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Volume Title: Comparative Operating Experience of Consumer Instalment Financing Agencies and Commercial Banks, 1929-41

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Volume Publisher: UMI

Volume ISBN: 0-870-14126-0

Volume URL: http://www.nber.org/books/daue44-1

Publication Date: 1944

Chapter Title: Cost Of Loan Operations

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Chapter URL: http://www.nber.org/chapters/c1778

Chapter pages in book: (p. 98 - 124)

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Cost of Loan Operations

OPERATING costs, excluding interest payment on borrowed funds, increased in relation to total income in each type of consumer instalment financing agency and in commercial banks over the period 1929-41. Among the specialized agencies the increase reflected higher costs; among commercial banks it reflected lower income. In relation to loans outstanding, operating costs fluctuated during the period, but, in general, decreased slightly.

The rate of operating costs varied widely among the types of agencies and among individual institutions within each type, the variation depending on the character and quality of the loans extended. Size of enterprise, as such, appears to have had little bearing on operating efficiency.

Operating costs are considered exclusive of interest payments on borrowed funds, in order to indicate the relative efficiency of these enterprises in managing the funds at their disposal. The use of this concept facilitates an appraisal of the relative return received from assets invested in the business enterprise, or operating profit. Interest payments are treated as a deduction from operating profit prior to determining the share of income accruing to equity capital, that is, net profit.

The measurement of operating costs in this analysis is based upon an examination from two points of view: from that of corporate management, in which primary emphasis falls on the share of total income absorbed by costs; and from that of the relationship of costs to the effective rate of return received on loans, in which primary emphasis falls on the amount of costs in relation to loans outstanding. The first measure is called the burden of operating costs and the second, the rate of operating cost.

As a rule, and for general purposes, the figure of total assets is the best base for this rate, since it is best adapted for presentation of earnings, expense, asset, equity and liability ratios in a uniform manner. Total outstanding loans, however, are used as a base for all items of income and expense, on the assumption that the acquisition, management and collection of loans constitute the chief activities causing variations in expenses; in the case of the consumer instalment financing agencies almost all of their assets do, in fact, consist of loans. Furthermore, just as the use of loans as a base in the case of the loan-income rate provides a measure of average charge, so in the case of operating costs it provides a measure—if not of "necessary costs"—of expense actually incurred, stated in a fashion comparable to the effective rate of charge.

Included in the expenses of operation in any business that extends credit is an element of costs which arises from the inability to foresee exactly which of a group of applicants for credit will fulfill the obligations assumed, and which will not. This cost element, the possible loss, is limited only by the total credit extended, and its potential importance as a component of total costs makes it well worth examining.

The use of loans as a base for determining the significance of losses or charge-offs is justified in the case of the consumer instalment financing agencies since loans constitute the chief if not the sole form of asset upon which loss is sustained in the regular course of operations.[1] But when comparisons are made with commercial banks, which hold large proportions of other forms of assets, chiefly securities, upon which losses are sustained in the regular course of operations, it will become necessary to distinguish between the banks' charge-offs on all forms of assets and not only on loans.

Particularly in discussing the operations of commercial banks it will be desirable to distinguish between gross and net charge-offs, the latter differing from the former in the reduction of recoveries on assets previously charged off.[2]

DISTRIBUTION OF OPERATING COSTS

There is no evidence of any great difference in the internal distribu-

[1] Amounts reported by the consumer instalment finance companies as worthless securities charged off have been purposely excluded from the amount of charge-offs in the income tax tabulations, in order that the latter might be more representative of bad-debt losses incident to the financing of consumer loans. See Appendix A.

[2] Data on losses are not available separately for the National Credit Office sample; in most of the companies, recoveries were included in gross income. Data covering the companies in the income tax sample consist only of gross charge-offs minus recoveries, that is, net charge-offs. For differences in the forms in which the data for various samples of institutions are available see Appendix A.

tion of operating costs (other than interest payments on borrowed money) between consumer instalment financing agencies and commercial banks.[3] Salaries have been the most significant single component of operating costs in all of these institutions, ranging from two-fifths of operating costs in industrial banks to one-half in commercial banks and personal finance companies,[4] and to two-thirds in credit unions. Rent and depreciation of fixed assets, insurance, taxes and fees have constituted other important types of cost in all the agencies (except federal credit unions) as well as in commercial banks.

Advertising has been a more important cost item in personal finance and industrial banking companies (and probably also in sales finance companies)[5] than in commercial banks or credit unions. Net charge-offs, which in personal finance companies were a larger item of cost than in industrial banks, have constituted a smaller and less erratic item in the specialized agencies than in commercial banks. Sundry operating expenses, including printing, stationery, postage, office supplies, telephone and telegraph, have usually amounted to considerably less than one-fourth of total operating costs.

INCOME ABSORBED BY OPERATING COSTS

During 1929 and 1930, as can be seen from Table 14, total operating costs (excluding interest on borrowed capital) absorbed from two-fifths to three-fifths of total income in each type of specialized agency and in commercial banks. In the succeeding depression years the proportion rose rapidly, reflecting, on one hand, a decline in the ability to collect interest charges, and, on the other, a steady in-

[3] Distributions of operating costs are presented in Appendix Tables B-6 to B-9, for personal finance companies (1929-39), insured industrial banks (1934-41), federal credit unions (1935-41) and all national banks (1929-41). Distributions for various other samples of industrial banking companies are presented in National Bureau of Economic Research (Financial Research Program), *Industrial Banking Companies and Their Credit Practices*, by Raymond J. Saulnier (New York 1940) pp. 155, 158, 160. Detailed distributions of costs of member banks in the First Federal Reserve District have been published by the Federal Reserve Bank of Boston since 1921. Data covering sales finance companies are not readily available.

[4] In M. R. Neifeld, *Personal Finance Comes of Age* (New York 1939) are presented the proportions of total expenses represented by salaries, bad debts and insurance against loss, advertising, rent and taxes, for licensees reporting in a selected group of states, 1929-36 (pp. 229-34), and also percentage distributions of total expenses, by items, for selected years, 1929-36, for reporting licensees in Canada and in 22 individual states (pp. 278-99).

[5] See National Bureau of Economic Research (Financial Research Program), *Sales Finance Companies and Their Credit Practices*, by Wilbur C. Plummer and Ralph A. Young (New York 1940) pp. 75, 286.

TABLE 14

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

Sample	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*	*1939*	*1940*	*1941*
Sales finance companies													
2 to 3 national[b]	44.8%	47.6%	55.4%	57.5%	55.5%	50.6%	47.5%	48.9%	50.7%	51.5%	55.6%	60.4%	64.8%
2 to 4 regional[b]	42.2	49.7	54.7	70.2	62.3	58.0	53.3	55.8	58.8	62.4	63.1	63.6	67.9
9 to 32 local[b]	51.0	59.9	61.5	69.5	63.8	56.3	57.7	57.8	57.5	67.8	66.8	66.2	66.5
202 local[c]	52.3	..	..	..	70.9	..	..	60.7	..	..	..	..	..
Personal finance companies													
2 national[d]	..	53.5	60.1	64.8	66.3	70.0	64.7	64.8	63.8	65.6	66.9	69.1	73.6
2 to 5 regional[d]	52.5	55.0	63.4	101.9	67.4	67.4	65.9	63.9	61.8	68.2	66.0	66.7	71.1
5 to 7 local[d]	..	..	..	..	..	71.8	69.3	69.6	66.2	72.6	70.5	66.2	69.9
153 local[c]	58.2	..	..	..	76.2	..	..	69.3	..	..	..	..	..
79 non-invest. type indust. bkg. cos.[e]	53.8	..	..	..	81.1	..	..	62.6	..	..	..	..	..
Invest. type indust. banks													
56 noninsured[c]	52.9	..	..	..	72.3	..	..	69.5	..	..	..	..	..
6 largest insured[e]	..	..	..	..	..	73.5	67.5	62.8	65.9	60.4	63.5	67.3	69.0
All other insured[e]	..	..	..	..	..	72.0	64.4	63.3	61.1	66.3	62.9	69.6	68.0
37 insured[c]	58.7	..	..	..	74.0	..	..	59.1	..	..	..	..	..
Credit unions													
All reporting federal credit unions[f]	..	..	..	..	..	..	45.5	29.7	30.1	34.5	34.7	34.7	37.7
Commercial banks													
All national banks[g]	44.5	52.2	70.9	84.4	109.4	97.2	60.9	45.8	58.4	61.7	56.9	59.9	60.2
All insured banks[e]	..	..	..	..	..	102.0	68.2	51.3	62.2	66.5	62.3	63.0	62.8

(footnotes on following page)

crease in bad-debt losses plus an inability to reduce salaries and other costs proportionately.

Either 1932 or 1933 appears to have marked the high point in absorption of total income by operating costs. The proportion declined in the immediate post-depression years, though not to the 1929 level, and showed a rising tendency in the last years of the period ending in 1941.

In commercial banks operating costs over the period 1929-41 were influenced by fluctuations in the amount of charge-offs on securities and other assets as well as on loans, and in the amount of profits on securities sold. Other operating costs—excluding the effect of charge-offs, recoveries and profits on assets sold[6]—represented a materially smaller proportion of total income in 1929 than was characteristic of the specialized agencies; the increase in the relative burden of such costs from 1929 to 1933 was also less drastic. But while the specialized agencies showed some improvement between 1933 and 1936 in the proportion of total income absorbed by these "other" operating costs, the commercial banks, taken as a unit, did not, and this relationship became more unfavorable with each year, through 1941.

Systematic differences among types of agencies, except credit unions, in the proportion of total income absorbed by total operating costs were not apparent over the period 1929-41. In general,

[6] The exclusion of net charge-offs provides a preferable basis for comparison with the consumer instalment financing agencies, because in commercial banks the total of net charge-offs is composed of heterogeneous elements, the amount of which, in any one year, is the result of a number of diverse and in part arbitrary factors.

FOOTNOTES TO TABLE 14

[a] Operating costs include net charge-offs (bad-debt expense minus recoveries) and all expenses other than interest payments. 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] Based on data from U. S. Farm Credit Administration, Division of Finance and Accounts.

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

the proportion was somewhat lower for the sales finance companies than for personal finance or industrial banking companies, but this tendency was irregular.

A materially smaller proportion of total income was absorbed by operating costs in federal credit unions than in any other type of institution, because of their very small salary and rental expense. Many of the services of these cooperative organizations are gratuitously performed by officers, or else represent an indirect subsidy in the form of services performed during working hours, where membership is confined to a single government or business establishment. In general, too, office space is provided gratuitously or at nominal cost.

Net charge-offs on loans, though characteristically they absorbed a very low proportion of total income in the specialized agencies, increased materially in the depression period and decreased sharply again in the recovery period. Figures for these agencies compare favorably with those for commercial banks, even though the data for the income tax sample cover only the years 1929, 1933 and 1936, and other data are fragmentary.

As is shown in Table 15, net bad-debt expense, or losses and charge-offs minus recoveries on loans, of the specialized agencies included in the income tax sample absorbed from 5 to 9 percent of total income in 1929, and from 12 to 23 percent in 1933, after the depression had struck. During the same years, net charge-offs on all the assets of national banks rose from 9 percent of total income in 1929—the highest figure among the specialized agencies—to 65 percent in 1933.

By 1936 losses for all types of agencies stood at about the 1929 level except those of personal finance companies, which constituted a proportion of total income considerably higher than in 1929, and those of insured industrial banks which represented a proportion considerably lower, while national banks showed net recoveries and profits on assets due entirely to substantial recoveries and profits on securities.

The extreme rise in the proportion of net charge-offs of non-investment type industrial banking companies in 1933 may be due to the fact that some of these companies' loans took the form, not of small loans to consumers, but of loans to business establishments unable to obtain accommodation at commercial banks. On this

TABLE 15

NET CHARGE-OFFS ON LOANS OF CONSUMER INSTALMENT FINANCING AGENCIES IN PERCENT OF TOTAL INCOME AND OF YEAR-END LOANS OUTSTANDING, 1929, 1933, 1936[a]

Agency	*1929*	*1933*	*1936*
NET CHARGE-OFFS IN % OF TOTAL INCOME			
202 sales finance companies	7.7%	12.5%	7.6%
153 personal finance companies	6.0	13.9	11.4
79 non-invest. type indust. bkg. cos.	8.8	22.7	8.4
93 invest. type indust. banks			
56 noninsured	4.8	16.5	6.6
37 insured	8.0	12.0	2.4
NET CHARGE-OFFS IN % OF YEAR-END LOANS OUTSTANDING			
202 sales finance companies	1.5%	2.3%	1.2%
153 personal finance companies	1.5	3.6	3.0
79 non-invest. type indust. bkg. cos.	1.4	3.1	1.3
93 invest. type indust. banks			
56 noninsured	.5	1.7	.7
37 insured	.8	1.2	.2

[a] Based on tabulations prepared by the Income Tax Study. Net charge-offs are bad-debt expense (charge-offs and losses on loans) minus recoveries.

paper the degree of fluctuation in charge-offs actually exceeded that characteristic of commercial banks.

In each of the years some companies represented in the income tax sample reported net recoveries, that is, recoveries exceeding charge-offs; but a larger number (except among the industrial banking companies in 1933 and 1936) reported neither net recoveries nor net charge-offs.[7] In 1929, nearly half of the companies that reported net bad-debt expense reported net charge-offs of less than 5 percent of total income, or net recoveries; two-fifths reported net charge-offs of 5 to 15 percent of total income; and only one-eighth reported net bad-debt expense in excess of 15 percent.

In 1933, however, in each type of institution more than two-fifths of the companies reporting net bad-debt expense (more than one-half among the non-investment type industrial banking companies) reported net charge-offs on loans in excess of 15 percent of total

[7] In most of these cases charge-offs were probably reported improperly under some other caption, but it is not likely that this would have occurred—unintentionally—unless the amounts concerned were insignificant. It seems reasonable, therefore, to consider these cases as substantially correct, particularly since the number reporting in this manner in 1933 and 1936 was considerably less than half as large as in 1929.

income. In 1936, in all types of institutions, the variation was greater than in 1933 or 1929, and all types showed an increase over 1929 in the proportion of companies reporting net recoveries.

THE RATE OF OPERATING COST

The operating costs of personal finance companies represented the highest rates on loans throughout the period 1929-41, reaching a level two to three times that of the other principal types of consumer instalment financing agencies. The figures are shown in Table 16. From 1929 to 1933 the operating costs of personal finance companies increased from about 15 or 20 to between 20 and 25 percent of outstanding loans, and never subsequently reverted to the earlier level.

While the 1929-33 increase in the national and regional companies as well as in those included in the income tax sample may be attributed almost entirely to a higher rate of charge-offs (minus recoveries) on uncollectable accounts,[8] there is evidence that the companies were unable to reduce other operating costs to keep pace with the decline in loans. The failure of operating costs to decline materially after the depression, in terms either of total loans outstanding or of total income (Table 14, above), may indicate the acquisition of a larger proportion of higher-cost loans, without a commensurate increase in income.

Also, although net charge-offs decreased during this period it is likely that other operating costs continued on a higher level: increased advertising expenses occasioned by more intense competition from other types of agencies for higher-quality consumer loans; higher taxes and license fees; higher salaries for operating personnel as the entry of more commercial banks into the consumer loan field brought other offers of employment, and higher head office salaries as this business continued to acquire greater respectability.[9]

Operating costs of the sales finance companies included in the income tax sample rose from 10 percent of total year-end loans outstanding in 1929 to 13 percent in 1933, and returned to 10 percent

[8] The very high figure for regional companies in 1932 is attributable to high charge-offs in that year, occasioned by the sale and closing of a large number of offices by one of these companies.

[9] The distinction between branch office and head office personnel is made because the degree of increase in costs of operations shown by Tables 14 and 16, based on the small samples and the income tax data, appears to be somewhat greater than that indicated by Appendix Table B-6, which is based on expenses reported by individual operating offices to state supervisors.

TABLE 16

OPERATING COSTS OF SELECTED SAMPLES OF CONSUMER INSTALMENT FINANCING AGENCIES AND COMMERCIAL BANKS IN PERCENT OF LOANS OUTSTANDING, 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]	7.9%	7.3%	8.1%	8.4%	9.2%	8.9%	7.1%	6.5%	6.1%	5.5%	6.1%	6.0%	6.6%
2 to 4 regional[b]	7.3	8.5	9.4	11.8	11.5	11.9	10.4	9.9	9.2	8.0	9.1	8.1	7.9
9 to 32 local[b]	12.2	12.4	12.9	13.0	12.8	11.9	12.0	10.9	10.5	10.6	11.5	10.7	10.6
202 local[c]	10.2	..	..	..	13.3	..	..	9.9	..	..	..	..	..
Personal finance companies													
2 national[d]	..	17.5	19.7	21.6	23.2	24.3	22.0	21.5	21.6	20.9	21.4	21.5	22.5
2 to 5 regional[d]	19.5	19.5	18.5	36.3	22.4	23.9	24.2	23.2	21.9	22.8	21.2	21.7	23.6
5 to 7 local[d]	..	..	..	..	..	23.0	23.6	21.8	21.0	21.4	21.6	21.6	22.0
153 local[c]	14.8	..	..	..	19.8	..	..	18.5	..	..	..	..	..
79 non-invest. type indust. bkg. cos.[c]	8.4	..	..	..	11.1	..	..	9.5	..	..	..	..	..
Invest. type indust. banks													
56 noninsured banks[e]	5.5	..	..	..	7.5	..	..	7.2	..	..	..	..	..
6 largest insured[e]	..	..	..	..	..	10.3	7.5	7.5	8.1	7.7	7.8	7.6	7.4
All other insured[e]	..	..	..	..	..	10.3	8.6	8.9	8.5	9.0	8.4	9.0	8.4
37 insured[e]	5.9	..	..	..	7.4	..	..	5.5	..	..	..	..	..
Credit unions													
All reporting federal credit unions[f]	..	..	..	..	..	..	2.8	2.3	2.7	3.3	3.3	3.4	4.0
Commercial banks													
All natl. banks (including net charge-offs)[g]	2.9	3.2	4.0	4.7	5.4	4.6	2.6	1.9	2.4	2.5	2.3	2.3	2.2
All natl. banks (excluding net charge-offs)[g]	2.4	2.5	2.3	2.5	2.3	2.4	2.3	2.3	2.3	2.4	2.3	2.3	2.1

(footnotes on opposite page)

in 1936. After that, according to the National Credit Office sample, the rate of operating cost fluctuated, with no evidence of a trend for national or local companies but with regional companies showing a slight decline. If cognizance could be taken of changes in operating and accounting practices since 1938, the rate would show an increase after that year.[10]

Industrial banking companies included in the income tax sample showed lower rates of operating cost in 1929, 1933 and 1936 than local sales finance companies, the investment type being considerably lower than the non-investment type.[11] Their rates showed about the same trend during those years. The rate of operating cost of all insured industrial banks—adjusted for hypothecated deposits—amounted to about 10 percent of year-end loans outstanding in

[10] See Chapter 4, footnote 17.

[11] The extent of the understatement resulting from lack of adjustment for hypothecated deposits among the investment type companies included in the income tax sample can be estimated from data submitted to the FDIC covering the 37 insured industrial banks. On the basis of the 1936 income tax reports the operating expenses (excluding charge-offs) of these companies amounted to 5.3 percent of year-end loans outstanding (as reported, that is, presumably not corrected for hypothecated deposits); on the basis of reports submitted to the FDIC, corrected for hypothecated deposits, the operating expenses amounted to 8.5 percent of year-end loans, or 9 percent of the average of month-end loans.

FOOTNOTES TO TABLE 16

[a] Operating costs include net charge-offs (bad-debt expense minus recoveries) and all expenses other than interest payments. 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. Here the denominator is the average of loans outstanding at the beginning and end of year.

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

[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. Here the denominator is the average of loans outstanding at the beginning and end of year.

[e] Based on data from Federal Deposit Insurance Corporation. The figures represent operating costs in percent of average of loans outstanding at beginning, middle and end of year, except for 1934 and 1935, when year-end loans outstanding are used as base; deposits accumulated for the repayment of loans have been deducted from total loans.

[f] Based on data from U. S. Farm Credit Administration, Division of Finance and Accounts. The figures represent operating costs in percent of year-end loans outstanding.

[g] Based on data in Annual Reports of the Comptroller of the Currency. Here the denominator is the average of loans and investments outstanding at call dates during the year.

1934, declining in subsequent years to a level of around 8 percent of average outstanding loans.

In relation to year-end loans outstanding, as in relation to total income, the operating costs of federal credit unions, at a level of about 3 percent or a little more,[12] were much lower than those of any other type of specialized agency during the period under consideration. The reasons for this low level have already been explained.

In commercial banks the level of operating costs, including net charge-offs, in relation to the average of *total earning assets* outstanding, followed a very erratic course from 1929 to 1941, as a result of fluctuations in charge-offs on loans, securities and other assets, fluctuations in recoveries on assets previously charged off, and more especially in profits on securities sold. But operating costs exclusive of net charge-offs represented, as shown in Table 16, an almost constant proportion of average loans and investments outstanding, remaining at a level slightly above 2 percent through the entire period.

Net charge-offs of national banks from 1929 to 1941 averaged 0.8 percent of total earning assets.[13] Their average rate of total operating costs over this period was thus slightly more than 3 percent, or approximately the same as the rate of operating costs on the principal earning asset—loans—of federal credit unions; approximately half the level shown by national sales finance companies in 1941; less than half the level shown by insured industrial banks in 1941; and about one-seventh the level shown by personal finance companies since the depression.

Operating costs, other than net charge-offs, incurred by commercial banks *in the making of loans* are not so much lower than those of the consumer instalment financing agencies as these comparisons would indicate. Since there has been an increase in the proportion of securities, particularly short-term United States government securities, whose acquisition and handling costs can be expected to be lower than those on loans, the burden of other operating costs attributable to the acquisition, handling and collection of loans—if these

[12] Francis E. Wilcox, in *A Statistical Study of Credit Unions in New York* (Chicago 1940) p. 56, reports that disbursements of 145 state-chartered credit unions for salaries and wages, committee fees, rent and printing, stationery and postage amounted to 3.1 percent of average loans outstanding in 1936.

[13] This is slightly below the average rate of 0.97 for the twenty-year period 1918-38.

could be distributed—would represent a higher percentage of loans in recent years.[14]

THE RATE OF LOSS ON LOANS

As mentioned above, the most striking characteristic of losses on loans has been their high degree of variation since 1929. The available data on consumer instalment financing agencies are not sufficiently precise or complete to make possible an accurate determination of the various agencies' rates of loss in relation to outstanding loans. It is probable, however, that the losses of personal finance companies, non-investment type industrial banking companies and sales finance companies have averaged between 1 and 2 percent of loans, and that those of the industrial banks have been significantly lower.

For the consumer instalment financing agencies included in the income tax sample the amount of net charge-offs in percent of year-end loans outstanding was presented above, in Table 15, for the years 1929, 1933 and 1936. Attention should be called, however, to the danger of using such data on net charge-offs for single years only.

Charge-offs are very largely a postponable charge, for the inability to collect a particular account or loan can usually be recognized by the management at any time over a considerable period; the management may also, without being subject to undue criticism, exercise discretion with respect to the time at which a charge-off is acknowledged in the company's books. And as for anticipated losses, the management is subject to conflicting forces, resulting in overestimation in some cases and underestimation in others; this is particularly true in a period in which excessive losses are to be anticipated.

When figures for a large number of companies are combined, the operative influences tend to cancel, but since this is not likely to be

[14] Although banks report separately the amount of income on loans, the amount of income on securities and the amount from other sources, they do not report operating costs in such a manner as to permit a segregation of costs applicable to loan operations from those applicable to security or other operations. The average of operating costs incurred by commercial banks on their consumer loans probably does not differ greatly from that of the consumer agencies. Fragmentary evidence on operating costs of personal loan departments of reporting state banks in New York, 1937-38, may be found in National Bureau of Economic Research (Financial Research Program), *Commercial Banks and Consumer Instalment Credit*, by John M. Chapman and Associates (New York 1940) pp. 171-82.

true of data covering smaller groups of companies, too much weight should not be placed upon the figures for a single year, particularly one such as 1933.

Rates of loss (in relation to loans) of companies included in the income tax sample rose sharply from 1929 to 1933 and fell again by 1936. It is probable that the "peak" of losses was attained in 1931 or 1932. For after the decline in business activity starting in 1929 credit continued to be extended for some time on standards previously in use, but as the crisis deepened, higher standards were enforced, with the result that losses on business secured in the later years of the depression were lower.

While the loss ratios of personal finance companies compared favorably with those of sales finance companies in 1929, they increased considerably more during the depression and failed to show a significant decrease by 1936, when net charge-offs were 3 percent of year-end loans outstanding. We know that the business of personal finance companies showed only a slight contraction from 1929 to 1933, whereas the loan volume of sales finance and industrial banking companies decreased sharply; and it may have been because at this time they extended a higher proportion of loans of doubtful quality, thus increasing their charge-offs.

The use of figures for these widely separated single years entails, however, the possibility of significant error; in any case these scattered figures appear to overstate a rate typical of a longer period. One of the two largest units in the personal finance field has reported its average net charge-offs for the thirteen-year period 1929-41 as 1.5 percent of average customers' notes.[15]

Although the rate of losses in sales finance companies was high in both 1929 and 1933, it rose less between those two years than did that of any other type of agency except insured industrial banks. This confirms the earlier conclusion that these companies were aggressive and efficient in handling their default problems during the depression.[16]

The sales finance companies' high level of losses in 1929 may have been due to a reluctance to show repossessions on their books and a

[15] Household Finance Corporation, *Annual Report* for 1941, p. 7. Gross charge-offs were reported as 2.3 percent and recoveries as 0.8 percent of average customers' notes.

[16] It was pointed out at the end of Chapter 3 that during the depression the proportion of miscellaneous assets—including repossessions—rose least among sales finance companies.

tendency to charge off repossessions in full, when acquired; or these local companies may have failed to follow the practice, almost universal among the larger companies, of protecting themselves with recourse contracts.[17] Among companies that did use recourse contracts the high ratios could have resulted from lack of attention, during a period of competitive expansion, to the solvency of retailers who subsequently failed to fulfill their contracts.

The loss ratios of non-investment type industrial banking companies were about the same as those of sales finance companies in 1929 and 1936, though they showed a somewhat greater increase between 1929 and 1933. By 1936 both were slightly lower than their pre-depression level.

There appears to be ample justification for the belief that loans made by industrial banks constitute a high grade of risk. In 1929 and 1936 net charge-offs of banks included in the income tax sample (Table 15) averaged approximately 0.5 of 1 percent of year-end loans outstanding; in 1933 the average for the group was approximately 1.5 percent, and charge-off rates did not vary much as between size classes.

Between 1934 and 1935 the loss ratio of insured industrial banks was cut in half, and thereafter fluctuated under 0.7 of 1 percent of average loans. That these rates certainly do not understate, and may even overstate, the losses characteristic of the field is suggested by the experience of one of the larger insured industrial banks, whose average rate of gross loss over approximately a quarter century approximated 0.6 of 1 percent of loan extensions; recoveries on loans previously charged off ranged from about 25 to about 75 percent of gross charge-offs, resulting in net charge-offs of about 0.3 of 1 percent of loan extensions for the entire period.

Federal credit unions' losses on charged-off loans are not reported on an annual basis, and are not included in the reported total of operating costs. From their inception to the end of 1941 their net losses amounted to 0.07 of 1 percent of loans made.[18]

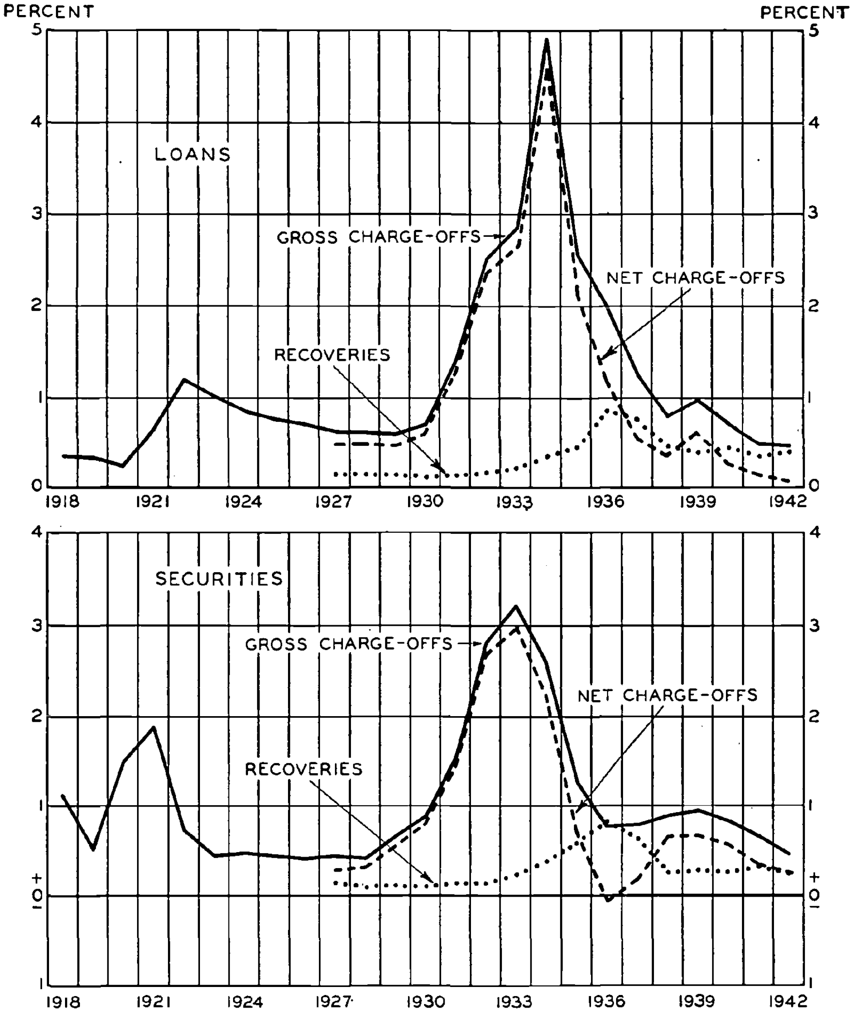
Available evidence indicates that losses on consumer loans compare favorably with average losses sustained by commercial banks

[17] Non-recourse contracts developed irregularly during the 1920's. In many of these, hidden clauses *actually* protected the companies to a greater extent than was readily apparent.

[18] See Federal Deposit Insurance Corporation, *Federal Credit Unions: Annual Report on Operations*, December 31, 1941.

CHART IX

RATES OF GROSS CHARGE-OFFS, RECOVERIES AND NET CHARGE-OFFS ON LOANS AND SECURITIES OF NATIONAL BANKS, 1918–42[a]



[a] Rates represent charge-offs or recoveries during the year ending June 30 in percent of mid-year holdings of loans or securities. Based on Annual Reports of the Comptroller of the Currency. Recoveries were not itemized by class of asset before 1927. The figures for 1933-36 pertaining to recoveries on securities have been adjusted for estimated profits on securities sold, which were reported with recoveries for the period July 1, 1932 to December 31, 1935; see text footnote 24.

on holdings of all types of loans and securities. Chart IX reveals that for national banks, whose highest rate of net charge-offs on loans occurred in 1934, both gross and net losses or charge-offs in each of the years 1931-36 (ending June 30) exceeded 1 percent of mid-year loans outstanding. Recoveries, itemized by class of asset only since 1927, remained reasonably consistent at first but rose sharply after gross charge-offs on loans had been high for several years.

Chart IX also presents comparable data covering losses sustained by national banks on securities. Gross losses or charge-offs on securities amounting to more than 1 percent of mid-year holdings occurred in 1918, 1920 and 1921, as well as in all of the years 1931-35. In both periods the increase in the rate of gross charge-offs, and the peaks in the rates, occurred earlier for securities than for loans; following the peaks the rate declined more rapidly for securities than for loans.[19]

Averages of annual rates of gross and net charge-offs on loans and securities of national banks over the period 1927-41, by type of bank, are presented in Table 17. Throughout this period the rates of net loss on loans were lowest in reserve city national banks in about 100 urban centers throughout the country, and were slightly higher in country banks. Rates for the latter reflect the losses sustained by banks in agricultural communities during the early years when agricultural values were declining. The highest rates were sustained by central reserve city national banks, the large metropolitan banks in New York City and Chicago.

For the period 1927-41 the average annual rate of loss on securities sustained by national banks was less than their average rate of loss on loans. Both net and gross charge-offs on securities were lowest for reserve city banks, and highest for country banks. The materially higher rate of charge-offs shown by country national banks was probably due, in part, to the greater likelihood of the smaller banks' charging off, in a lump sum, premiums on bonds purchased, and then reporting them as a part of charge-offs. All of

[19] For the period July 1, 1932 to December 31, 1935, the Comptroller of the Currency reported recoveries on securities, and profits on securities sold, as a combined figure. For the purpose of this analysis an estimated breakdown was made of that figure. Although there is no very satisfactory basis for making such an estimate, and the margin of error is wide, the error is much less than that entailed by the use of the combined figure.

TABLE 17

GROSS AND NET CHARGE-OFFS ON LOANS AND SECURITIES OF ALL NATIONAL BANKS IN PERCENT OF MID-YEAR LOANS OUTSTANDING AND MID-YEAR HOLDINGS OF SECURITIES, AVERAGE FOR 1927–41, BY TYPE OF BANK[a]

Type of Bank	*Charge-Offs on Loans in % of Mid-Year Loans Outstanding*		*Charge-Offs on Securities in % of Mid-Year Holdings of Securities*	
	Gross	Net	Gross	Net[b]
Central reserve city banks	1.8%	1.3%	1.1%	.7%
Reserve city banks	1.1	.9	.9	.6
Country banks	1.4	1.1	1.5	1.2
ALL NATIONAL BANKS	1.4%	1.1%	1.2%	.8%

[a] Based on Annual Reports of the Comptroller of the Currency. The figures are averages of annual data for fiscal years, ending June 30.
[b] Partly estimated.

the large central reserve city banks, on the other hand, and most of the reserve city banks, are likely to amortize bond premiums over the life of the bonds, deducting them from the reported amount of interest income on securities.[20]

INFLUENCE OF CHARACTER OF LOANS ON COSTS

In all of the years studied, income tax data show a very pronounced relationship between income rate and operating costs in percent of year-end loans outstanding. Chart X shows that without any significant exceptions, the higher the rate of income, the higher the rate of operating costs,[21] indicating that the type of paper which produces a higher rate of income entails a higher rate of cost for acquisition, servicing and collection.

The higher operating costs of companies that received a higher-

[20] Some understatement of losses of large central reserve city and reserve city banks—although the amount cannot be determined—results from the general practice followed by these banks in the early 1930's of setting up a contingency reserve against possible market losses on securities by a transfer from surplus or from undivided profits; later, when this "surplus reserve" was utilized, direct charges made to it were, in some cases, not reported as losses or charge-offs on securities.

[21] The exceptions occur in groups containing a very small number of companies, chiefly in those containing companies whose income rate was less than 8 percent. Some of the companies in the latter groups may have held paper that potentially produced a higher average rate, but failed to collect a significant proportion of charges.

than-average rate of income may be attributed, in part, to a lower average size of loan. Some operating costs are about the same for all loan accounts, but others are higher for small loans; the rate of income, too, is sometimes higher on loans of smaller amounts.[22] Among sales finance companies the proportion of wholesale paper, carrying a low rate of charge, has a significant relation to the average income rate, and probably also affects the rate of operating costs, since the average size of such notes is considerably larger than most consumer instalment accounts.

In relation not only to year-end loans outstanding but also to total income the operating costs of the companies in the income tax sample increased with rising rates of income. The increase was not sufficient, however, to eliminate all of the advantage resulting from the higher rate of income. As we shall see in the next chapter, these higher income companies enjoyed a higher-than-average rate of profitability.

It can be seen from Chart X that in every income class the rate of operating costs (in relation to year-end loans outstanding) was higher in 1933 than in 1929. These cost rates for 1933 reflect several factors: higher charge-offs, due to greater difficulty in collecting principal; higher collection costs, occasioned by strenuous efforts to collect interest and principal; and a higher rate of other costs, resulting from an inability to reduce overhead as rapidly as loan volume fell.

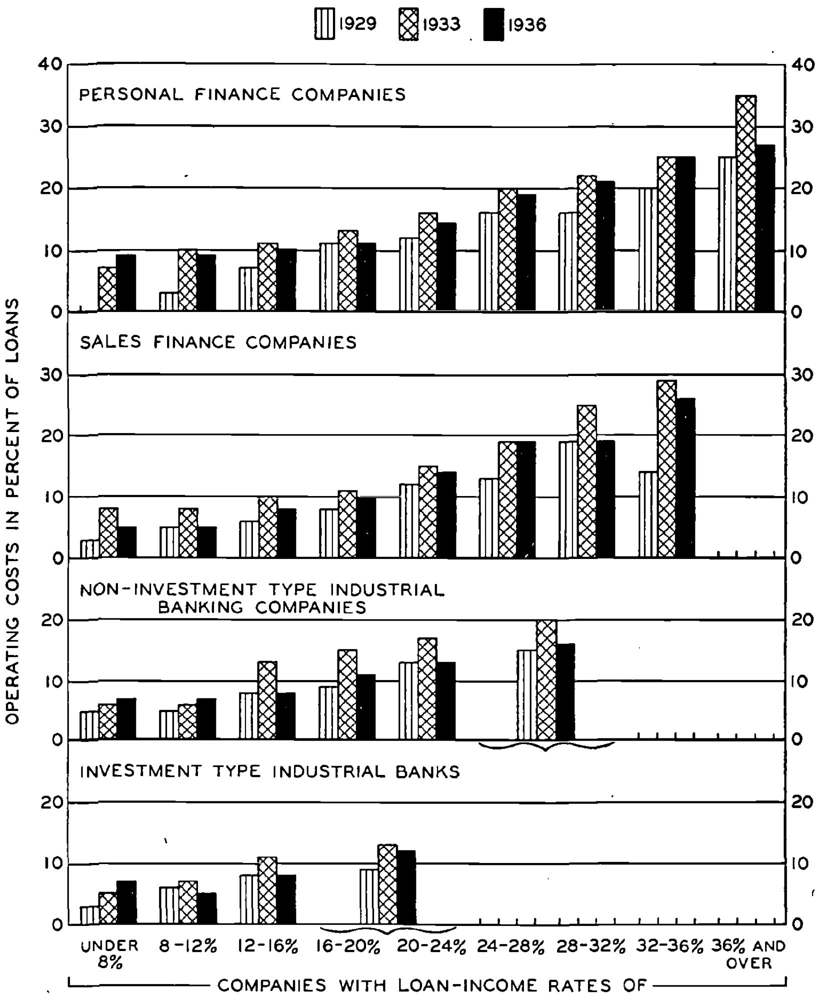
It must be recognized, however, that in 1933, because of difficulty in collecting the usual proportion of charges on loans, there were probably a good many companies in lower-than-customary income groups.[23] In view of this shift of companies from one income group to another, the indicated increase in total costs from 1929 to 1933 represents an overstatement of the typical increase

[22] In a large number of states the small loan law provides for a higher maximum rate on smaller than on larger loans; and even in other states those companies that charge less than the maximum rates permitted are likely to charge a higher average rate on smaller than on larger loans. In either case the result is a higher average rate of gross income for a company with a higher proportion of smaller loans than for one with a higher proportion of larger loans, even though the character of the loans is otherwise the same. The usual practice of industrial banks, of charging a fixed investigation fee per loan in addition to the interest charges, also brings about a higher average rate of income for the company with a smaller average size of loan.

[23] While the shift of companies into lower-than-customary income groups can occur in any year, the number of instances in a year like 1929 is likely to be so small as not to affect seriously the representativeness of the cost rates.

CHART X

RATES OF OPERATING COSTS OF CONSUMER INSTALMENT FINANCING AGENCIES, BY LOAN-INCOME RATES, 1929, 1933, 1936[a]



[a] Rates of operating costs represent averages of operating costs, which include net charge-offs (bad-debt expense minus recoveries) and all expenses other than interest payments, in percent of total year-end loans outstanding. Loan-income rates represent total income (composed predominantly of loan income) in percent of total year-end loans outstanding; each rate group is inclusive of the lower limit and exclusive of the upper. Based on tabulations prepared by the Income Tax Study.

in the lower income groups and an understatement of that in the higher.[24]

In almost all income classes and types of agencies the rate of operating costs was higher for 1936 than for 1929, both years of relative prosperity. The reason may have been either a reduction in the rate of charge of some companies with no change in the character of the loans held and no change in their costs; or a general increase in operating costs affecting all companies, regardless of the character of paper held. Both influences might have stemmed from increased competition in the consumer instalment credit field.

In commercial banks, too, there has been a very strong relationship between the rate of income on loans and the level of operating costs, excluding net charge-offs. Banks' operating costs, however, are influenced by the great variation in types of assets held, as indicated by the proportion of total assets in the form of loans. Since a very high loan proportion has been characteristic of all the specialized companies, it is not necessary to consider the effect of this factor on their rate of operating cost; moreover, those companies that held large amounts of other assets were excluded from the income tax sample in the analysis of income and expenses.

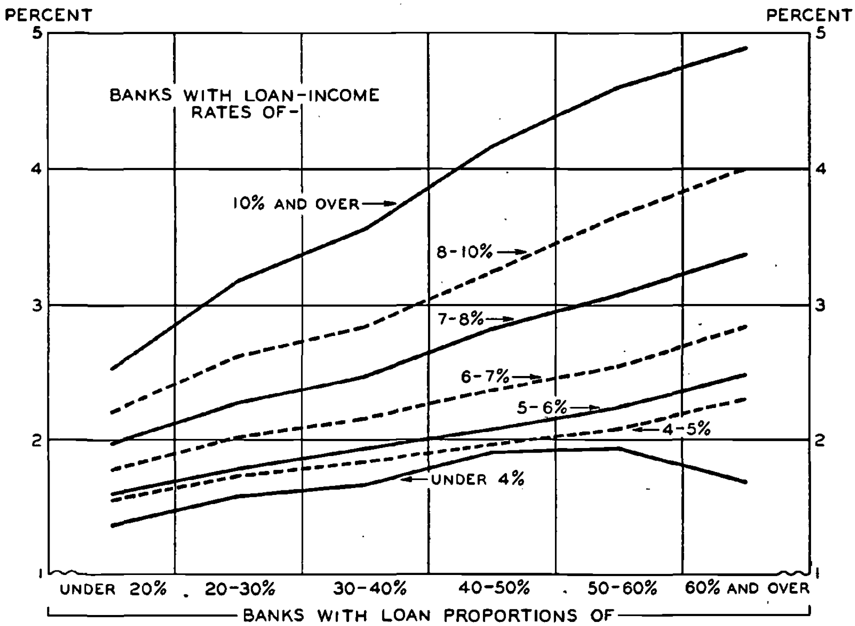
The influence of the proportion of total assets in the form of loans can be isolated by examining cost rates of banks with approximately the same rate of income on loans; and, conversely, the influence of the rate of income on loans can be isolated by examining cost rates of banks with approximately the same proportion of total assets in the form of loans. The results are pictured in Chart XI, which shows that average operating costs[25] increase consistently and materially with increases in each of these factors. The higher cost rates found for banks with higher loan

[24] The overstatement occurs with respect to any group into which companies have shifted, and the understatement occurs for any group from which companies have shifted.

[25] Net charge-offs and profits on assets sold have here been excluded from operating costs, because commercial banks' losses, charge-offs and recoveries on securities, and profits on securities sold, were so erratic from year to year and from bank to bank that their inclusion would provide unsatisfactory results. For this calculation the use of total assets as a base for computing the cost rate was more feasible than the use of loans outstanding. It is also more satisfactory, because—in spite of the high proportion of assets other than loans—it gives a better indication of the strength of the relationships under consideration.

CHART XI

RATES OF "OTHER" OPERATING COSTS OF INSURED COMMERCIAL BANKS, BY LOAN PROPORTIONS AND LOAN-INCOME RATES, 1940[a]



[a] Rates of "other" operating costs represent all expenses other than interest payments and net charge-offs, 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 "other" operating costs, and points for banks having substantially the same loan-income rate were then joined. The slope of the resultant lines shows the increase in "other" operating costs with increases in loan proportions. The increase in "other" operating costs 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.

proportions[26] may be explained by the fact that the investment of funds in securities, or their retention in the form of cash assets, entails less operating expense than the investment of funds in loans.

The higher cost rates that accompany higher loan-income rates, regardless of the proportion of loans held, are indicative of the differences in expense entailed in the extension of different types of loans. It may be presumed that the loans of banks represented in the chart by any one line are fairly similar in character, for all such banks receive the same average loan-income rate, and the income produced by loans is strongly influenced by the character and quality of the paper.

INFLUENCE OF CHARACTER OF LOANS ON LOSSES

In each of the consumer instalment financing agencies net charge-offs, in percent of year-end loans outstanding, bore a direct relation to loan-income rate in the years covered by the income tax data.[27] But while companies that received higher-than-average income rates sustained higher-than-average losses, the increase in charge-offs was not commensurate with the increased income.[28] In other words, the higher losses did not amount to more than a small proportion of the higher rates charged.

For example, in 1936 those personal finance companies whose average loan-income rate was between 12 and 16 percent of year-end loans outstanding reported average net charge-offs of 0.7 of 1 percent, whereas those whose average loan-income rate was between 32 and 36 percent reported average net charge-offs of 4.2 percent; thus an income rate 20 percentage points higher was accompanied by a loss rate 3.5 percentage points higher. This was reflected in the proportion of total income absorbed by losses, which was small for both high-rate and low-rate companies.

[26] The only deviation from the pattern is the decline in cost rate among the banks that had loans of more than 60 percent of total assets, and loan-income rates of less than 4 percent. There was only a small number of banks, however, in this category.

[27] This tendency was consistent in each type of agency in each year, with practically no significant exceptions in 1929 or 1936. The 1933 figures showed a greater degree of irregularity, though the tendency was discernible. See Appendix Table B-10.

[28] In some cases the increase in charge-offs of the companies holding high-rate loans was proportionally greater than the increase in income rate; in other cases the opposite was true; and in still other cases the increase in charge-offs was in proportion to the increase in income rate.

Sales finance and non-investment type industrial banking companies showed rates of loss reasonably similar to those reported by the personal finance companies, in comparable income classes. The same was true of investment type industrial banking companies, when allowance was made for hypothecated deposits. Thus

TABLE 18

GROSS CHARGE-OFFS, RECOVERIES AND NET CHARGE-OFFS ON LOANS OF INSURED COMMERCIAL BANKS IN PERCENT OF AVERAGE LOANS OUTSTANDING, AND NET CHARGE-OFFS IN PERCENT OF INCOME ON LOANS, 1940, BY LOAN-INCOME RATES[a]

Loan-Income Rates[b]	*Number of Banks*	*In % of Average Loans Outstanding* Gross Charge-Offs	Recoveries	Net Charge-Offs	*Net Charge-Offs In % of Income on Loans*
Less than 3%	97	.25%	.24%	.01%	.73%
3–4	351	.50	.34	.16	4.41
4–5	1,433	.55	.34	.21	4.69
5–6	4,049	.58	.31	.27	4.82
6–7	3,505	.65	.40	.25	3.87
7–8	1,731	.79	.56	.23	3.16
8–9	949	.99	.73	.26	3.11
9–10	445	1.11	.81	.30	3.15
10–11	218	1.22	.85	.37	3.57
11–12	135	1.25	.88	.37	3.24
12–15	134	.91	.69	.22	1.65
15 or more	25	1.43	.74	.69	4.00
ALL BANKS	13,072	.69%	.44%	.25%	3.90%

[a] Based on data from Federal Deposit Insurance Corporation. Figures are averages of rates of individual banks. Loan-income rates represent income on loans in percent of loans outstanding. In regard to banks that were members of the Federal Reserve System loans outstanding 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.

[b] Each level is inclusive of the lower limit and exclusive of the upper.

it appears that when these consumer instalment financing companies competed in the same narrowly-defined market, they charged about the same rate and had about the same losses, regardless of type of company.

Among insured commercial banks, while the rate of gross charge-offs on loans varied in direct relation to the rate of loan income and the character of the loans, the rate of recoveries on loans previously charged off tended to vary in the same way. Therefore the rate of net charge-offs, although tending slightly to increase with higher loan-income rates, varied little. For example, as can be seen from Table 18, commercial banks with an average loan-income rate of 4.5 percent in 1940 sustained net charge-offs of 0.21 percent of average loans outstanding; banks with an average income rate of 10.5 percent sustained net charge-offs of 0.37 percent.

Whether average rates of net charge-offs for identical banks throughout an entire business cycle, or over a long period of years, would show a materially greater degree of variation cannot be determined. But available data covering all insured commercial banks for 1938 and 1939, and the smaller group of insured commercial banks submitting reports to the FDIC for 1936 and 1937, support the conclusion that the degree of variation in rate of net charge-offs is characteristically very small in relation to the degree of variation in the rate of income from loans.

INFLUENCE OF SIZE

There are wide variations in the size of individual institutions within any one type of agency or bank. It is pertinent to inquire, therefore, into the degree to which large-scale operations in these fields make for an increase in efficiency.

For each type of company in the income tax sample, operating costs, in relation to year-end loans outstanding, were lower among the larger than among the smaller companies.[29] The degree of variation accompanying size differences was minor, however, in comparison with that shown when the companies were grouped according to rate of income.[30] There is good reason to doubt, therefore, that size differences reflect the influence of size *per se*;[31] it is more likely that they reflect the effect of differences in aver-

[29] This was true also of operating costs in relation to total income, but there the variation was less marked, and the tendency was not so regular or so consistent. In none of the years covered by the income tax tabulations was a relationship evident between size of company and proportion of total income absorbed by net charge-offs.

[30] See Chart X.

[31] An irreducible minimum volume of operations is necessary, of course, in any company; a smaller volume will result in a very high rate of operating costs.

age rate of income characteristic of companies in particular size groups.

This conclusion is fortified by data in the smaller samples obtained from the National Credit Office, Inc. Almost without exception the rates of operating cost were higher in the local sales finance companies than in the regional, and higher in the regionals than in the nationals.[32] Although this variation may indicate that a higher degree of efficiency characterizes large-scale operations, it probably resulted mainly from the higher proportion of wholesale and factoring paper discounted by the national and regional companies.

In the National Credit Office samples of personal finance companies during the period 1929-41 no consistent differences in costs were found for national, regional and local companies.[33] Reports of licensed lenders in Illinois and New Jersey, for 1937, reveal a tendency (not, however, without exceptions) for larger offices to have a lower level of operating costs than smaller offices;[34] and available data on personal finance licensees in New York State indicate that in 1939 some decrease in rates of operating cost was associated with larger-scale operation, that is, with a larger volume of loans handled through a single office and branch offices.[35] But these lower costs are attributable, in part at least, to the tendency of the larger offices and the larger chains to make a higher proportion of relatively large loans, and a smaller proportion of very small loans.[36]

Among insured industrial banks operating costs (in relation to average loans outstanding) showed a much greater tendency to vary with variations in rate of income than with variations in size of institution.

[32] See Chapter 4, footnote 18. Also see Table 16. The variation among national, regional and local companies in the proportion of total income absorbed by operating costs was irregular, as shown in Table 14.
[33] See Tables 14 and 16.
[34] See National Bureau of Economic Research (Financial Research Program), *Personal Finance Companies and Their Credit Practices*, by Ralph A. Young and Associates (New York 1940) pp. 116-17.
[35] Detailed operating costs in percent of average loans outstanding of 204 licensed lenders in New York, classified by size of office, are presented in State of New York Banking Department, *Second Special Report of the Superintendent of Banks Relative to Licensed Lenders* (1941) pp. 14, 29. These data cover the individual offices for which licenses have been granted; some companies operate a number of offices.
[36] *Ibid.*, Tables 3A, 3B, 3C, 3D, pp. 30-32.

TABLE 19

RATES OF "OTHER" OPERATING COSTS OF INSURED COMMERCIAL BANKS WITH LOANS OF 30 TO 40 PERCENT OF TOTAL ASSETS, 1940, BY LOAN-INCOME RATES AND AMOUNT OF DEPOSITS[a]

	Loan-Income Rates[c]						
Deposits[b]	Under 4%	4–5%	5–6%	6–7%	7–8%	8–10%	10% or Over
$100,000 or less	..	(3.1)%	(5.7)%	(4.3)%	(3.4)%	3.9%	4.1%
100,000–250,000	(3.0)%	2.0	2.3	2.5	2.9	3.1	3.8
250,000–500,000	(2.0)	2.1	2.0	2.3	2.5	2.8	3.3
500,000–1,000,000	1.8	1.8	1.9	2.0	2.2	2.6	3.2
1,000,000–2,000,000	1.9	1.8	1.8	2.0	2.3	2.6	(2.8)
2,000,000–5,000,000	1.6	1.8	1.8	2.1	(2.3)	(2.3)	..
5,000,000–10,000,000	(1.7)	1.7	1.9	2.0	(3.3)	(3.1)	..
10,000,000–50,000,000	1.5	1.9	1.9	(1.8)	..	..	..
Over 50,000,000	1.4	1.6	(2.0)	..	..	..	..

[a] Based on data from Federal Deposit Insurance Corporation. Rates of "other" operating costs represent costs of operation, exclusive of net charge-offs and interest payments, in percent of total assets; figures are averages of rates of individual banks, and pertain only to banks whose loans outstanding amounted to 30-40 percent of total assets. Loan-income rates represent income on loans in percent of loans outstanding. In regard to banks that were members of the Federal Reserve System loans outstanding, total assets and deposits 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. 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. Parentheses indicate groups containing 10 banks or fewer.

[b] Each level is exclusive of the lower limit and inclusive of the upper.

[c] Each level is inclusive of the lower limit and exclusive of the upper.

The same was true of commercial banks, as is evident from Table 19, which pertains to banks whose average loans outstanding in 1940 were between 30 and 40 percent of total assets. Except among the smallest banks—those with deposits of $500,000 or less—the cost rates (in this instance operating costs exclusive of net charge-offs as well as interest payments, and computed in percent of total assets) declined only slightly and irregularly among banks with approximately the same loan-income rate as size of bank increased.

But irrespective of size, the cost rates shown by banks with similar loan proportions exhibited a decided tendency to rise as loan-income rates increased.[37] Thus in commercial banks, as in the specialized agencies, available evidence indicates that character and size of loan have much more influence on operating costs than size of operating unit.

[37] The same tendency was found as loan proportions increased; see Appendix Table B-11. That table indicates no marked relationship between size of bank and rate of operating costs (except among the smallest banks) for banks with the same loan-income rate and approximately the same loan proportions, but it shows a very marked relationship between cost rates and the proportion of total assets in the form of loans for banks of approximately the same size, and with the same loan-income rate.