This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

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

Volume Author/Editor: Ernst A. Dauer

Volume Publisher: UMI

Volume ISBN: 0-870-14126-0

Volume URL: http://www.nber.org/books/daue44-1
Publication Date: 1944

Chapter Title: Interest Payments: The Cost Of Borrowed Funds
Chapter Author: Ernst A. Dauer
Chapter URL: http://www.nber.org/chapters/c1780
Chapter pages in book: (p. 140-153)

## Interest Payments: The Cost of Borrowed Funds

ALl consumer instalment financing agencies and commercial banks benefited by the decline in interest rates over the period 1929-41. But whereas in 1929 rates of interest paid on borrowings varied materially among the specialized agencies and commercial banks, by 1941 only relatively small differences were apparent. ${ }^{1}$

The burden of interest payments-measured by the portion of total income they absorbed-also declined over the period in all types of agencies and in banks, primarily because rates declined as the proportion of borrowed funds increased. The burden of interest payments varied considerably among the different types of agencies, in accordance not only with different timing in rate reductions, but also with differences in the proportion of borrowed funds between types of companies.

The cost of borrowed funds is measured by the rate of interest paid on borrowings, ${ }^{2}$ in relation to the total amount of debt presumably subject to interest. Some understatement of the interest rate results from this calculation, because some debt is included upon which no interest was actually paid; but except in the case of industrial banks and, to a lesser extent, of sales finance companies, this understatement is not believed to be serious. ${ }^{3}$
${ }^{1}$ Except for local personal finance companies and credit unions. The average rate of interest paid by federal credit unions was considerably higher than that paid by the other agencies; but the credit unions borrowed only a negligible portion of their funds and these borrowings were principally from other credit unions.
2 The term "interest" is here used to include fees that are a part of the cost of borrowed funds. Thus the figures for interest include not only trustees' fees on collateral trust notes (which were relatively significant in the case of companies in the National Credit Office sample) and amortization of discount on bonds sold, but also, in several instances, a significant amount of unamortized discount on bonds called for redemption prior to maturity.
8 The error results from the extent to which accounts payable, dealers' deposits, demand deposits, and hypothecated deposits upon which no interest has been paid, have been included in total debt; it probably does not exceed 5 percent of the figures shown, except in the case of the investment type industrial banks included in the

## RATE OF INTEREST PAID ON BORROWINGS

Table 24 reveals that during 1929-41 interest cost, in percent of total debt presumably subject to interest, showed marked variation from year to year and from one type of company to another. ${ }^{4}$ At the beginning of the period there was a sharp divergence between rates of interest paid on borrowings by agencies whose funds were derived from depositors or the sale of investment cer-tificates-industrial and commercial banks-and those whose funds were derived from banks, from the sale of bonds, or in the open market-the sales finance, personal finance and non-investment type industrial banking companies. The latter group, regardless of type or size of company, paid from 6 to 8 percent for borrowed money, whereas the former paid approximately half as much.

All types of agencies (except credit unions) benefited substantially from the reduction in interest rates after 1929, although that reduction made itself felt at different times. By. 1941 the specialized agencies, on the average, were paying interest rates of between 1 and 3 percent-only slightly above the rate paid on time and savings deposits by commercial banks.

In 1929 sales finance companies paid as high a rate of interest on borrowed funds as any other type of agency. Even the very largest companies included in the National Credit Office sample,

[^0][^1]TABLE 24 and Commercial Banks in Percent of Debt, 1929-41a
Interest Payments of Selected Samples of Consumer Instalment Financing Agencies and Commercial banks in Percent of Debt,

| Sample | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales finance companies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 to 3 national ${ }^{\text {b }}$ | $6.4 \%$ | 5.2\% | 4.0\% | 5.0\% | 3.2\% | 2.8\% | 1.9\% | 1.8\% | 2.0\% | 2.2\% | 1.9\% | 1.4\% | 1.2\% |
| 2 to 4 regional ${ }^{\text {b }}$ | 7.5 | 6.2 | 5.3 | 5.4 | 5.4 | 4.0 | 2.4 | 1.8 | 1.9 | 1.6 | 1.6 | 1.5 | 1.6 |
| 9 to 32 local $^{\text {b }}$ | 8.3 | 6.6 | 7.1 | 6.6 | 6.0 | 6.2 | 4.4 | 3.6 | 3.3 | 3.0 | 2.9 | 2.6 | 2.4 |
| 202 local $^{\text {c }}$ | 6.3 | . | . | . | 4.8 | .. , | . . | 2.7 | . | . . | . . | . . | . . |
| Personal finance companies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 national ${ }^{\text {d }}$ | . | 7.0 | 6.5 | 5.8 | 5.1 | 4.1 | 4.8 | 2.0 | 2.1 | 1.8 | 2.0 | 2.1 | 2.2 |
| 2 to 5 regional ${ }^{\text {d }}$ | 7.5 | 7.3 | 7.4 | 8.0 | 5.7 | 5.6 | 4.6 | 3.9 | 2.9 | 2.6 | 2.2 | 2.1 | 2.1 |
| 5 to 7 locald ${ }^{\text {d }}$ | . | .. | . . | . . | $\cdots$ | 5.6 | 6.9 | 3.8 | 4.3 | 3.8 | 3.8 | 4.1 | 3.6 |
| 153 local ${ }^{\circ}$ | 5.7 | . | . | - | 6.1 | . . | . | 5.8 | . | . | . | . . | . . |
| 79 non-invest. type indust. bkg. cos. ${ }^{\circ}$ | 6.3 | $\cdots$ | $\cdots$ | $\cdots$ | 6.4 | - | $\cdots$ | 4.7 | $\cdots$ | $\cdots$ | . | $\cdots$ | $\cdots$ |
| Invest. type indust. banks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 56 noninsured ${ }^{\text {a }}$ | 2.9 | - | $\cdots$ | $\cdots$ | 2.8 | $\cdots$ |  | 2.2 | $\cdots$ | $\cdots$ |  | $\cdots$ |  |
| 6 largest insured ${ }^{\text {a }}$ | . . | . . | . | . | . | 3.0 | 2.4 | 2.3 | 2.2 | 2.0 | 1.9 | 1.9 | 1.7 |
| All other insured ${ }^{\text {e }}$ | $\cdots$ | . | . | . | . | 2.6 | 2.3 | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 1.9 |
| 37 insured ${ }^{\text {d }}$ | 2.7 | - | $\cdots$ | $\cdots$ | 2.5 | . | . | 1.5 | . | . | . | . | . . |
| Credit unions |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All reporting federal credit unions ${ }^{f}$ | $\cdots$ | -• | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | 1.4 | 2.4 | 3.6 | 4.2 | 3.8 | 4.2 | 5.5 |
| Commercial banks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All national banksg | 3.4 | 3.4 | 3.1 | 2.9 | 2.6 | 2.5 | 2.0 | 1.7 | 1.7 | 1.6 | 1.5 | 1.4 | 1.2 |
| All insured banks ${ }^{\text {e }}$ | . | . | . | . | . | 2.4 | 2.0 | 1.7 | 1.6 | 1.6 | 1.4 | 1.3 | 1.2 |

those having access to the open market, were then paying as high a rate as the smaller companies included in the income tax sample, whose sources of funds were presumably more limited. But in the immediately succeeding years the effect of the high regard that sales finance companies in general had acquired among credit sources, as well as the pressure among banks for outlets for funds, began to be noticeable. By 1934, sales finance companies engaged in nationwide and regional operations had so benefited by the reduction in open-market borrowing rates that they were paying a rate of about one-half the 1929 level.

By 1936, however, both the local companies included in the National Credit Office sample, which were presumably borrowing in the open market, and the 202 local companies in the income tax sample, presumably restricted to local sources for credit, were also borrowing at about one-half the 1929 rates. By the end of the period national sales finance companies were paying an average rate on long- and short-term borrowed funds combined, which was as low as the rate paid by commercial banks on time and savings deposits. Regional and local companies with access to the open market were paying somewhat higher average rates, and so, probably, were the smaller local companies with more restricted sources of funds.

[^2]For the large personal finance companies engaged in operations on a nation-wide, regional and local scale, recognition of a high degree of creditworthiness came a little more slowly than for the comparable sales finance companies. From 1936 on, however, the rate of interest paid by national personal finance companies approximated only about 2 percent, and that of the locals 4 percent.

The differentials evident through most of the period in rates paid by the national, regional and local personal finance companies bespoke the lag in recognition of the creditworthiness of smaller institutions. They may also have resulted from the smaller institutions' practice of borrowing funds from sources allied with management or stockholder interests, which deliberately required rates in excess of those available from competitive sources; possible indication of such a practice is seen in the fact that for local companies included in the income tax sample the computed rate for 1936 exceeded that for $1929 .{ }^{5}$

The rate of interest paid by federal credit unions does not appear to have been affected by easy money conditions in the later years of the period. This may be partly attributed to the fact that these organizations have done a large portion of their borrowing from other credit unions, a source not likely to be responsive to changes in short-term interest rates. ${ }^{6}$

[^3]Since the sources of funds of non-investment type industrial banking companies and personal finance companies were somewhat alike; it is not surprising to find similarity in both the level of, and changes in, their rates of interest paid on borrowings.

Early in the period the rate of interest paid by industrial banks included in the income tax sample was the lowest to be found among consumer financing agencies. During the latter years, however, the rate paid by insured industrial banks was in excess of that paid by the large sales finance companies. This differential reflects the difference between the primary source of funds of industrial banks and of other types of companies. ${ }^{7}$

Since the great bulk of the borrowed funds of industrial banks takes the form of time and savings deposits, the level of interest rates, and their trend, are subject to the competitive influence of rates on similar deposits in commercial banks. Nevertheless, the average rate paid by insured industrial banks, adjusted for hypothecated deposits, was considerably in excess of the average paid by insured commercial banks. This was true even of the larger insured industrial banks located in very large centers, in which interest rates were materially affected by easy money conditions.

To obtain an adequate and growing volume of deposit, these banks paid rates of interest on time and savings deposits in excess of those paid by larger commercial banks that were their competitors. They were enabled to do so by the satisfactory returns they received on loans; and their rates of net earnings and net profit remained materially above those of the average commercial bank. This suggests that the greater prestige attached to the maintenance of an account with a commercial bank is sufficient to prevent

[^4]transfer of a significant amount of deposits to an industrial bank, a transfer which an assumption of pure competition would imply. ${ }^{8}$

During the late 1920's the average rate of interest paid on time and savings deposits by commercial banks ranged between 3 and $31 / 2$ percent. The decline in rates began in the early thirties, and was marked and steady until 1936. The impetus in the decline may be traced to limitations imposed by the Banking Act of 1933,9 but its continuance must be ascribed to the influence of the general decline brought about by the easy condition of the money market. By 1941 the interest rate, as shown in Table 24, approached onethird that prevailing in the late twenties.
Data on the rates of interest paid by individual insured commercial banks for 1939, 1940 and 1941 reveal considerable variation from bank to bank, but parallel other data indicating a relative shortage or relative plethora of funds in the communities concerned. In general, banks that paid higher rates of interest on time and savings deposits were the banks with higher proportions of assets in the form of loans producing good rates of interest. For the most part, they were small banks or banks in small communities, and they paid relatively high rates of interest because it was worth their while, apparently, to do so in order to attract additional funds in the form of time deposits. Yet despite the higher rates paid on deposits, they were able to show the best rates of earnings.

The lowest rates of interest paid on time and savings deposits were found among banks in the larger cities, where interest rates generally were very low, where high-rate loans represented a very small proportion of total assets, and where cash, reserves with other banks, and low-yield securities represented a large proportion of total assets. ${ }^{10}$ Here free funds in the form of demand deposits

[^5]were plentiful, and there was no incentive to try to attract additional funds. These banks, in spite of their very low rates of interest on deposits, showed the lowest rates of net earnings.

The rate of interest received on loans by consumer instalment financing agencies and commercial banks, and the rate of interest paid by these institutions, represent a cost of money to different segments of the economy. To a certain extent both rates are subject to factors that affect the availability of lendable funds. But during the period under consideration, the effect of easy money conditions upon rates paid by these agencies and by commercial banks was much greater than upon average rates collected from their respective customers, so that the differential in favor of the agencies and banks increased.

The extent of this differential, and the changes in it, are best seen from the ratio of average rate of interest on loans to average rate of interest paid on borrowings. ${ }^{11}$ At the beginning of the period the average rate of interest received on loans represented, in personal finance companies, about 4.5 to 5 times the average rate paid on borrowings. Comparable ratios for the other consumer instalment financing groups were as follows: investment type industrial banks, 3.5 to 4 ; sales finance companies, 2.5 to 3.5 ; non-investment type industrial banking companies, 2.5.

In succeeding years the rapid decrease in the rate of interest paid on borrowings increased these ratios in each type of company, ${ }^{12}$ but the relative relationship between rates collected on consumer loans and rates paid for borrowed funds remained essentially the same from one type of company to another: the largest ratio, about 8 to 15 , shown by the personal finance companies, was followed

[^6]be considered an incidental factor. See the statement in the Annual Report of the FDIC for 1939, p. 54. The distribution of insured commercial banks according to the rate of interest paid on average time and savings deposits, and by the rate of net earnings in 1939, the rate of income on loans, and the ratio of loans to total assets, is presented in Table 146 of the same report, p. 188. The distribution of insured commercial banks according to the rate of interest paid on average time and savings deposits, and by the ratio of time and savings deposits to total deposits, the amount of deposits, and the population of center in which located, is presented in Table 147 of the same report, p. 189. Similar distributions are shown in the Annual Reports for 1940, pp. 200, 202, 203, and 1941, pp. 169-72.
by sales finance companies, 6 to 9 ; insured industrial banks, 5 to 6 ; and credit unions, 2.

Figures covering all national banks indicate a comparable but less drastic change in the ratio of average rate of interest received on loans to average rate of interest paid on time and savings deposits, the commercial banks' chief source of interest-bearing funds. In 1929 the average rate of income on loans was 1.8 times the average rate of interest paid on time and savings deposits, while in 1936 the ratio was 2.6 and by 1941 it had become 3.5, resulting in a striking shift in the importance of interest cost to commercial banks. During 1929-34 interest paid on deposits and borrowings amounted to more than 50 percent of income received from loans, but it amounted to less than 30 percent in 1941.

## INCOME ABSORBED BY INTEREST

From Table 25 it can be seen that in all the specialized agencies, as in commercial banks, the payment of interest exacted a more significant proportion of total income at the beginning than at the end of the period 1929-41. Data on the income tax sample show that among sales finance companies and investment type in dustrial banks interest payments absorbed more than one-fifth of total income in 1929, while as a result of smaller proportions of outstanding debt, they absorbed only 14 percent among noninvestment type industrial banking companies and less than 7 percent among personal finance companies. By 1936, with the decline in interest rates, the burden of interest payments had lessened in all the agencies except personal finance companies.

Despite the increase in proportion of borrowings and the decrease in rate of total income on loans, the force of the decline in interest rates on borrowings was so great in the sales finance companies that between 1929 and 1936 the proportion of total income absorbed by interest payments was reduced to nearly half in the local companies, and to about one-fourth in the national and regional companies. In subsequent years it continued to decline for the smaller sample of local companies, and although it increased somewhat for the regionals and nationals, by 1941 it had returned to the 1936 level.

For the income tax sample of personal finance companies the portion of total income absorbed by interest payments was higher
TABLE 25
Interest Payments of Selegted Samples of Consumer Instalment Finanging Agencies and Commercial Banks in Percent of Total Income, 1929-41a

| Sample | 1929 | 1930 | 1937 | 1932 | 1933 | 7934 | 1935 | 1936 | 1937 | 7938 | 1939 | 1940 | 1941 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales finance companies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 to 3 national ${ }^{\text {b }}$ | 32.8\% | 25.1\% | 19.3\% | 20.6\% | 9.8\% | 9.3\% | 8.2\% | 9.4\% | 12.5\% | 15.7\% | 12.2\% | 10.9\% | 9.5\% |
| 2 to 4 regional ${ }^{\text {b }}$ | 29.6 | 23.9 | 20.0 | 20.3 | 14.0 | 10.6 | 7.7 | 6.9 | 8.9 | 8.4 | 7.4 | 8.6 | 10.2 |
| 9 to 32 local $^{\text {b }}$ | 25.6 | 23.9 | 24.2 | 22.1 | 15.8 | 18.2 | 15.3 | 14.2 | 13.8 | 13.4 | 11.7 | 11.8 | 11.3 |
| 202 local ${ }^{\text {c }}$ | 20.8 | . . | . . | . . | 13.3 | . . | . . | 11.6 | . . | . . | . . | . . | . . |
| Personal finance companies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 nationald | . | 6.0 | 7.2 | 6.2 | 4.3 | 3.6 | 2.3 | 2.2 | 2.5 | 2.2 | 2.5 | 2.9 | 3.3 |
| 2 to 5 regional ${ }^{\text {d }}$ | 9.3 | 6.3 | 13.8 | 9.7 | 5.3 | 6.7 | 5.6 | 4.9 | 3.9 | 3.8 | 3.4 | 3.4 | 3.5 |
| 5 to 7 locald ${ }^{\text {d }}$ | . | . . | . . | .. | . | 4.4 | 5.8 | 3.2 | 5.2 | 5.5 | 5.0 | 5.5 | 5.4 |
| 153 local ${ }^{\text {e }}$ | 6.6 | - | . | - | 4.8 | . . | . . | 7.6 | . . | . . | . . | .. | . . |
| 79 non-invest. type indust. bkg. cos. ${ }^{\circ}$ | 13.9 | $\cdots$ | $\cdots$ | . | 10.4 |  | $\cdots$ | 10.2 | . | $\cdots$ | $\cdots$ | -• | $\ldots$ |
| Invest. type indust. banks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 56 noninsured ${ }^{\text {c }}$ | 20.9 | -• | - | . | 20.4 | . | $\cdots$ | 17.2 | . | $\cdots$ | . | . | . |
| 6 largest insured ${ }^{\text {e }}$ | . . | . | . | . | . . | 26.5 | 21.7 | 19.4 | 18.6 | 16.9 | 16.5 | 16.3 | 14.8 |
| All other insured ${ }^{\text {e }}$ | . . | - | . . | . | . | 15.6 | 14.9 | 13.6 | 14.0 | 13.6 | 13.2 | 13.1 | 13.3 |
| 37 insured ${ }^{\text {c }}$ | 22.6 | $\cdots$ | - | $\cdots$ | 19.8 | . . | . . | 13.9 | . . | . . | . | . . | . . |
| Credit unions |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All reporting federal credit unions ${ }^{f}$ | - | $\cdots$ | -• | - | -• | - | 1.1 | 1.0 | 1.1 | 1.3 | 1.1 | 1.0 | . 9 |
| Commercial banks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All national bankss | 34.7 | 35.8 | -33.8 | 32.0 | 26.3 | 21.8 | 19.1 | 16.2 | 15.1 | 14.6 | 13.5 | 12.2 | 10.7 |
| All insured banks ${ }^{\text {e }}$ | . . | . . | . | . . | . . | 20.4 | 17.8 | 15.3 | 14.5 | 14.6 | 13.4 | 12.3 | 11.0 |

in 1936 than before the depression, due to the increase in proportion of borrowings and the continued high rate of interest on them. But for the national or regional companies, whose rate of interest paid on borrowings fell off sharply after 1929, there was a marked drop in the amount of total income absorbed by interest expense; after 1937 it showed no material change.

The very low proportion of borrowings of federal credit unions accounts for absorption of only about 1 percent of those organizations' total income by interest expense in 1935-41, the lowest figure for any type of agency. For the insured industrial banks this proportion decreased gradually from year to year after 1934, with the decrease in the rate of interest paid on deposits.

More than one-third of the total income of commercial banks was required to meet interest payments in 1929, a substantially higher proportion than was generally required in any of the specialized agencies. It began to decline, however, in 1932, and thereafter its fall was very rapid, following the prohibition of interest payments on demand deposits and regulation of interest rates on time and savings deposits. ${ }^{13}$

By 1941 only about one-tenth of the total income of commercial banks was absorbed by interest payments, a figure about equal to that of sales finance companies and somewhat lower than that of insured industrial banks. The downward trend in this proportion was due almost entirely to the decline in interest rates paid on ${ }^{18}$ See footnote 9, above.
footnotes' to table 25
a 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.
${ }^{\text {d }}$ 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.
${ }^{\text {e }}$ Based on data from Federal Deposit Insurance Corporation. Interest payments include all interest reported paid on time and savings deposits, postal saving deposits and borrowed money. Cash depositories and banks in this study designated as insured industrial banks are included with all insured commercial banks.
${ }^{\text { }}$ Based on data from U. S. Farm Credit Administration, Division of Finance and Accounts.
${ }^{\mathrm{g}}$ Based on data in Annual Reports of the Comptroller of the Currency. Interest payments include all interest reported paid on time and savings deposits (except time deposits of other banks), postal savings deposits and borrowed money; before 1935 they include, in addition, interest on demand deposits.
deposits, a decline more drastic in commercial than in insured industrial banks.

In general, among companies included in the income tax sample, the larger the company the higher the proportion of total income absorbed by interest cost. Predominant in effecting this relationship was the disposition shown by the larger companies to borrow a higher proportion of funds than the smaller companies. Only among sales finance companies in 1936 was the payment of decisively lower rates of interest by the larger companies a factor strong enough to counteract the influence of heavier borrowing and eliminate all relationship between size of company and the proportion of total income absorbed by interest. ${ }^{14}$

This tendency for larger companies to show higher interest cost in relation to total income was not clear-cut among the smaller samples. After 1930 regional sales finance companies showed a lower proportionate interest cost than the locals, but the national companies moved erratically, exceeding both regionals and locals in some years and falling below both in other years. This lack of a conclusive size-interest cost relationship was due primarily to the fact that differences in the proportion of borrowings in these companies, all borrowers in the open market, were not consistent with scope of operations. Among personal finance companies in the National Credit Office sample the relative burden of interest expense was consistently lower for the national than for the regional companies throughout the period; and after 1936 it was lower for the regionals than for the locals.

## INFLUENCE OF CHARACTER OF LOANS ON THE RATE OF INTEREST PAID ON BORROWINGS

In Chapter 5 it was pointed out that companies receiving higher-

[^7]than-average rates of income from loans sustained higher-thanaverage rates of operating costs, including charge-offs. Similarly, it appears from the data presented in Table 26 that the higher the rate of income received on loans, the higher the rate paid by the company on its own borrowings.

TABLE 26
Interest Payments of Consumer Instalment
Financing Agencies in Percent of Year-End Debt, 1936, by Loan-Income Rates ${ }^{\text {a }}$

| Loan-Income Rates ${ }^{b}$ | Sales Finance Companies | Personal <br> Finance <br> Companies | Industrial Banking Cos. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Non-Invest. Type | Invest. Type |
| Under 8\% | (1.8)\% | (8.0)\% | .6\% | 1.7\% |
| 8-12 | 2.6 | 3.7 | 4.9 | 1.7 |
| 12-16 | 2.2 | 3.5 | 4.8 | 2.4 |
| 16-20 | 3.6 | 4.6 | 4.2 |  |
| 20-24 | 3.5 | 4.5 | 4.8 | \}(3.1) |
| 24-28 | 5.1 | 7.8 | $\}$ (8.5) |  |
| 28-32 | (4.6) | 5.4 | f(8.5) |  |
| 32-36 | (5.9) | 7.1 | .. |  |
| 36 or over | (6.8) | 5.7 | . | . |
| all companies | 2.7\% | 5.8\% | 4.7\% | 1.8\% |
| Number of companies | 202 | 153 | 79 | 93 |

${ }^{2}$ Based on tabulations prepared by the Income Tax Study. Parentheses indicate groups containing 10 companies or fewer.
${ }^{5}$ Total income (composed predominantly of loan income) in percent of total yearend loans outstanding. Each level is inclusive of the lower limit and exclusive of the upper.

This positive relationship between rate of income on loans and rate of interest on borrowings probably derives from the willingness of companies with a large proportion of loans that produce high rates of income to pay high rates to obtain additional funds. ${ }^{15}$ It may also be due in some cases to the borrowing of funds, at higher cost, from sources closely allied to the management, and in others to the prejudice in some quarters against institutions engaged in high-rate lending.

The relation of rate of income on loans to rate of interest on borrowings was most evident among sales finance companies, but it was fairly clear, though with more exceptions, among personal ${ }^{15}$ This was pointed out above, with respect to insured banks.
finance companies. Among industrial banking companies the apparent relationship was based on so few groups that it would be considered inconclusive in the absence of proof of a similar relationship in the other agencies.

The burden of interest payments, however, did not increase with increases in the rate of income from loans. The reason for this is that, just as in the case of the rate of operating costs, the rate of interest paid on borrowings, while higher among the higher income.rate groups, was not nearly so much higher as the rate of income. In addition, the companies with a higher-than-average rate of total income generally showed a smaller proportion of borrowings. Thus the interest payments of the higher loan-income rate companies accounted for only a portion of the higher rates received, and did not absorb higher proportions of total income.


[^0]:    ${ }^{4}$ Too much emphasis should not be placed upon the year-to-year fluctuations in the rate of interest as computed for these companies, for the degree of representativeness may vary from year to year. See Appendix A for a discussion of how the ratios may be influenced by the asset and liability figures that have been used as representative of average figures. In regard to the companies included in the income tax sample, the year-end borrowings used as the base may in a great many cases have been materially below the averages for the year, as a result of the pressure under which these companies were placed to reduce borrowings during the early years of the 1930's. A counteracting influence may also have affected the ratios: the nonpayment of interest due during the year-by companies whose income tax was reported on a cash basis-resulted in an indicated reduction in the computed rates which cannot be distinguished from an actual reduction in the average contractual rates.

[^1]:    income tax sample, which probably did not pay interest on their hypothecated deposits. If purity of the data could have been assumed, accounts payable should have been excluded, since it is not the general practice-though instances may exist-to pay interest on accounts payable, particularly with respect to current items. But the existence of large amounts of accounts payable in some instances in the income tax data-in spite of the fact that the amount of accounts payable may be expected to be insignificant in consumer instalment financing companies-appears to justify the assumption that these were improperly reported or tabulated. In the other samples accounts payable were not included.

[^2]:    footnotes to table 24
    ${ }^{\text {a }}$ The number of companies for each year may be found in Appendix Table B-1.
    ${ }^{\mathrm{b}}$ 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 debt at the beginning and end of year.
    ${ }^{\text {c }}$ Based on tabulations prepared by the Income Tax Study. The figures represent interest payments in percent of year-end debt.
    ${ }^{d}$ 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 debt at the beginning and end of year.

    - Based on data from Federal Deposit Insurance Corporation. Interest payments include all interest reported paid on time and savings deposits, postal savings deposits and borrowed money. Figures represent interest payments in percent of average of time and savings deposits (including postal savings deposits) 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 time and savings deposits of industrial banks. Cash depositories and banks designated in this study as insured industrial banks are included with all insured commercial banks.
    ${ }^{\text {r }}$ Based on data from U. S. Farm Credit Administration, Division of Finance and Accounts. The figures represent interest payments in percent of year-end debt.
    ${ }^{5}$ Based on data in Annual Reports of the Comptroller of the Currency. Interest payments include all interest reported paid on time and savings deposits (except time deposits of other banks), postal savings deposits and borrowed money. Figures represent interest payments in percent of average of time and savings deposits (including postal savings deposits) for call dates during the year.

[^3]:    ${ }^{5}$ Although these computed rates may be influenced by the nature of the data, the distribution of the individual companies included supports the representativeness of the average. Examination of the individual personal finance companies reveals that the rate of interest payments on year-end debt is meaningless in a number of instances, but that these are not sufficiently important to bias the results; the rate is therefore reasonably representative. In several instances the amount of interest paid during the year exceeded the debt outstanding at the end of the year, and in several no debt was outstanding at the end of the year. Repayment of all or of a large proportion of the debt outstanding at the beginning of the year is the most reasonable explanation for such cases, although some of the institutions concerned may have kept their books on a cash basis, and made payments during the year which covered interest for a number of years.
    Conversely, there were a number of instances in which debt was reported at the end of the year, but no interest payments during the year; these cases could result from the original issuance of interest-bearing obligations during the year, on which no interest was paid or accrued, or from a failure to pay or to accrue interest on debt that had been outstanding throughout the year. Since all of the companies concerned were small, with total assets of less than $\$ 100,000$, it is possible that holders of the stock and of the debt obligations were identical, and that no interest was actually paid.
    ${ }^{6}$ The much lower rates shown for 1935 and 1936 are believed to represent payment of interest for only a portion of those years, a situation resulting in part from the rapid growth in number of federal credit unions at that time.

[^4]:    ${ }^{7}$ It must be recognized that the rate of interest paid on deposits by industrial and commercial banks does not represent a true comparison with the rate of interest paid on borrowings by the other types of consumer instalment financing agencies, because a portion, or all, of the cost of running the time and savings deposit department-rent, light, heat, and personnel-should properly be considered a cost of borrowing. Figures of departmental costs vary greatly, depending upon the method of the individual investigator. Some indication of the magnitude of these costs may be derived, however, from figures covering 83 Massachusetts banks for 1937, which showed the following savings department expenses, in percent of time and savings deposits: salaries, 0.22 percent; advertising, 0.01 percent; operating expenses, 0.16 percent; occupancy expenses, 0.10 percent; and total expenses, 0.49 percent (Driscoll, Millet \& Company, Supplementary Report on Survey of Commercial Banks in Massachusetts for the Year 1938, Philadelphia).

[^5]:    ${ }^{8}$ The difference in the rates paid by the insured and the noninsured investment type industrial banks can probably be attributed to the added safety resulting from the insurance of deposits by the Federal Deposit Insurance Corporation.
    ${ }^{9}$ This act prohibited the payment of interest on demand deposits, with certain minor exceptions, and gave the Board of Governors of the Federal Reserve System power to limit the rates of interest paid on time and savings deposits by national and state banks that were members of the Federal Reserve System. The same power over insured state banks not members of the Federal Reserve System was granted to the Board of Directors of the Federal Deposit Insurance Corporation by the Banking Act of 1935.
    ${ }^{10}$ The regulation of interest on deposits by clearing house agreements in the larger centers, and the effective absence of such agreements in the smaller centers, may

[^6]:    ${ }^{11}$ See Appendix Table B-14.
    ${ }^{12}$ It should not be overlooked that the rates paid by the customers of these companies cover a materially greater element of service than is inherent in the rates paid for the larger amounts borrowed by the companies.

[^7]:    ${ }^{14}$ In 1929 and 1933 the positive relationship between the size of sales finance companies and the proportion of total income absorbed by interest was reasonably consistent, and resulted from the lower rate of gross income and the higher proportion of borrowings shown by the larger companies. Personal finance companies and non-investment type industrial banking companies also showed a positive relationship between size of company and the proportion of total income absorbed by interest cost, but with varying degrees of regularity in each year. The greatest regularity for personal finance companies was shown in 1936; in each of the years the higher proportion of borrowings shown by the larger companies was the predominant influence upon the importance of interest as a cost-component. Investment type industrial banks showed a very pronounced relationship in 1933 and 1936; in 1929 it was less regular.

