enables the companies operating in twenty or more states to retain a much larger percentage of gross income as operating profit than the other groups. This group of companies had the highest average operating profit to gross income in seven of the nine years. The companies operating in one to four states had a better showing than those in five to nineteen states in three of the four years for which comparison can be made. There has been a tendency for the operating profit of the companies in twenty or more states to increase, the average reaching its highest point in the last year. The one to four group has not yet reached the peak of its previous good years, although considerably above earlier low points. For this group the figure for 1936 is the best in recent years.

### **Net Profit to Gross Income**

The ratios of net profit to gross income show characteristics similar to those for operating profit to gross income. A somewhat greater

shrinkage between operating profit and net profit is shown by the companies operating in twenty or more states than by the other two groups—a difference which is perhaps indicative of heavier taxes or other expenses, or smaller miscellaneous income. However, the average net profit to gross income ratio for this group of companies was above that of the one to four group in the last seven of the nine years. The one to four group had a better showing than the five to nineteen group in only two of the five years for which a comparison is possible, and reached the lowest point of any of the groups.

The companies operating in twenty or more states display much more stability than that achieved by the other two groups. Except in 1932, in each year since 1930 they have carried more than one-third of their gross income to net profit for stockholders. The greatest instability is displayed by the companies operating in one to four states. For these companies net profit has generally ranged from 20 to 25 per cent of gross income.

### **Gross Income to Volume**

A comparison of gross income with volume of business provides a measure of the size of the finance company charges in relation to the face value of the notes that they have purchased. Because of the fact that the volume is the result of one year's operations, whereas gross income is derived from contracts purchased in overlapping years, a direct comparison is not possible. When volume of business is rising, this ratio understates the situation, and when volume is declining the ratio probably overstates the facts.

For companies operating in twenty or more states, the gross income approximated 5 per cent of the volume of notes purchased in four of the last six years. In other words, they have taken as gross about one dollar in twenty of the face value of notes financed. This ratio has consistently been lower for the large companies than for the other two groups of companies. The highest ratios are reported by the companies operating in five to nineteen states, for which this proportion has declined from 9.96 per cent in 1933 to approximately 7 per cent in the last three years. Companies operating in the smallest areas had a higher rate of gross income only in 1936; in other years they have been consistently below the five to nineteen group by a small margin.

One apparent explanation of the low ratios among the companies operating in twenty or more states might be lower charges. Before accepting this explanation, however, consideration must be given to the possibility that this group handles more low-rate wholesale paper than

TABLE XIII  
RATIOS SHOWING RATE OF RETURN AND DIVIDEND COVERAGE, CLASSIFIED ACCORDING TO NUMBER OF STATES SERVED, 1928 TO 1936

Year	Net Profit Plus Interest to Total Assets			Net Profit to Net Worth			Total Dividends to Net Profit			Net Profit to Preferred Dividends		
	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States	20 or more States	5 to 19 States	1 to 4 States
1936	.0462	.0479	.0628	.1663	.0876	.1079	.8699	1.0900	.7350	18.0565	4.9412	5.9198
1935	.0520	.0540	.0575	.1440	.1324	.0992	.9269	.4795	.7605	11.4243	3.8332	6.8818
1934	.0581	.0492	.0641	.1275	.0800	.0811	.5205	.6523	.5390	9.9157	3.4311	4.0697
1933	.0484	.0643	.0555	.0850	.0518	.0735	.5789	.7150	.6581	5.0451	2.3055	3.3151
1932	.0607	.....	.0466	.0690	.0710	.0319	.7578	.7842	1.3823	1.7719	1.9052	1.4363
1931	.0654	.....	.0631	.1037	.0960	.0757	.8014	.8870	1.2723	2.5359	3.0181	2.0041
1930	.0760	.....	.0649	.1157	.1093	.0916	.8892	.8065	1.5261	2.4979	4.0068	2.5177
1929	.....	.....	.0715	.0754	.1521	.1242	1.4396	.5087	.5794	5.3279	5.4030	3.0653
1928	.....	.....	.0913	.1366	.1757	.1355	.5385	.4163	.4919	4.5047	4.3076	4.0354

either of the other groups. Naturally included in this group are some of the companies which may be described as factory affiliates, and they probably do a larger proportion of wholesale financing than either of the other groups. Despite this factor, it seems probable that the other groups buy more retail paper carrying higher charges than does the first group. It is also possible that the companies operating in fewer states include in their number some companies active in the handling of paper on household equipment and similar items, which carries higher rates, while the companies operating in more states are carrying more paper covering equipment installations and factoring, which is low-rate paper. The data are inadequate for a complete analysis of these suggestions, but such figures as are available will be analyzed later.

The tendency of the ratio of gross income to volume for all groups was to fall after 1932 and to show a slight rise in 1936. This declining trend of gross income to volume seems to indicate a lowering of charges over this period of years; the rise in 1936 may perhaps be explained by an increased purchase of long-term paper rather than by a stiffening of rates. This conclusion, if sound, points to competition exerted in the direction of rate reduction and lowering of charges to the customers. Observation seems to support this conclusion and the additional statement that the larger operators have taken the lead in reducing rates.

### **RATE OF RETURN AND DIVIDEND COVERAGE**

In this section two ratios have been computed to measure the rate of return on the investment of finance companies. The first of these is net profit plus interest relative to total assets. It shows the total return on the total sum invested in the business, irrespective of how this money is obtained or financed. The second is net profit to net worth, which shows the rate of return earned on the investments of stockholders. This is followed by examination of what proportion of the profits was paid out as dividends, and how well the preferred dividends were covered by earnings.

#### **Net Profit Plus Interest to Total Assets**

This comparison should show the true earnings of the assets, irrespective of the financing policy followed by the companies. It is representative of the productivity of the assets and should show the efficiency of use of all the assets.

Table XIII shows that the five to nineteen group was high for

1933, and the one to four group was high for the three years from 1934 to 1936. There is an apparent tendency over the entire period for the ratio to fall, and in recent years it seems to have stabilized at considerably lower levels than prevailed in previous good years. This change may be indicative of the maturing of the business and of the existence of more strenuous and effective competition. It is also noteworthy that this ratio remained high until the years 1932 and 1933, and is at present, for all companies, below the levels prevailing in the so-called depression years.

Although some of the rates of return on total assets were rather high when the risk involved is considered, as a whole, and especially in recent years, the earnings have been fairly moderate. From 1933 to 1936 inclusive, the highest average ratio was .0643 and the lowest .0462. There is not much reason for considering these averages immoderate. Obviously, some concerns did better than these averages; others earned less.

### Net Profit to Net Worth

Although the earnings on total assets were modest in practically all cases, as measured by averages, some marked differences are found in the net profit to net worth ratios. With minor exceptions, the rate of return on net worth is markedly higher than on total assets. Furthermore, the order of the three groups is considerably changed. The net profit capacity of the companies, when financing factors and trading on stockholders' equity are considered, is quite different from what the earnings on total assets suggested.

Although the average ratios of net profit to net worth vary considerably, they show distinctly favorable results, especially in the last four years. With one exception, the average ratios from 1933 to 1936 have exceeded 7 per cent, and have ranged to a high of 16.63 per cent.

A ranking of the groups on the number of years in which their average ratio was highest, lowest, and in the middle gives the following:

	<i>20 or more</i>	<i>5 to 19</i>	<i>1 to 4</i>
Highest.....	6	3	0
Lowest.....	1	3	5
Middle.....	2	3	4

Here the twenty or more group is high in six years, continuously so for the four years from 1933 to 1936, and is low in only one year. The five to nineteen group is high in three years, notably so in 1928 and 1929, and is low in three years. The one to four group is never high and was low in five years, for three successive years from 1930 to 1932.

It is apparent that the advantage of the twenty or more group in borrowing money at lower cost, plus its more extensive trading on the equity, provides a larger margin of profits to the owners.

An outstanding fact is that in no year did any group average show a loss. As a whole the earnings are stable. The losses revealed by the individual companies were as follows:

*20 or more group*: 1 company in 1 year, 1932, with a loss of .0010. Since there were 40 cases, this is a loss of 2.5 cases out of 100.

*5 to 19 group*: 1 company in 1 year, 1933, had a loss of .0032. Since there were 28 cases, this is a loss of 3.6 cases per 100.

*1 to 4 group*: 1 company in 1 year, 1932, had a loss of .0433.

1 company in 2 years, 1934 and 1935, had losses of .0699 and .0025, respectively.

1 company in 1 year, 1932, had a loss of .0132. Since there were 85 cases, this is a loss of 4.7 cases per 100.

It is extremely doubtful if many industries could show a similarly small percentage of cases and years in which losses were suffered. In the face of the very adverse business conditions encountered, this record is truly remarkable.

The rate of profit earned upon net worth seems neither especially low nor particularly high. It seems to be an adequate rate that most business men would regard as satisfactory. This rate is probably less than critics of the business would lead one to believe, and is also probably more than the average in many other lines of trade. It is best characterized by the term "stable." It is noticeable that there are no unusually good years and no distressingly bad years. Apparently this is not what one could call a highly speculative business.

It is possible that further division of the net worth into preferred and common stock equities would have revealed even higher rates of return. Furthermore, since the figures shown are "averages," it is obvious that both higher and lower returns on net worth were shown for individual companies.

### **Total Dividends to Net Profits**

No particular trend is apparent although there is a definite tendency to retain a portion of the earnings. The average retention for each of the groups is shown by averaging the dividend to net profit percentages for the entire period. The twenty or more group paid out 81.36 per cent, the five to nineteen group paid out 70.44 per cent, and the one to four group paid out 88.27 per cent. This is indicative of a more liberal

dividend policy for the last group, and the least liberal policy for the five to nineteen group.

The figures in Table XIII indicate what proportions of the profits have been distributed in the form of cash dividends. In only five instances among the twenty-seven for the averages of the three groups of companies did they dip into their surplus to pay stockholders. Three of these were in the years 1930 to 1931 for the companies serving less than five states. Each of the other groups had one instance of payments in excess of annual profits.

#### **Net Profits to Preferred Dividends**

In none of the years did any group fail to earn its preferred dividends. The best record in this respect was established by the twenty or more group, which earned 1.77 times its preferred dividends in 1932, the worst year, and 18.06 times the dividends in 1936, the best. The five to nineteen group also had its poorest year in 1932, when earnings amounted to 1.91 times the preferred dividends, and the best year in 1929 when the ratio was 5.40. In 1936, the ratio for this group was 4.94. The one to four group had its poorest year in 1932, earning only 1.44 times its preferred dividends, the poorest showing for any of the groups, and the best in 1935, with a ratio of 6.88. In 1936 its earnings were 5.92 times its preferred dividends. The records of the individual companies show that the lowest ratio for the twenty or more group was found in 1932, when one of the companies failed to earn its preferred dividends. The lowest for the five to nineteen group was likewise in 1932, but even that company earned 1.21 times its preferred dividends. The one to four group included one company that failed to earn preferred dividends in two years, 1934 and 1935.



#### IV. SUMMARY

The growth of institutions to serve the short-term non-business credit requirements of society furnishes another illustration of the evolutionary adaptation of economic institutions to the changing social needs. Because banks were unwilling or poorly adapted to the business of making loans directly to individuals for non-business purposes, specialized financial institutions of a quasi-banking nature developed to supply these needs at a time when the demand for loans of this sort had become greater because of the development of new durable, high-value commodities (e.g. automobiles, radios, pianos, mechanical refrigerators), which could not be sold in volume for cash or short-term credit. A specialized credit institution developed because manufacturers were unable or unwilling to aid the retailers in carrying this credit by extending long-term credit to dealers and also because dealers were inadequately financed to perform this service, as well as poorly adapted or organized for it. Credit advances for these purposes had become more practicable because of changed social attitudes toward the use of credit by individuals and an improvement in the credit status of individuals and families. This combination of circumstances some two decades ago explains the growth and development of some of the new types of quasi-banking institutions that are the subject of the present study.

The scope of the study was limited to "automobile finance companies" or "sales finance companies," and further restricted by the decision to center attention upon the financial structure of these companies and to examine both the asset and liability structure, with special attention to the sources of funds. The data examined covered a period of years starting before the depression so that the extent and character of the adjustment to changed business conditions would be more apparent. The end results of the financial structure and operations were examined by analysis of the income statement and comparisons of operations. The general method of analysis used was a computation of ratios for individual companies and the grouping and summarizing of companies by means of the arithmetic averages of the individual ratios.

To supplement the ratio analysis, dollar figures were used for certain comparisons. An examination of the total assets employed and the volume of business done showed that on the downward swing the volume of business handled decreased faster than the total assets employed, and that on the upward movement the volume increased faster

than did the assets. A comparison of smaller with larger companies, made during a period of rising volume, showed that the larger companies increased their assets faster than the smaller companies and that the smaller companies increased their volume at a slightly greater rate than did the larger companies.

In making the ratio analysis the study was divided into two major divisions.

In the first division the changes over a period of years were stressed by analyzing the ratios for all the individual companies during three major periods; pre-depression, from 1926 to 1929; depression, from 1930 to 1932; and post-depression from 1933 to 1936.

The investment of the resources showed a high cash position, with cash used in place of secondary-reserve type securities. A tendency to strengthen cash position during the depression period was noted. Receivables were the major asset and amounted to over 80 per cent of the total assets. This proportion declined during the depression and rose in the following period. The spread between high and low from 83.33 per cent to 80.66 per cent was narrow, especially in view of the large percentage of change in both total assets and volume of business and, therefore, shows a high degree of operation flexibility. With cash and receivables constituting the major portion of the assets, the companies naturally had a very large proportion of current assets. Repossessions were at no time as much as 1 per cent of the total assets. In the period 1930 to 1932 they amounted to 121 per cent of the 1926 to 1929 figure, and from 1933 to 1936 they were only 52 per cent of that figure.

The decrease in the proportion of repossessions in the last period supports the conclusion that despite the increase in long-term paper and the reduction of down payments the standard for credit acceptance was improved sufficiently to avoid having an abnormal number of repossessions. Thus, although repossessions changed greatly, they were at no time large enough to absorb a significant proportion of the assets. Fixed assets were very small and amounted to less than 5 per cent of total assets.

The asset structure, despite changes in volume of business and total assets employed, was sufficiently flexible to accommodate itself to these changes. As a consequence, the proportion of earning assets remained almost unchanged and non-productive investment of resources was held to what might be termed a normal proportion. Since the major portion, in fact, 90 per cent, of the assets was current, the companies had a high degree of liquidity and flexibility. This per-

mitted and facilitated adjustments to changing business conditions without much disturbance.

During the depression years current liabilities decreased from 56.41 per cent to 47.20 per cent of total assets. The increase in cash and the decrease in liabilities brought about an adjustment in the direction of greater liquidity. The financial position was also strengthened by an increase in the net worth from 31.63 per cent to 42.30 per cent. During the recovery period current liabilities rose to 52.23 per cent and net worth fell to 37.73 per cent. There was also a reduction in fixed liabilities in the depression years and, contrary to the trend of current liabilities, they did not increase during the recovery period.

Preferred stock was found to be the most important of the net worth items and larger than the common stock. The major burden of furnishing owner capital was thus relegated to the holders of preferred stock. Although the total net worth seems adequate, the question may well be raised as to whether the owners' investment in common stock is sufficient for the degree of control they exercise.

The same flexibility noted in the assets is also evident in the liabilities and net worth items. Here also the major liability is current, and thus can be readily changed. The combination of easily changed asset amounts and liability amounts made adjustments of the financial structure to reduced size requirements easy. These adjustments were also sound since they were made in such a way as to promote a stronger financial condition, liabilities being reduced, net worth increased, and cash position strengthened.

Examination of the income ratios shows a very distinct decrease over the period in the proportion of gross income absorbed by interest and other money costs, which is largely explained by the marked decline in interest rates. Other expenses did not show the same trend and instead increased almost as markedly as money costs fell. The net effect of these opposite changes was to leave operating profit and net profit almost unchanged. It seems that the increase in operating expenses will leave the companies exposed to the possibility of sharp curtailment of earnings when and if money rates once more stiffen, unless operating expenses are reduced or finance charges are increased to absorb higher costs.

In the second division of the study the companies were grouped on the basis of the geographical extent of their operations into three classifications: (1) those operating in from one to four states, (2) those operating in from five to nineteen states, and (3) those operating

in twenty or more states. Ratios were computed for each year and comparisons made of yearly changes for these groups of companies. This method of analysis stressed the variations in policy as between companies of different size and also as between different time periods.

The major difference in asset policy of the three groups was found in the proportions of fixed and current assets. The companies operating in from one to four states maintain a larger proportion of their assets in the form of fixed assets than either of the other groups and have a correspondingly smaller proportion in current assets. The companies operating in five to nineteen states had the largest proportion of repossessions.

All three of the groups showed a tendency for current liabilities to decline during the depression and to increase with the recovery. The general range of current liabilities was from 50 to 60 per cent of total assets. The most rapid and complete adjustment of current liabilities to changing conditions was made by the companies operating in twenty or more states. The companies operating in from one to four states, which in recent years have had the lowest proportion of current liabilities, were the slowest to reduce their liability proportion during the depression and were the slowest to increase this proportion during the recovery. Their borrowing policies now seem to be the most conservative found in the three groups.

The item of dealers' reserves has had an interesting growth and has come to be more extensively used by all groups during the period of years studied. These reserves are currently used most extensively by the companies operating in more than twenty states. These reserves amount to 10 per cent of current liabilities and 6 per cent of receivables and so are significant both as a source of funds and as a protection against losses. To the extent that these dealer reserves are rebates to dealers, their increase shows a more extensive use of this rather doubtful practice.

The largest proportion of owner investment is found in the companies serving one to four states and the lowest in the companies serving twenty or more states. The most common or usual proportion of borrowing to net worth is about \$2 to \$3 supplied by creditors for every \$1 supplied by owners. Within the net worth, preferred stock is generally a larger item than common stock. In fact, the sum of preferred stock and surplus is about twice as large as common stock. Although the stability of earnings and the relationship of earnings to preferred stock requirements are such that the proportions need not be considered unsound, it seems that a larger common stock proportion

would be more commensurate with the extent of trading on the equity practiced and the extent of the control exercised by the common. It may also be questioned whether the position would not be improved, even though at the sacrifice of some flexibility, by a greater transfer of surplus from the surplus account to the stock account.

The flexibility of the companies and their ability to adjust their financial structure to changes in economic conditions is strikingly demonstrated by the manner in which the current and fixed liabilities were reduced and the net worth increased during the depression years. In this process the current ratio was made stronger and the net worth to debt ratio improved. At the peak the latter ratio showed that the owners were supplying \$2 for every \$1 put in by creditors in the twenty or more group of companies and in the five to nineteen group, and \$3 to every \$1 of creditors' capital in the one to four states group of companies. Flexibility was again demonstrated by the rapidity with which the pre-depression proportions of three to one and two to one were restored in the recovery period. Here again, however, the one to four group showed more conservative policies by keeping owner participation about equal to creditor participation.

Operations are revealed by volume ratios. The volume of business to total assets ratio shows a turnover of assets twice a year, which is illustrative of the extremely liquid condition of the asset structure. The liquidity of the receivables is, likewise, revealed by their rate of turnover. This ratio did not change greatly during the years covered, although a slight tendency was discernible for it to become slower, probably indicating greater purchases of long-term paper. Among the groups, the five to nineteen had the slowest rate of turnover.

Because of their generally smaller owners' equity, the larger companies show a better turnover rate on net worth than do the smaller companies.

When the income figures of the groups are examined it is seen that for all groups the proportions of gross income absorbed by money costs have declined, with a marked advantage in this respect for the companies in the twenty or more group and only moderate declines for the other groups. This decline in money costs came after 1932; the lowest figures, in 1936.

Other expenses, while increasing for all groups, did not increase so much for the twenty or more group as for the others. In respect to both interest costs and other costs the companies operating in twenty or more states are apparently able to take advantage of the economies of large size. This also gives them a better profit showing; thus their

profits are more stable than those of either of the other groups. Profits were at their highest point in 1936. Greatest instability of profits is found among the one to four companies. In some aspects of the comparison the one to four companies seem to be in a more favorable position than the five to nineteen group. This fact suggests that the smaller operators are able to take advantage of certain economies of small size not available to the middle group, which are too large to benefit by the economies of small size and too small to take advantage of the savings of large-scale operation.

The gross income to volume ratio has been close to 5 per cent in four of the last six years for the larger companies, whose ratios have been consistently lower than those of companies in the other groups. There was a tendency after 1932 for this ratio to fall, but it rose slightly in 1936. The decline in this ratio leads to the conclusion that competition has brought about lower charges to customers. There is also a probability that the lower gross income is attributable in part to the relative increase in the volume of wholesale paper in recent years, with its lower finance charge.

The ratio of net profit plus interest to total assets has also shown a tendency to fall, which may be indicative of the maturity of the business. The net profit to net worth percentages, with one exception, have ranged from 7 to 16.63 with the twenty or more group being highest and the one to four group lowest in this proportion. Although the earnings do not seem exorbitant, they are certainly satisfactory. A particularly noteworthy characteristic of the profit position of the companies is its stability. Although profits are not extremely high, neither are they discouragingly low, and deficits are rare, occurring in only 3.9 per cent of the cases studied, which is a very low proportion of loss for the years considered. This stability of earnings obviously justifies extensive trading on the equity and free use of preferred stock, dividends on which are well covered by earnings.

The general characteristics found to be outstanding and common to all groups were flexibility in the asset and liability structure and stability in the operations and earnings. The asset and liability proportions were found to be well adjusted to the requirements of the business and, on the whole, sound. The flexibility of the component parts permitted adjustments to changing conditions to be made easily and rapidly. The stability of their earnings does not lend any support to the suspicion that the business is unduly speculative.