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Volume Title: Term Lending to Business

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Volume Publisher: UMI

Volume ISBN: 0-870-14129-5

Volume URL: <http://www.nber.org/books/jaco42-1>

Publication Date: 1942

Chapter Title: 6. Interest Rates And Costs In Term Lending

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Chapter URL: <http://www.nber.org/chapters/c5755>

Chapter pages in book: (p. 102 - 112)

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Interest Rates and Costs in Term Lending

TERM LOANS OF COMMERCIAL banks have carried interest rates that were much lower, on the average, than those charged by Federal Reserve banks and the Reconstruction Finance Corporation for medium-term business credit. These rates have had a greater range as between loans made at any one time and have varied to a greater extent through time. Commercial bank charges have been more responsive than those of the public lending agencies to differences in financial strength of borrowers, size of loans, term of loans, and changing conditions in the money market.

Interest Rates Charged for Term Loans

The percentages of the number and amount of a broad sample of commercial bank term loans made in large and medium-sized cities at different rates of interest are given in Table 13.¹ During the three-year period, March 1939-March 1942, a larger *number* of loans were made at 5 to 6 percent rates than at any other level of interest rates. Loans at these rates were made for the most part in southern and western cities and the amount of bank term credit comprised by these loans were negligible, never as much as 7 percent and generally less than 2 percent of the total. Over the whole

¹ Since 1939, the Board of Governors of the Federal Reserve System has been collecting quarterly data on the number and amount of term loans made at different interest rates by commercial banks located in 19 leading cities. Data cover loans made during the first half of the months of March, June, September and December, excepting data for March 1939 which refer to the second half of the month. During the reporting periods they included 4,440 loans whose aggregate original amount was \$522 million, and may be regarded as representative of term loan rates during these years in medium-sized and large cities. See *Federal Reserve Bulletin* (November 1939) pp. 963-67.

Table 13—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF TERM LOANS MADE AT DIFFERENT RATES OF INTEREST BY COMMERCIAL BANKS IN 19 CITIES DURING SELECTED PERIODS FROM MARCH 16, 1939 THROUGH MARCH 15, 1942^a

Interest Rate Per Annum ^b	1939			1940			1941			1942			
	Mar. 16-31	June 1-15	Sept. 1-15	Dec. 1-15	Mar. 1-15	June 1-15	Sept. 1-15	Dec. 1-15	Mar. 1-15	June 1-15	Sept. 1-15	Dec. 1-15	Mar. 1-15
	NUMBER OF LOANS MADE												
1-2 percent	.6	..	6.4	.4	1.9	8.6	11.9	6.6	2.1	8.8	5.3	7.9	7.1
2-3 percent	7.9	5.1	8.8	14.2	5.0	24.0	9.0	20.2	7.8	8.8	15.0	15.2	7.8
3-4 percent	16.9	11.4	12.0	24.9	23.2	12.9	11.9	11.8	5.0	14.0	7.1	12.4	6.6
4-5 percent	21.2	22.9	11.2	14.2	23.2	14.6	28.3	13.2	3.1	11.1	12.8	6.6	6.9
5-6 percent	19.7	34.3	30.6	17.6	25.5	32.6	27.0	28.9	13.6	36.2	46.1	34.9	23.8
6-7 percent	24.1	3.4	20.6	13.7	18.1	5.6	11.5	18.4	65.1	19.9	4.0	18.1	40.5
7 percent and over	9.6	22.9	10.4	15.0	3.1	1.7	.4	.9	3.3	1.2	9.7	4.9	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	AMOUNT OF LOANS MADE												
1-2 percent	1.0	..	26.0	.5	12.1	27.7	85.5	18.6	3.4	40.3	49.6	58.9	35.4
2-3 percent	37.1	17.2	57.2	30.3	53.6	28.8	4.4	66.4	81.9	16.8	25.1	18.6	15.3
3-4 percent	45.5	67.5	15.2	36.6	26.7	36.7	7.8	11.2	11.0	36.0	10.1	19.1	8.5
4-5 percent	15.2	10.1	1.0	24.9	5.9	5.3	2.2	2.0	2.3	4.6	5.3	1.2	35.1
5-6 percent	.5	4.3	.4	6.9	1.1	1.4	.1	1.4	1.1	1.4	6.8	2.1	5.1
6-7 percent	.6	.8	.2	.7	.5	..	..	.4	.3	.8	3.0	.1	.2
7 percent and over	.1	.1	..	.1	.1	.1	..	..	.1	.1	.1	.1	.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a Computed from a special tabulation furnished by the Board of Governors of the Federal Reserve System.

^b No loans made at less than 1 percent. ^c Less than .05 percent.

period the largest *amount* of bank term credit has been accounted for by loans with rates of 2 to 4 percent. No loans were made at less than 1 percent interest, and a few loans have carried charges exceeding 7 percent. There is evidence of a softening of rates during the third reporting period of 1939 and the first three periods of 1940. Some stiffening in rate is indicated during the first half of 1941 and again in the first period of 1942 after an easing of rates during the latter part of 1941. These changes in rates are also revealed by changes in the weighted average of all bank term loan interest rates as depicted in Chart IV. The rather sharp short-run fluctuations in the average term loan rate reflect changes in the size of loans, term of loans, and credit ratings of borrowers through time, as well as changes in money market conditions.

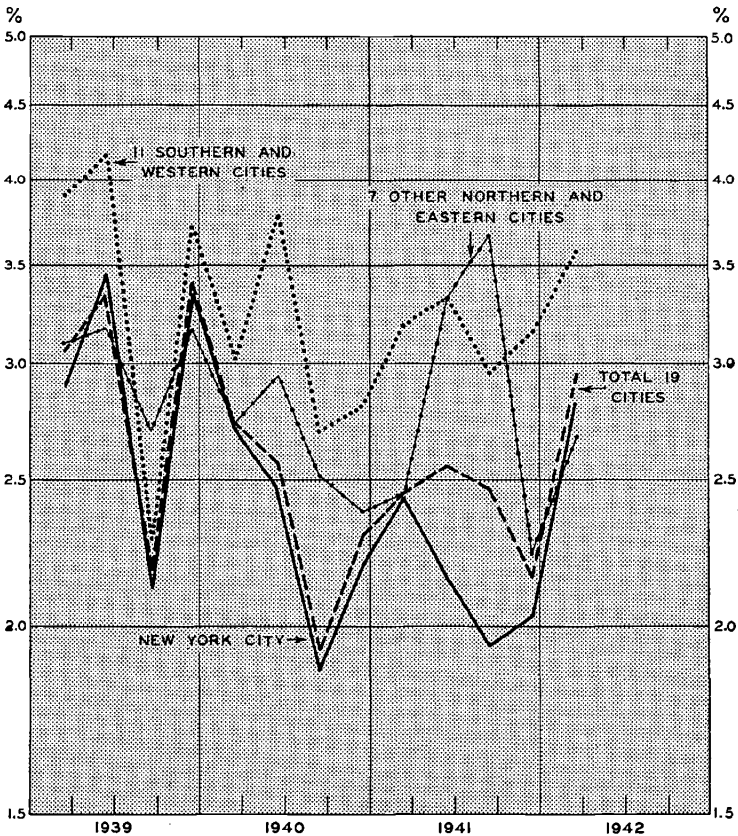
There is a high degree of inverse correlation between the size of commercial bank term loans and the interest rates charged; small loans carry high rates, and conversely. This is clearly revealed by the following tabulation of the average size of the loans included in Table 13 that were made at different interest rates, and the percentages of the total number and amount of loans made at each rate:²

<i>Interest Rate</i>	<i>Number of Loans</i>	<i>Amount of Loans</i>	<i>Average Size of Loans</i>
1-2%	5.4%	32.3%	\$701,400
2-3	11.1	35.9	379,000
3-4	11.4	21.3	221,500
4-5	11.9	7.6	75,200
5-6	28.1	2.3	9,500
6-7	26.0	.5	2,200
7 and over	6.1	.1	1,600

The substantial "fixed" costs of making a credit investigation and administering a term loan, irrespective of its size, together with the normally larger risks of lending relatively small amounts to smaller business enterprises, account for this inverse correlation between size of loan and interest rate.

² Data furnished by the Board of Governors of the Federal Reserve System.

INTEREST RATES PER ANNUM CHARGED ON TERM LOANS
TO BUSINESS BY COMMERCIAL BANKS IN 19 CITIES,
BY SELECTED PERIODS, 1939-42[©]



© Data taken from tabulations of Board of Governors
of the Federal Reserve System.
Rates are weighted averages.

The rate charged a given concern by a commercial bank for a medium-term loan is normally somewhat higher than the rate charged on a short-term loan to the same enterprise. Yet the differential has been surprisingly small in many instances. Some businesses, particularly large and well-established corporations, have been able to negotiate bank term credit at astonishingly low rates. More than 85 percent of the term credit extended during the first half of September 1940 by the banks whose loans are included in Table 13 carried rates of 1 to 2 percent per annum. However, this represents an irregularity in the market and reflects a few large loans made during that period at especially low rates.

The effective interest rates at which medium-term bonds and notes have been purchased privately from issuers by life insurance companies have borne a strong resemblance to rates charged for large term loans by commercial banks. Table 14 shows the percentages of all medium-term debt securities purchased annually during 1937-40 by five leading insurance companies and held at the end of 1940, distributed according to the interest rate yielded to maturity. A large proportion of

Table 14—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF MEDIUM-TERM ISSUES PRIVATELY PURCHASED BY 5 LIFE INSURANCE COMPANIES DURING 1937-40 AT DIFFERENT EFFECTIVE RATES OF INTEREST, AND HELD ON DECEMBER 31, 1940^a

<i>Effective Interest Rate</i>	<i>Number of Issues Purchased</i>					<i>Amount of Issues Purchased</i>				
	1937	1938	1939	1940	All Years ^b	1937	1938	1939	1940	All Years ^b
Less than 1 per cent	..	..	..	7.9	3.7	..	..	..	13.9	5.5
1-2 percent	..	..	12.8	12.9	8.3	..	..	18.3	5.1	5.5
2-3 percent	43.5	10.3	20.5	46.5	32.8	54.2	31.3	36.9	57.3	44.6
3-4 percent	21.7	65.6	41.1	22.8	33.6	19.0	55.6	30.4	16.6	28.5
4-5 percent	34.8	24.1	25.6	9.9	20.7	26.8	13.1	14.4	7.1	15.7
5 percent and over	..	..	..	..	.9	..	..	..	..	.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a A National Bureau sample of the 5 largest legal reserve life insurance companies domiciled in the United States. Medium-term issues are those having terms at time of acquisition of 15 years or less.

^b Includes issues purchased prior to 1937.

the number and amount of all issues yielded between 2 and 4 percent. Since 1938 only a relatively small amount of these credits yielded 5 percent or more. Only a few issues, purchased during 1940, yielded less than 1 percent per annum, these representing several one-year and two-year notes discounted for national instalment financing companies. During the four-year period there was a tendency for yields of medium-term private placements to fall, paralleling the decline in yields from large bank term loans.

If the data were more numerous and better classified, it would be extremely interesting to compare the yields of bank term loans, medium-term private placements, and public offerings of medium-term corporate bonds and notes, for credits of about equal size extended to corporations of comparable size and credit standing. In view of the rapid expansion in the annual volume of term loans and private placements since 1933, such a comparison would probably show that, on the average, large loans with maturities up to eight or nine years distant could be obtained most cheaply from commercial banks, and credits with terms of about eight to fifteen years could be negotiated to best advantage with life insurance companies.

The great majority of business loans made by the RFC have carried an interest charge of 5 percent per annum, a few loans having been made at 4 to 6 percent. After April 1, 1939, the proportion of loans made at 4 percent increased somewhat. It has evidently not been the policy of the Corporation to vary interest rates in accordance with regional differences or with respect to size of loan, credit rating of borrower or other factors.

Federal Reserve banks, like the RFC, are not restricted in their charges by the legislation authorizing them to make business loans, each bank being free to formulate its own policy. The rates charged by each bank for industrial advances during the period September 1934 to June 1939 ranged within the following limits:³

³ Compiled from *Federal Reserve Bulletin*, various issues.

Federal Reserve Bank of Boston	3½-6%
Federal Reserve Bank of New York	4 -6
Federal Reserve Bank of Philadelphia	4 -6
Federal Reserve Bank of Cleveland	4½-6
Federal Reserve Bank of Richmond	6
Federal Reserve Bank of Atlanta	5 -6
Federal Reserve Bank of Chicago	5 -6
Federal Reserve Bank of St. Louis	5 -5½
Federal Reserve Bank of Minneapolis	6
Federal Reserve Bank of Kansas City	4 -6
Federal Reserve Bank of Dallas	5 -6
Federal Reserve Bank of San Francisco	5 -6

There has been a tendency for the rates charged by each Federal Reserve bank to reflect, at least in part, the prevalent differences between geographical areas in the costs of business credit. Reserve banks located in the New England and North Atlantic areas have granted loans at somewhat lower rates than those in the South, Middle West and Pacific regions. Moreover, the existence of a range of rates for *each* Reserve bank indicates an endeavor to take some account of differences in the size, credit risk and costs of administering different loans. Clearly, the rate structure of Federal Reserve banks more closely resembles that of private agencies than do the rates of the RFC.

Costs of Term Lending

From a functional point of view, the costs incurred by a term lending institution include: (1) outlays for credit investigations preceding the disbursement of loans, (2) interest and other costs of the funds advanced, (3) expenditures on supervision and control of outstanding loans until their maturity, and (4) losses resulting from non-payment of individual loans. The surplus of interest and fee income from term loans over these expenditures constitutes net income from the term lending operation.

Quantitative information is lacking on the costs of making term loans per dollar of funds annually outstanding. No term lending institution has made data available on its costs of extending medium-term credit to business. In fact, few institutions employ a sufficiently detailed cost accounting procedure to determine accurately net income from each type of credit

extended. Even the most elaborate procedure would, in any event, be defective in failing to make provision for the accumulation of reserves against term loan losses, since the amount of such accumulation cannot be estimated until more is known about the repayment record of term loans.

It is fairly clear that the costs of making medium-term business loans per dollar of credit annually outstanding are considerably larger than those incurred in making short-term loans to *similar borrowers*. In the first place, the longer maturities of the loans call for a more elaborate credit investigation. In case collateral security is pledged, there are legal and other costs to be incurred in evaluating and perfecting a lien on the pledged assets. Moreover, term loans often require a continuing analysis of the debtor's progress, including field trips by bank representatives to the borrower's place of business. Finally, and apart from all these costs of loan administration, the more distant maturities of medium-term loans require the lender to assume greater risks, for which higher compensation is in order. The amount of the cost differential between medium-term and short-term lending of similar sums to the same borrower cannot be stated precisely or in general terms. It will depend mainly upon the size of the loan, the credit rating of the borrower, and the term of the loan.

It is also evident that a substantial part of the out-of-pocket costs of making and administering a term loan are fixed and invariable, whatever the amount of the loan. Although a somewhat more elaborate and costly credit investigation is normally made in passing upon an application for a large term loan, much the same routine is followed for the small loan. As a result, the costs of making small loans, per dollar of credit outstanding per annum, are substantially higher than is the case with large loans. For this reason, many banks place minimum limits upon the size of loans they will make, the most frequent minima being \$50,000 or \$100,000. The experience of the RFC shows that relatively large expenses are incurred in making small term loans to business concerns. It has been authoritatively stated that the business loans of the

Corporation take approximately two-thirds of the time of the executives and the board of directors,⁴ although such loans constituted only 8 percent of total RFC loans to all non-governmental institutions outstanding at the end of 1940.⁵ If all expenses of the Corporation are allocable between types of loans in the same ratio as the time of the executives and the board, the costs of making business loans would be about eight times those of making all other nongovernmental loans, per dollar of credit outstanding. The annual administrative expenses of the RFC have been placed at about 1 percent of *all* outstanding loans.⁶

Profitability of Term Lending

Largely because of the inadequacy of information concerning costs of term lending, nothing definitive can be said regarding the profitability of term lending to commercial banks. The remarkable rate of growth in bank term loan volume since 1933 might be considered to establish a presumption of profitability. The prevailing view of commercial bankers is that term loans have formed a comparatively lucrative outlet for idle cash. The excellent record of these credits up to the middle of 1941, a record of negligible losses, defaults, or forced rearrangements of amortization provisions, undoubtedly supports this attitude.

However, the evidence is not yet conclusive. Until it can be shown that interest and fee income from term loans has exceeded all of the costs of making and administering them, including losses, by amounts sufficient to produce larger net yields than have been afforded by other banking assets carry-

⁴ See U. S. Senate Committee on Banking and Currency, *Business Loans by Federal Reserve Banks*, p. 49, for testimony of Jesse H. Jones, Chairman of the Reconstruction Finance Corporation.

⁵ These include loans to banks and trust companies, building and loan associations, insurance companies, mortgage loan companies, agricultural financing institutions, railroads, business enterprises, national defense business concerns, and mining, milling and smelting companies. See Reconstruction Finance Corporation, *Quarterly Report*, Fourth Quarter of 1940, pp. 7-13.

⁶ See U. S. Senate Committee on Banking and Currency, *op. cit.*, p. 50.

ing equal risks, relative profitability is not established. Thoughtful bankers recognize that term loans have not yet passed the acid test of a severe and protracted depression. In addition, the practice of banks not to accumulate out of interest income special reserves against term loan losses may, in some cases, have tended to exaggerate the net income term loans are believed to produce. While the risks assumed by commercial banks in making term loans have been materially smaller than those carried by loans of the RFC and Federal Reserve banks, the weighted average interest rate charge for term loans by commercial banks has also been much smaller than that charged by the public agencies.

The evidence points to a probable ultimate loss on the business loans of the RFC, considered as a group. The Chairman of the Corporation has said that the percentage of loss to volume of loans disbursed would probably be greater for business loans than for any other class of credit extended by the RFC.⁷ At the middle of 1940, he estimated this loss ratio at 10 percent of loan volume. Considering this loss in combination with the comparatively large costs of administering RFC business loans, to which reference has been made previously, it is highly improbable that interest income will cover all of the costs. Clearly, commercial banks or other private lending institutions could not profitably have made the business loans of the RFC, at the charges imposed by that agency.

It also appears probable that the industrial advances of the Federal Reserve banks, taken as a group, will not produce any considerable net income, although particular banks appear to have earned a satisfactory return on their direct business loan operations. The Chairman of the Board of Governors of the Federal Reserve System stated at the middle of 1940:⁸

⁷ See Reconstruction Finance Corporation, *op. cit.*, p. 11, and U. S. Senate Committee on Banking and Currency, *op. cit.*, p. 49. Although national defense activity since June of 1940 improved the financial condition of many RFC borrowers, it is likely that many others, unable to get defense orders, or suffering from rising labor costs and shortages of raw materials, have suffered further impairment of financial position.

⁸ See U. S. Senate Committee on Banking and Currency, *op. cit.*, p. 51.

. . . On the basis of information now available, it would appear that for the Federal Reserve banks as a whole the earnings on industrial advances and commitments will approximately offset the expenses and losses incurred in connection with such loans.⁹

While the profit-and-loss record of the Federal Reserve bank business credits is thus indicated to be somewhat more favorable than that of the RFC business loans, private financing agencies evidently could not have earned as much by making the Reserve bank loans as by investing their funds in other assets.

Congress intended that the public agencies should make business loans involving greater risks than private institutions were able to assume. Furthermore, the data show that the medium-term business credits extended by the RFC were fraught with somewhat larger uncertainties concerning repayment than those of the Federal Reserve banks. Congress assigned the RFC a more difficult task when it placed no restriction on term of loans and gave much greater latitude in use of funds by borrowers from the RFC. The business credits granted by both of these public agencies have undoubtedly produced broad social benefits, which must be weighed in determining the economic value of their business lending operations. An evaluation of these benefits is beyond the scope of the present investigation.

⁹ This judgment is supported by data made available by the Board of Governors of the Federal Reserve System on the industrial loan program covering operations up to December 31, 1941. During the 7½-year period the Federal Reserve banks had net earnings on industrial loans, in excess of expenses, charge-offs and reserves for losses, of \$500,000. The total volume of advances made up to the end of 1941 was about \$80 million; commitments to make advances which were still outstanding at the end of 1941 or on which no advance had been made amount to \$73 million.