

REVISION



FEDERAL RESERVE

statistical release

58.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

RAKE RATES ON SHORT-TERM BUSINESS LOANS

April 1, 1967

E.2

FEBRUARY 1-15, 1967

Interest rate (per cent per annum)	Percentage distribution of dollar amount by size of loan					
	All sizes Feb. 1967	\$1,000-\$9,999 Feb. 1967	\$10,000-\$99,999 Feb. 1967	\$100,000-\$499,999 Feb. 1967	\$500,000-\$999,999 Feb. 1967	\$1,000,000 and over Feb. 1967
Less than 5 1/2.....	2.0	0.9	0.8	1.3	2.6	2.4
5 1/2.....	3.1	0.5	0.5	1.3	1.2	5.1
Over 5 1/2 - 5 3/4 inclusive.....	13.7	0.7	3.9	15.4	27.6	31.8
Over 5 3/4 - 6 inclusive.....	23.4	10.1	14.0	24.4	30.6	25.4
Over 6 and less than 6 1/2.....	13.3	22.7	22.8	21.7	15.2	6.7
6 1/2.....	5.9	10.7	11.8	8.2	6.6	3.2
Over 6 1/2 and less than 7.....	7.1	15.6	17.0	10.6	6.2	3.2
7.....	5.0	12.1	10.4	6.5	6.1	2.5
Over 7.....	6.5	26.0	18.9	10.6	5.0	1.7
Total per cent.....	100.0	100.0	100.0	100.0	100.0	100.0
Total - Dollar amount.....	3,790,782	56,204	434,988	858,526	549,219	1,891,845
Total - Number of loans.....	35,900	15,454	14,264	4,478	897	806

Weighted Average Rates

35 centers	6.13	6.73	6.63	6.33	6.13	5.90
New York City	5.86	6.55	6.40	6.08	5.89	5.77
7 other Northeast	6.45	6.75	6.85	6.57	6.39	6.09
8 North Central	6.11	6.80	6.65	6.30	6.17	5.92
7 Southeast	6.08	6.58	6.32	6.06	6.03	5.84
8 Southwest	6.18	6.65	6.50	6.27	6.13	5.95
4 West Coast	6.29	7.26	6.90	6.49	6.27	6.03

1/ Beginning with this release, the Quarterly Survey of Interest Rates on Loans to Business has been revised to incorporate changes in coverage, in the sample of reporting banks, and in the format for publication of the data. In addition, the schedule of reporting periods has been shifted from the last month of each calendar quarter to the middle month of the quarter. For a description of the revised series see the forthcoming April Federal Reserve Bulletin.

* Dollar amounts in thousands.

CORRECTION MAY 1967 BULLETIN Pgs. 721-727.
FILMED following this issue of E.2.

Revision in Quarterly Survey of Interest Rates on Business Loans

The Federal Reserve Quarterly Survey of Interest Rates Charged by Banks on Business Loans has been revised beginning with the first Survey in 1967. While the changes are numerous, they do not alter the basic character of the Survey. Rather, they are generally in the nature of adjustments or refinements, designed to improve the quality of the information collected and published and to take account of shifts in the structure of bank lending to businesses since the last revision of the Survey in 1948. Nevertheless, in the aggregate, they do have a small effect on the averages, and they preclude precise comparability between the old and the revised series. The new data will appear regularly in the BULLETIN beginning with this issue (see page 814) and also in the Board's E.2 press release.

NATURE AND PURPOSE OF CHANGES

The most apparent change is in the schedule of reporting periods, which has been shifted from the last month of each calendar quarter to the middle month of the quarter. Thus, the first survey on the revised basis covers new loans and renewals of outstanding loans made during the first 15 calendar days of February, and subsequent surveys will cover loans made in the first half of May, August, and November. The principal reason for this change in schedule is to avoid distortions in the interest rate averages stemming from the large and variable amounts of borrowing for income tax payments by large firms—which are able to

borrow at lower rates than small firms—in the first or final months of each quarter of the calendar year.

Exclusions. To provide for increased homogeneity in the character of the loans reported, two types of loans are being excluded from the Survey—namely, loans to foreign businesses and business instalment loans. It has been found that these two types of loans were not reported by a substantial number of banks in the old Survey. Moreover, the rates charged on both types of loans are generally higher than those charged on regular business loans to domestic customers, and they are subject to different influences. Thus, the exclusions should result in rate averages that are somewhat lower but more representative of normal business loans than those previously available.

Business instalment loans are more similar to consumer instalment loans than to other commercial and industrial loans made by banks—including regular term loans, which often are repayable in instalments. The typical instalment loan is an intermediate-term credit for financing specific items of machinery or equipment, and it is usually secured by a chattel mortgage on that asset. The effective interest rate is generally almost twice the stated rate, because the stated rate is applied to the original amount of the loan rather than to the declining balance, as in the case of regular business term loans. In large banks, business instalment loans often are administered in a separate instalment loan department along

with automobile and other consumer loans, and the rates and other terms applicable to such loans tend to be influenced by developments in consumer lending.

It is recognized that banks extend a substantial volume of credit to businesses, particularly smaller businesses, through installment loans. Thus, rate information on these loans is needed in order to obtain a complete picture on the structure and level of rates charged on business loans. But in view of the small average size of business installment loans, their special rate characteristics, and their separate administration at respondent banks, the present Survey does not provide an optimum arrangement for collecting rate information on this type of credit.

The exclusion of foreign loans also will help to improve the usefulness of the series as a measure of rates charged on loans to domestic businesses. Because of the greater difficulty in credit review and the frequently larger risk in extending credit to foreign than to domestic customers, these loans tend to have higher rates than domestic loans. Their exclusion will ease the reporting burden on respondent banks because foreign loans often are administered in a separate department of the bank.

Reporting. Modifications have also been made in the reporting of loan maturities. The major change has been to substitute a three-way for a two-way maturity classification. Previously, respondents were asked to indicate for each loan whether it had a maturity of 1 year or less (short-term loan) or more than 1 year (term loan); in the revised Survey, a new category has been added to cover revolving credits. In the past, published rates were based only on the short-term loans, because the term loans reported in each Survey were not sufficiently

numerous or homogeneous to yield analytically useful rate averages.

A separate category for revolving credits will increase the homogeneity of the rate information reported and make the resulting averages more meaningful. These credits, while generally governed by a contract of 1 to 2 years maturity, often are disbursed through short-term notes of, say, 90 days maturity. Thus, the rates charged on these are more similar to those on term loans than to short-term loans. Also, the rates on the individual notes made under revolving credits may not necessarily reflect the current level of rates on new loans. Since revolving credit loans in the previous Survey were reported as short-term loans by some respondents and as term loans by others, the rate information for both categories will be improved by the separation.

In addition, for each ordinary term loan reported, respondents are now being asked to state the maturity date. This information will provide the basis for some analysis not only of the maturity structure of term loans but also of the relationship between interest rates and loan maturity. A decision regarding possible publication of information on term loan rates is being deferred until the results of several Surveys have been analyzed.

To obtain a somewhat more precise measure than formerly of the interest cost on business loans, the revised Survey requires respondents to indicate whether the interest charge is calculated on a discount basis or accrued on the unpaid balance. Where a discount basis is used, the actual interest cost to the borrower is slightly higher than the stated rate. With the additional information on the method of calculating interest, all rates can be converted to a uniform effective-rate basis. In addition, this information can

be used for observing and analyzing any shifts that might occur, either cyclically or secularly, in the methods banks use in computing interest charges.

Expanded coverage. In keeping with the traditional orientation of the Survey to provide information on interest rates charged by large banks in financial centers, the panel of respondents has been enlarged to reflect changes in the structure of business lending since the previous panel was selected. The number of financial centers covered by the Survey has been raised from 19 to 35 and the number of respondent banks from 66 to 126. In general, financial centers are being included in the Survey if the banking offices in that center had roughly \$150 million or more of business loans outstanding in December 1964. As a rule individual banks in each center were included if their business loans totaled \$40 million or more; there were some exceptions where the volume of loans in the reporting center covered by large respondents was unusually high and the additional small banks would not appreciably influence the averages. About five banks in the old reporting panel fell below the cutoff, and they were dropped from the Survey. Respondents in the revised Survey, as in the previous one, will continue to report information on each loan above prescribed size cutoffs made in the 15-day reporting period except for large branch systems, where sampling is permitted.

This expansion in coverage suggested the desirability of refining the geographic groupings of reporting centers that are used for calculating and publishing the rate averages. Beginning with the February Survey, average rates will be published for six geographic areas (the areas and the reporting centers in the revised Survey are listed

in the Appendix, page 727) instead of three (New York City, other northern and eastern cities, and southern and western cities).

Weighting procedure. In the revised Survey the reported information on interest rates will be converted into averages by using weighting procedures similar to those employed in the old Survey.¹ However, because of significant shifts over the years in the size and area distribution of bank loans to business, the weights derived from the 1946 Survey were no longer appropriate. Moreover, the extensive changes in coverage incorporated in the current revision meant that even if weights derived from recent interest rate Surveys on the old basis were used, they would not be representative.

Accordingly, a new set of fixed weights is to be derived from the revised Survey. Weights to be used in the first three Surveys will be based on the size of loan and area distribution of the amounts of loans reported in the first quarterly Survey. After the fourth Survey is completed, new weights will be derived from the combined data of the first four Surveys, and these will be used to revise data for those Surveys and in compiling the series for the next 4 years. At the end of this 5-year period, it is planned that the weighting system will be reviewed and any necessary revisions will be made.

Size categories. Since the last revision of the Survey, the size distribution of bank loans to businesses has shifted substantially upward, particularly toward loans of \$1 million and over. This shift has suggested the desirability of creating additional loan-size categories for publishing information on rates and volume of loans reported. The availability of additional size-of-loan detail also should help to pinpoint the rate effects

¹ See Federal Reserve BULLETIN, March 1949, pp. 234 and 235.

of fluctuations from quarter to quarter in the volume of loans reported, which often are substantial in the larger loan categories. Accordingly, instead of the two major groupings above \$100,000 used in the old Survey (\$100,000-199,999 and \$200,000 and over), the revised Survey has three (\$100,000-499,999, \$500,000-999,999, and \$1,000,000 and over).

The BULLETIN table will show not only the interest rate averages in each loan-size category, as previously, but also the percentage distribution of the dollar amount of loans reported at each rate or in each rate range. This information previously has been available only in the E.2 press release.

EFFECT OF CHANGES

Expansion of the sample has increased both the number and the volume of loans on which rate information is reported; for the number the increase was substantial. In February the 126 respondents in the new Survey reported information on nearly 36,000 individual short-term loans. This was 74 per cent more than the number reported by the 66 banks in the old Survey that were retained in the new sample, as shown in Table 1. The increase in dollar amount of loans reported by all respondents was 28

per cent larger than the volume reported by the 66 respondents in the old Survey; this smaller increase reflects the fact that the new respondents generally are smaller.

Because the new Survey incorporates changes in both concept and sample, with no provision for complete one-time reporting on both the old and the new basis, it is not possible to isolate all of the effects of the revisions on the amount of change in short-term rates between the Surveys in December and in February. However, it has been possible to segregate the data reported in February by the 66 banks in the old Survey that are retained for the new Survey and to tabulate data for these banks separately. These tabulations provide the basis for determining the rate effects for the three revisions in which such effects can be measured—namely, changes in the sample of reporting banks, in the method of calculating the effective rate for discounted loans, and in the weights for size of loan and geographic area used in calculating the rate averages. The net effects on the short-term rate averages of the remaining changes—exclusion of foreign, business instalment, and revolving credit loans and change in timing of the Survey—cannot be ascertained. The exclusion of foreign and business instalment loans

TABLE 1

COMPARISON OF SHORT-TERM BUSINESS LOANS REPORTED BY OLD AND NEW SAMPLES OF RESPONDENT BANKS, FEBRUARY 1-15, 1967

(Amounts are shown in thousands of dollars)

Area	Amount				Number			
	Old sample	New sample	Increase	Percentage increase	Old sample	New sample	Increase	Percentage increase
All centers	\$2,969,100	\$3,770,782	\$821,682	27.7	20,594	35,960	15,366	74.3
New York City	841,109	907,419	66,310	7.9	2,568	2,760	212	8.3
Other Northeast	398,001	616,143	218,142	54.8	5,140	11,089	5,949	115.7
North central	1,058,717	1,231,976	173,259	16.4	4,539	7,229	2,690	59.3
Southeast	143,812	252,110	108,298	75.3	3,526	5,434	1,908	54.1
Southwest	299,759	545,574	245,815	82.0	2,817	7,064	4,247	150.8
West coast	227,702	237,560	9,858	4.3	2,004	2,304	300	15.0

TABLE 2
RATES ON SHORT-TERM BUSINESS LOANS REPORTED BY OLD AND NEW SAMPLES OF RESPONDENT BANKS, FEBRUARY 1-15, 1967
 (Weighted averages; per cent per annum)

Area	All sizes		Size of loan (in thousands of dollars)									
	New sample	Old sample	1-9		10-99		100-499		500-999		1,000 and over	
			New	Old	New	Old	New	Old	New	Old	New	Old
All centers.....	6.13	6.08	6.73	6.81	6.63	6.68	6.33	6.32	6.13	6.09	5.90	5.88
New York City.....	5.86	5.85	6.55	6.55	6.49	6.48	6.08	6.07	5.89	5.86	5.77	5.76
Other Northeast.....	6.45	6.41	6.75	6.75	6.85	6.81	6.57	6.52	6.39	6.33	6.09	6.07
North central.....	6.11	6.06	6.80	6.72	6.65	6.62	6.39	6.35	6.17	6.14	5.92	5.91
Southeast.....	6.08	6.14	6.58	6.75	6.32	6.45	6.06	6.08	6.03	6.06	5.84	5.82
Southwest.....	6.18	6.17	6.65	6.93	6.50	6.71	6.27	6.29	6.13	6.11	5.95	5.95
West coast.....	6.29	6.27	7.26	7.29	6.90	6.91	6.49	6.49	6.27	6.26	6.03	6.03

NOTE.—All rates are derived in accordance with reporting and processing procedures established for the new Survey. Thus, they exclude foreign and business installment loans and revolving credits and are based on weights derived from the size and area distribution of loans reported in the February Survey.

would tend to lower the averages while the exclusion of revolving credit loans and the shift of the reporting period away from quarterly tax-borrowing months probably would tend to raise them. The net effect of all these changes on the rate averages is likely to be slightly downward.

The net effect of the expansion of the sample of reporting banks was to raise the average rate 5 basis points above the level that would have been obtained from data reported by the old sample of respondents, as shown in Table 2. In the small loan categories, rates reported by the new respondents generally tended to be lower than those reported by respondents in the old Survey; for larger loans, the new respondents charged somewhat higher rates than did the old.

Table 3 summarizes all the measurable effects of the revisions on short-term interest rates, including the effects of expansion of the sample. In this table the algebraic signs of these effects are the opposite of their actual effect on the level of rates. This makes it possible to derive from the rate averages shown by the new Survey, through subtraction, the rate averages that would have been obtained in February had the Survey been

confined to the old sample of banks and the averages calculated on the basis of the old procedures. These adjusted rates are comparable with the data for the Surveys in December and earlier on the old basis—except for the revisions mentioned above for which the rate effects cannot be ascertained.

In all geographic areas except southern and western cities, the net effects of all measurable changes on the over-all rate averages were small. In other words, the upward rate effects from expansion of the sample and the new method for calculating interest on discounted loans were about offset by the downward effects stemming from the revisions in weights, which reflected mainly the increased influence on the averages of the larger loans carrying relatively low interest rates. Within individual loan-size categories, however, the revisions in some cases were substantial. The effects of the change in the method used for calculating the interest charge on discounted loans was much greater in New York City and in other northern and eastern cities than in southern and western cities—reflecting differences in the volume of discounted loans reported. Discounted loans accounted for almost half

the number and one-third the dollar volume of all short-term loans reported by old-Survey respondents in New York City and in other northern and eastern cities compared with less than one-sixth the number and dollar amount in southern and western cities.

TABLE 3
EFFECTS OF SURVEY REVISIONS ON SHORT-TERM INTEREST RATES, FEBRUARY 1-15, 1967
(Per cent per annum)

Rate, and type of adjustment	All sizes	Size of loan (in thousands of dollars)			
		1-9	10-99	100-199	200 and over
All centers:					
Average rate, new Survey.....	6.13	6.73	6.63	6.42	6.01
Adjustments to eliminate measurable effects of revisions—Total.....	-.01	+.02	-.03	-.08	-.04
Expansion of sample.....	-.05	+.08	+.05	-.01	-.03
Change in rate calculation for discounted loans ¹	-.03	-.04	-.04	-.03	-.02
Changes in weights ²	+.07	-.02	-.04	-.04	+.01
Average rate, adjusted ²	6.12	6.75	6.60	6.34	5.97
New York City:					
Average rate, new Survey.....	5.86	6.55	6.49	6.16	5.81
Adjustments to eliminate measurable effects of revisions—Total.....	+.02	-.08	-.07	-.06	-.02
Expansion of sample.....	-.01	-.01	-.01	-.01	-.01
Change in rate calculation for discounted loans ¹	-.04	-.07	-.06	-.05	-.03
Changes in weights ²	+.07				+.02
Average rate, adjusted ²	5.88	6.47	6.42	6.10	5.79
Other northern and eastern cities:					
Average rate, new Survey.....	6.23	6.75	6.76	6.56	6.11
Adjustments to eliminate measurable effects of revisions—Total.....	+.01	-.10	-.06	-.09	+.02
Expansion of sample.....	-.07	-.03	-.02	-.05	-.05
Change in rate calculation for discounted loans ¹	-.03	-.05	-.04	-.04	-.03
Changes in weights ²	+.11	-.02			+.10
Average rate, adjusted ²	6.24	6.65	6.70	6.47	6.13
Southern and western cities:					
Average rate, new Survey.....	6.18	6.72	6.53	6.34	6.05
Adjustments to eliminate measurable effects of revisions—Total.....	+.14	+.20	+.13	+.04	+.06
Expansion of sample.....		+.21	+.15	+.06	
Change in rate calculation for discounted loans ¹	-.02	-.01	-.03	-.02	
Changes in weights ²	+.16	+.01	+.01		+.06
Average rate, adjusted ²	6.32	6.92	6.66	6.38	6.11

¹ Calculated from data reported by 66 banks in the old Survey.
² The adjusted rates are those that would be obtained by processing the February Survey data from the 66 respondents in the old Survey according to the procedures used in the old Survey. These averages

are not entirely comparable with those published for December and earlier periods because of the exclusion of foreign, business installment, and revolving credit loans and the shift in reporting period for which the rate effects cannot be ascertained.

APPENDIX

GEOGRAPHIC AREAS AND REPORTING CENTERS FOR REVISED QUARTERLY INTEREST RATE SURVEY

<i>Geographic area</i>	<i>Reporting center</i>	<i>Geographic area</i>	<i>Reporting center</i>
New York City	New York City	Southeast	Baltimore Richmond Washington, D.C. Charlotte Atlanta New Orleans Nashville
Other Northeast	Boston Hartford and Providence Buffalo Nassau County, N.Y. Rochester Newark Philadelphia	Southwest	St. Louis Louisville Memphis Kansas City Oklahoma City and Tulsa Denver Dallas and Fort Worth Houston
North central	Cleveland Pittsburgh Cincinnati Chicago Detroit Indianapolis Milwaukee Minneapolis and St. Paul	West coast	San Francisco Los Angeles Seattle Portland