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Volume Author/Editor: Ernst A. Dauer

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Profitability of Operations

OPERATING profit—the income produced by the entire amount of assets used in an enterprise before the payment or allocation of any return to those who have furnished the funds—is the complement of operating costs; and in each type of consumer instalment financing agency and in commercial banks it decreased over the period 1929-41.

For both the specialized agencies and commercial banks, operating profit in relation to total funds invested in the business—called the rate of operating profit[1]—fluctuated considerably in various phases of the business cycle, but over the period as a whole showed a marked decline.

The rate of operating profit provides one of the best measures of the success of a business as an operating unit;[2] it is the most commonly used measure of profitability in the field of regulated industries—the public utilities and railroads. Its use brings into sharper focus the influence exerted upon the rate of net profit on equity capital by the rate of compensation paid for borrowed funds and by the extent to which the owners' equity, through choice or necessity on the part of the management, is used in the enter-

[1] In the literature on the operations of personal finance companies the rate of operating profit, while purporting to be related to total assets, is actually based indirectly on the amount of loans. For example, in the formula developed by the Russell Sage Foundation, which sets the amount of "necessary and useful" assets in the personal finance business as 115 percent of loans. See Chapter 3, footnote 3.

[2] Professor Paton speaks of this concept, which he calls the earning rate on total capital, as follows: "Of the various possible measures of earning power, that which expresses income from the standpoint of the entire capital of the business, regardless of the form of capitalization, is doubtless the most significant, particularly when comparisons among individual enterprises and between special groups or fields are desired. It is the rate of return realized on all the capital committed to the undertaking, as opposed to the earning power of the stockholders' equity, that indicates the degree of success attending the activity of the concern as an operating unit" (National Bureau of Economic Research, *Corporate Profits as Shown by Audit Reports,* by W. A. Paton, New York, 1935, p. 18). Paton uses the rate of profit to stockholders' equity to indicate "earning power from the standpoint of stockholders" (*ibid.,* p. 41).

prise.[3] In comparing two industries, however, it should be borne in mind that a difference in the level of their rates of operating profit does not necessarily indicate differences in efficiency of management, but may be the consequence, as in the case of commercial banks, of differences inherent in the industries.[4]

PORTION OF TOTAL INCOME RETAINED AS OPERATING PROFIT

During 1929-41, as is shown in Table 20, the portion of total income represented by operating profit was higher, in general, for the sales finance companies than for the personal finance companies; among industrial banks it tended to fluctuate at an intermediate level, and was notably highest in federal credit unions. Approximately two-thirds of total income was retained by federal credit unions during 1938-41, as compared with from one-third to less than one-half retained by the other agencies. This was due to the credit unions' very low expenses.

During the depression all types of specialized agencies, but especially personal finance and non-investment type industrial banking companies, showed a decrease in the portion of total income represented by operating profit. In general, the subsequent increase did not restore it to the pre-depression level, and after 1936 operating profit represented a declining proportion.

In commercial banks the portion of total income represented by operating profit was as high as in sales finance companies in 1929, but during the depression it declined much more drastically than in the specialized agencies, at one point becoming actually an operating loss. This downward swing was the result of the

[3] Professor Crum uses the "return on equity," a ratio of "profits to equity of stockholders," as the basis of his study of corporate earning power (William Leonard Crum, *Corporate Size and Earning Power,* Cambridge, Mass., 1939, p. 18). Epstein employs the term "profit to total capital" for the ratio of profit before interest payments on long-term debt to net worth plus funded debt, and the term "income to capitalization" for the ratio of net profit to equity capital (National Bureau of Economic Research, *Industrial Profits in the United States,* by Ralph C. Epstein, New York, 1934, p. 50).

[4] The maintenance of a significant portion of total assets in the form of cash and liquid assets has been necessitated by the singular status of the commercial bank as the originator of the most important component of the monetary system—demand deposits. Over the last decade the credit policy of the Board of Governors of the Federal Reserve System has resulted in an increase in the amount of such legally required reserves against deposits, and has thereby reduced the ability of the individual bank to invest its funds in income-producing assets.

TABLE 20

OPERATING PROFIT OF SELECTED SAMPLES OF CONSUMER INSTALMENT FINANCING AGENCIES AND COMMERCIAL BANKS IN PERCENT OF TOTAL INCOME, 1929–41[a]

Sample	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*	*1939*	*1940*	*1941*
Sales finance companies													
2 to 3 national[b]	55.2%	52.4%	44.6%	42.5%	44.5%	49.4%	52.5%	51.1%	49.3%	48.5%	44.4%	39.6%	35.2%
2 to 4 regional[b]	57.8	50.3	45.3	39.8	37.7	42.0	46.7	44.2	41.2	37.6	36.9	36.4	32.1
9 to 32 local[b]	49.0	40.1	38.5	30.5	36.2	43.7	42.3	42.2	42.5	32.2	33.2	33.8	33.5
202 local[c]	47.7	..	..	..	29.1	..	..	39.3	..	..	..	..	..
Personal finance companies													
2 national[d]	..	46.5	39.9	35.2	33.7	30.0	35.3	35.2	36.2	34.4	33.1	30.9	26.4
2 to 5 regional[d]	47.5	45.0	36.6	−1.9	32.6	32.6	34.1	36.1	38.2	31.8	34.0	33.3	28.9
5 to 7 local[d]	..	..	..	..	..	28.2	30.7	35.4	33.8	27.4	29.5	33.8	30.1
153 local[c]	41.8	..	..	..	23.8	..	..	30.7	..	..	..	..	..
79 non-invest. type indust. bkg. cos.[c]	46.2	..	..	..	18.9	..	..	37.4	..	..	..	..	..
Invest. type indust. banks													
56 noninsured[c]	47.1	..	..	..	27.7	..	..	30.5	..	..	..	..	..
6 largest insured[e]	..	..	..	..	..	26.5	32.5	37.2	34.1	39.6	36.5	32.7	31.0
All other insured[e]	..	..	..	..	..	28.0	35.6	36.7	38.9	33.7	37.1	30.4	32.0
37 insured[c]	41.3	..	..	..	26.0	..	..	40.9	..	..	..	..	..
Credit unions													
All reporting federal credit unions[f]	..	..	..	..	..	..	54.5	70.3	69.9	65.5	65.3	65.3	62.3
Commercial banks													
All national banks[g]	55.5	47.8	29.1	15.6	−9.4	2.8	39.1	54.2	41.6	38.3	43.1	40.1	39.8
All insured banks[e]	..	..	..	..	..	−2.0	31.8	48.7	37.8	33.5	37.7	37.0	39.2

(footnotes on following page)

large volume of charge-offs on loans, securities and other assets, while the sharp rise in 1936 was due chiefly to recoveries and profits on securities. After 1936 operating profit again represented about the same proportion of total income in national banks as in sales finance companies.

RATE OF OPERATING PROFIT

Throughout the period 1929-41, personal finance companies had the highest rate of operating profit of any type of institution under consideration. Figures are shown in Table 21. From a high predepression level of 10 to 15 percent, their rate of operating profit declined by almost one-half, reaching its low point probably in 1932; in subsequent years, though it rose again somewhat, it did not regain the earlier level,[5] and after 1937 it showed an irregular but marked decline.

In most of the years under review sales finance companies reported a rate of operating profit scarcely more than one-half that of personal finance companies. Here again the rate tended downward, after its slight peak in 1934-35, and in 1941, in fact, was lower than its depression level and half or less than half its 1929 level.

Industrial banking companies included in the income tax

[5] This is also indicated by the average of figures on reporting licensees in a large group of states. In comparable years the personal finance companies included in the income tax sample reported a somewhat lower rate of operating profit. In regard to the negative rate for regional personal finance companies in 1932, see Chapter 5, footnote 8.

FOOTNOTES TO TABLE 20

[a] Operating profit designates the amount of profit after the payment of all costs except the cost of borrowed funds. The number of companies for each year may be found in Appendix Table B-1.

[b] Based on data from the National Credit Office, Inc. Some of these companies are included in the 202 local companies of the income tax sample. In the majority of cases recoveries are probably included in total income.

[c] Based on tabulations prepared by the Income Tax Study.

[d] Based on data from the National Credit Office, Inc. Some of these companies are included in the 153 local companies of the income tax sample. In the majority of cases recoveries are probably included in total income.

[e] Based on data from Federal Deposit Insurance Corporation. Cash depositories and banks designated in this study as insured industrial banks are included with all insured commercial banks.

[f] Data obtained from U. S. Farm Credit Administration, Division of Finance and Accounts.

[g] Based on data in Annual Reports of the Comptroller of the Currency.

TABLE 21

OPERATING PROFIT OF SELECTED SAMPLES OF CONSUMER INSTALMENT FINANCING AGENCIES AND COMMERCIAL BANKS IN PERCENT OF TOTAL ASSETS, 1929–41[a]

Sample	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*	*1939*	*1940*	*1941*
Sales finance companies													
2 to 3 national[b]	8.1%	6.8%	5.4%	4.8%	5.9%	7.2%	6.7%	6.0%	5.3%	4.6%	4.2%	3.5%	3.2%
2 to 4 regional[b]	8.6	7.3	6.5	4.0	5.3	7.0	7.7	6.7	5.5	4.0	4.4	4.0	3.3
9 to 32 local[b]	9.5	6.6	6.8	4.7	6.0	7.7	7.5	6.8	6.6	4.2	4.7	4.6	4.6
202 local[c]	8.1	..	..	..	4.5	..	..	5.6	..	..	..	..	..
Personal finance companies													
2 national[d]	..	13.4	11.3	10.0	10.0	9.1	10.6	10.4	10.8	9.5	9.2	8.6	7.3
2 to 5 regional[d]	15.0	13.6	9.7	−.6	9.2	9.8	10.2	11.0	11.5	8.9	9.2	9.2	8.1
5 to 7 local[d]	..	..	..	..	..	7.9	9.0	10.6	9.7	7.2	7.9	9.5	8.1
153 local[c]	9.9	..	..	..	5.5	..	..	7.3	..	..	..	..	..
79 non-invest. type indust. bkg. cos.[c]	6.6	..	..	..	2.3	..	..	5.2	..	..	..	..	..
Invest. type indust. banks													
56 noninsured[e]	4.6	..	..	..	2.5	..	..	2.8	..	..	..	..	..
6 largest insured[e]	..	..	..	..	..	2.3	2.8	3.4	3.2	3.7	3.3	2.8	2.6
All other insured[e]	..	..	..	..	..	2.9	3.6	4.0	4.3	3.5	3.7	3.0	3.0
37 insured[c]	3.7	..	..	..	2.2	..	..	3.3	..	..	..	..	..
Credit unions													
All reporting federal credit unions[f]	..	..	..	..	..	..	2.6	4.3	5.1	5.0	4.9	4.9	4.3
Commercial banks													
All national banks[g]	2.7	2.2	1.2	.7	−.4	.1	1.2	1.5	1.2	1.1	1.1	.9	.9
All insured banks[e]	..	..	..	..	..	−.1	1.0	1.4	1.1	1.0	1.0	.9	.9

(footnotes on following page)

sample had lower rates of operating profit than sales finance companies in all three years for which data are available. The rate of non-investment type industrial banking companies, higher in 1929 than that of investment type banks, showed a larger proportionate drop from 1929 to 1933 than that of the other types of companies; but in 1936 it was only slightly lower than it had been in 1929. From 1935 to 1939 the rate of insured industrial banks—the lowest of any of the specialized agencies—fluctuated at a fairly stable level, but declined appreciably in 1940-41.

From 1937 to 1940 the operating profit of federal credit unions showed a high degree of stability, about 5 percent of total assets. This high level, which in 1938-40 exceeded that attained by any type of agency except the personal finance company, is due entirely to the credit unions' low level of operating expenses, since their rate of total income on loans is comparable to, or lower than, that of insured industrial banks. In 1941 their rate of operating profit dropped somewhat.

Over the entire period 1929-41, commercial banks showed a rate of operating profit materially lower than that of the specialized agencies. This may be attributed primarily to the difference in asset composition, since cash and other non-income-producing assets, as well as investments in lower-rate securities, characteristically constitute a larger proportion of total assets of com-

FOOTNOTES TO TABLE 21

[a] Operating profit designates the amount of profit after the payment of all costs except the cost of borrowed funds. The number of companies for each year may be found in Appendix Table B-1.

[b] Based on data from the National Credit Office, Inc. Some of these companies are included in the 202 local companies of the income tax sample. Here the denominator is the average of total assets at the beginning and end of year.

[c] Based on tabulations prepared by the Income Tax Study. The figures represent operating profit in percent of year-end assets.

[d] Based on data from the National Credit Office, Inc. Some of these companies are included in the 153 local companies of the income tax sample. Here the denominator is the average of total assets at the beginning and end of year.

[e] Based on data from Federal Deposit Insurance Corporation. Total assets are averages of figures for beginning, middle and end of year, except for industrial banks in 1934 and 1935, when year-end figures are used; deposits accumulated for the repayment of loans have been deducted from total assets of industrial banks. Cash depositories and banks designated in this study as insured industrial banks are included with all insured commercial banks.

[f] Data obtained from U. S. Farm Credit Administration, Division of Finance and Accounts. The figures represent operating profit in percent of year-end assets.

[g] Based on data in Annual Reports of the Comptroller of the Currency. Total assets are averages of figures for call dates during the year.

mercial banks than of the other agencies.[6] After 1934 the rate of operating profit of commercial banks remained fairly steady, at approximately 1 percent of total assets,[7] but earlier it had swung from 2.7 percent in 1929 to an operating loss of 0.4 of 1 percent in 1933. These extreme fluctuations were caused by the large amount of charge-offs taken in the depression years. The more recent lower rates, as compared with 1929, can be credited in part to lower total income, accompanied by lower but not commensurately lower, operating expenses (both resulting from a decreased volume of lending business), and in part to an increase in assets other than loans.

INFLUENCE OF CHARACTER OF LOANS ON THE RATE OF OPERATING PROFIT

In general, individual institutions with higher-than-average rates of income on loans also showed higher-than-average rates of operating profit, indicating that the charges made on high-rate paper more than covered the higher losses and other incidental operating costs.

In the preceding chapter it was pointed out that in general the higher the rate of total income on loans, the larger the proportion of total income absorbed by operating costs. Since the balance of total income not absorbed by operating costs is operating profit, it follows that the higher the rate of total income the lower the proportion of total income retained as operating profit.

But companies with lower-than-average rates of income on loans, though they retained higher-than-average proportions of total income as operating profit, showed lower-than-average operating profit—in relation to total assets. The relatively low operating costs on low-rate paper were not sufficiently low to offset the influence of the higher rate of total income on high-rate loans. Table 22 shows that almost without exception the *rate* of operating profit among the companies included in the income tax sample increased with each increase in the rate of total income in 1936.[8]

This tendency is consistent with the finding that national and

[6] See footnote 4, above.

[7] Except in 1936, when it jumped to 1.5 percent, because of an unusually large amount of recoveries and of profits on securities sold.

[8] Practically no exceptions were shown in 1929 by groups containing more than ten companies; in 1933 there were a few irregularities.

regional sales finance companies had a lower rate of operating profit than the locals (Table 21), even though their operating profit constituted a higher proportion of total income (Table 20). To an increasing degree in recent years the national and regional companies have shown a lower rate of total income than the local

TABLE 22

OPERATING PROFIT OF CONSUMER INSTALMENT FINANCING AGENCIES IN PERCENT OF YEAR-END TOTAL ASSETS, 1936, BY LOAN-INCOME RATES[a]

			Industrial Banking Cos.	
Loan-Income Rates[b]	*Sales Finance Companies*	*Personal Finance Companies*	Non-Invest. Type	Invest. Type
Under 8%	(1.6)%	(-1.9)%	(-.8)%	-.1%
8–12	4.6	(1.9)	3.5	3.3
12–16	5.5	3.7	4.8	5.0
16–20	6.7	6.1	5.7	(5.8)
20–24	6.0	6.5	8.6	
24–28	6.2	7.1	(9.6)	..
28–32	(9.3)	8.2		..
32–36	(6.1)	8.1	..	..
36 or over	(4.7)	10.4	..	..
ALL COMPANIES	5.6%	7.3%	5.2%	3.1%
Number of companies	202	153	79	93

[a] Based on tabulations prepared by the Income Tax Study. Parentheses indicate groups containing 10 companies or fewer.
[b] Total income (composed predominantly of loan income) in percent of total year-end loans outstanding. Each level is inclusive of the lower limit and exclusive of the upper.

companies as a result of their acquisition of a larger proportion of wholesale and other low-rate paper.[9]

Data on operating profit in percent of employed assets of personal finance licensees in Illinois, New Jersey and New York (Table 23) also illustrate the influence of differences in rate of total income. New Jersey licensees, that showed lower rates of total income than Illinois and New York licensees in almost all the size groups, also showed lower rates of operating profit.

[9] In Chapter 5 attention was called to the positive relationship between the rate of total income on loans and the proportion of total income absorbed by operating expenses. Although the proportion of total income retained as operating profit on low-rate paper is higher, the amount of operating profit per $100 of low-rate paper is lower.

TABLE 23

RATES OF OPERATING PROFIT AND TOTAL INCOME OF PERSONAL FINANCE LICENSEES IN ILLINOIS AND NEW JERSEY, 1937, AND NEW YORK, 1938, BY YEAR-END EMPLOYED ASSETS[a]

Employed Assets	*Operating Profit in % of Year-End Employed Assets*			*Total Income in % of Year-End Employed Assets*			*Operating Profit in % of Total Income*		
	Ill.[b]	N. J.[c]	N. Y.[d]	Ill.[b]	N. J.[c]	N. Y.[d]	Ill.[b]	N. J.[c]	N. Y.[d]
$10,000 or less	6.7%	. .		27.4%	. .		24.6%	. .	
10,000–25,000	3.9	(−8.5)%		23.1	(16.7)%		16.8	(−50.9)%	
25,000–50,000	5.9	1.7	8.6%	26.1	15.1	26.6%	22.7	11.2	32.4%
50,000–75,000	8.7	1.9		26.2	18.9		33.0	10.1	
75,000–100,000	7.9	(2.0)		26.2	(17.5)		30.1	(11.4)	
100,000–200,000	8.6	7.4	10.4	25.6	22.5	27.8	33.5	33.1	37.5
200,000–300,000	9.8	9.6	10.9	27.3	24.7	27.7	35.7	38.9	39.5
300,000–400,000	10.8	11.4	11.9	26.5	25.8	27.6	40.7	44.1	42.9
Over 400,000	10.9	(9.2)	11.7	31.3	(21.5)	26.9	34.9	(42.6)	43.3
ALL LICENSEES	9.4%	8.4%	11.3%	27.2%	22.7%	27.4%	34.6%	36.9%	41.1%

[a] Parentheses indicate groups containing 10 companies or fewer.

[b] Based on Illinois, Division of Small Loans, *Analysis of Reports Filed by Personal Finance Companies, 1937*, Schedule I, p. 16. The total year-end employed assets of the 353 offices was about $41,200,000.

[c] Based on individual reports of small loan licensees in the New Jersey *Annual Report of Commissioner of Banking and Insurance* (1937) pp. 90-101. The total year-end employed assets of the 103 offices was about $18,400,000.

[d] Based on *Special Report of the Superintendent of Banks of the State of New York Relative to Licensed Lenders* (1940) p. 14. The figures used are average estimated employed assets, and represent 115 percent of average loans outstanding throughout the year. The total average employed assets of the 200 offices was about $52,300,000.

Within any one of these states those offices having lower average rates of total income also showed lower average rates of operating profit. This relationship between rate of total income and rate of operating profit was particularly evident when the differences between rates of total income were large.[10]

In an analysis prepared by the Superintendent of Banks of the State of New York it was shown that personal finance company offices in small communities were more profitable than those in large cities, a situation "due primarily to the maintenance generally of maximum rates in smaller communities."[11] This finding not only confirms the earlier conclusion concerning the relation of rate of total income on loans to rate of operating profit, but draws attention to the fact that differences in rate of total income on loans are indicative of differences in competitive status, as well as in size and character of loans.

Among insured industrial banks there was an unmistakable relationship in most of the years 1936-41, between rate of income on loans and average rate of operating profit.[12] Since, however, it was most pronounced in 1936 and least pronounced in later years, one may ask whether this connection has not been giving way before new competitive conditions in the field of consumer instalment credit.

As in the case of the consumer agencies, insured commercial banks with higher loan-income rates showed higher average rates of operating profit, even though operating costs absorbed a larger proportion of total income. Figures for differences in operating profit among individual insured commercial banks are not available, but a study has been made of the factors affecting the rate of net earnings on total assets.[13] Conclusions based on the relation

[10] It must be recognized that for some licensees lower rates of total income may reflect inability to collect charges levied, and thus directly indicate less efficiency rather than lower charges, larger loans, or a higher quality of loan. To the extent that this is the case, the degree of the relationship between size of office and rate of operating profit which appears in Table 23 would be strengthened, even after cognizance were taken of the influence of differences in rate of total income. But in Illinois only the licensees with offices having employed assets of $50,000 or less, and in New York and New Jersey only those with assets of $100,000 or less, showed rates of operating profit materially below those of the other size-of-office groups.

[11] State of New York Banking Department, *Special Report of the Superintendent of Banks Relative to Licensed Lenders* (1940) p. 12.

[12] See Appendix Table B-12.

[13] The most commonly used concepts of profitability in the field of commercial banking are net earnings and net profit. In considering the profitability of banking

between the rate of net earnings and other factors may be considered representative of the relation between the rate of operating profit and the same factors.[14]

Chart XII indicates that the profitability of commercial banking operations, as revealed by the rate of net earnings on total assets, depends in large part upon the proportion of loans held by the individual bank and upon the average rate of income received on average loans outstanding. In 1940, among banks with the same ratio of loans to total assets, average net earnings in percent of total assets increased almost without exception with higher rates of income on loans. Among banks earning the same average rates of income on loans the rate of average net earnings also increased with increases in the proportion of loans.[15]

[14] The amount of "operating profit" equals the net earnings plus interest on borrowed funds (in recent years consisting almost exclusively of time and savings deposits) minus net charge-offs. Since interest on deposits (in relation to total assets) has in recent years borne a consistent, positive relationship to the rate of net earnings, a "correction" for this item in each individual case would raise the level of, and augment the relationships shown by, the rates of net earnings. Net charge-offs (in relation to total assets) may show sharp and irregular variation in any single year in an *individual* institution, as pointed out in the preceding footnote, but there is no reason for believing that the deduction of net charge-offs would affect the relationships shown for the rate of net earnings. For 1940 (and for 1938 and 1939) the ratio of net charge-offs to total assets showed no consistent or regular variation with variation in size of bank, in size of center, in rate of net earnings, or in rate of income on loans.

[15] Except for banks earning less than 4 percent on loans; but in these cases no consistent relationship was to be expected, since the rate of return on loans was approximately equal to or below the rate of return on securities, and the share of total income derived from loans tended to be equal to or less than that derived from securities.

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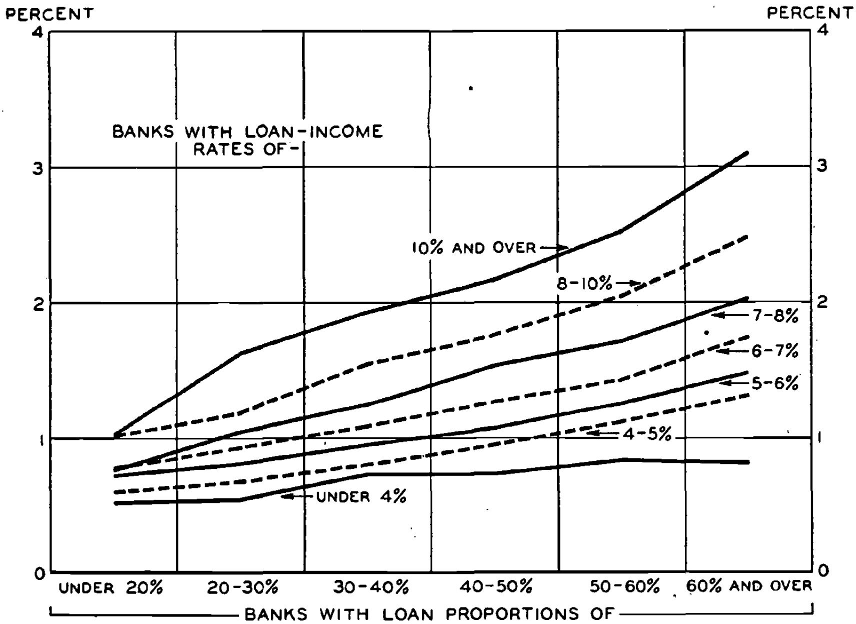
operations for a single year, particularly for individual institutions, the figure of net earnings from current operations is more significant than that of net profit. Net earnings from current operations indicate the extent to which the total income of the bank, after covering interest on deposits and other operating expenses exclusive of net charge-offs, is available to provide for net charge-offs on assets and for a return on capital. Since the figures of net earnings are relatively stable from year to year in an individual institution, they provide satisfactory data for analysis of factors related to differences among individual banks. Net profit consists of net earnings from current operations, plus recoveries on assets previously charged off, reductions in valuation allowances, and profits on securities sold, minus charge-offs on assets and additions to valuation accounts. In any one year the figure of net profit is affected by the amount of losses or recoveries on assets that happened to be taken in that year. Inasmuch as the items upon which losses or recoveries are taken accumulate over a period of years, the amounts that happen to be charged off or recovered in any one year may not necessarily bear any relation to operations in that year. Moreover, the erratic nature of the amount of net charge-offs in an individual institution makes the use of the figure of net profit for a single year unsatisfactory for the analysis of factors affecting the profitability of operations of individual institutions.

CHART XII

RATES OF NET EARNINGS OF INSURED COMMERCIAL BANKS, BY LOAN PROPORTIONS AND LOAN-INCOME RATES, 1940[a]



[a] Rates of net earnings represent net earnings from current operations in percent of total assets; figures used are averages of rates of individual banks. Loan proportions represent loans outstanding in percent of total assets. Loan-income rates represent income on loans in percent of loans outstanding. Points were plotted for each average rate of net earnings, and points for banks having substantially the same loan-income rate were then joined. The slope of the resultant lines shows the increase in rate of net earnings with increases in loan proportions. The increase in rate of net earnings with increases in loan-income rates is shown within a single vertical column of the chart, by the higher levels of the successive lines.

Based on data from Federal Deposit Insurance Corporation. In regard to banks that were members of the Federal Reserve System loans outstanding and total assets are averages of figures for call dates during the year, and in regard to non-member banks they are averages of figures for the beginning, middle and end of the year. Cash depositories, banks designated in this study as insured industrial banks, and banks that submitted reports covering less than the full year's operations or whose operations were materially affected by mergers during the year are not included. Loan-income rate groups and loan-proportion groups are inclusive of the lower limit and exclusive of the upper.

Conclusions drawn from the average rates of net earnings on total assets of insured commercial banks are supplemented by a survey of the distribution of the banks according to rate of net earnings of banks having varying loan proportions and varying average loan-income rates. For example, among banks with low proportions of loans (less than 30 percent of total assets) and low average rates of income on loans (less than 5 percent of total loans), 76 percent showed net deficits or net earnings of less than 1 percent of total assets; while among banks with high loan proportions (50 percent or more of total assets) and high loan-income rates (10 percent or more of total loans), 88 percent showed net earnings of 2 percent or more of total assets, and of these considerably more than one-half showed net earnings of 3 percent or over.

Rates of profitability of commercial banking institutions are thus subject to the same factors that influence the rates of income on loans (discussed in Chapter 4) and the proportion of total assets in the form of loans (discussed in Chapter 3).[16]

INFLUENCE OF SIZE

Although evidence indicates that rates of operating profit were influenced by the quality and character of the paper held, there was little indication that these rates were higher among larger than among smaller enterprises.

No conclusive relationship between size of institution and either the share of income retained or the rate of operating profit was shown by the companies included in the income tax sample. Among sales finance companies the smaller institutions showed higher rates of operating profit in 1929, whereas in 1933 the rates were quite irregular, and in 1936 the larger institutions showed the higher rates. Among personal finance and non-investment type industrial banking companies the larger companies tended to show a higher rate of operating profit, but this tendency was subject to a number of irregularities.

Moreover, the differential between rates of operating profit

[16] The average portion of total income retained as operating profit did not differ materially among insured commercial banks in centers of different sizes, but the average ratio of operating profit to total assets showed consistent and material decreases with increasing size of center; this indicates that operating profit is, in general, subject to the same influence as rates of income on loans and percentages of loans to total assets.

shown by the larger and the smaller institutions was small in comparison with that which appeared when companies were grouped by rate of total income on loans. Therefore it is likely that size differences, or lack of differences, in rates of operating profit were influenced materially by differences in rates of total income.

The fact that throughout most of the period, national and regional sales finance companies showed a lower rate of operating profit than the local companies may be attributed to the larger proportion of low-rate paper acquired by the larger companies, the influence of which was particularly noticeable in the last few years. In the same way, the generally lower rate of operating profit shown by the six largest insured industrial banks reflects the influence of the larger banks' lower average rate of total income.

In Illinois collateral evidence indicates that the size of licensed personal finance company offices showed a marked relation to rate of profitability in some of the years 1929-40, and suggests that the smaller offices were less able to recover after the depression.[17] In the first two years there was no evidence of a relationship, but when the rate of operating profit fell to a low in all size groups in 1933 or 1934, the decline affected the offices with assets of less than $200,000 to a much greater extent than it did the larger offices. In addition, by 1936 the larger offices had regained more of their depression losses than the smaller offices.

The poorer showing made by the smaller offices in the depression years may probably be laid to a greater rate of loss and to a lesser ability to control operating expenses.[18] Failure to attain their pre-depression position in 1936 and subsequent years may have been due to an inability to adjust themselves to increased competition in the consumer instalment financing field, effecting higher costs on loans without a commensurate rise in rate of total income.

Among insured industrial banks with deposits of less than $500,000 the average rate of operating profit appears to have been substantially higher than among the larger banks. In each of the years 1936-41 the rate of operating profit of banks with deposits of

[17] Figures for 1929-36 are presented in M. R. Neifeld, *Personal Finance Comes of Age* (New York 1939) p. 240; comparable figures for 1937-40 were supplied to me by Mr. Neifeld.

[18] It may have resulted also from the lesser ability of the smaller companies to contract total funds with contraction in business.

$250,000 to $500,000 was sharply above that of banks in the next higher size group. This suggests that the larger industrial companies were increasingly engaged in activities characteristic of commercial banks.

The rate of operating profit of insured commercial banks appears to have stood in inverse relationship to size of institution, whether the rates were based on aggregates or on figures for individual banks. However, large banks tend to hold more of their assets in the form of cash and low-yield government securities, and more of their loans are made to large business concerns at a low rate of return. Thus the element of size relationship disappears when banks are grouped according to other factors that have been found to be important determinants of rates of profitability.

Among banks of approximately the same size the average ratio of *net earnings* to total assets showed consistent and regular increase with increases in both the rate of income on loans and the percent of loans; but when size of bank was varied and the percentage of loans and rate of income were approximately the same, the variation in average net earnings with increases in size of bank was irregular.