Operation of the National and Federal Reserve Banking Systems

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON BANKING AND CURRENCY UNITED STATES SENATE

SEVENTY-FIRST CONGRESS

THIRD SESSION

PURSUANT TO

S. Res. 71

A RESOLUTION TO MAKE A COMPLETE SURVEY OF THE NATIONAL AND FEDERAL RESERVE BANKING SYSTEMS

APPENDIX, PART 6

FEDERAL RESERVE QUESTIONNAIRES

Printed for the use of the Committee on Banking and Currency

UNITED STATES
GOVERNMENT PRINTING OFFICE
34718 WASHINGTON : 1931

COMMITTEE ON BANKING AND CURRENCY

PETER NORBECK, South Dakota, *Chairman.*

LAWRENCE C. PHIPPS, Colorado.
SMITH W. BROOKHART, Iowa.
PHILLIPS LEE GOLDSBOROUGH, Maryland
JOHN G. TOWNSEND, Jr., Delaware.
FREDERIC C. WALCOTT, Connecticut.
JOHN J. BLAINE, Wisconsin.
ROBERT D. CAREY, Wyoming.
JAMES J. DAVIS, Pennsylvania.
DUNCAN U. FLETCHER, Florida.
CARTER GLASS, Virginia.
ROBERT F. WAGNER, New York.
ALBEN W. BARKLEY, Kentucky.
TOM CONNALLY, Texas.
WILLIAM E. BROCK, Tennessee.
ROBERT J. BULKLEY, Ohio.
CAMERON MORRISON, North Carolina.

JULIAN W. BLOUNT, *Clerk.*

SUBCOMMITTEE ON SENATE RESOLUTION 71

CARTER GLASS, Virginia, *Chairman*

PETER NORBECK, South Dakota.
JOHN G. TOWNSEND, Jr., Delaware.
FREDERIC C. WALCOTT, Connecticut.
ROBERT J. BULKLEY, Ohio.

OPERATION OF THE NATIONAL AND FEDERAL RESERVE BANKING SYSTEMS

INQUIRY INTO PRESENT BANKING CONDITIONS—FEDERAL RESERVE POLICY AND PRACTICE

In December, 1930, the subcommittee, pursuant to the intent of Senate Resolution No. 71, which called for an ascertainment of conditions in the Federal reserve and national banking systems, and a complete survey thereof, sent to various banks and bankers throughout the United States a series of questionnaires, numbered from 1 to 12, designed to develop the facts as to certain outstanding features of practice.

Of these questionnaires, Nos. 7, 8, 9, and 10 were addressed to Federal reserve banks. The questionnaires themselves, with the answers thereto, are herewith presented, omitting such matters as were designated by the several banks as having been received from their sources of information, as confidential. Some differences of opinion were expressed by the officers of sundry reserve banks as to the arrangement of the material thus submitted. Since it was not possible to follow the opinions of all upon this matter of arrangement, owing to their conflicting character, effort has been made to present the data in accord with the views of the larger number.

QUESTIONNAIRE No. 7

The Eligibility and Acceptability of Paper

The purpose of the following series of questions is to ascertain whether the provisions of the Federal reserve act, the rulings and regulations of the Federal Reserve Board, the acceptability standards of each Federal reserve bank suffice at present to control credit expansion in the speculative and the investment markets:

CALLING FOR STATEMENTS OF OPINION

1. State the changes, if any, that you would suggest be made (1) in the provisions of the Federal reserve act relative to the type of paper eligible for rediscount, (2) in the rulings and regulations of the Federal Reserve Board relative to the interpretation of these provisions.
2. What credit tests are employed by your institution to determine the acceptability of paper offered for rediscount by member banks?
3. Are acceptability requirements raised in periods when your institution is following restrictive credit policies?
4. In your opinion, do the provisions of the Federal reserve act, the rulings and regulations of the Federal Reserve Board, and the acceptability requirements of your institution set sufficiently high standards for paper that may be rediscounted by member banks?
5. State whether your institution ever required or now requires excess collateral from borrowing member banks.
6. If you regard the eligibility and acceptability requirements relative to paper presented by member banks for rediscount as sufficiently high, what are

the reasons impelling your institution to require excess collateral from member banks?

7. Would it assist in preventing Federal reserve credit from being used for speculative and investment purposes to repeal the provision in the Federal reserve act permitting member banks to borrow on their 15-day promissory notes secured by Government obligations?

8. Should member banks, which are borrowing from Federal reserve banks on their 15-day promissory notes secured by Government obligations, be prohibited from increasing their own collateral security loans? Should this prohibition be extended to member banks securing funds from the reserve bank either through borrowing or rediscounting?

9. Does your institution habitually inquire into the use of the proceeds of the funds extended to member banks? Do your lending policies toward member banks vary according to the composition of the portfolio of the particular member bank? Is your bank examination department of assistance in the formulation of your lending policies?

10. What has been the experience of your institution with the use of "moral suasion" in preventing the funds of borrowing or nonborrowing member banks from being used for speculative or investment purposes as compared with the use of the discount rate or other methods of credit control?

11. To what extent have dealings in Federal funds relieved member banks from the necessity of rediscounting? To what extent have they been resorted to by member banks lacking eligible paper?

CALLING FOR STATISTICAL INFORMATION

12. Append data for the past four years of the amount of paper offered by member banks for rediscount which has been rejected by your institution, grouped according to the reasons prompting the rejection, similar to such tables appearing in the recent annual reports of the Federal Reserve Bank of Dallas.

13. Append a statement of the amount of paper held in your failed banks' account for each month through the past four years.

14. Append on a monthly basis statistics of borrowings grouped by unit banks and by branch banks in your district over the past four years, together with the aggregate resources of the borrowing unit and branch member banks.

Digest of Replies Received from the Different Federal Reserve Banks

QUESTION No. 1.—Relative to changing the provisions of the Federal reserve act regarding the type of paper eligible for rediscount.

With a few exceptions, the Federal reserve banks did not favor changing the provisions of the Federal reserve act relative to paper eligible for discount or the rulings or the regulations of the Federal Reserve Board interpretative of these provisions.

The Chicago Federal Reserve Bank offered two suggestions, to be employed temporarily and only at times of extreme emergencies: (*a*) That the maturity date on otherwise eligible paper be extended from 90 days to six months. Rediscounts of such paper should bear a higher rediscount rate than that prevailing on 90-day paper, and should be allowed only under conditions and circumstances to be established by the regulations of the Federal Reserve Board; (*b*) That the Federal reserve banks be permitted to make loans to member banks not exceeding 90 days on notes secured by bonds which are now acceptable by the Treasury Department as security for war-loan deposits. Such advances would be granted at penalty rates and would not serve as a basis for the issuance of Federal reserve notes.

The Dallas Federal Reserve Bank suggested: (*a*) That landlords' obligations be made eligible for rediscount, and (*b*) that the statutory maturity limit on advances to member banks secured by notes, drafts, bills of exchange, or bankers' acceptances eligible for discount and purchase be increased from 15 to 90 days.

The Philadelphia Federal Reserve Bank suggested that in some instances it might be advisable to grant permission to advance funds to individual member banks in distress against any of their assets. The obligations taken should not be used as security for Federal reserve notes.

The Richmond Federal Reserve Bank suggested that in a national emergency, the existence of which should be determined by the Federal Reserve Board, the reserve banks might be permitted to make advances, secured by high-grade bonds, to banks lacking eligible paper. The paper discounted should not serve as security for Federal reserve notes.

QUESTION No. 2.—Relative to credit tests applied by the Federal reserve banks to paper offered for discount.

Judging from the replies received from the Federal reserve banks, there is apparently considerable variation in the degree to which credit tests are applied to paper offered for rediscount. The financial and income statements of the maker, judged on the basis of the type of business in which he is engaged; and the quality of management of the indorsing member bank receive primary emphasis.

QUESTION No. 3.—Relative to raising acceptability requirements during periods of restrictive credit policies.

The Federal reserve banks, with the exception of Atlanta and Boston, replied that acceptability requirements were not raised during such periods.

QUESTION No. 4.—Relative to the adequacy of eligible paper standards set by the provisions of the Federal reserve act, by the rulings and regulations of the Federal Reserve Board, and by the acceptability requirements of the Federal reserve banks.

The consensus of opinion among the Federal reserve banks is that the present requirements set sufficiently high standards. The thought was expressed that member banks are familiar with the eligibility and acceptability requirements and that to change these would introduce a needless uncertainty.

QUESTION No. 5.—Relative to the requiring of excess collateral.

All Federal reserve banks have at one time or another required excess collateral from member banks in a limited number of individual cases. In recent years the San Francisco Federal Reserve Bank apparently is the only one which does not require or accept excess collateral.

QUESTION No. 6.—Relative to reasons for requiring excess collateral.

The Federal reserve banks cited the following reasons for requiring excess collateral:

1. Nonliquid or weak condition of member-bank portfolio leading to the impaired value of a member bank's indorsement.

2. As a means of forcing the correction of an undesirable situation in the affairs of a member bank. This might be resorted to particularly in the case of too heavy or continuous borrowings on the part of the member institution.

3. A desire to save a distressed member bank when paper offered does not measure up fully to standards of acceptability.

4. The economic conditions in and the character of the business of a particular community.

QUESTION No. 7.—Relative to the repeal of the provision in the Federal reserve act permitting member banks to borrow on their 15-day promissory notes secured by Government obligations as a means of preventing the use of Federal reserve credit for speculative and investment purposes.

All Federal reserve banks expressed themselves as opposed to the repeal of this provision, though five indicated that it might tend toward the reduction of the amount of Federal reserve credit used for speculative and investment purposes.

The reasons given in opposition to the repeal were:

1. Member banks borrowings arise from a loss in deposits or from an increase in loans and are not related to specific transactions. They are resorted to as a means of restoring or maintaining reserves which might be depleted by reason of a variety of different transactions.

2. The convenience on the part of member banks in borrowing against Government obligations.

3. The assistance rendered in strengthening the market for Government obligations.

4. The fact that the repeal of this provision would not in the past have affected the total volume of Federal reserve credit, since, in the aggregate, all banks possessed eligible paper considerably in excess of total borrowings.

5. The fact that in certain communities there is a dearth of eligible paper so that banks there would find themselves discriminated against or embarrassed.

QUESTION No. 8.—Relative to prohibiting member banks from increasing their own security loans when borrowing from the Federal reserve banks on the basis of their 15-day promissory notes secured by Government obligations.

All of the Federal reserve banks expressed themselves as being opposed to this suggestion. The reasons given were that the enactment of such a provision would prevent member banks from engaging in normal and legitimate transactions and from relieving an emergency situation exemplified by the stock market crash of 1929, and would tend to drive banks from membership in the Federal reserve system. The thought was expressed that any abuses in the use of the borrowing or rediscounting privilege could be handled administratively.

QUESTION No. 9.—(*a*) Relative to the practice of inquiring habitually into the use of the proceeds of funds extended member banks.

The Federal Reserve Banks of Chicago, Cleveland, and Minneapolis replied that they did habitually inquire into the use of the proceeds of funds extended member banks.

(*b*) Relative to relation of lending policy to the composition of the portfolio of borrowing institutions.

The Federal Reserve Banks of Chicago and Cleveland replied that their lending policies did vary with the composition of the portfolio of the borrowing banks.

The other reserve banks replied that variations in lending policy were not the usual rule, though in speculative periods close consideration would be given the portfolio of borrowing banks and always such consideration would be given in event the banks were thought to be in an unsound condition.

(*c*) Relative to the assistance rendered by the bank-examination departments in the formulation of lending policies.

Practically all the Federal reserve banks replied that their examination departments and the reports received from the national and State bank examiners were of assistance in determining the value of a member bank's indorsement and the quality of paper offered for rediscount.

The Kansas City Federal Reserve Bank replied that it did not examine national banks and examined State banks only when special circumstances made this desirable.

The St. Louis Federal Reserve Bank replied that the examination department had been of assistance not as to policies but rather as to individual credits.

QUESTION No. 10.—Relative to the experience of the reserve banks with the use of "moral suasion."

"Moral suasion" or direct action has been applied to a varying degree by all Federal reserve banks.

The Federal reserve banks of Atlanta, Chicago, Cleveland, Dallas, Kansas City, and St. Louis, replied that they had applied "moral suasion" to very good effect.

In the opinion of the Federal reserve banks of Boston, New York, and Richmond rate control is preferable to the use of "moral suasion." One reason given was that it is impossible to obtain uniformity in results. Some banks cooperate better than others. Business may be driven from the more to the less cooperative institution.

A general opinion was that rate control is effective in the financial centers, whereas "moral suasion" is required to control the loan policies of banks outside the metropolitan centers.

The St. Louis Federal Reserve Bank replied that use of the discount rate is not practicable in that district, since legal contract rates vary from 6 to 10 per cent.

QUESTION No. 11.—Relative to dealings in Federal funds.

The Federal Reserve Banks of Atlanta, Dallas, Minneapolis, Richmond, and St. Louis reported that dealings in Federal funds in those districts were negligible. In the other Federal reserve districts transactions in Federal funds have taken place to a greater or less extent in the larger centers among banks of high credit standing. Interdistrict dealings in Federal funds of considerable importance were reported.

The Federal reserve banks reported that Federal funds transactions are resorted to not by reason of a deficiency in eligible paper or securities but by reason of differentials prevailing in the Federal funds rate as compared with the rediscount rate.

The Federal Reserve Bank of Chicago stated that such transactions have been beneficial in decreasing the amount of Federal reserve credit that might otherwise go into the market.

With the exception of San Francisco, the Federal reserve banks reported that transactions in Federal funds were of a temporary nature. The San Francisco Reserve Bank stated that member banks there frequently transfer the same amount of Federal funds back and forth between banks in eastern cities for a considerable period of time.

QUESTION No. 12.—Relative to rejection of eligible paper. (See statistical appendix.)

Only five of the Federal reserve banks were able to supply the information called for in the form requested.

The per cent of paper rejected by each Federal reserve bank to that offered came to the following:

Amount of paper rejected in per cent of paper offered

Federal reserve bank of—	1927	1928	1929	1930
Atlanta	(1)	(1)	(1)	(1)
Boston	(2)	(2)	(2)	(2)
Chicago	(3)	(3)	(3)	(3)
Cleveland	(4)	(4)	(4)	3.65
Dallas	9.93	2.09	4.30	8.44
Kansas City	(4)	(4)	(4)	1.00
Minneapolis	(5)	(5)	(5)	(5)
New York	.15	.084	.111	.47
Philadelphia	2.19	1.29	.75	2.24
Richmond	(4)	(4)	(4)	(4)
St. Louis	2.51	3.41	4.45	7.40
San Francisco	(6)	(6)	(6)	(6)

[1] In 1929 and 1930 the Federal Reserve Bank of Atlanta (Atlanta office) rejected $12,144,274.81 of the amount of paper offered; the New Orleans branch through 1927, 1928, 1929, 1930 rejected $17,614.25. (See statistical appendix.)

[2] Estimated very small amount.

[3] Through 1927, 1928, 1929, and 1930 the Federal Reserve Bank of Chicago rejected $20,462,186 of the amount of paper offered. (See statistical appendix.)

[4] Data not available.

[5] Through 1927, 1928, 1929, and 1930 the Federal Reserve Bank of Minneapolis rejected $6,645,314.28 of the amount of paper offered. (See statistical appendix.)

[6] Amount estimated less than 5 per cent.

QUESTION No. 13.—Relative to volume of paper held in failed banks' account. (See statistical appendix.)

Maximum and minimum amount of paper held in failed banks' account in any one month during the past four years

Federal reserve bank of—	Maximum	Minimum
Atlanta	$10,455,533.46 (July, 1929)	$3,405,505.04 (January, 1928).
Boston	$83,800.60 (September, 1928)	(In 38 months of the period no paper was held in the failed banks' account.)
Chicago	$2,900,125.84 (January, 1927)	$276,553.65 (June, 1930).
Cleveland	$100,931.50 (January-May, 1928)	None in 1927, 1929, and 1930.
Dallas	$398,591.18 (February, 1930)	None from June-December, 1929.
Kansas City	$612,010.62 (May 31, 1927)	$64,746.76 (Aug. 31, 1929).
Minneapolis	$1,812,164.98 (January, 1927)	$432,178.44 (January, 1930).
New York	$4,826.58 (Aug. 31, 1930). (See statistical appendix.)	None in 1927, 1928, 1929.
Philadelphia	$43,425.08 (Dec. 31, 1928)	(In 44 months of the period no paper was held in the failed banks' account.)
Richmond	$925,897.93 (Dec 31, 1930)	$236,788.57 (April, 1927).
St. Louis	$12,712,952.28 (Nov. 30, 1930)	$65,807.92 (June 30, 1930).
San Francisco	$1,034,000 (Jan. 20, 1929)	$165,000 (Sept. 10 and 20, 1930).

QUESTION No. 14.—Relative to the volume of branch and unit bank borrowings. (See statistical appendix.)

In the Federal reserve districts of Dallas, Kansas City, and St. Louis branch banking is nonexistent or relatively unimportant.

Data in the form called for was not supplied by the Federal Reserve Bank of Cleveland.

The data reported by the other Federal reserve banks reflected much wider swings in the borrowings of branch member banks than in the case of unit member banks, both in absolute amount and in per cent of total resources.

Since branch banking has reached its most extensive development in the San Francisco reserve district, the following tabulation has been inserted as indicative of the relative dependence of unit and branch banks on the resources of the Federal reserve system.

Classification	1927	1928	1929	1930
UNIT BANKS				
1. Maximum borrowings:				
(a) Amount	$34,650,000 (July 5)	$27,564,000 (Nov. 6)	$44,049,000 (Nov. 5)	$20,817,000 (Jan. 7)
(b) In per cent of resources of borrowing unit banks	4.3	4.8	5.6	3.3
2. Minimum borrowings:				
(a) Amount	$4,337,000 (Dec. 6)	$4,181,000 (Feb. 7)	$22,286,000 (Feb. 5)	$6,000,000 (Dec. 2).
(b) In per cent of resources of borrowing unit banks	2.7	2.9	4.1	2.3
BRANCH BANKS WITH OFFICES IN HEAD OFFICE CITY ONLY				
1. Maximum borrowings:				
(a) Amount	$11,766,000 (July 5)	$15,275,000 (Oct. 2)	$17,515,000 (Oct. 1)	$6,500,000 (May 6)
(b) In per cent of resources of borrowing banks	5.2	4.5	4.4	2.8
2. Minimum borrowings:				
(a) Amount	$110,000 (Sept. 6)	$5,331,000 (Feb. 7)	$3,775,000 (Dec. 3)	[1]
(b) In per cent of resources of borrowing banks	1.1	3.3	1.1	------------
BRANCH BANKS WITH BRANCHES OUTSIDE HEAD OFFICE CITY				
1. Maximum borrowings:				
(a) Amount	$41,500,000 (Dec. 6)	$66,340,000 (Sept. 4)	$52,200,000 (Mar. 5)	$21,293,000 (July 1)
(b) In per cent of resources of borrowing banks	4.0	5.0	4.4	2.3
2. Minimum borrowings:				
(a) Amount	$2,424,000 (June 7)	$19,300,000 (Jan. 3)	$4,250,000 (Jan. 8)	$25,000 (Oct. 7)
(b) In per cent of resources of borrowing banks	0.6	2.2	1.5	2.9

[1] No borrowings in September, November, and December.

The Federal Reserve Bank of Boston included the borrowings of "chain" and "group" banks in the data for branch banks, so that the statistics given present a very complete picture of the relative dependence of unit and group banks on Federal reserve resources. The data reflect a much wider swing in the borrowings of the group than in the borrowings of the unit banks.

Daily average borrowings

Year	Branch banks		Unit banks	
	Maximum	Minimum	Maximum	Minimum
1927	$25,867,000 (December)	$9,148,000 (April)	$17,355,000 (February)	$11,147,000 (September)
1928	57,454,000 (June)	12,462,000 (January)	27,348,000 (June)	10,994,000 (January)
1929	76,388,000 (June)	18,283,000 (December)	28,191,000 (July)	15,708,000 (November)
1930	11,753,000 (January)	3,212,000 (October)	12,803,000 (December)	5,698,000 (October)

Relative to their resources, the branch banks ordinarily borrowed less than did the unit institutions.

Replies Received from the Different Federal Reserve Banks Tabulated by Questions

1. State the changes, if any, that you would suggest be made (1) in the provisions of the Federal reserve act relative to the type of paper eligible for rediscount; (2) in the rulings and regulations of the Federal Reserve Board relative to the interpretation of these provisions.

Atlanta.—The provisions of the Federal reserve act and the rulings and regulations of the Federal Reserve Board relative to the interpretation of those provisions are ample, and no changes are considered necessary.

Boston.—None. Suggestions have been made from time to time relative to the broadening of the Federal reserve act and the regulations of the Federal Reserve Board to include as eligible for rediscount public service corporation paper, finance corporation paper, municipal notes, and various other types of paper, but careful consideration of each change proposed has strengthened in every case the opinion that such liberalization of the act and regulations would be undesirable.

Chicago.—We believe that there should be no departure from the principle of eligibility and the basis of issuance of Federal reserve notes as embodied in the Federal reserve act, excepting in cases of extreme emergency, and then only as a temporary measure.

Without violating such principle, we would suggest for consideration the desirability of increasing the maturity date on otherwise eligible paper from the present restriction of 90 days to a maturity not to exceed six months, such additional latitude to be exercised only under certain circumstances to be established by regulations of the Federal Reserve Board. Such paper of longer maturity should bear a higher rediscount rate than the 90-day paper and should be a basis for the issuance of Federal reserve notes.

In cases of extreme emergency, we would suggest for consideration the advisability of permitting the Federal reserve banks, under regulations to be established by the Federal Reserve Board, to make loans to member banks not exceeding 90 days on notes secured by bonds which are now acceptable by the Treasury Department as security for war-loan deposits, and subject specifically as to their value as collateral to the approval of the lending Federal reserve bank. Such loans should bear a penalty rate of interest and should not be a basis for the issuance of Federal reserve notes.

We would suggest no changes in the rulings and regulations of the Federal Reserve Board excepting such as may be necessary to conform with the above.

Cleveland.—(*a*) We see no present need for any change in the Federal reserve act as to the types of paper eligible for rediscount.

(*b*) The regulations and rulings of the Federal Reserve Board relative to the interpretation of eligible paper are, in our opinion, at the present time practical and sufficiently comprehensive to admit to rediscount all the classes of paper which should be eligible considering the intent and purpose of the Federal reserve act as it relates to rediscounts and loans.

Dallas.—(1) Landlords' obligations, the proceeds of which have been loaned by a landlord to tenants on his farm for the purpose of financing crop production or the carrying of livestock, and which in all other respects comply with eligibility requirements as set forth in section 13 of the Federal reserve act and in Regulation A of the Federal Reserve Board's regulations, should be made eligible for rediscount. We see no difference between the principle involved in this suggestion and that involved in rediscounting factors' paper, which is now eligible for rediscount under section 13 of the Federal reserve act.

We also recommend that the statutory maturity limit now imposed on member banks' promissory notes in favor of Federal reserve banks when secured by such notes, drafts, bills of exchange, or bankers' acceptances as are eligible for rediscount or purchase by Federal reserve banks under the provisions of the Federal reserve act, be increased from 15 days to 90 days.

(2) Rulings and regulations of the Federal Reserve Board should be amended to conform to the above-suggested changes in the Federal reserve act, if and as such changes are adopted. Otherwise, none.

Kansas City.—No changes to suggest. Well-managed banks in this district have an ample supply of eligible paper to enable them to care for all reasonable demands. Emergency situations can be satisfactorily handled as such.

Minneapolis.—We suggest that no changes be made either in the law or in the regulations and rulings of the Federal Reserve Board.

New York.—In our judgment the provisions of the Federal reserve act and the rulings and regulations of the Federal Reserve Board relative to the type of paper eligible for rediscount are satisfactory as they now stand and we have no suggestions in regard to changes designed to control credit expansion in the speculative and the investment markets. In our answers to questions 7 and 8 of this questionnaire we point out in detail why the form of the borrowing from Federal reserve banks (i. e., the type of paper on which member banks borrow) does not affect, and can not be used as a means of controlling, either the specific purposes for which bank credit is used or the total volume of bank credit. By the same reasoning, it is impossible to control credit expansion in the speculative and investment markets by changes in the rules affecting the eligibility of paper.

Philadelphia.—Except as stated below, we do not recommend any changes. Under existing law and regulations there is sufficient paper in the banks, eligible for rediscount, to enable them to secure all the Federal reserve credit that at any time may be required. However, in cases of unusual emergencies of individual banks it might be advisable to allow the Federal reserve bank, of which such bank is a member, to make advances upon any of its assets in order to help the bank over its emergency. The obligations taken by the Federal reserve bank should not be used as security for circulation, and should be liquidated promptly.

Richmond.—For the present, we believe, no changes either in the type of paper eligible for rediscount or in the rulings and regulations of the Federal Reserve Board, relative to the interpretation of these provisions are necessary for the accommodation of the public. Eventually it may be desirable in a national emergency, the existence of which should be determined by the Federal Reserve Board, to take from banks which can not furnish eligible commercial or agricultural paper their notes secured by high-class bonds, such, for instance, as are made eligible investments for savings banks in many States at the present time, such paper not to be eligible as security for Federal reserve notes.

St. Louis.—(1) None. (2) None.

San Francisco.—No changes recommended.

The present law and regulations governing the character of paper a Federal reserve bank may discount have been found adequate and sufficiently flexible to enable the Federal Reserve Bank of San Francisco to extend to member banks applying for accommodation a volume of credit appropriate to the necessities of such banks in meeting seasonal and emergency requirements. No member bank in a satisfactory condition has been obliged to suspend operations or deny deserved credit because it was unable to furnish the Federal Reserve Bank of San Francisco with eligible paper.

2. What credit tests are employed by your institution to determine the acceptability of paper offered for rediscount by member banks?

Atlanta.—On all lines of $500 or more of individuals, firms, or corporations engaged in commercial or industrial businesses financial statements are required. These statements must show a reasonable excess of current assets over current liabilities, a satisfactory ratio of net worth to total liabilities, and a satisfactory ratio of net worth to fixed assets in order to determine capital deficiency borrowings. On all lines of $500 or over of individuals, firms, or corporations engaged in agriculture financial statements are required, and these statements must show a satisfactory ratio of net worth to total liabilities.

The quality of the management of the indorsing member bank likewise receives consideration in judging the credit acceptability of paper submitted by it for rediscount.

Boston.—Detailed current financial statements are required of borrowers or indorsers on all rediscounted notes aggregating $5,000 or more, and occasionally such statements are required when the total rediscounted is even smaller in amount. If a rediscounting bank's capital is less than $50,000 a similar financial statement is required when the paper of a maker or indorser is equal to or in excess of 10 per cent of the bank's capital. Steps are taken to determine, by reference to the borrower's business, financial statement, or otherwise when necessary, whether the proceeds of paper rediscounted were used for an eligible purpose in accordance with the regulations of the Federal Reserve Board. Credit tests applied in handling loans of smaller amounts vary with the condition of the borrowing bank, the total amount of their borrowings, and period of continuous accommodation, the business and record of the individual borrowers as well as the consideration of all information in credit files relative to the borrowing bank and individual borrowers and indorsers obtained from various reports, personal conferences and investigations, replies to inquiries, commercial-agency ratings, newspaper clippings, and other available sources. All financial statements are analyzed and the relation between "quick assets" and "current liabilities" receives first consideration, and attention is also given to the ratio of "total debt" to "net worth." It is rather a general policy not to take under rediscount an amount of paper of any one maker or indorser in excess of the net quick assets shown in the financial statement. Some liberality has been exercised with the paper of textile mills owing to conditions existing in this industry—an allowance of $5 per spindle as potential quick assets being made when the ratio of "quick assets" to "current liabilities" is very low, but this allowance is made only when the physical properties are free and clear of funded indebtedness of every description. And with farmers' statements greater consideration is given to the "net worth" position reflected, as such statements do not as a rule show as liquid a condition as strictly commercial statements owing to the necessity for comparatively large investments in real estate.

Chicago.—In accordance with the regulations of the Federal Reserve Board, satisfactory financial statements are required in connection with all paper accepted for rediscount where the amount involved in the aggregate is $5,000 or over. In many instances where any doubt arises as to the acceptability of the paper, financial statements are required in connection with smaller offerings, down to $1,000 or less.

In addition to the foregoing, good use is made of information which has been accumulated by the credit department of this bank, and the examiners' official reports are carefully searched for any information which may be contained therein with respect to the paper under consideration.

Cleveland.—In considering so-called commercial paper we require a reasonably recent statement of the maker or indorser whose paper is offered. That statement must show a satisfactory condition. In analyzing these statements due consideration is given to the nature of the business, and ratios such as quick assets to current liabilities, worth to debt, worth to fixed, merchandise to receivables, sales to receivables, and sales to merchanadise; all for the purpose of determining liquidity and ability of the borrower to pay in the ordinary conduct of his business.

In the case of agricultural paper a reasonably recent statement of the borrower is required. Such statement must show a reasonably satisfactory condition and indicate that the borrower's paper is based upon current operations and will be liquidated through the usual marketing of his products.

Whether commercial or agricultural paper is offered a statement is required in all cases when the aggregate amount of paper of any one borrower, offered by any bank, is $1,000 or more; also regardless of the type of paper offered due consideration is given to the indorsement of the member bank.

Dallas.—Our tests fall into two general categories: (a) primary tests, which are applied to the paper itself, and (b) secondary tests, which are applied to the conditions and circumstances surrounding the offering. We are sometimes offered paper which, when subjected to primary tests, does not wholly measure up to our standards of acceptability, but which falls short of these standards by a margin so slight that we feel justified in accepting it if in our opinion the offering bank's history and managerial policies are such as to warrant the belief that the credit risk involved in the offered paper is less than it appears to be from superficial indications. Therefore, we consider the paper in the light of both primary and secondary tests, as follows:

Primary tests: (*a*) The probability of the maker's ability to pay the obligation at maturity, as evidenced by any of the following factors: The collateral attached to the note, the maker's financial responsibility as shown by a recent financial statement, or the strength of the indorsers or guarantors as evidenced by their financial statements or other information in our possession.

(*b*) The experience of the offering bank in connection with previous loans to the maker of the paper, and our experience with the same type of paper rediscounted for other banks.

Secondary tests: The character of the management of the offering bank and its history, with particular reference to its losses, the frequency or continuity of its borrowings, the maintenance of proper ratios, the maintenanace of its legal reserves, or its inclination to excessive loaning and/or excessive borrowing.

Kansas City.—All financial statements of commercial borrowers are carefully analyzed and ratios figured in accordance with accepted practices of well-managed commercial banks. For comparative purposes, statistics gathered by certain recognized credit organizations, such as the Robert Morris Associates, are used. Evidence of reasonable liquidity is necessary in the statements of commercial borrowers. The statements of farmers anad stockmen are analyzed on a more liberal basis, consideration being given to growing crops, tractors, and other farm machinery, as well as real estate, and we do not demand absolute liquidity on the basis of livestock, grain on hand, or other currently salable assets. Notes secured by chattel mortgages are viewed from the standpoint of probable cash value of the livestock or other chattels covered thereby.

Minneapolis.—Such evidences as are shown in the financial statement of the note maker and by the character of the collateral, and on commercial paper by the commercial ratings of the note maker as well.

New York.—The credit tests employed by us to determine the acceptability of paper offered for rediscount by member banks are substantially as follows:

Our first and main reliance is on the indorsement of the borrowing member bank, and we are constantly scrutinizing the value of each bank's indorsement. In addition paper offered by the bank must meet certain tests.

A statement of the borrower is obtained in all cases where the obligation amounts to $5,000 or more, and in some instances for less amounts. Reports of commercial agencies covering financial standing, history, and trade reputation of borrowers are obtained on all items of $1,000 and over, and information is given for all items by the borrowing bank as to business and net worth of the borrower, and use of the proceeds of the note. It is also our custom to obtain information by direct checking with banks and others on names where such a course appears necessary.

Our credit files are maintained in a manner similar to those of large commercial banks. The net worth of the borrower relative to his debt is taken into consideration and the ratio of quick assets to current liabilities is regarded as an important factor. The borrower's history in active business and the trend indicated by the comparison of statements over a number of years are also considered important.

We have found it necessary, in passing upon acceptability of paper, to recognize in dealing with individual banks that generally they can not offer for discount paper of a better quality than their community produces. This is especially so in the case of the smaller banks.

Decision as to the acceptability of paper is based upon our estimate of the borrower's financial standing, ability to pay, and general reputation as disclosed by the information which we are able to develop by the means above indicated, also upon the value of the indorsement of the offering member bank.

Philadelphia.—We obtain a copy of a recent statement of the person or concern in question. It must reflect a reasonably liquid condition from the standpoint of the business involved and must show satisfactory proportions in the following ratios: Quick assets to current liabilities, current debt to net worth, total debt to net worth, and accounts receivable and merchandise to net worth. Comparison with previous statement is made and trend of operations and profits noted. When considered necessary, additional information pertaining to sales, trade standing, and banking relations is obtained through various reporting agencies or the banks themselves. Reports of examination are scrutinized for any criticism of the paper offered, and our examiners frequently submit data. Our transit and collection departments advise us daily of checks and notes protested. Published business records of lawsuits, receiverships, etc., are also covered and filed for ready conference.

Richmond.—In every case banks applying for rediscounts are required to state the business of the maker and the net worth of the maker and of the indorser. Certified copies of financial statements are required, in accordance with the regulations of the Federal Reserve Board, and in special cases financial statements of the borrowers are required for smaller amounts than those specified in the regulations and such additional information as can be obtained.

St. Louis.—Probability of payment of note at maturity as evidenced by statement of the maker, or value and marketability of chattels or other security; also previous record of borrower as disclosed by our records and other credit data.

San Francisco.—With the exception of notes adequately secured by United States Government obligations, a current financial statement of the borrower is required in all instances.

In the case of unsecured paper and paper supported by collateral under the control of the borrower (livestock under chattel mortgage, for instance), such financial statement must show that the maker has assets of sound value in an amount well in excess of liabilities and has liquid assets, including growing crops and livestock being made ready for an early market, of sufficient worth to make it reasonably certain that the borrower can meet this current (short-term and unfunded) indebtedness, including the obligation offered for discount, by realizing on such liquid assets in the normal course of events.

3. Are acceptability requirements raised in periods when your institution is following restrictive credit policies?

Atlanta.—Yes; they are. Acceptability requirements have been raised especially in periods when this bank was endeavoring to prevent the use of Federal reserve credit in speculative channels.

Boston.—Acceptability requirements are raised during periods of either general restrictive credit policies or in case of individual bank. The need for the credit asked for is more carefully investigated and in the individual call for credit by a bank the character of business of the locality covered by the borrowing bank, the character of business done by that bank, especially as to its investment policy, and the need for the loan.

Chicago.—No.

Cleveland.—No.

Dallas.—No.

Kansas City.—No.

Minneapolis.—No.

New York.—No.

Philadelphia.—No.

Richmond.—No.

St. Louis.—No. Credit principles are the same at all times.

San Francisco.—No. If the discount rate is ineffective. restraint, if necessary, is placed on the volume of credit being extended a member bank.

It would be unreasonable to raise the standard on notes adequately secured by United States Government obligations, or to raise the standard on eligible paper which is unquestionably sound and liquid.

A credit strain is most likely to be caused by the borrowings of large banks which have the greatest amount of Government securities and the largest amount of the best quality of eligible paper. To raise the standard of requirements on all paper would result in denying credit to banks which are not abusing their rediscounting privileges either from the standpoint of the volume of credit being used or the quality of paper discounted. In a credit stringency (1921, for instance), it becomes necessary to lower the standard, within the bounds of safety, in order to accommodate commerce.

4. In your opinion, do the provisions of the Federal reserve act, the rulings and regulations of the Federal Reserve Board, and the acceptability requirements of your institution set sufficiently high standards for paper that may be rediscounted by member banks?

Atlanta.—They do.

Boston.—We consider that our "acceptability requirements" are of a high though reasonable standard, and that it would be undesirable to change this standard, as it would introduce an element of uncertainty in dealing with member banks, which are now quite familiar with our requirements as the result of their experience during the years since the inauguration of the system.

Chicago.—Yes.

Cleveland.—Yes.

Dallas.—Yes.

Kansas City.—Yes.

Minneapolis.—Yes; we believe they are adequate.

New York.—Yes.

Philadelphia.—Members of the Federal reserve banks consist of two classes—city banks and country banks. As regards the business paper of city banks, the provisions of the act and regulations of the Federal Reserve Board do set sufficiently high standards for paper that may be rediscounted. There is little real business paper originating in the rural districts, most of it is farmers' paper and that of small tradesmen, who have difficulty in meeting the requirements. We would not recommend any change. Higher standards could not be met, but it is well to have these country banks aim to comply with existing ones.

Richmond.—Yes.
St. Louis.—Yes.
San Francisco.—Yes.

5. State whether your institution ever required or now requires excess collateral from borrowing member banks.

Atlanta.—Excess collateral has been and is now being required from some of our borrowing member banks.

Boston.—This institution has in the past and still does require excess collateral from a comparatively few borrowing member banks. At the present time we are holding excess collateral from 4 out of 398 member banks, and these 4 institutions are among the 122 member banks that at present are borrowing from the Federal reserve bank.

Chicago.—Yes.

Cleveland.—We do in exceptional cases require additional collateral. On January 31, 1931, 264 member banks were borrowing from this bank and but 7 of them, borrowing a total of $182,113, were required to pledge collateral over and above the face value of their borrowings. The usual amount of the additional collateral which we request in these special cases is 25 to 35 per cent of their indebtedness to us.

In these few cases the indebtedness consists of eligible paper discounted or advances secured by eligible paper. The additional collateral may consist either of eligible or noneligible paper or of securities.

Dallas.—By "excess collateral" we assume you mean paper placed and pledged with us by member banks to provide us with a margin of additional security for rediscount advances over and above the security afforded by the paper actually discounted. In some cases we require such additional collateral. In other cases we do not require it.

Kansas City.—Yes; but only from banks believed to be in overextended or otherwise unsatisfactory condition.

Minneapolis.—Yes.

New York.—We have always required and now require a margin of collateral in a limited number of individual cases. In such cases borrowings are handled in the form of a collateral note secured by eligible paper equaling at least the amount of the note and also by a margin of additional paper or collateral which need not necessarily be of eligible character. In this district we have found it necessary to require a margin of collateral in but comparatively few instances.

Philadelphia.—We frequently take excess collateral from borrowing member banks.

Richmond.—It has always been our practice from the beginning to require excess collateral in many cases.

St. Louis.—Yes.

San Francisco.—For several years past no excess collateral has been required or accepted. When values of properties and commodities fell sharply in the fall of 1920 paper being carried under discount (particularly that arising out of agricultural operations) diminished greatly in quality. Borrowers in many cases were unable to meet their obligations. This, together with the accompanying heavy shrinkage in deposits, made it necessary for numerous banks not only to continue their borrowings but to increase them. In one section particularly crop failures in 1921 and 1922 added to the difficulties. With the hope of averting unwarranted suspensions and to protect advances previously made additional collateral was required in many cases.

6. If you regard the eligibility and acceptability requirements relative to paper presented by member banks for rediscount as sufficiently high, what are the reasons impelling your institution to require excess collateral from member banks?

Atlanta.—(1) Special conditions in the community.
(2) Conditions in the borrowing bank.
(3) Emergency conditions requiring temporarily excessive borrowings.

Boston.—While the grade of paper submitted by a member bank might be satisfactory and the standards of eligibility and acceptability high, this institution still might consider it desirable to require excess collateral if the member bank appeared to be generally nonliquid or weak as a result of poor management or unsatisfactory local or other conditions. The character of the bank's entire loan, investments, other assets and liabilities, and the volume of checks going through for collection are elements for consideration in calling for excess collateral in connection with the paper rediscounted, which may be relatively small in total, good in itself, but slow or even difficult in collection should the bank be closed. It has been our experience in some instances that a call for general collateral has the effect of a warning and stimulates the correction of undesirable situations in the affairs of a member bank.

Chicago.—Ordinary banking prudence makes it imperative that in extending credit through the rediscounting process due consideration be given to the condition of the applying bank, and where the condition is unsatisfactory to the extent that the indorsement of the bank does not lend the protection to which we are entitled it is our policy to require excess collateral. Excess collateral is also frequently called for where borrowings of member banks are excessive. In considering this question it should be borne in mind that by taking collateral we have in many instances been enabled to extend credit to struggling institutions which were doing their utmost in a constructive way to better their condition.

Cleveland.—Sound banking judgment. When it has come to our knowledge that the condition of a borrowing bank is unsatisfactory by reason of incompetent management, unsound practices, or impaired liquidity, or that losses sustained have seriously impaired the condition of the bank, although not to the extent that the supervisory authorities consider it insolvent or beyond hope of working out of the situation, the member bank's indorsement is weakened, and it is then that if the member bank is indebted to us or if we are called upon for further assistance we feel impelled to grant such assistance only upon adequate collateral. To deny reasonable assistance in these cases might lead to the closing of banks which otherwise migh tbe saved.

Dallas.—In some cases where the offered paper in its general or special aspects does not measure up to our standards of acceptability we consider it better practice to grant the offering bank a line of rediscount credit supported by a safe margin of additional collateral than to refuse the bank any credit accommodations whatever. In other cases, even if the paper meets our requirements as to acceptability, we sometimes require a margin of additional collateral either for our own protection or for the good of the borrowing bank, or both. In our rediscount operations we take the position that the eligibility and acceptability of paper offered for rediscount are not always the only factors that should be considered by a Federal reserve bank in making loans to its member banks. The Federal reserve act specifically requires that these loans be limited to " such advances as may be safely and reasonably made, with due regard for the claims and demands of other member banks." This part of the act clearly places upon the Federal reserve banks the burden of responsibility for safeguarding their loans to member banks with the elements of safety and reasonableness, which we interpret to mean safety for the borrowing bank as well as for the Federal reserve bank. Therefore, when paper is offered for rediscount—even if it apparently conforms (at the time it is offered) to all accepted tests of credit acceptability—if it represents an excessive loaning program or an excessive borrowing program on the part of the member bank, it can not be safely or reasonably used by the Federal reserve bank as the basis of extending credit to the member bank, unless the credit is extended upon such terms and conditions as will tend to reduce to a minimum both the credit risk represented by the member bank's obligation to the Federal reserve bank and by the maker's obligation to the member bank.

For these reasons we sometimes require additional collateral, not only for our own protection against a possible change in the value of the rediscounted paper prior to its maturity, but also for the sake of the effect such requirement usually has in correcting dangerous trends in the policies and affairs of the borrowing bank, as, for example, where the offering bank shows an inclination to borrow too heavily and/or continuously, either from us or from other sources; where the statement of the offering bank shows unsatisfactory ratios, and the management expresses a desire to borrow an amount which appears to be out of proportion to the bank's capital; where reports of official examinations show a heavy proportion of criticised assets; where a member bank's deposits include a dangerously large amount of public funds which are not offset by cash resources, readily marketable securities, or other liquid assets; or where economic conditions in the bank's territory are so subnormal as to necessitate its carrying over a hazardous volume of nonliquid loans.

Other facts which we consider in determining the advisability of requiring excess collateral from a member bank, as well as in determining the amount of the margin to be required, are (a) the amount of its loans to its own directors and their interests, (b) the net worth of its stockholders, and (c) the extent of the financial interest of the directors in the borrowing bank. Sometimes we require the indorsement or guaranty of directors and/or substantial stockholders of the borrowing bank, either in addition to or in lieu of a margin of collateral.

Kansas City.—(*a*) To supplement the protection afforded by the member bank's indorsement, which has become lessened by the large amount of discounted paper or by other conditions.

(*b*) In some cases, in addition to the above reasons to afford additional security for advances made on paper which does not meet the requirements as to accepability but which is accepted because the member bank must have the credit and has no more acceptable paper to offer.

(*c*) To impress upon the bank's management, and particularly upon its directors, the gravity of its overextended or otherwise unsatisfactory condition.

We bear in mind that paper discounted serves as security for Federal reserve notes, and consequently endeavor to avoid loss on lines which appear to be weak. Excess collateral is returned to the borrowing bank upon its return to satisfactory condition, or to the receiver in case of insolvency, after the amount due us has been collected.

Requirement of excess collateral, on occasion, is a long-established practice among commercial banks in this district.

Minneapolis.—In an almost wholly agricultural district market-price levels and weather conditions may materially change during the life of the paper. Excess collateral is not taken except as conditions in the particular member bank, or in the area in which the bank is located, may indicate that it is a factor of safety.

New York.—There are a number of reasons which at times impel us to require margin of collateral on member bank borrowings. The controlling reason is stated in Federal reserve act, section 4, which requires that directors of a reserve bank shall "extend to each member such discounts, advancements, and accommodations as may be safely and reasonably made, with due regard to claims and demands of other member banks." This provision contemplates that loans shall be prudently made and in such manner as to assure, as far as possible, that repayment in full will be made. Even if this provision were not in the act, we would, nevertheless, consider this to be an implied responsibility of the management of a Federal reserve bank. We do not, however, believe the making of loans to member banks can or should be limited to cases in which there is complete certainty that no loss will result, but we feel, on the contrary, that if a Federal reserve bank is to perform the duties which devolve upon it, loans must, in many instances, be made where surrounding conditions are such as to indicate some possibility of loss. The requiring of marginal collateral is a natural accompaniment of the effort to extend loans to member banks whose condition, for one reason or another, is not for the moment unquestionably safe, and at the same time to have the loans or advances which are made to them fall in the category of loans which "may be safely and reasonably made."

Conditions which make it necessary to require a margin of collateral include the following:

(*a*) Impaired value of the member bank's indorsement, due to depreciation in its securities account, losses in loans, or other losses which reduce the ratio that its capital funds bear to its liabilities. It is sometimes necessary to extend accommodation to a bank during the period in which steps are being taken by its directors to bring about restoration of the capital account.

(*b*) Variation in the dependence to be placed on the judgment of the member bank as to the goodness of loans it has made. The paper in different banks may be equally eligible from a legal viewpoint and apparently acceptable from a credit standpoint, but the loss experience of a particular member bank may have been such as to indicate that its paper will show a considerably larger proportion of loss than that of other and better-managed institutions.

(*c*) The character of the business of the community may be such as to give rise to paper of poor average grade, even though legally eligible and apparently good. In situations of this kind a large volume of the bankers' paper can not be classified either as certainly good or as bad, but requires some middle classification. To reject a considerable portion of this would probably be unfair to the member bank, especially as the reserve bank is obliged to form its opinion largely upon the data obtained at secondhand, and does not have the opportunity to have personal contact with borrowers or to observe the daily course of their business as reflected in their current bank account. Ordinarily in cases of this middle classification the member bank's indorsement is quite adequate to make the loan safe, but if the value of that indorsement is impaired for any reason, a margin of collateral becomes important.

(*d*) Emergency conditions: When a bank is undergoing a run, it is only with great difficulty that it can assemble paper and prepare applications for rediscount rapidly enough to meet the needs of the situation. The difficulty of selecting paper of an acceptable character at such a time is great and to pass upon several thousand items quickly enough to give the needed credit to the member bank is almost impossible for a reserve bank, especially in cases of paper of a borrower whose statement has never before been on file with the Federal reserve bank. In such a case the member bank may meet the situation and receive the needed accommodation by offering a margin on its paper, perhaps using for the purpose of margin, paper or other collateral not of eligible character.

(*e*) It is necessary to recognize in taking commercial paper from a member bank which is in possible danger of being closed by a run, that in the event of such closing the collectibility of the paper of its customers would be very much impaired, and that many notes which might be paid if the bank were to continue as a going institution might be partially or wholly uncollectible in the event of its closing.

In all of the above circumstances the taking of a margin of collateral makes is possible to extend assistance with reasonable safety where otherwise loans could not be safely made. It is interesting in this connection to note that the large commercial banks with a large number of country correspondents customarily take a substantial margin of collateral, even though their advances are made upon securities which are readily salable in the open market, and the value of which is, therefore, practically independent of the condition of the borrowing bank.

Philadelphia.—No matter how high the requirements are, there always is some risk in discounting paper. While the paper of suburban and country banks complies with the requirements, yet it is difficult to make a satisfactory investigation of it, and in the aggregate it can not be considered as gilt-edged; neither do the institutions offering such paper rank among the strongest, and additional security is taken to protect us, both against the bank and the possible failure of the makers of the paper.

Richmond.—While the standards of eligibility are believed to meet requirements, nevertheless it is not possible to determine to our satisfaction the goodness of paper offered in all cases. The present situation affords an illustration. Furthermore, the marginal collateral requirement is in force partly as a restraining influence upon the tendency to borrow excessively. Marginal collateral is not required to be paper that is eligible for rediscount.

St. Louis.—Our experience has proven that paper that is acceptable and could be collected by a going bank often will not pay out when collected through the receiver of a closed bank. This applies more particularly to agricultural paper. Unless acceptability requirements are excessively high, the practice of taking extra collateral (a sound development of commercial banking) is necessary to avoid losses.

San Francisco.—Requirements are adequate.

Generally speaking, the taking of marginal collateral is justified only as a temporary measure to protect advances previously made (see answer to question 5) or to meet some outstanding emergency wherein it would appear by such action a serious calamity might be averted. It is possible for an unexpectedly large demand for credit to come faster than a member bank can gather its paper and credit data for submission to the Federal reserve bank in such form as to make speedy action thereon possible.

7. Would it assist in preventing Federal reserve credit from being used for speculative and investment purposes to repeal the provision in the Federal reserve act permitting member banks to borrow on their 15-day promissory notes secured by Government obligations?

Atlanta.—Not in our district. It is our opinion that most of the borrowings of our member banks on their 15-day promissory notes secured by Government obligations are for the purpose of restoring or maintaining their reserves. Such notes are ordinarily discounted for short periods only.

Boston.—We do not believe so. Many member banks carry Government obligations as secondary reserves, and even though eligible paper is held in portfolio the Governments are frequently used for borrowing purposes, as the detail work in connection with such borrowing is less than in rediscounting. It might tend to reduce the control of the Federal reserve bank over its member banks.

Chicago.—To refuse to take 15-day notes secured by Government obligations for member banks might possibly in a few cases restrict speculative and investment uses of money. In our judgment, however, any benefits of that kind which would accrue from so doing would be very much more than overbalanced by the legitimate service we are now rendering to such borrowing banks by taking such 15-day notes, thus making available to them funds for commercial enterprises or declining deposits.

Cleveland.—It might, but such repeal would seriously handicap many member banks who carry United States Government obligations as secondary reserve because their communities do not supply them with eligible paper in sufficient amounts. It also would handicap some of the State bank members who do not cater to commercial business but carry Governments as a member of borrowing from their Federal reserve bank to meet legitimate demands.

In our judgment, a repeal of that provision of the act would greatly limit the usefulness of Federal reserve banks, especially in view of the declining trend of eligible paper created.

Dallas.—It would undoubtedly assist in accomplishing the purpose referred to, but we doubt the wisdom of making such a change at the present time, in view of its probable effects upon Government financing and upon other phases of the general credit structure. We think consideration should be given to the large amount of Government obligations outstanding and the causes which created them.

Kansas City.—Probably so, but to very slight extent in this district, where use of Federal reserve credit for speculative or investment purposes has been negligible. Any good thus accomplished would be offset by the harm incident to depriving the banks of this privilege which lends convenience and economy to temporary borrowings, adds to the desirability of Government securities as a secondary reserve, and, therefore, tends to maintain the price of such securities at a higher level than would otherwise be the case.

Minneapolis.—No; we do not believe it would.

New York.—There appear to be two possible lines of reasoning which might be advanced in support of a proposal to prohibit member banks from borrowing on their 15-day promissory notes secured by Government obligations, as a means of preventing Federal reserve credit from being used for speculative and investment purposes. The first argument would relate to the specific use by banks of the funds so obtained, and the second would relate to the effects on the total volume of Federal reserve credit in use. The first question is whether Federal reserve funds which are obtained by banks by the presentation of their collateral notes secured by governments, are used in any different way from the Federal reserve funds obtained through other channels. The chain of circumstances which results in member banks' borrowing and the processes followed are about as follows:

1. The member bank finds itself with its reserves deficient; that is, with its reserve deposit at the Federal reserve bank less than the amount required by law. This may be due to (*a*) a withdrawal of deposits, or (*b*) an increase in its own loans. If the loss of reserves is due to the loss of deposits it is difficult to anticipate and outside the control of the bank, and this is also true of increases in loans in cases where prior commitments have been made. Increases in certain types of loans can, of course, be anticipated, and as a matter of practice a bank is reluctant to increase its loans if it anticipates that this operation will result in a deficiency of reserves. In fact, it may generally be assumed that a deficiency of reserve which leads to member bank borrowing is usually due to events which are unpredictable and outside the bank's immediate control.

2. Finding itself with deficient reserves a member bank has a number of alternatives, somewhat as follows: (*a*) To call demand loans, (*b*) to sell bills or investments, (*c*) to borrow from a correspondent bank, (*d*) to borrow from a Federal reserve bank.

Federal reserve credit may get into use through two of these channels. If the bank has bankers' acceptances in its investment portfolio, they may be sold to a Federal reserve bank, thus putting Federal reserve credit into use. Otherwise there is only one avenue open which is the avenue of borrowing.

3. Having decided to borrow from the reserve bank a bank then has the choice as to whether it will present some of its customers' paper for rediscount or will give the Federal reserve bank its own 15-day collateral note secured either by

Government securities or by customers' paper. Usually the collateral note secured by governments is the most convenient means because many of the member banks hold in safe-keeping with their reserve bank some amount of Government securities which they can use as collateral for borrowing simply by forwarding to the reserve bank a collateral note. This avoids the necessity of picking out customers' paper, listing it on application blanks, making sure the reserve bank has statements properly filed, arranging appropriate maturities, and other possible inconveniencies arising from surrendering possession of the paper.

4. The form of the borrowing transaction is that he borrowing bank sends to the reserve bank its note or its paper for rediscount and receives credit in its reserve deposit account on the books of the Federal reserve bank. The destination of the proceeds is identical whether the loan is made against rediscounted commercial paper or the member bank's collateral note secured either by governments or eligible paper. The proceeds are used to build up depleted bank reserves.

5. The process by which Federal reserve credit gets into use does not end here, however, for the borrowing bank takes only the first step in a series of steps by which $1 of Federal reserve credit may expand into about $10 of bank credit (applying the ratio which the country's gold and other reserve funds normally bear to bank credit). This is perhaps the most perplexing and least well-understood operation in banking, and to reduce it to simple terms the attached chart (A) has been prepared. To simplify the picture it is assumed that bank 1 borrows from the reserve bank as a result of making a new business loan; that the bank does not require the merchant borrower to maintain any larger balance and that succeeding banks receiving the funds put out in this way follow a precisely similar procedure. The net result of the process is that on the basis of $1,000 of new Federal reserve credit an expansion of about $10,000 of bank loans and deposits takes place, while reserves of member banks increase but $1,000. The actual process is, of course, more complicated and confused, and the uses of the credit more varied than indicated on the chart. The important fact to be observed in this connection is that the borrowing bank has little influence over the eventual use of the Federal reserve credit it may borrow. It is simply an instrument, and in most cases a passive one, by which Federal reserve credit first gets into use. The nature of the use is largely determined by others.

CHART *A.—How $1,000 of Federal Reserve Credit Grows to $10,000 of Bank Credit*

Bank No. 1 lends a merchant $1,000. The merchant withdraws this $1,000. As a result the bank's reserves are depleted and it borrows $1,000 from its reserve bank. This $1,000 becomes the basis for credit expansion as follows:

Bank No. 1 lends $1,000 to merchant No. 1 who pays it to manufacturer No. 1, who deposits $1,000 in bank No. 2 which sets aside $100 for reserves and has $900 of free funds to lend;

Then bank No. 2 lends $900 to merchant No. 2 who pays it to manufacturer No. 2, who deposits $900 in bank No. 3 which sets aside $90 for reserves and has $810 of free funds to lend;

Then bank No. 3 lends $810 to merchant No. 3 who pays it to manufacturer No. 3, who deposits $810 in bank No. 4 which sets aside $81 for reserves and has $729 of free funds to lend;

Then bank No. 4 lends $729 to merchant No. 4 who pays it to manufacturer No. 4, who deposits $729 in bank No. 5 which sets aside $73 for reserves and has $656 of free funds to lend;

Then bank No. 5 lends $656 to merchant No. 5 who pays it to manufacturer No. 5, who deposits $656 in bank No. 6 which sets aside $66 for reserves and has $590 of free funds to lend;

Then bank No. 6 lends $590 to merchant No. 6 who pays it to manufacturer No. 6, who deposits, $590 in bank No. 7 which sets aside $59 for reserves and has $531 of free funds to lend;

Then bank No. 7 lends $531 to merchant No. 7 who pays it to manufacturer No. 7, who deposits $531 in bank No. 8 which sets aside $53 for reserves and has $478 of free funds to lend;

Then bank No. 8 lends $478 to merchant No. 8 who pays it to manufacturer No. 8, who deposits $478 in bank No. 9 which sets aside $48 for reserves and has $430 of free funds to lend;

Then bank No. 9 lends $430 to merchant No. 9 who pays it to manufacturer No. 9, who deposits $430 in bank No. 10 which sets aside $43 for reserves and has $387 of free funds to lend;

Then bank No. 10 lends $387 to merchant No. 10 who pays it to manufacturer No. 10, who deposits $387 in bank No. 11 which sets aside $39 for reserves and has $348 of free funds to lend;

And so on, until following totals are reached: Total loans, $10,000; total deposits, $10,000; total reserves, $1,000.

This table is simplified by assuming (1) that deposits balance is not required of borrower, (2) that all deposits made are demand deposits, (3) that all the banks concerned have a 10 per cent reserve requirement on net demand deposits, (4) that all loans and use of funds are identical in character, (5) that the banks receiving Federal reserve funds are not in debt at the reserve bank—otherwise the funds would be used to repay this debt. Actual results are more complicated but follow the same principles.

From this survey of the way in which Federal reserve funds get into use through a member bank, several conclusions may be drawn.

(*a*) The most common event leading to borrowing, a depletion of reserves through the loss of deposits, is completely outside the control of the borrowing bank. The funds are used by the bank customer in any way he pleases.

(b) In ninety-nine cases out of a hundred the kind of paper used by a member bank to borrow from the reserve bank has no connection with the operation which made it necessary for the bank to borrow.

(*c*) The act of borrowing at a reserve bank is only the first of a series of operations in which Federal reserve credit is passed from hand to hand until it may expand into a volume of bank credit many times its own amount. Nine-tenths of this process is completely beyond the control of the borrowing bank. In other words, even if it were possible and practicable to identify particular loans by member banks as the immediate cause of Federal reserve borrowing, and to limit such borrowing to that which has been made necessary by certain types of loans, this would not be in any degree effective to control the character of nine-tenths of the additional member bank loans which would be made possible by the Federal reserve credit released through the borrowing from the Federal reserve bank.

(*d*) Therefore the particular form which the withdrawal of Federal reserve funds takes in no way determines the eventual use of the money. The loan is simply a vehicle for letting out Federal reserve funds into general use, and the use is no different whether the funds are put out in the form of loans against member bank notes secured by Government collateral, or in the form of rediscounts, bills, or any other form of Federal reserve credit.

The second question is whether the privilege which banks have of borrowing on their 15-day notes secured by governments tends to encourage an excessive expansion of credit; that is, whether the availability of this method results in a larger use of Federal reserve funds than would occur if this facility were withdrawn. Upon this point it is first necessary to review the figures. They are published currently for all member banks in the Federal Reserve Bulletin and may be summarized by saying that all member banks on last September 24 held Government securities amounting to $3,446,000,000, and eligible paper amounting to $3,812,000,000. These figures compare with a total of about $1,000,000,000 of Federal reserve credit in use on that date of which about $600,000,000 took the form of Government securities bought in the open market, $200,000,000 bankers' acceptances sold to the Federal reserve bank, and $200,000,000 discounts, i. e., loans to member banks. On that date member banks as a whole had borrowing capacity against eligible paper alone considerably more than fifteen times the amount of their actual borrowings at the reserve bank. In recent years the maximum amount of borrowing by member banks at the reserve banks was a little over $1,000,000,000 or a little more than one quarter of the total amount of eligible paper. For the New York City banks the average holdings of governments and of eligible paper during the year 1929 as indicated by the four call condition statements of that year are as follows:

Government obligations owned	$1, 014, 000, 000
Eligible paper held	1, 061, 000, 000
Maximum borrowings at any one time	425, 200, 000

These figures indicate that the borrowings of these banks as a group did not at any time reach a total of more than approximately 40 per cent of the eligible paper held, and it is a reasonable assumption that the borrowings of these banks under anything approaching normal conditions would not amount to more than the eligible paper held. In fact, during the credit disturbances in the fall of 1929 the borrowings of only two New York City banks exceeded at any time the amount of eligible paper held by them.

When we turn, however, from the banks in principal centers to the smaller banks, the case is not so clear. A number of smaller institutions would be considerably embarrassed by a lack of sufficient eligible paper. While the position of these banks with respect to borrowing would have no considerable effect on the total volume of Federal reserve credit called into use, the removal of the privilege of borrowing on governments would discriminate against a number of member institutions, and especially those in smaller cities and towns.

While the removal of this right in ordinary times would have little effect on the total volume of Federal reserve credit it would become an important and essential consideration in times of bank disturbances when banks may be called upon to meet sudden or large withdrawals. Even the present facilities of access to the reserve bank have proved inadequate for some of these occasions, and the removal of this facility would to a considerable extent cripple the reserve system from accomplishing one of the major purposes for its establishment which was to meet emergencies. Without these facilities the system would be much less useful to many small banks.

It was clearly the purpose of the Federal reserve act to make borrowing possible on a large scale in emergencies. When it was enacted the amount of eligible commercial paper was much larger than at present relative to total bank loans and investments, as illustrated by the following figures, which relate to national banks only:

All National Banks

[In millions of dollars]

Date	Eligible paper held	Total loans and discounts	Per cent of eligible paper to total loans and discounts
Dec. 27, 1916	2, 293	8 395	27.3
June 30, 1920	4, 320	13, 611	31.7
June 30, 1924	3, 542	11, 979	29.5
June 30, 1928	3, 266	15, 145	21.5
June 30, 1930	2, 719	14, 874	18.2

In the face of steadily declining amounts of eligible paper and declining amounts of Government securities outstanding, there is question how long even the present terms of the reserve act will provide sufficient possible access of individual member banks to the reserve banks, especially in emergencies. The amount of eligible paper is very unevenly distributed among individual member banks.

Two further general comments may be made on this general subject.

The first relates to the goodness of Government-secured paper as a reserve bank asset as compared with commercial paper. The primary security in each case is the obligation of the member bank, and as long as the member bank remains open one form of paper is as good as the other. If the member bank fails, however, the Government-secured obligation is better than customers' paper because the customer's credit is often so closely tied up with the bank that his ability to meet his obligations is considerably impaired by the bank's failure. A second comment relates to the method of control over the volume of Federal reserve credit and bank credit generally. If the amount of paper eligible for discount is to be adequate to meet emergencies and unusual demands, it must be far in excess of the amount of reserve funds in use in ordinary times. Therefore, the control of the volume of reserve funds year in and year out is to be found, not in controlling the amount of eligible paper, but in controlling the operation of putting reserve funds into use—and this means primarily rate control. The history of recent years appears to show that rate control has been effective to the extent that it has been exercised vigorously and promptly.

Philadelphia.—No.

Richmond.—We do not think so in this district. What restraint this prohibition might exercise in the larger banks would be overbalanced by other practical considerations.

St. Louis.—No.

San Francisco.—It would assist, but not necessarily prevent, the practice because other means are available for obtaining Federal reserve credit surreptitiously. Repeal of the law, however, would be an unnecessarily severe measure if intended solely as a cure to possible abuses by a comparatively few large member banks situated in metropolitan centers.

As an emergency measure, the privilege of borrowing against United States Government securities is a source of great comfort to member banks. Such a method of borrowing might (by law) be permitted only when the Federal reserve bank has satisfied itself that the member bank has no eligible and acceptable paper to submit for discount, and the member bank can show by its own records and to the satisfaction of the Federal reserve bank that the funds being obtained from the Federal reserve bank are being used for the purposes contemplated under the law.

8. Should member banks, which are borrowing from Federal reserve banks on their 15-day promissory notes secured by Government obligations, be prohibited from increasing their own security loans? Should this prohibition be extended to member banks securing funds from the reserve bank either through borrowing or rediscounting?

Atlanta.—(1) No. The legitimate business needs of the customers of a member bank who are able to secure their notes with investment stocks or bonds as collateral could not be met by the bank under the prohibition suggested. (2) This prohibition should not apply to member banks borrowing on or rediscounting eligible paper with the reserve bank. Under such a prohibition, the credit facilities of the reserve bank would be restricted when the member bank was engaged in a perfectly legitimate function.

Boston.—It is our opinion that in this district this situation can be handled without the restriction suggested. We do not believe that a member bank, because it is borrowing from a Federal reserve bank on a 15-day promissory note secured by Government obligations, should be prohibited as a general proposition from increasing its own collateral security loans to customers unless the bank is a continuous borrower with a Federal reserve bank, and in that case the matter should be taken up by the Federal reserve bank with a view to having the member bank "go out of debt" with the reserve bank. We believe it makes no particular difference whether a member bank obtains Federal reserve funds by borrowing on its own collateral note, rediscounting, or selling its acceptances.

Chicago.—No. Commercial banks must carry some investment loans. Our experience has been that officers of member banks respond cheerfully and promptly to the suggestion that proceeds of borrowing on their 15-day notes shall not be used either by the bank or its customers for speculative or investment purposes. It would be difficult, if not impossible, to go beyond such suggestion and "prohibit" borrowing banks from increasing their collateral loans.

Cleveland.—No. To prohibit banks from making loans on securities merely because they are borrowing from a Federal reserve bank for a temporary period would be detrimental to banks and many times to borrowers fully entitled to credit even though such accommodations may be to carry investment securities. The proceeds of such loans are often used for commercial purposes. In such cases the method used to obtain reserve-bank credit is inconsequential.

Dallas.—(1) Not necessarily or inflexibly. Member banks' 15-day promissory notes secured by Government obligations are inherently eligible for rediscount without regard to the use of the proceeds by the borrowing bank; and the laws governing such borrowings should be sufficiently flexible to permit the borrowing bank to make necessary adjustments from time to time in its loan portfolio. For this reason, we think the correction of abuses of Federal reserve credit should be a matter of administrative control by the Federal reserve bank management, particularly since the use which a member bank actually makes of such credit can only be determined by an investigation of the loan and investment operations of the member bank or by an analysis of the fluctuations of its loans and deposits.

(2) See answer to first subdivision of the question.

Kansas City.—No. Loans on collateral are normal and legitimate banking transactions, and when taken in any reasonable amount should not subject a member bank to the penalties of an arbitrary rule. More equitable and more satisfactory means can be employed to restrain individual member banks from using funds secured from the Federal reserve bank for call loans, noncustomer collateral loans, or an undue extension of collateral loans to customers. During abnormal periods, such as existed in 1928 and 1929, member banks indebted to the Federal reserve bank, either through borrowings against Government obligations or rediscounting, should be prohibited from loaning funds on call or increasing their collateral security loans, if, in the judgment of the management of Federal reserve banks or the Federal Reserve Board, such action is desirable.

Minneapolis.—No.

New York.—As indicated in the answer to the last question, we do not believe a distinction may properly be drawn between different forms of borrowing from the reserve banks. The form of borrowing from the reserve banks does not affect the nature of the use of the proceeds of the loan made by the member bank to its customer, and there is, therefore, nothing to be gained by placing an additional penalty upon any one form of borrowing. The question then becomes whether all member-bank borrowing should be subject to the restriction that borrowing banks may not increase their own collateral security loans. This restriction has presumably been suggested as a means of controlling the growth of speculative loans. The following considerations may be suggested:

1. Not all collateral loans are speculative in character or to be discouraged. A considerable amount of collateral borrowing is for business purposes and for legitimate and necessary financing. Much of the credit required for the development of the country's industry has for years been financed upon the basis of stocks and bonds.

2. The question arises whether banks have in fact abused the borrowing privilege by excessive advances of collateral loans which necessitated their use of Federal reserve credit. Broadly speaking, the records indicate that the banks in this district have not increased their collateral loans unnecessarily at times when they were indebted at the reserve banks. There have, of course, been some exceptions to this rule, but hardly sufficient to affect the general credit situation. During the speculative enthusiasm of 1928 and 1929, with call rates at attractive levels, the New York City banks made a very slight increase in their loans to brokers.

3. There are many occasions when the proposed restriction would work not only a hardship, but might bring about serious consequences.

(*a*) The events of the stock-market crash of October and November, 1929, are illustrative. To prevent a money panic the New York City banks were required, in a period of two weeks, to take over temporarily a considerable part of the $2,000,000,000 of brokers loans withdrawn by other lenders. To do this they found it necessary to borrow the necessary reserve at the Federal reserve bank. This action prevented a serious panic.

(*b*) In bank emergencies one bank is frequently called upon to lend to another considerable amounts in the form of collateral loans, and frequently the lending bank is compelled to borrow from a reserve bank.

4. In their ordinary operations commercial banks must follow a consistent policy from day to day as to collateral loans. They must make general undertakings to accommodate their customers. They can not make a loan to-day on collateral security and refuse to make a precisely similar loan under similar conditions to-morrow. Therefore, if the law should prohibit them from making any loans on collateral security while they are indebted to the Federal reserve bank, they would be forced to do one of two things:

(*a*) Discontinue their business of making loans on collateral security, or

(*b*) Discontinue borrowing from the Federal reserve bank.

They should not be forced to do (*a*) because making loans on collateral security is properly and lawfully a part of a bank's business, and it is responsive to the legitimate requirements of the bank's customers; nor should they be forced to do (*b*) because if banks were to adopt the policy of never borrowing from the Federal reserve bank the advantages of membership would be greatly diminished, and there would be many withdrawals from membership and a corresponding loss in effectiveness of the system.

For these reasons it seems to us undesirable that the proposed restriction should be placed upon member bank borrowings. It appears impracticable for a reserve bank to attempt to differentiate between the different kinds of collateral loans in a member bank's portfolio. So often the character of the loan is merely a question of motive of the original borrower, which it is impossible for the reserve bank to determine.

Philadelphia.—This question specifically refers to "their own collateral security loans." We think the making of collaterally-secured loans is a part of a bank's regular business, to some extent essential to the operations and life of the community, and provide desirable investments for the funds of a bank, which it can use in meeting increased demands for loans from its customers or withdrawals of deposits. Except when it is strictly necessary for the good of the community such collateral loans should not be increased when a bank is borrowing from its Federal reserve bank upon its 15-day notes secured by Government obligations or by rediscounting. If, however, under such circumstances a bank is using Federal reserve credit to a reasonable extent only, it should not be required to call such loans.

Richmond.—(*a*) No. (*b*) Not practicable.

St. Louis.—No.

San Francisco.—Unqualifiedly prohibiting a member bank to increase the amount of its collateral security loans to regular customers while the bank is conducting normal borrowings at the Federal reserve bank would work an unwarranted hardship upon a borrowing member bank in competition with other banks. Restrictions, therefore, should not be imposed unless the member bank, out of the ordinary course of its affairs, is using Federal reserve credit to make and carry loans the result of which counteracts the credit policies being pursued by the Federal reserve bank.

9. Does your institution habitually inquire into the use of the proceeds of the funds extended to member banks? Do your lending policies toward member banks vary according to the composition of the portfolio of the particular member bank? Is your bank examination department of assistance in the formulation of your lending policies?

Atlanta.—(1) No.

(2) Ordinarily, no; but in speculative periods we have given close consideration to the portfolios of borrowing banks.

(3) Yes.

Boston.—We do not "habitually inquire into the use of the proceeds of the funds extended to member banks." Such inquiries are made only when statement analysis, "call reports of condition," or other information available indicates the possibility of improper use of proceeds. A bank whose portfolio appears from information at hand to be unsatisfactory in any respect is given more careful attention in every way. Our bank examination department is of great assistance in the formation of our lending policies.

Chicago.—(1) The Federal Reserve Bank of Chicago does habitually inquire into the use of proceeds of loans to member banks. The method is by questionnaire on the face of the application for rediscounts. If that does not bring the desired information, other inquiries are resorted to.

(2) Yes.

(3) The bank examination department is of great assistance in formulating loaning policies of this bank.

Cleveland.—(A) Yes; this information is obtained through conferences, by correspondence, and in visits to member banks by officers and field representatives. Our applications for rediscount contain one question: "Purpose for which this rediscount is made."

(B) Yes.

(C) Our bank examinations department is of vital assistance to us in formulating our lending policies.

Dallas.—(1) Inquiries are frequently but not habitually made as to the use of the proceeds.

(2) Not in the sense that we assume is implied by your question. We do base lending policies to some extent on the relative volume of slow, doubtful, or worthless paper found in the portfolio of the borrowing bank, as reflected in examination reports.

(3) Yes; our examination department is of a great deal of assistance in the formulation of our lending policies.

Kansas City.—We do not habitually inquire into use of funds extended to member banks and our lending policies do not vary according to the composition of the portfolio of a particular member bank except in such instances as mentioned in answer to question No. 8. Our bank examination department is of assistance in the formulation of lending policies only in that its analyses of reports of examinations, both State and National, contribute to our knowledge of the condition of member banks. Our department has not been called upon to examine any national banks, and it examines State bank members, of which there are only 21 in the district, only when special circumstances make it appear desirable.

Minneapolis.—(*a*) Our rediscount applications require this information.

(*b*) We endeavor to pursue a uniform policy as to all of our member banks and to follow their seasonal requirements.

(*c*) Decidedly so.

New York.—(1) While we do not habitually inquire into the use of the proceeds of every loan extended to member banks, we do, nevertheless, follow closely the borrowing record of the member banks, and in cases where the amount or duration of a bank's borrowing gets out of line with that of other banks in the same community, or suggests anything unusual, we study their operations and in frequent cases confer with the officers, and in some instances require from them either daily or weekly reports showing changes in loans and other assets and in deposits.

(2) Only to the extent that if a member bank's portfolio is so generally unsatisfactory as to raise a question as to the soundness of the bank's condition, it affects the value of the bank's indorsement.

(3) Yes; in respect to determining the condition of member banks and, therefore, the value of their indorsement, and also to some extent in determining the quality of the paper which the banks hold and may offer for rediscount.

Philadelphia.—With every application for rediscount, the statement is made that "the proceeds of the notes offered for rediscount have been or will be used for the purpose of production, distribution, or marketing of goods, etc." An examination of the paper is made to see whether or not the businesses of the makers and any other facts raise doubts as to that statement. We do not know in just what sense the word "policy" is used in this question. Our discount operations with our member banks do not vary according to the composition of portfolio of the particular bank except as to the amount of eligible paper it contains. By active participation with the State examining departments our bank examination department keeps us advised as to the condition, credit policy, and character of the management of all our State member banks, so that our transactions with them are conducted with satisfactory knowledge of their condition. The department also analyzes the reports of national banks and as far as possible from such reports keeps us informed as to the condition of those institutions. The services of our bank examination department have been of the greatest value.

Richmond.—(*a*) Not habitually.

(*b*) No.

(*c*) Yes.

St. Louis.—(1) Not habitually.

(2) No. Of course, our advances to banks known to be in bad condition and under bad management receive especially close scrutiny.

(3) Not as to policies. The department is of assistance as to individual credits.

San Francisco.—A. Federal reserve bank, by its contact with member banks, usually understands the reason for a bank's borrowing. If not, it inquires.

B. Lending policies are governed by—

(*a*) The condition of the bank's assets as shown by reports of examination by the Comptroller of the Currency (national banks) and reports of State bank commissioners (State bank members).

(*b*) The reason for borrowing.

(*c*) The volume of credit likely to be required and the bank's ability to liquidate such borrowings in proper season.

(*d*) The quality of paper the bank is able to submit.

C. Our examination department assists in formulating policies to the limited extent that it supplements the examinations of State banking departments.

With the exception of metropolitan banks it is fairly simple to determine the reason for and approximate volume of a member bank's contemplated borrowings. The seasonal trend of its deposits and loans and the results of the past season's crop and marketing operations will give the variations which might be expected in the bank's loans, deposits, and borrowing situation. Weekly statements from borrowing banks keep the Federal reserve bank in touch with each bank's situation. In the case of large banks in metropolitan cities it is more difficult to follow borrowings because of the wide fluctuation in their affairs, which are not of a seasonal character but are brought about by large depositors and borrowers shifting their operations from the twelfth to other districts, and vice versa. These movements are influenced by the available supply of credit and interest rates in the important centers.

10. What has been the experience of your institution with the use of "moral suasion" in preventing the funds of borrowing or nonborrowing member banks from being used for speculative or investment purposes as compared with the use of the discount rate or other methods of credit control?

Atlanta.—It is difficult to make this comparison, but in 1929 we used such moral suasion to fine effect. Our member banks were fully advised as to our policy to restrict loans to legitimate uses and to prevent our credit from getting into speculative channels. The response of our member banks was very gratifying, with the result that borrowing banks almost unanimously refrained from call loans. This moral suasion was backed up by our rediscount rate. Jointly, the effect of restricting our credit to legitimate uses was satisfactory.

Boston.—While our experience with the use of moral suasion in preventing funds of borrowing or nonborrowing member banks from being used for speculative or investment purposes has been satisfactory, it is our belief that changes in rates offer a more definite and desirable means of accomplishing these results. The discount rate is much more potent in its effects on the large city banks than on banks in the country. The changes in discount rates are passed along by city banks to their customers, whereas changes in discount rates have not only a slow but comparatively little effect on the operations of banks out of town on rates which such banks charge to their customers.

Chicago.—This bank from the beginning has consistently endeavored to impress upon its member banks what constitutes the right use of Federal reserve credit, and, generally speaking, we have had the cooperation of the banks. We believe that moral suasion has been a more powerful factor in avoiding the misuse of Federal reserve credit than has the discount rate or other methods employed.

Cleveland.—We have no hesitancy in conferring with the officers of member banks whenever it appears that borrowing from us is being resorted to for purposes inconsistent with the spirit of the Federal reserve act. In general, our member banks have shown a fine cooperation in this regard. We have not knowingly permitted abuse of our credit facilities, and when instances of abuse have come to our attention effective measures were applied. To resort to higher rates as a corrective measure would penalize a vast majority of member banks making proper use of our facilities.

We have no authority, either stated or implied, on our own initiative to indicate to member banks what use they should make of their available funds, especially when such member banks are not borrowers from us.

Dallas.—Highly satisfactory. We have a file of correspondence with banks which borrowed from us while they were carrying "street loans." We have also had a number of satisfactory conferences with nonborrowing banks which contemplated borrowing from us for the purpose of making or carrying loans "on call" but which voluntarily abandoned the plan after receiving our views on the subject.

Kansas City.—The use of moral suasion has been effective, although we do not consider that we have had any really difficult problems of this kind to meet. Rate changes have very little effect.

Minneapolis.—We have had no occasion to use moral suasion for such purposes except in a single case, where our advice was immediately followed. In our judgment speculative credit can not appreciably be controlled by the discount rate.

New York.—We find it more or less constantly necessary to deal with particular institutions along the lines of what might be called moral suasion, where for one reason or another they appear to be borrowing either in amounts or for a length of time out of proportion to other banks similarly situated or doing a similar type of business. In some instances our efforts have been directed to banks which we have felt were using reserve bank credit as a substitute for capital, or were borrowing merely for a profit. This method of direct action or moral suasion has been used by us practically from the beginning of the system and with considerable effect. It is a necessary part of any program which contemplates the proper use of the facilities of the reserve bank and in individual cases can be made quite effective. However, for the reasons indicated in the replies to questions 7 and 8 (which discussed in some detail the difficulty of determining the use made of credit) we do not believe it is possible for Federal reserve banks by moral suasion or other means to prevent credit from being used for speculative or investment purposes as distinguished from other purposes. Moreover, for the reasons hereinafter stated, we believe it is impracticable to use moral suasion as an effective part of a program designed generally to restrict or control expansion in or use of Federal reserve credit.

The first difficulty is that a principal cause of member-bank borrowings is a loss of deposits which is not connected with loans currently made. In most cases the bank which actually borrows at the reserve bank is not the institution which originally makes the extension of credit resulting in an additional demand for Federal reserve credit. The second difficulty in the use of moral suasion is that it is a personal appeal, the effectiveness of which depends largely upon the human characteristics of the person appealed to. Some bankers are exceedingly anxious to cooperate with the reserve bank and are willing to sacrifice all other considerations to an accomplishment of that purpose. Others resent any suggestions as to how they should run their own business and are but little affected by anything less than the most drastic methods. The great majority of bankers range all the way in between these extremes. It is not possible to present a case to any considerable number of bankers in such a manner as to secure anything approaching uniformity. Moral suasion, if effective, is bound to lead to discrimination, as it merely drives business from the cooperative bank to another less cooperative one. No matter how clear or explicit the expression of policy may be, whether it is communicated by circular letter or by individual contact, the different bankers to whom it is addressed will give it various interpretations, which are likely to be affected by the interests or supposed interests of their respective banks or customers. There is no doubt that much can be done by direct contacts with bank officers, and in cases where the individual bank is borrowing in a manner which requires special treatment the method of direct contact must necessarily be employed. It is a slow operation and, when many banks are to be dealt with, it does not produce results nearly so promptly, effectively, or equitably as does a change in rate. The reasons for a change in rate may not be thoroughly understood by the member banks, but their reaction to it is sufficiently uniform to bring about prompt movement in the direction in which the rate should operate.

Philadelphia.—Our experience has been that bank officers sometimes yield to so-called moral suasion. Moral suasion is practically the only way we have of controlling our out-of-town banks. Their rate to their customers almost invariably is 6 per cent, so our changes in rates have no effect on theirs; it only reduces or increases the profits they make on their borrowings from us. At times we have prevented their openly borrowing from us to loan on the exchanges and by interviews, inquiry, and investigation we have prevented to quite an extent its being done clandestinely by or through them.

Richmond.—While, on the few occasions when we have thought it best to use moral suasion, our member banks have fully cooperated, we believe as a matter of principle that the rate control is the more effective.

St. Louis.—Moral suasion has been most effective. Use of discount rate would be automatic and much easier, but is not practicable as legal contract rates in eighth district vary from 6 to 10 per cent.

San Francisco.—As to banks situated outside of metropolitan centers, the discount rate does not have any noticeable effect on the total volume of borrowings at the Federal reserve bank and with correspondents. The reason, no doubt, is that changes in Federal reserve rates are not passed on to customers. In metropolitan centers a change in the discount rate is likely to be passed on to the bank's borrowing customers. It depends largely upon the disposition of borrowers to accept an increase in rate as to whether the member bank will begin to reduce its indebtedness. When, in the light of existing circumstances, it appears that a member bank is making improper use of Federal reserve credit, it is requested to discontinue doing so.

11. To what extent have dealings in Federal funds relieved member banks from the necessity of rediscounting? To what extent have they been resorted to by member banks lacking eligible paper?

Atlanta.—(1) To no appreciable extent.

(2) To no extent.

Boston.—Dealing in Federal funds has undoubtedly relieved member banks, particularly large city banks, from the necessity of rediscounting, although it would be difficult to determine just how extensive the effects have been. Practically all of the dealings in Federal funds in this district have been carried on either between Boston banks or between Boston banks and banks in other large financial centers, although there are indications that these dealings are beginning to extend to banks in this district outside of Boston. As Boston is an industrial center, the city banks have in portfolio varying amounts of eligible paper, and the motive for dealing in Federal funds has not been the lack of eligible paper, but rather a matter of rates—the member banks purchasing Federal funds when they may be secured at a rate lower than the established rediscount rate.

Chicago.—Dealings in Federal reserve funds are confined principally to the larger banks in the important financial centers. This practice, which we believe to be legitimate, has relieved the large member banks from the necessity of borrowing at the Federal reserve banks for their temporary requirements. It is our opinion this has been beneficial inasmuch as it conserves the use of Federal reserve credit by decreasing the amount of Federal reserve credit which would otherwise go into the market. In our experience, we know of no cases where member banks have resorted to the use of Federal reserve funds because of their lack of eligible paper.

Cleveland.—Dealings in Federal funds to a limited extent have been resorted to by some of our larger member banks. Such dealings have no doubt relieved them from the necessity of borrowing from us temporarily, but we are without information as to the volume. These purchases have been made because of a saving in cost as against borrowing and not ncessarily because of a lack of eligible paper.

Dallas.—(1) To a very small extent in this district.

(2) Not to any extent in this district to our knowledge.

Kansas City.—Dealings in Federal funds in this district have been confined almost entirely to transactions between banks located in Kansas City or our branch cities and we doubt whether any such transactions have in recent years been resorted to because of lack of eligible paper by such member banks. Ordinarily purchases of Federal exchange have been made by one member bank from another merely to cover a very temporary shortage in reserve and in no instance have we learned of any member bank being a regular purchaser of Federal exchange for any considerable period of time. These transactions have, perhaps, resulted in some slight reduction in member bank rediscounting, but if member banks could not sell their excess reserve balances locally, they would merely transfer them by wire to some other point and the net result would be the same.

Minneapolis.—Dealings in Federal funds are negligible in the ninth Federal reserve district.

New York.—In order to make clear the discussion of this question it seems desirable first to explain how Federal funds originate. Federal funds are in effect the excess reserves of one bank or group of banks, which are made available to other banks. In the conduct of their business, member banks frequently find upon adjustment of their reserve position that they have an excess of reserves for the day. Ordinarily if the bank with an excess reserve is borrowing at the reserve bank, such excess will be used to reduce or eliminate its indebtedness, but if the bank is not in debt to the reserve bank, or if the excess reserve exceeds its indebtedness, the bank will naturally seek to employ the funds. The ordinary employment of funds by a member bank does not require actual payment until the business day following the commitment, since normally it either issues a check payable through the clearing house or establishes a credit on its books. In either case it does not actually lose the funds until the following day, so that the usual methods of employing its excess reserves would still leave the bank with the excess for one day. In order to employ these funds for that one day, there has developed a market in Federal funds. The natural market for such funds is with banks which are deficient in reserves, as such banks are of course generally glad to purchase Federal funds if they can do so upon advantageous terms, rather than to borrow at the reserve bank.

Dealings in such funds have relieved member banks from the necessity of rediscounting only to a relatively slight extent. When such funds are scarce the demand is at the maximum, and when they are in supply there generally exists little demand for them. There has not come to our notice any cases where member banks have resorted to the purchase of Federal funds because they lack eligible paper, and such transactions are unlikely because of the risk of placing dependence on a source of credit which may fail when most needed. As a matter of fact, trading in Federal funds in this district is limited to banks of the highest credit standing, because the bank selling Federal funds is in effect making an unsecured loan for one day, and the class of banks entitled to this type of accommodation generally have an ample supply of eligible paper. There appears also to be a growing tendency to deal in Federal funds between Federal reserve districts; and it is not unlikely, when there is a difference in reserve bank rates, that such interdistrict transactions may be the means of member banks in the district having the higher rate obtaining Federal reserve funds more cheaply than they could otherwise be obtained. A market in Federal funds, if limited to banks of unquestioned credit standing, should on the whole be a desirable thing, since it should be of assistance in making funds available where needed, and should make for a greater fluidity of credit.

Philadelphia.—It is impossible for us to state to any degree of accuracy the extent to which Federal reserve funds were used as a substitute for rediscount, but we do know that this method of borrowing has been used quite extensively by the large city banks, and on one or two occasions, as near as we can estimate, they were indebted to the New York banks and dealers to the extent of $50,000,000. This method of borrowing is confined mostly to the large city banks and the question of rate, not the lack of eligible paper, is the dominating factor in such transactions.

Richmond.—Dealings in Federal reserve funds have been resorted to only to a very limited extent in this district, and then not used for lack of eligible paper, to our knowledge, but for convenience and possibly at less cost.

St. Louis.—(1) Very little.

(2) Not at all.

San Francisco.—To a considerable extent. A number of banks in eastern cities follow the practice of transferring their surplus funds to correspondent banks on the Pacific coast, with the request that the identical amount be retransferred East early the following day. Frequently, banks transfer practically the same amount back and forth day after day for a considerable time.

Funds transferred by wire at 3 p. m. eastern standard time reach the Pacific coast at say 12.30 p. m. Pacific standard time. Immediately trading commences for the purpose of adjusting reserves and borrowing.

In some instances the funds are transferred as the result of a specific purchase by the Pacific coast bank, or in the normal course to augment interest-bearing balances, or, in some cases, are transferred to be sold "at the best price available."

Obviously, these "low-rate" funds in the San Francisco market have an important effect on the volume of Federal reserve bank credit outstanding.

No instance is known of a member bank using Federal reserve funds in an amount greater than that for which it could have furnished eligible paper or security.

Statistical Appendix

12. Append data for the past four years, of the amount of paper offered by member banks for rediscount which has been rejected by your institution, grouped according to the reasons prompting the rejection, similar to such tables appearing in the recent annual reports of the Federal Reserve Bank of Dallas.

FEDERAL RESERVE BANK OF ATLANTA

Data on the amount of paper offered by member banks for rediscount for 1929 and 1930 which was rejected by the Atlanta office

Bankers acceptance liability over 50 percent of capital and surplus	$6,385.60
Collateral insufficient	25,486.62
Dependent storage of collateral	48,273.15
Examiners' criticism	312,090.40
Ineligible collateral	76,190.16
Maturity in excess legal limit	409,531.71
Note not officially signed	115,286.44
Occupation ineligible	205,919.03
Personal, not commercial, industrial, or agricultural	103,914.99
Physical defects, alterations, etc.	1,213,800.82
Post dated	7,781.62
Proceeds used for ineligible purpose	61,140.80
Rate of interest in excess of legal rate	1,402.50

Statement ineligible	$3,158,994.88
Statement requested; not furnished	5,750,644.36
Unwilling to increase unsecured indebtedness	310,003.01
Various items aggregating	300,806.72
Excess of 10 per cent of capital and surplus	36,622.00
Total	12,144,274.81

This information for the years 1927 and 1928 is not available from our records as kept at that time.

Data on the amount of paper offered by member banks for rediscount for the years 1927, 1928, 1929, and 1930, which was rejected by our New Orleans branch grouped according to reasons prompting rejections.

Notes not completed	$1,009,344.06
Post dated	89,876.33
Body and figures	529,521.28
Commodity not independently stored	124,076.55
Notes past due	223,097.59
Over 90 days	755,767.30
Ineligible	1,215,564.45
Collateral irregular	1,286,051.06
Alterations	1,480,097.50
Undesirability	10,775,218.13
Total	17,488,614.25

FEDERAL RESERVE BANK OF BOSTON

The amount of paper offered by member banks for rediscount which has been rejected by this institution is relatively very small—so very small in fact that it has not been considered necessary to keep any independent record or reasons therefor. The correspondence is scattered through our bank correspondence files and the work and expense involved in its location would be entirely out of proportion to the value of the information obtained. Our member banks, during the period of the operation of the system, have gained such familiarity with eligibility and acceptability requirements that the amount of paper submitted, which it is necessary to return, is very small. Of the paper returned, the largest percentage has been for technical defects, which are present more often in paper coming from the smaller institutions. Next in percentage would doubtless be paper returned because of unsatisfactory financial statement relation between quick assets and current liabilities. Actual ineligibility would probably be the next in percentage of items returned, and the most frequent class under this heading would be public utility company notes, which seem to bring up the question of eligibility in the "outside" banking institutions quite frequently.

FEDERAL RESERVE BANK OF CHICAGO

The following comprises that part of the paper offered by member banks for rediscount which has been returned to member banks during the past four years for the following reasons: Ineligibility, eligibility not established, insufficient credit information, credit showing.

	Farming	Commercial	Total
1927	$1,670,956	$3,802,900	$5,473,856
1928	1,058,510	6,793,570	7,852,080
1929	855,250	3,969,400	4,824,650
1930	658,300	1,653,300	2,311,600

As our records do not show the same classifications of paper as shown by the reports of the Federal Reserve Bank of Dallas, we have submitted the figures according to the above classifications.

FEDERAL RESERVE BANK OF CLEVELAND

We have kept no statistical data on the number and amounts of items returned or the reasons for their return prior to 1930. The amounts of paper offered for rediscount for that year and rejected for various reasons are shown below:

	Amount	Percentage	Items	Percentage
Ineligibility	$573,639.18	0.83	109	0.85
Technical defects	270,047.14	.39	103	.80
Insufficient credit information	425,735.48	.63	94	.73
Credit showing	942,365.53	1.36	231	1.80
Miscellaneous	300,189.98	.44	126	.98
Total returned	2,511,977.21	3.65	663	5.16
Total accepted	68,760,838.38	96.35	12,830	94.84
Total	71,272,815.59	100.00	13,493	100.00

FEDERAL RESERVE BANK OF DALLAS

Classification and disposition of notes submitted by member banks during 1927

Number and amount of items received:	
Number	31,442
Amount	$66,932,943.76
Classification:	
Farming	$26,699,893.73
Commercial	39,561,341.60
Miscellaneous	671,708.43
Total	66,932,943.76

Reasons for return of paper showing percentage returned to total received

	Amount	Percentage	Items	Percentage
Ineligibility	$676,479.15	1.01	199	0.63
Technical defects	880,066.96	1.31	583	1.85
Insufficient credit information	846,749.35	1.26	589	1.87
Credit showing	4,110,216.59	6.14	5,217	16.59
Miscellaneous	114,019.70	.21	205	.65
Total returned	6,657,531.75	9.93	6,793	21.59
Total accepted	60,275,412.01	90.07	24,649	78.41
Total	66,932,943.76	100.00	31,442	100.00

Classification and disposition of notes submitted by member banks during 1928

Number and amount of items received:	
Number	30,165
Amount	$91,162,384.88
Classification:	
Farming	17,447,407.52
Commercial	73,027,702.55
Miscellaneous	687,274.81
Total	91,162,384.88

Reasons for return of paper, showing percentage returned to total received

	Amount	Percentage	Items	Percentage
Ineligibility	$475, 467. 71	0. 52	130	0. 43
Technical defects	305, 094. 90	. 33	188	. 62
Insufficient credit information	301, 913. 48	. 33	179	. 60
Credit showing	758, 122. 56	. 83	896	2. 97
Miscellaneous	68, 701. 79	. 08	45	. 15
Total returned	1, 909, 300. 44	2. 09	1, 438	4. 77
Total accepted	89, 253, 084. 44	97. 91	28, 727	95. 23
Total	91, 162, 384. 88	100. 00	30, 165	100. 00

Classification and disposition of notes submitted by member banks during 1929

Number and amount of items received:	
Number	34, 840
Amount	$166, 610, 654. 05
Classification:	
Farming	23, 813, 804. 62
Commercial	139, 408, 219. 63
Miscellaneous	3, 388, 629. 80
Total	166, 610, 654. 05

Reasons for return of paper, showing percentage returned to total received

	Amount	Percentage	Items	Percentage
Ineligibility	$2, 712, 091. 13	1. 63	272	0. 78
Technical defects	746, 622. 78	. 45	335	. 96
Insufficient credit information	1, 264, 875. 51	. 76	217	. 62
Credit showing	2, 359, 206. 86	1. 41	1, 152	3. 31
Miscellaneous	82, 460. 14	. 05	54	. 15
Total returned	7, 165, 256. 42	4. 30	2, 030	5. 82
Total accepted	159, 445, 397. 63	95. 70	32, 810	94. 18
Total	166, 610, 654. 05	100. 00	34, 840	100. 00

Classification and disposition of notes submitted by member banks during 1930

Number and amount of items received:	
Number	55, 008
Amount	$87, 358, 502. 32
Classification:	
Farming	35, 220, 477. 47
Commercial	49, 862, 696. 77
Miscellaneous	2, 257, 328. 08
Total	87, 358, 502. 32

Reasons for return of paper, showing percentage returned to total received

	Amount	Percentage	Items	Percentage
Ineligibility	$1,039,613.40	1.19	424	0.77
Technical defects	447,118.10	.51	335	.61
Insufficient credit information	589,075.69	.67	240	.44
Credit showing	4,831,111.57	5.53	3,566	6.48
Miscellaneous	470,246.69	.54	199	.36
Total returned	7,377,165.45	8.44	4,764	8.66
Total accepted	79,981,336.87	91.56	50,244	91.34
Total	87,358,502.32	100.00	55,008	100.00

FEDERAL RESERVE BANK OF KANSAS CITY

The total amount of paper rejected during the year 1930 was $2,997,984.46, equal to 1 per cent of the entire amount submitted by member banks for rediscount.

The above amount of rejected paper consisted of 2,084 notes, or 6½ per cent of the total number offered.

Reasons for rejection as follows:

Ineligible	286
Alteration	114
Indorsement	142
Other legal irregularities	863
Credit information	548
Insufficient security	257
Miscellaneous	95
Total	2,305

The above classification includes 165 notes rejected for two or more reasons. We have maintained the above record only for the year 1930, and it does not include a segregation by reasons of the amount rejected. This information and corresponding reports for the other years mentioned in question 7 could be compiled from our files by the expenditure of considerable time and effort, but we assume that the above classification will serve your purpose. There is no reason to believe that the percentage of rejections or reasons for rejections during prior years would show material variations from the above figures for the year 1930.

FEDERAL RESERVE BANK OF MINNEAPOLIS

Annual amount of paper offered for discount or rediscount which has been rejected (1927 to 1930, inclusive)

	Head office	Helena branch	Combined
1927	$1,256,140.18	$596,984.48	$1,853,124.66
1928	980,883.75	287,364.79	1,268,248.54
1929	1,210,480.03	656,475.95	1,866,955.98
1930	1,138,797.18	518,187.92	1,656,985.10

NOTE.—These totals were computed by subtracting discounted paper from all paper offered. The resulting figures contain some paper offered but recalled without being considered by our credit officials. No record has been kept of reasons for rejection of paper.

FEDERAL RESERVE BANK OF NEW YORK

In passing upon paper which is offered us for rediscount, we customarily credit the applying member bank with the amount of its application after deducting any items which are technically irregular in form or obviously ineligible, or where the name is recognized as being undesirable from a credit standpoint. We have gone over our applications of the past four years and assembled data, which are given in the table below, as to the total number and amount of items thus deducted, and as to this class of items the tables given below are complete.

All items for which credit is actually given are held pending receipt and study of such information as may be needed, and a considerable number of such items are subsequently returned because of insufficient credit information or credit showing. The figures as to items so returned are somewhat incomplete, in that they include only items formally acted upon by the discount committee and on which the immediate removal of the items was required. A considerable number of items which are obviously undesirable are returned following investigation and study by the credit department without submission to the discount committee, and of these items no detailed record has been kept. There are also instances in which the items, being of early maturity or accompanying a member bank collateral note of early maturity, have been permitted to remain until the due date of the obligation with the understanding that paper of the same borrower would not be offered again unless and until his condition showed improvement. In such cases no formal record has been made of the withdrawal of the paper, and this paper is not included in the figures given.

The figures given refer only to applications for rediscount or advances against eligible paper, and do not include advances against United States Government obligations.

Classification and disposition of notes submitted by member banks to loan and discount department

	Amount	Percentage	Items	Percentage
1927				
Ineligibility	$1,619,792	0.07	126	0.30
Technical defects	966,531	.04	359	.85
Insufficient credit information	3,970		1	
Credit showing	1,035,341	.04	54	.10
Total returned	3,625,634	.15	540	1.25
Total accepted	2,353,716,576	99.85	41,573	98.75
Total received	2,357,342,210	100.00	42,113	100.00
1928				
Ineligibility	1,309,177	.04	216	.41
Technical defects	1,021,257	.03	404	.78
Insufficient credit information	132,442	.004	1	
Credit showing	324,024	.01	30	.05
Total returned	2,786,900	.084	651	1.24
Total accepted	3,322,038,574	99.916	50,978	98.76
Total received	3,324,825,474	100.000	51,629	100.00
1929				
Ineligibility	2,102,303	.06	421	.54
Technical defects	1,313,486	.04	576	.73
Insufficient credit information	40,000	.001	1	
Credit showing	466,605	.01	20	.02
Total returned	3,922,394	.111	1,018	1.29
Total accepted	3,281,789,816	99.889	77,057	98.71
Total received	3,285,712,210	100.000	78,075	100.00
1930				
Ineligibility	915,131	.11	419	.56
Technical defects	1,870,270	.23	1,113	1.50
Credit showing	1,068,484	.13	20	.03
Total returned	3,853,885	.47	1,552	2.09
Total accepted	799,889,349	99.53	73,351	97.91
Total received	803,743,234	100.00	74,903	100.00

FEDERAL RESERVE BANK OF PHILADELPHIA

Reasons for return of paper, showing percentage returned to total received

	Amount	Percentage	Items	Percentage
1927				
Ineligibility	$1, 264, 763. 47	0. 26	199	0. 63
Technical defects	1, 988, 419. 10	. 41	907	2. 88
Insufficient credit information	2, 358, 558. 82	. 48	179	. 57
Credit showing	5, 079, 103. 65	1. 04	528	1. 68
Total returned	10, 690, 845. 04	2. 19	1, 813	5. 76
Total accepted	477, 472, 092. 06	97. 81	29, 631	94. 24
Total received	488, 162, 937. 10	100. 00	31, 444	100. 00
1928				
Ineligibility	2, 325, 703. 00	. 27	246	. 86
Technical defects	2, 391, 126. 46	. 28	859	2. 99
Insufficient credit information	1, 507, 914. 18	. 17	200	. 69
Credit showing	4, 860, 184. 20	. 57	411	1. 43
Total returned	11, 084, 927. 84	1. 29	1, 716	5. 97
Total accepted	834, 175, 243. 62	98. 71	26, 995	94. 03
Total received	845, 260, 171. 46	100. 00	28, 711	100. 00
1929				
Ineligibility	1, 842, 557. 71	. 12	401	. 88
Technical defects	2, 477, 575. 10	. 17	1, 160	2. 56
Insufficient credit information	1, 769, 963. 52	. 11	161	. 35
Credit showing	5, 206, 283. 55	. 35	659	1. 45
Total returned	11, 296, 379. 88	. 75	2, 381	5. 24
Total accepted	1,445,788,580. 22	99. 25	42, 929	94. 76
Total received	1,457,084,960. 10	100. 00	45, 309	100. 00
1930				
Ineligibility	732, 035. 68	. 24	276	. 63
Technical defects	1, 546, 286. 46	. 48	974	2. 25
Insufficient credit information	620, 225. 09	. 21	38	. 08
Credit showing	4, 171, 081. 16	1. 31	672	1. 55
Total returned	7, 069, 628. 39	2. 24	1, 960	4. 51
Total accepted	309, 417, 780. 07	97. 76	41, 243	95. 49
Total received	316, 487, 408. 46	100. 00	43, 203	100. 00

FEDERAL RESERVE BANK OF RICHMOND

We have kept no record which would enable us to determine the amount of paper offered by member banks for rediscount which has been rejected. Such paper would be so small in proportion to the amount accepted that we feel it would be of no value for our own purposes.

FEDERAL RESERVE BANK OF ST. LOUIS

Amount of paper offered by member banks for past four years, grouped according to reasons for rejection

	1927	1928	1929	1930
Ineligibility	$476, 005. 92	$864, 732. 20	$1, 134, 872. 44	$1, 893, 371. 99
Technical defects	230, 798. 42	806, 507. 07	2, 259, 958. 52	1, 289, 070. 38
Insufficient credit information	3, 034, 557. 33	4, 705, 126. 46	7, 465, 760. 22	4, 917, 466. 46
Credit showing	1, 331, 650. 27	3, 492, 512. 77	3, 869, 375. 35	4, 239, 944. 53
Miscellaneous	200, 604. 04	309, 210. 59	524, 512. 06	441, 057. 14
Total rejected	5, 273, 615. 98	10, 178, 089. 09	15, 254, 478. 59	12, 780, 910. 50
Total accepted	204, 978, 456. 48	289, 018, 602. 32	329, 036, 831. 15	159, 517, 555. 62
Total	210, 252, 072. 46	299, 196, 691. 41	344, 291, 309. 74	172, 298, 466. 12

FEDERAL RESERVE BANK OF SAN FRANCISCO

No tabulated record of rejected paper has been maintained. It is estimated, however, that less than 5 per cent of the notes offered for discount are not accepted.

Principally, rejections are due to irregularities in promissory notes or supporting documents and to absence of sufficient information regarding important items in the borrowers' financial statements to permit an understanding of borrowers' affairs.

All paper returned to an offering bank is accompanied by a carefully prepared letter dwelling on the features which occasion its rejection. This procedure not only has an educational value but it affords the member bank an opportunity to reoffer the paper if it has any new facts to present or believes the Federal reserve bank's reasoning is not correct.

If it is apparent the member bank does not understand the rediscounting requirements, a representative of the Federal reserve bank visits the member bank, reviews its portfolio, and discusses the features determining which paper is available for rediscount and which is not.

13. Append a statement of the amount of paper held in your failed banks' account for each month through the past four years.

FEDERAL RESERVE BANK OF ATLANTA

Statement of the amount of paper held in failed banks' account at the end of each month for the years 1927, 1928, 1929, and 1930

	Claims account [1]	Paper held		Claims account [1]	Paper held
1927			1929		
January	$676, 155. 29	$3, 917, 254. 09	January	$1, 076, 048. 32	$4, 752, 783. 88
February	670, 701. 47	3, 958, 979. 58	February	1, 361, 819. 88	5, 342, 734. 34
March	820, 089. 26	4, 236, 684. 08	March	1, 638, 789. 86	5, 802, 968. 02
April	794, 345. 55	4, 155, 570. 51	April	1, 558, 873. 34	5, 713, 329. 53
May	640, 519. 15	3, 976, 164. 78	May	1, 668, 576. 74	5, 854, 439. 37
June	642, 364. 64	3, 959, 409. 05	June	1, 837, 706. 07	6, 110, 562. 73
July	622, 431. 50	3, 884, 977. 66	July	4, 701, 215. 65	10, 455, 533. 46
August	605, 858. 16	3, 866, 088. 99	August	4, 301, 588. 80	9, 950, 407. 41
September	572, 940. 59	3. 744, 947. 96	September	3, 961, 161. 63	9, 679, 691. 08
October	542, 128. 17	3, 715, 959. 59	October	3, 717, 704. 42	9, 417, 325. 39
November	521, 894. 84	3, 483, 910. 20	November	3, 556, 300. 73	9, 28[illegible], 377. 20
December	499, 729. 50	3, 468, 302. 06	December	3, 751, 872. 00	9, 626, 897. 07
1928			1930		
January	856, 277. 72	3, 405, 505. 04	January	3, 977, 424. 26	9, 669, 625. 84
February	845, 916. 06	3, 471, 535. 82	February	4, 005, 479. 68	9, 927, 826. 73
March	909, 075. 99	3, 624, 919. 56	March	3, 769, 841. 09	9, 742, 180. 08
April	880, 370. 19	3, 574, 120. 51	April	3, 576, 600. 57	9, 519, 914. 01
May	923, 098. 48	4, 167, 626. 61	May	3, 360, 011. 75	9, 274, 339. 71
June	890, 112. 97	4, 079, 184. 23	June	3, 249, 849. 55	8, 916, 354. 29
July	860, 267. 14	4, 038, 305. 57	July	3, 097, 339. 26	8, 284, 557. 73
August	833, 117. 06	3, 980, 038. 97	August	3, 039, 886. 15	8, 291, 899. 08
September	1, 369, 627. 45	5, 189, 423. 36	September	2, 888, 624. 57	8, 059, 459. 21
October	1, 298, 814. 15	5, 110, 459. 93	October	2, 702, 780. 09	7, 879, 052. 48
November	2, 275, 908. 67	6, 378, 442. 60	November	3, 968, 147. 17	9, 535, 177. 16
December	1, 130, 198. 98	4, 838, 285. 05	December	4, 510, 272. 21	10, 336, 845. 03

[1] Aggregate indebtedness of closed member banks to Federal Reserve Bank of Atlanta. It will be noticed the amount of paper held greatly exceeds the aggregate amount due the reserve bank by closed member banks. This is accounted for by reason of the fact that on a number of closed banks a large portion of the indebtedness has been charged off, but that the collateral securing the indebtedness of the banks is held intact, and is reduced only by collections, compromise settlements, and bankruptcy of individual debtors. A large percentage of the paper held as collateral is doubtful or worthless, but the notes are held in anticipation of the makers offering some form of composition settlement.

FEDERAL RESERVE BANK OF BOSTON

Paper held in failed banks' account on the last day of each month

Month	1928 [1]	1930 [2]
June		$44,953.08
July		35,367.71
August		30,520.47
September	$83,800.60	29,521.00
October	70,770.60	28,464 60
November	54,995.60	27,498.60
December		20,255.60

[1] Citizens National Bank, Woonsocket, R. I.
[2] First National Bank in Poultney, Poultney, Vt.

FEDERAL RESERVE BANK OF CHICAGO

Paper held in failed banks' account by months, January, 1927, to December, 1930, inclusive

	January	February	March	April	May	June
1927	$2,900,125.84	$2,426,794.47	$2,563,806.21	$2,302,793.09	$2,014,711.99	$2,066,752.89
1928	1,420,791.69	1,457,540.03	1,170,606.49	939,050.18	965,912.51	904,543.29
1929	522,054.65	515,812.76	474,585.42	429,457.01	445,405.66	414,856.46
1930	600,726.32	619,199.13	420,202.56	371,604.94	302,180.26	281,915.28

	July	August	September	October	November	December
1927	$1,636,563.26	$1,334,307.98	$1,367,771.69	$1,651,201.59	$1,579,223.60	$1,527,122.35
1928	782,911.87	703,586.40	661,530.56	602,893.06	645,150.90	636,377.22
1929	367,886.90	389,074.91	382,858.05	512,503.53	507,097.74	479,967.64
1930	280,884.30	276,553.65	285,780.92	281,933.40	379,897.50	1,226,993.50

The foregoing applies to rediscounted paper only. In addition thereto excess collateral has been held in many of the cases involved.

FEDERAL RESERVE BANK OF CLEVELAND

	Maximum	Minimum
1927	None.	
1928:		
January to April, inclusive	None.	
May	$100,931.50	$100,000.00
June	100,931.50	62,285.63
July	62,285.63	40,272.65
August	40,272.65	23,034.24
September	23,034.24	16,224.41
October	16,224.41	4,600.50
November	4,600.50	None.
December	None.	
1929	None.	
1930	None.	

FEDERAL RESERVE BANK OF DALLAS

Statement of the amount of paper held in failed bank's account for each month for the past four years

	1927	1928	1929	1930
January	$226,473.06	$18,222.88	$15,085.49	$960.81
February	123,040.88	17,599.41	10,327.87	398,591.18
March	85,207.07	16,681.50	9,304.96	255,371.62
April	73,679.50	16,409.70	5,415.24	85,294.60
May	128,299.11	9,064.18	5,409.24	67,684.47
June	83,186.27	9,064.18		63,550.20
July	68,518.42	8,765.21		57,983.65
August	49,796.70	8,765.21		96,420.86
September	45,105.79	8,765.21		140,201.07
October	24,386.99	5,096.91		131,605.19
November	28,121.63	4,676.91		119,704.84
December	20,162.00	6,562.52		141,604.14

The figures given above are net liability and not total amount of paper held, as in some instances marginal collateral was held in addition to the amount of the indebtedness. With the exception of the present liability the indebtedness of failed banks during the years mentioned has been collected in full with expenses.

FEDERAL RESERVE BANK OF KANSAS CITY

Statement of the amount of liability due from failed banks for each month during the years 1927, 1928, 1929, and 1930

1927	
Jan. 31	$357,393.39
Feb. 28	327,064.92
Mar. 31	276,696.58
Apr. 30	251,753.59
May 31	612,010.62
June 30	511,703.57
July 31	430,367.41
Aug. 31	348,906.77
Sept. 30	298,295.18
Oct. 31	274,388.93
Nov. 30	299,346.77
Dec. 31	285,902.85

1928	
Jan. 31	286,947.19
Feb. 29	285,664.79
Mar. 31	316,748.00
Apr. 30	329,202.02
May 31	292,708.30
June 30	253,137.22
July 31	225,471.09
Aug. 31	281,602.87
Sept. 30	201,306.35
Oct. 31	151,275.97
Nov. 30	184,911.58
Dec. 31	132,702.03

1929	
Jan. 31	$166,470.67
Feb. 28	198,811.85
Mar. 31	138,157.87
Apr. 30	111,717.46
May 31	96,178.03
June 30	75,994.98
July 31	70,922.30
Aug. 31	64,746.76
Sept. 30	127,442.30
Oct. 31	107,547.31
Nov. 30	78,423.36
Dec. 31	103,693.87

1930	
Jan. 31	149,332.39
Feb. 28	121,878.47
Mar. 31	208,587.38
Apr. 30	284,187.29
May 31	222,078.72
June 30	157,902.29
July 31	162,972.62
Aug. 31	123,716.58
Sept. 30	228,025.68
Oct. 31	212,204.96
Nov. 30	214,831.42
Dec. 31	179,520.20

FEDERAL RESERVE BANK OF MINNEAPOLIS

Amount of discounted and rediscounted paper held in the failed banks' account at the close of each month during the years 1927–1930, inclusive

	Amount due us	Amount charged off by us	Total
1927			
January	$1,812,164.98		$1,812,164.98
February	1,770,186.27		1,770,186.27
March	1,659,069.13		1,659,069.13
April	1,617,695.85		1,617,695.85
May	1,536,498.17		1,536,498.17
June	1,479,720.83		1,479,720.83
July	1,426,255.82		1,426,255.82
August	1,380,714.28		1,380,714.28
September	1,268,622.05		1,268,622.05
October	1,123,029.18		1,123,029.18
November	1,030,949.09		1,030,949.09
December	856,493.58	$95,621.61	952,115.19
1928			
January	805,248.58	95,571.61	900,820.19
February	757,741.90	88,442.39	846,184.29
March	746,267.97	88,272.39	834,540.36
April	692,516 83	88,272.39	780,789.22
May	677,830.14	87,645.30	765,475.44
June	660,800.15	87,635.30	748,435.45
July	635.763.81	87,550.30	723,314.11
August	594,872.48	87,050.30	681,922.78
September	550,640.39	87,050.30	637,690.69
October	492,172.15	85,849.37	578,021.52
November	456,858.52	85,849.37	542,707.89
December	604,423.14	104,897.38	709,320.52
1929			
January	574,975.58	104,397.38	679,372.96
February	536,211.66	104,397.38	640,609.04
March	542,895.57	104,397.38	647,292.95
April	394,131.18	104,397.38	498,528.56
May	381,502.65	104,397.38	485,900.03
June	426,197.63	104,397.38	530,595.01
July	440,496.67	104,397.38	544,894.05
August	434,633.92	104,397.38	539,031.30
September	410,524.35	103,902.38	514,426.73
October	371,319.18	102,586.79	473,905.97
November	439,677.43	99,453.81	539,131.24
December	375,778.82	99,428.81	475,207.63
1930			
January	332,749.63	99,428.81	432,178.44
February	339,691.49	99,403.81	439,095.30
March	374,456.87	99,403.81	473,860.68
April	340,458.68	123,967.48	464,426.16
May	327,447.03	123,967.48	451,414.51
June	321,351.63	123,967.48	445,319.11
July	337,887.52	123,967.48	461,855.00
August	326,388.87	151,222.59	477,611.46
September	327,063.93	151,222.59	478,286.52
October	305,542.65	151,222.59	456,765.24
November	307,414 48	151,222.59	458,637.07
December	398,839.78	156,290.34	555,130.12

FEDERAL RESERVE BANK OF NEW YORK

Volume of paper held in failed banks' account: 1927, none; 1928, none; 1929, none; 1930, August 31, $4,826.58; at close of other months, none.

NOTE. Since the above statement does not properly reflect the amount of paper held for failed banks, we submit the following information, which covers all paper so held during the 4-year period:

Bank	Date closed	Amount owed	Amount of rediscounts or collateral held		Liquidation of loan completed
			United States Government	Commercial or agricultural paper	
A	Aug. 8, 1930	$20,500.00		$20,500.00	Aug. 18, 1930
B	Aug. 15, 1930	11,065.09		11,065.09	Sept. 23, 1930
C	Dec. 6, 1930	14,825.00		25,050.00	Dec. 22, 1930
D	Taken over by banking department morning of Dec. 11, 1930.	19,000,000.00	$1,000,000.00	29,310,067.07	Dec. 13, 1930

FEDERAL RESERVE BANK OF PHILADELPHIA

Paper held in claims account failed or suspended banks last day of each month

January, 1929	$19,631.65
August, 1929	25,449.05
December, 1928	43,425.08
December, 1930	40,036.11

FEDERAL RESERVE BANK OF RICHMOND

Balances due by failed banks on rediscounted paper (exclusive of interest accrued on past due paper) at end of each month during 1927, 1928, 1929, and 1930

Month	1927	1928	1929	1930
January	$238,839.99	$341,007.05	$438,929.23	$614,258.62
February	330,783.10	346,482.40	422,712.08	754,894.87
March	276,735.63	341,457.58	424,333.61	595,095.12
April	236,788.57	348,321.18	416,412.96	566,848.41
May	255,100.97	354,872.12	362,986.73	550,437.61
June	251,047.51	351,138.12	368,827.60	480,084.20
July	243,629.36	346,792.25	377,374.22	472,652.18
August	335,030.94	337,955.94	408,894.29	465,419.05
September	364,393.54	340,796.81	437,290.05	452,765.99
October	365,769.50	325,934.02	502,610.41	450,287.49
November	340,326.01	403,223.53	579,035.99	606,724.63
December	327,346.00	432,696.67	626,003.77	925,897.93

FEDERAL RESERVE BANK OF ST. LOUIS

Amount of paper held in failed banks account on last reporting date of each month

1927	
Jan. 31	$920,761.61
Feb. 28	839,966.19
Mar. 31	1,014,092.09
Apr. 30	941,036.23
May 31	1,014,459.97
June 30	1,070,207.44
July 31	987,363.66
Aug. 31	899,363.89
Sept. 30	$859,747.83
Oct. 31	791,010.24
Nov. 30	749,850.43
Dec. 31	724,812.72
1928	
Jan. 31	602,311.74
Feb. 28	688,755.32
Mar. 31	570,847.84

Statement of the amount of liability due from failed banks for each month during the years 1927, 1928, 1929, and 1930—Continued

Apr. 30	$490, 659. 34
May 31	486, 131. 65
June 30	485, 658. 52
July 31	485, 081. 83
Aug. 31	477, 143. 83
Sept. 29	471, 607. 18
Oct. 31	469, 384. 91
Nov. 30	387, 682. 37
Dec. 31	371, 170. 91
1929	
Jan. 31	302, 435. 61
Feb. 28	294, 761. 99
Mar. 30	282, 754. 17
Apr. 30	259, 397. 38
May 31	259, 338. 79
June 29	269, 121. 15
July 31	277, 885. 81
Aug. 31	244, 850. 79
Sept. 30	$268, 755. 60
Oct. 31	222, 872. 18
Nov. 30	266, 953. 17
Dec. 31	217, 661. 07
1930	
Jan. 30	271, 268. 71
Feb. 28	294, 382. 76
Mar. 31	236, 121. 71
Apr. 30	230, 611. 94
May 31	212, 750. 95
June 30	65, 807. 92
July 30	482, 886. 69
Aug. 30	551, 018. 12
Sept. 30	476, 020. 47
Oct. 31	430, 585. 20
Nov. 30	12, 712, 952. 28
Dec. 31	6, 828, 835. 74

FEDERAL RESERVE BANKS OF SAN FRANCISCO

Claims account, closed or suspended banks

[000 omitted]

	1927	1928	1929	1930		1927	1928	1929	1930
Jan. 1	900	566	317	234	July 10	850	471	254	172
Jan. 10	963	561	309	229	July 20	793	470	254	172
Jan. 20	955	552	1,034	229	Aug. 1	783	470	254	168
Feb. 1	939	548	295	229	Aug. 10	772	469	243	168
Feb. 10	936	540	295	228	Aug. 20	772	465	243	168
Feb. 20	922	529	294	228	Sept. 1	738	464	243	168
Mar. 1	911	620	290	229	Sept. 10	733	462	243	165
Mar. 10	896	588	290	228	Sept. 20	724	460	243	165
Mar. 20	872	568	290	228	Oct. 1	704	443	243	184
Apr. 1	855	558	288	226	Oct. 10	692	441	241	182
Apr. 10	843	539	286	226	Oct. 20	678	430	241	181
Apr. 20	908	539	286	221	Nov. 1	675	427	241	177
May 1	915	525	286	221	Nov. 10	669	426	241	175
May 10	918	521	286	221	Nov. 20	651	425	241	174
May 20	919	518	285	225	Dec. 1	641	424	241	174
June 1	912	481	285	223	Dec. 10	636	425	242	175
June 10	896	481	283	223	Dec. 20	634	405	242	312
June 20	865	475	272	224	Charged to profit and loss during year	52	105	------	4
July 1	860	471	257	172					

14. Append on a monthly basis statistics of borrowings grouped by unit banks and by branch banks in your district over the past four years, together with the aggregate resources of the borrowing unit and branch member banks.

FEDERAL RESERVE BANK OF ATLANTA

Statistics of borrowings on a monthly basis grouped by unit banks and by branch banks in the sixth Federal reserve district over the past four years, together with the aggregate resources of the borrowing unit and branch member banks

Date	Branch banks borrowings (000 omitted)	Unit banks borrowings	Aggregate resources of borrowing banks	
			Branch banks	Unit banks
1927				
January	$11,000	$39,851,000	$67,444,000	$732,532,000
February	------------	29,059,000	67,444,000	732,532,000
March	500,000	44,192,000	67,444,000	732,532,000
April	------------	42,959,000	67,444,000	732,532,000
May	28,000	41,260,000	70,475,000	479,976,000
June	64,000	39,725,000	70,475,000	479,976,000
July	79,000	39,882,000	70,475,000	479,976,000
August	85,000	39,575,000	70,475,000	479,976,000
September	54,000	40,615,000	78,086,000	543,695,000
October	43,000	38,761,000	78,086,000	543,695,000
November	42,000	40,701,000	78,086,000	543,695,000
December	45,000	49,811,000	74,590,000	370,448,000
1928				
January	59,000	40,408,000	74,840,000	634,425,000
February	751,000	42,054,000	74,840,000	634,425,000
March	962,000	44,359,000	74,840,000	634,425,000
April	610,000	95,326,000	74,840,000	634,425,000
May	1,886,000	92,341,000	76,542,000	811,021,000
June	1,184,000	102,969,000	76,542,000	811,021,000
July	1,400,000	115,111,000	76,542,000	811,021,000
August	1,287,000	114,786,000	76,542,000	811,021,000
September	2,287,000	118,502,000	75,552,000	929,008,000
October	2,450,000	123,966,000	75,552,000	929,008,000
November	786,000	114,733,000	75,552,000	929,008,000
December	212,000	95,843,000	80,880,000	653,231,000
1929				
January	281,000	100,548,000	78,062,000	882,215,000
February	298,000	91,383,000	78,062,000	882,215,000
March	267,000	95,041,000	78,062,000	882,215,000
April	386,000	108,918,000	78,062,000	882,215,000
May	421,000	114,474,000	75,580,000	788,719,000
June	757,000	87,820,000	75,580,000	788,719,000
July	389,000	103,101,000	75,580,000	788,719,000
August	967,000	95,455,000	80,587,000	815,671,000
September	329,000	84,423,000	80,587,000	815,671,000
October	241,000	83,166,000	80,587,000	815,671,000
November	639,000	76,858,000	83,782,000	786,413,000
December	2,108,000	51,739,000	83,782,000	786,413,000
1930				
January	299,000	45,748,000	84,385,000	401,863,000
February	295,000	28,771,000	84,385,000	401,863,000
March	295,000	19,856,000	84,385,000	401,863,000
April	338,000	24,103,000	84,385,000	401,863,000
May	404,000	38,686,000	85,473,000	388,997,000
June	379,000	34,239,000	85,473,000	388,997,000
July	385,000	30,044,000	85,473,000	388,997,000
August	383,000	28,690,000	90,456,000	460,605,000
September	323,000	30,619,000	90,456,000	460,605,000
October	255,000	29,733,000	90,456,000	460,605,000
November	205,000	36,243,000	86,757,000	470,086,000
December	156,000	37,784,000	86,757,000	470,086,000

FEDERAL RESERVE BANK OF BOSTON

Statistics of borrowings grouped by unit banks and by branch banks in this district over the past four years, together with the aggregate resources of the borrowing unit and branch member banks

[000 omitted]

Date	Daily average borrowings of member banks in district No. 1 with Federal reserve bank, Boston			Aggregate resources of member banks district No. 1 borrowing from Federal reserve bank, Boston, as of date of the quarterly condition reports		
	Unit banks	Branch banks [1]	All banks	Unit banks	Branch banks [1]	All banks
1927						
January	$16,402	$16,955	$33,357			
February	17,355	11,678	29,033			
March	17,089	18,716	35,805	$612,424	$1,439,698	$2,052,122
April	14,053	9,148	23,201			
May	14,861	22,268	37,129			
June	15,557	18,286	33,848	769,937	1,517,839	2,287,776
July	14,164	15,525	29,689			
August	13,289	16,564	29,853			
September	11,147	17,231	28,378			
October	13,329	19,961	33,290	456,285	1,714,974	2,171,259
November	16,322	20,032	36,354			
December	14,322	25,867	40,189	663,264	1,602,316	2,265,580
1928						
January	10,994	12,462	23,456			
February	15,345	29,839	45,184	437,887	1,638,708	2,076,595
March	16,213	33,282	49,495			
April	13,193	31,174	44,367			
May	16,777	42,808	59,585			
June	27,348	57,454	84,802	867,532	1,976,817	2,844,349
July	25,099	42,862	67,961			
August	23,529	37,565	61,094			
September	22,636	28,280	50,916			
October	13,908	31,951	45,859	597,209	2,047,473	2,644,682
November	20,120	30,506	50,626			
December	24,544	40,456	65,000	931,629	1,889,199	2,820,828
1929						
January	18,500	41,926	60,426			
February	19,823	42,063	61,886			
March	22,168	36,472	58,640	588,671	2,171,106	2,759,777
April	20,478	55,334	75,812			
May	21,742	74,772	96,514			
June	22,992	76,388	99,380	871,877	2,105,705	2,977,582
July	28,191	50,246	78,437			
August	18,806	60,681	79,487			
September	23,493	47,769	71,262			
October	19,001	41,686	60,687	626,243	2,171,079	2,797,322
November	15,708	31,191	46,899			
December	22,106	18,283	40,389	827,609	1,153,141	1,980,750
1930						
January	12,155	11,753	23,908			
February	12,455	10,715	23,170			
March	11,210	9,938	21,148	500,972	1,235,576	1,736,548
April	9,246	6,384	15,630			
May	10,181	7,509	17,690			
June	11,792	5,522	17,314	524,813	1,000,072	1,524,885
July	8,942	3,637	12,579			
August	8,255	4,302	12,557			
September	6,813	4,744	11,557	406,693	375,647	782,340
October	5,698	3,212	8,916			
November	7,609	4,684	12,293			
December	12,803	4,476	17,279	398,971	909,417	1,308,388

[1] Includes so-called "chain" and "group" banks.

FEDERAL RESERVE BANK OF CHICAGO

Borrowings of member banks from January, 1927, to December, 1930, grouped by unit banks and by branch banks, together with the aggregate resources of the borrowing unit and branch banks

	Borrowings		Resources	
	Unit banks	Branch banks	Unit banks	Branch banks
1927				
January	$42,589,000	$32,616,000	$2,531,820,000	$970,317,000
February	50,594,000	29,132,000	2,201,322,000	775,878,000
March	67,484,000	21,570,000	2,164,396,000	755,228,000
April	42,993,000	9,737,000	1,326,845,000	471,617,000
May	45,611,000	12,621,000	1,487,765,000	244,062,000
June	38,639,000	23,458,000	982,425,000	693,157,000
July	34,081,000	18,540,000	1,233,076,000	732,671,000
August	21,299,000	11,462,000	1,116,369,000	534,575,000
September	27,667,000	9,174,000	1,487,042,000	494,291,000
October	36,176,000	19,829,000	1,534,896,000	700,332,000
November	35,515,000	25,381,000	1,524,646,000	814,200,000
December	27,535,000	25,135,000	921,161,000	986,623,000
1928				
January	25,760,000	15,843,000	1,709,582,000	548,504,000
February	32,891,000	28,493,000	1,267,380,000	1,019,222,000
March	80,953,000	30,555,000	2,613,690,000	1,059,507,000
April	76,704,000	40,932,000	2,001,444,000	1,119,682,000
May	80,232,000	55,862,000	2,471,769,000	1,065,791,000
June	91,724,000	61,368,000	2,672,934,000	1,166,785,000
July	97,329,000	51,387,000	2,690,956,000	1,238,743,000
August	117,473,000	49,276,000	3,071,993,000	1,267,855,000
September	66,327,000	56,550,000	2,208,231,000	1,182,517,000
October	108,720,000	59,310,000	2,055,840,000	1,236,260,000
November	115,632,000	56,500,000	2,862,233,000	1,302,397,000
December	94,195,000	52,323,000	2,713,569,000	1,358,903,000
1929				
January	88,666,000	43,771,000	2,654,371,000	1,425,681,000
February	140,532,000	54,366,000	2,797,036,000	1,355,818,000
March	133,697,000	69,349,000	3,063,732,000	1,185,998,000
April	56,801,000	49,278,000	3,090,545,000	1,080,423,000
May	112,444,000	41,364,000	2,928,990,000	1,361,569,000
June	85,521,000	37,232,000	2,479,571,000	1,087,454,000
July	71,303,000	42,902,000	2,685,455,000	1,090,093,000
August	45,842,000	59,607,000	2,083,548,000	1,294,010,000
September	90,213,000	49,017,000	2,390,517,000	1,415,939,000
October	44,129,000	67,204,000	1,441,215,000	1,378,159,000
November	117,627,000	57,886,000	2,011,343,000	1,348,324,000
December	70,298,000	42,369,000	2,544,943,000	1,184,804,000
1930				
January	38,205,000	40,574,000	940,072,000	1,149,603,000
February	28,896,000	27,537,000	834,048,000	958,965,000
March	28,475,000	9,486,000	572,775,000	338,738,000
April	16,646,000	6,652,000	609,631,000	357,922,000
May	15,594,000	2,681,000	449,500,000	123,478,000
June	13,788,000	3,579,000	587,491,000	127,043,000
July	13,635,000	2,817,000	432,808,000	148,199,000
August	17,937,000	1,649,000	653,184,000	80,394,000
September	14,608,000	5,774,000	966,261,000	253,147,000
October	15,641,000	3,106,000	969,308,000	173,127,000
November	15,936,000	4,100,000	511,218,000	148,265,000
December	15,384,000	7,420,000	370,800,000	329,952,000

FEDERAL RESERVE BANK OF CLEVELAND

While branch banking is practiced in certain sections of our district, all borrowing is done by the parent banks. Our rediscount and loan facilities have been used only by the unit banks; and in the cases of banks with branches, by the parent banks.

FEDERAL RESERVE BANK OF DALLAS

At the present time there are no member banks in this district that are engaged in branch banking. We have had only two such banks in our membership during the past four years, both of which withdrew from the system in 1930. As their borrowings were inconsequential in comparison with the total borrowings of our member banks, we assume it is unnecessary to furnish the statistics referred to, although they will be furnished, if desired.

FEDERAL RESERVE BANK OF KANSAS CITY

There are no branch banks in the district.

FEDERAL RESERVE BANK OF MINNEAPOLIS

Borrowings of member banks in the ninth Federal reserve district by months, 1927–1930, inclusive, divided into two groups

	Borrowings by unit banks		Borrowings by branch banks	
	Amount rediscounted	Balance at close of month	Amount rediscounted	Balance at close of month
1927				
January	$6,340,767.89	$3,952,382.76	$45,000.00	$20,000.00
February	6,644,794.24	4,731,197.02	10,000.00	
March	7,621,519.99	5,844,657.33	600,000.00	
April	12,470,430.77	6,582,768.43	7,270,000.00	20,000.00
May	9,058,647.14	6,680,875.92	4,300,000.00	15,000.00
June	8,903,836.66	4,002,907.43	5,735,000.00	10,000.00
July	9,129,599.19	5,383,417.99	15,145,000.00	35,000.00
August	10,029,327.23	7,323,936.54	425,000.00	
September	3.397,783.14	3,530,639.96		
October	2,960,262.63	2,199,718.66	5,150,000.00	25,000.00
November	3,840,649.87	2,723,127.68	5,700,000.00	1,000,000.00
December	2,227,575.72	1,893,795.06	14,026,500.00	11,500.00
1928				
January	4,774,077.80	3,612,772.83	7,561,000.00	
February	5,336,806.88	3,550,093.47	12,385,000.00	350,000.00
March	3,080,974.13	2,960,742.15	34,600,000.00	1,000,000.00
April	21,305,222.53	8,210,031.80	38,810,000.00	6,100,000.00
May	16,590,351.08	8,737,709.69	18,100,000.00	1,400,000.00
June	24,364,763.90	7,371,139.31	9,600,000.00	
July	24,411,196.27	11,691,528.99	37,700,000.00	2,000,000.00
August	25,185,599.30	15,642,417.96	48,885,000.00	4,550,000.00
September	19,179,722.60	11,587,762.28	53,950,000.00	2,600,000.00
October	26,729,299.01	12,343,179.60	55,650,000.00	1,300,000.00
November	11,807,035.53	7,189,228.71	66,400,000.00	8,400,000.00
December	12,291,348.35	4,495,262.61	46,660,000.00	
1929				
January	15,704,966.75	8,056,221.96	33,165,000.00	1,950,000.00
February	16,001,624.09	8,926,200.74	25,350,000.00	8,250,000.00
March	20,295,401.15	5,950,668.40	42,563,000.00	9,750,000.00
April	29,824,450.06	9,126,146.39	108,075,000.00	13,345,000.00
May	24,261,140.84	10,249,888.51	31,520,000.00	8,815,000 00
June	20,055,034.04	8,089,521.52	39,325,000.00	2,915,000.00
July	20,866,062.80	12,720,167.60	76,324,798.00	7,519,792.00
August	21,884,458.76	9,618,366.55	85,645,000.00	19,705,000.00
September	26,350,110.16	10,945,879.42	97,572,500.00	30,090,000.00
October	33,380,824.47	9,994,701.51	90,807,000.00	23,820,000.00
November	27,801,535.66	8,620,105.20	68,800,000.00	19,515,000.00
December	20,971,683.40	7,155,460.25	59,265,600.00	3,021,300.00
1930				
January	18,948,449.45	5,321,434.42	13,460,000.00	200,000.00
February	7,282,769.24	2,278,828.82	300,000.00	
March	2,753,409.47	2,464,777.67	2,600,000.00	
April	4,777,645.35	3,681,021.50	6,100,000.00	
May	3,986,580.62	3,653,952.39	1,530,000.00	30,000.00
June	2,514,000.23	3,845,881.80	4,000,000.00	
July	3,895,117.60	4,323,402.02		
August	1,891,651.55	4,266,390.39		
September	2,262,850.67	4,112,523.12		
October	4,222,757.29	4,323,193.16	1,500,000.00	
November	2,762,271.49	3,897,168.54		
December	3,477,219.16	3,541,939.19	53,400.00	33,400.00

	Dec. 31, 1927	Dec. 31, 1928	Dec. 31, 1929	Sept. 24, 1930
Total resources:				
Unit banks	$961,918,000	$995,261,000	$950,954,000	$926,087,000
Branch banks	202,864,000	212,884,000	223,515,000	215,571,000

FEDERAL RESERVE BANK OF NEW YORK

(*a*) We understand that this question applies to banks having branches outside of the municipality in which the head office is located. There are only three member banks in this district which meet this definition. Their borrowings at the end of each month and resources on call dates during the last four years were as follows:

(000 omitted)

	Borrowings	Date	Resources	Total borrowings of member banks	Total resources of member banks
1927					
January	$1,915			$108,702	
February	600			135,746	
March	625	Mar. 23	$77,865	69,457	$12,932,444
April	950			144,440	
May	125			87,842	
June	1,050	June 30	83,123	90,947	14,181,638
July	1,050			100,454	
August	938			106,188	
September	1,744	Oct. 10	81,974	126,212	13,863,875
October	989			100,767	
November	250			148,115	
December	1,225	Dec. 31	89,427	281,338	15,012,041
1928					
January				117,555	
February		Feb. 28	90,910	83,336	14,249,820
March	625			144,986	
April	1,770			289,327	
May	595			358,977	
June	2,670	June 30	106,963	453,915	15,149,320
July	2,620			321,603	
August	2,620			292,153	
September	2,620	Oct. 3	107,550	370,627	15,023,698
October	2,620			261,460	
November	1,620			345,993	
December	2,270	Dec. 31	107,025	463,981	18,033,942
1929					
January	2,245			174,436	
February	1,745			224,133	
March	1,180	Mar. 27	104,301	287,175	16,656,085
April	1,795			213,571	
May	1,410			221,886	
June	2,000	June 30	105,069	402,455	15,997,708
July	1,200			385,951	
August	1,705			367,031	
September	2,465	Oct. 4	104,867	172,301	16,907,250
October	2,375			228,150	
November	450			220,251	
December	3,150	Dec. 31	105,915	171,760	18,363,619
1930					
January	215			$46,825	
February				48,644	
March		Mar. 27	$101,244	90,790	$16,577,634
April				41,270	
May	250			113,592	
June	1,650	June 30	105,070	84,039	18,102,613
July	1,600			34,296	
August	300			34,763	
September		Oct. 4	101,976	103,135	16,336,667
October	750			36,725	
November	1,100			58,343	
December	1,500	Dec. 31	104,074	61,897	Not available.

FEDERAL RESERVE BANK OF PHILADELPHIA

Unit and branch banks borrowings and resources

	Unit banks		Branch banks	
	Borrowings	Resources	Borrowings	Resources
1927				
January	$22,367,221.26	$685,772,758.00	$15,979,523.70	$444,832,799.00
February	30,011,678.41	772,004,321.00	9,395,071.24	593,076,064.00
March	35,040,554.45	947,283,066.00	27,798,233.26	914,508,604.00
April	32,430,970.87	814,965,122.00	14,133,745.17	466,260,078.00
May	37,414,039.63	1,030,158,182.00	18,653,524.30	923,180,010.00
June	34,107,919.55	950,995,614.00	22,999,555.99	764,725,398.00
July	31,562,840.69	891,985,847.00	18,209,674.26	591,178,994.00
August	26,711,803.38	708,764,833.00	10,091,879.19	286,672,075.00
September	24,062,573.06	709,312,789.00	11,854,438.49	538,244,820.00
October	27,857,163.42	776,749,145.00	11,196,058.52	529,820,880.00
November	30,759,678.45	792,803,800.00	9,922,689.64	467,261,801.00
December	37,163,504.50	837,784,363.00	30,207,345.03	765,676,089.00
1928				
January	28,126,078.64	956,292,572.00	18,837,199.96	919,253,283.00
February	31,277,554.81	960,431,482.00	28,477,489.08	1,022,272,081.00
March	25,477,076.11	846,242,201.00	28,737,149.42	1,029,593,112.00
April	32,712,521.02	933,019,892.00	29,593,833.35	840,853,914.00
May	44,720,067.27	1,092,232,468.00	31,726,660.45	931,065,520.00
June	46,198,160.40	1,236,139,664.00	53,306,868.75	1,248,467,869.00
July	43,431,207.71	1,115,826,606.00	50,778,896.79	1,118,150,682.00
August	50,419,833.97	1,117,305,038.00	66,892,507.13	1,195,139,094.00
September	45,171,056.13	1,090,990,778.00	63,864,342.06	1,229,975,767.00
October	38,491,457.40	1,158,582,724.00	47.626,672.56	1,233,432,602.00
November	44,591,480.68	1,196,237,108.00	35,501,731.46	1,230,432,700.00
December	40,129,812.42	1,119,491,671.00	44,184,674.20	1,170,735,173.00
1929				
January	44,953,805.30	1,300,122,156.00	30,651,059.54	1,266,068,432.00
February	48,526,414.87	1,301,462,458.00	53,922,450.86	1,076,518,925.00
March	49,118,850.26	1,375,215,487.00	70,093,792.08	1,334,683,632.00
April	50,994,290.81	1,402,663,705.00	53,705,041.98	1,180,805,016.00
May	52,556,518.74	1,344,302,194.00	47,642,542.29	1,174,842,030.00
June	51,591,049.48	1,228,979,928.00	33,288,572.03	967,346,242.00
July	51,359,693.88	1,268,957,347.00	24,486,970.21	932,856,359.00
August	47,279,514.72	1,203,469,045.00	56,777,691.74	1,343,360,490.00
September	41,970,175.23	1,269,324,788.00	42,599,819.98	1,170,050,858.00
October	48,825,551.74	1,312,159,800.00	63,683,952.86	1,357,656,466.00
November	52,889,909.63	1,310,242,369.00	48,445,403.69	1,323,735,226.00
December	46,084,720.83	1,024,463,012.00	19,692,058.28	678,253,376.00
1930				
January	40,181,629.73	1,114,373,110.00	12,309,804.71	561,562,556.00
February	34,077,349.95	967,976,712.00	11,739,488.17	689,648,356.00
March	27,880,949.57	737,426,451.00	5,421,674.98	291,540,295.00
April	24,940,181.58	808,646,805.00	4,640,757.60	198,223,716.00
May	28,578,443.38	916,887,207.00	4,228,084.15	153,387,599.00
June	24,637,275.04	787,011,228.00	4,857,642.80	164,443,372.00
July	18,643,101.77	693,595,749.00	2,601,891.33	80,363,029.00
August	15,180,806.65	648,930,372.00	3,050,413.01	112,377,384.00
September	14,815,820.05	559,914,683.00	2,457,143.33	111,670,041.00
October	17,917,968.42	708,931,902.00	3,094,009.26	93,971,458.00
November	18,240,684.62	722,554,271.00	5,572,059.56	142,593,669.00
December	21,866,586.09	709,532,213.00	3,796,528.62	84,345,903.00

FEDERAL RESERVE BANK OF RICHMOND

NOTE.—In our records of the average monthly borrowings of member banks we keep no record of aggregate resources. Our comparison is made between borrowings and basic lines, which we think is far more satisfactory. In the following tables we have stated month by month from 1927 to 1930, inclusive, the borrowings of all member banks in the district having branches in different towns or cities and the borrowings of all member banks of the district, in each case compared with aggregate basic lines. In the third column is shown the ratio of borrowings to basic lines.

(000 omitted)

	Branch banks			All banks		
	Basic line	Borrowings	Per cent	Basic line	Borrowings	Per cent
1927						
January	4,898	$468	9.55	132,133	$24,076	18.22
February	4,835	1,228	25.40	129,702	23,267	17.94
March	4,875	1,173	24.06	129,489	21,001	16.22
April	4,839	823	17.01	128,629	24,271	18.87
May	5,056	459	9.08	127,806	25,247	19.75
June	5,250	246	4.69	128,689	25,615	19.90
July	5,162	0	0	129,808	20,029	15.43
August	5,663	84	1.48	133,800	21,877	16.35
September	5,343	52	.97	133,809	29,112	21.76
October	5,378	145	2.70	134,712	27,263	20.24
November	5,361	317	5.91	133,703	18,952	14.17
December	5,687	621	10.92	140,505	25,324	18.02
1928						
January	5,099	171	3.35	137,774	30,792	22.35
February	5,647	271	4.80	137,479	29,709	21.61
March	5,458	894	16.38	134,298	21,291	23.30
April	5,314	547	10.29	131,721	41,036	31.15
May	5,207	475	9.12	130,177	45,345	34.83
June	5,287	672	12.71	128,821	52,520	40.77
July	5,187	1,357	26.16	128,179	58,415	45.57
August	5,264	1,738	33.02	125,720	63,445	50.47
September	4,887	3,011	61.61	124,395	55,321	44.47
October	4,979	3,167	63.61	126,826	44,609	35.17
November	5,035	1,993	39.58	128,058	45,364	35.42
December	4,983	2,342	47.00	129,448	38,559	29.79
1929						
January	5,150	3,795	73.69	130,442	42,501	32.58
February	5,488	5,352	97.52	130,034	45,313	34.85
March	4,972	4,479	90.08	132,571	51,817	39.09
April	4,840	5,212	107.69	127,507	58,384	45.79
May	5,009	4,672	93.27	125,815	62,440	49.63
June	4,734	4,253	89.84	123,457	56,074	45.42
July	4,771	3,798	79.61	123,125	59,539	48.36
August	4,549	5,159	113.41	124,177	67,082	54.02
September	4,248	5,163	121.54	120,088	55,902	46.55
October	4,614	4,764	103.25	119,753	53,818	44.94
November	4,775	4,447	93.13	121,998	53,465	43.82
December	4,921	743	15.10	121,715	38,936	31.99
1930						
January	4,778	49	1.03	123,159	25,822	20.97
February	4,936	731	14.81	124,586	20,198	16.21
March	4,531	290	6.40	113,517	14,936	13.16
April	4,222	455	10.78	119,410	18,932	15.85
May	4,601	304	6.61	119,094	18,066	15.17
June	4,548	693	15.24	118,409	21,366	18.04
July	4,681	516	11.02	118,573	19,269	16.25
August	4,753	2,076	43.68	115,438	22,418	19.42
September	4,737	988	20.86	118,503	19,063	16.09
October	4,837	77	1.59	118,174	18,125	15.34
November	4,927	1,463	29.69	118,079	28,818	24.41
December	4,897	1,627	33.22	117,421	22,757	19.38

FEDERAL RESERVE BANK OF ST. LOUIS

Branch banking unimportant.—No member banks in district 8 have branches, except Union Planters National, Memphis, Tenn., has one branch in that city, and three members in Louisville, Ky., have additional offices in that city to receive deposits and pay checks.

FEDERAL RESERVE BANK OF SAN FRANCISCO

(000 omitted)

Date	Unit banks		Branch banks			
			Having branches in head office city only		Having branches outside head office city	
	Borrowings	Resources	Borrowings	Resources	Borrowings	Resources
Jan. 4, 1927	$32, 893	$656, 681	$8, 400	$209, 144	$11, 100	$513, 782
Feb. 1, 1927	29, 528	463, 143	7, 375	148, 605	7, 010	244, 394
Mar. 1, 1927	17, 410	488, 232	6, 560	148, 605	24, 270	1, 031, 814
Apr. 5, 1927	26, 512	624, 636	5, 416	182, 099	25, 520	1, 200, 672
May 3, 1927	21, 623	632, 336	8, 075	159, 236	32, 520	1, 066, 033
June 7, 1927	29, 462	666, 276	9, 676	228, 462	2, 424	416, 170
July 5, 1927	34, 650	808, 793	11, 766	224, 067	8, 675	525, 750
Aug. 2, 1927	26, 422	607, 281	4, 016	253, 296	23, 478	1, 067, 781
Sept. 6, 1927	17, 750	519, 019	110	10, 142	29, 300	1, 066, 867
Oct. 4, 1927	27, 652	484, 415	6, 909	160, 739	11, 457	395, 149
Nov. 1, 1927	17, 717	513, 202	7, 821	160, 739	16, 800	1, 159, 451
Dec. 6, 1927	4, 337	158, 294	3, 222	160, 739	41, 500	1, 042, 655
Jan. 3, 1928	12, 696	570, 929	5, 437	222, 772	19, 300	890, 452
Feb. 7, 1928	4, 181	145, 522	5, 331	162, 487	37, 950	856, 173
Mar. 6, 1928	11, 626	402, 540	11, 286	162, 487	47, 800	890, 442
Apr. 3, 1928	10, 966	456, 343	11, 633	230, 994	45, 200	792, 181
May 1, 1928	20, 145	687, 965	12, 215	230, 994	58, 007	1, 509, 012
June 5, 1928	19, 410	638, 532	13, 950	218, 543	34, 142	1, 509, 012
July 3, 1928	24, 205	744, 857	7, 075	246, 636	24, 570	1, 189, 280
Aug. 7, 1928	14, 070	523, 245	8, 850	677, 177	48, 900	1, 189, 280
Sept. 4, 1928	23, 277	712, 381	12, 400	527, 249	66, 340	1, 339, 208
Oct. 2, 1928	25, 813	474, 788	15, 275	340, 625	36, 498	1, 403, 676
Nov. 6, 1928	27, 564	570, 761	12, 749	262, 817	37, 193	1, 753, 252
Dec. 4, 1928	26, 440	712, 452	12, 350	183, 047	34, 506	1, 603, 324
Jan. 8, 1929	25, 689	589, 683	13, 963	272, 282	4, 250	279, 507
Feb. 5, 1929	22, 286	538, 668	11, 425	361, 637	39, 100	1, 193, 914
Mar. 5, 1929	27, 368	682, 397	16, 638	317, 939	52, 200	1, 193, 914
Apr. 2, 1929	29, 508	779, 679	14, 445	177, 385	43, 200	1, 219, 455
May 7, 1929	34, 989	695, 812	13, 459	318, 636	15, 350	1, 219, 455
June 4, 1929	40, 137	783, 565	16, 202	443, 331	11, 900	744, 971
July 2, 1929	37, 983	771, 126	14, 295	434, 484	11, 110	964, 482
Aug. 6, 1929	33, 447	684, 979	4, 634	316, 340	28, 643	964, 482
Sept. 3, 1929	34, 110	806, 993	7, 327	275, 277	27, 988	964, 482
Oct. 1, 1929	37, 939	671, 708	17, 515	398, 117	41, 949	1, 454, 073
Nov. 5, 1929	44, 049	794, 746	10, 850	398, 117	45, 473	1, 160, 214
Dec. 3, 1929	23, 603	708, 704	3, 775	331, 042	47, 250	1, 042, 977
Jan. 7, 1930	20, 817	633, 485	3, 900	145, 345	7, 250	915, 150
Feb. 4, 1930	11, 559	357, 887	2, 400	145, 345	3, 450	1, 025, 473
Mar. 4, 1930	12, 855	441, 065	1, 750	220, 700	6, 538	916, 007
Apr. 1, 1930	12, 552	449, 283	1, 900	283, 286	7, 045	970, 031
May 6, 1930	7, 444	222, 825	6, 500	231, 946	802	970, 031
June 3, 1930	9, 935	481, 562	1, 600	151, 388	6, 560	970, 031
July 1, 1930	7, 548	144, 337	1, 000	82, 459	21, 293	924, 248
Aug. 5, 1930	8, 577	150, 469	500	151, 226	16, 045	924, 248
Sept. 2, 1930	8, 763	213, 227			6, 036	924, 248
Oct. 7, 1930	5, 168	118, 396	185	10, 723	25	849
Nov. 4, 1930	8, 582	202, 187			8, 001	1, 425, 595
Dec. 2, 1930	6, 000	258, 742			3, 800	1, 150, 286

34718—31—PT 6——4

QUESTIONNAIRE NO. 8

The Discount Rate Policy

Through the past several years there has been considerable discussion regarding the efficacy of discount-rate changes. The purpose of the following questions is to ascertain the experience of each Federal reserve bank regarding the various effects of discount-rate changes. Wherever possible conclusions should be buttressed by concrete examples:

1. List the various more important considerations which induced your board of directors, on the occasion of each change in rates of rediscount since January, 1924, to vote for such changes.

2. Did the changes made in rates of rediscount, listed in your answer to the above question, bring about the desired results? If not, what circumstances intervened to prevent the aims from being realized?

3. Has the experience in your district shown that discount-rate changes have been better timed on upward or downward movements?

4. Is the efficacy of discount-rate changes enhanced by large rather than small changes?

5. Do member banks tend to transfer increases in rates of rediscount in the form of higher interest charges to their own customers? Summarize the effects of changes in rates of rediscount on rates of interest charged on agricultural, business, and security loans.

6. What has been the effect of high or low rates of rediscount on increases and decreases in the volume of member-bank borrowings?

7. Should rates of rediscount vary from reserve district to reserve district, or should they be uniform throughout the entire country?

8. Have differences in rates of rediscount prevalent in the several reserve districts affected the interdistrict flow of funds?

9. Need rates of rediscount be changed frequently excepting at those reserve banks located in the financial centers?

10. Should the rate charged on member-bank promissory notes secured by Government obligations be above the yield borne by those obligations?

11. Should a higher rate be imposed on the promissory notes of member banks secured by Government obligations than on rediscounts of commercial and agricultural paper?

12. Would the imposition of such discriminatory rates help to prevent the seepage of Federal reserve credit into speculative security loans?

13. Would efforts at the control of credit be made more effective if rates of rediscount should vary, as was once the case, with the maturity of the paper offered for rediscount?

14. Should rates of rediscount stand above market rates of interest on bank loans to prime customers in your district?

15. Assuming that European central banks have found it desirable to maintain rates of rediscount above market rates, what factors have made the adoption of this practice unnecessary in the United States?

16. What rates of interest in your district should be taken as constituting a measure of market rates of interest?

17. May the rate on bankers' acceptances be included in computations of market rates of interest, inasmuch as the reserve banks, buying for own and for foreign account, have constituted the principal market?

18. Would it give the reserve banks a greater measure of credit control to enact a provision permitting the application of progressive rates of rediscount?

19. Would it be desirable to enact a provision permitting the reserve banks to charge borrowing member banks, which have funds on the brokers' loan market, a rate of interest equal to or above the average call loan-renewal rate?

20. What measures have been taken in your district to prevent member banks from borrowing from the reserve bank to profit by the difference between rates of rediscount and the lending rates in the market?

21. What changes, if any, would you suggest be made in the provisions of the Federal reserve act relative to the fixing of rates of rediscount at the reserve banks?

Digest of Replies Received from the Different Federal Reserve Banks

QUESTION No. 1.—Relative to the more important considerations leading to changes in rates of rediscount since January, 1924.

A large number of reasons were cited by the Federal reserve banks prompting increases or decreases in rates of rediscount.

Among the reasons given for rate increases were:

1. A rise in open-market rates.
2. A decline in gold reserves, particularly below the level of those for the entire system.
3. A decline in deposits and an expansion in the loans of member banks.
4. Increases in rates of rediscount in other Federal reserve districts.
5. Increased member bank borrowings.
6. An increase in security loans with no increase in commercial loans.
7. The growth of speculation.
8. An absence of seasonal liquidation in credit.
9. Misapplication of Federal reserve credit.
10. A more rapid increase in credit volume than in business.
11. A preference on the part of member banks to continue to rediscount rather than to sell securities or call loans.
12. A use of local funds on brokers' loan market.
13. The presence of higher rates of interest in the East, which shifted the borrowing demand to interior banks.

Among the reasons given for rate reductions were:

1. Decline in member bank borrowings.
2. A reduction of rates of interest in other Federal reserve districts.
3. The ability of large member banks to borrow from banks in financial centers at a lower cost.
4. To bring policy in line with action of open-market investment committee.
5. A desire to adjust rates of rediscount to market rates of interest.
6. Declining business, employment, and commodity prices.
7. The liquidation of member bank credit.
8. To remove all obstacles to business recovery.
9. To repel gold imports and relieve tension in the international money markets.
10. To encourage use of credit facilities.
11. To stimulate a growth in credit equal to the Nation's needs.
12. To meet the request of the Federal Reserve Board.

QUESTION No. 2.—Relative to whether aims of discount rate changes were realized.

As one Federal reserve bank indicated, it is very difficult to measure the effects of discount rate changes and separate these from the other factors in the financial setting. Even so, three Federal reserve banks, Cleveland, Minneapolis, and Richmond, apparently were quite well satisfied with the general results of discount-rate policy. Some of the other reserve banks expressed doubts relative to the effectiveness of discount-rate policy through 1928 and 1929. The reasons cited for the ineffectiveness of the policy, then, were the undue delay in raising rates, the tardy reversal of former policy, the dominance of the call-loan market in the interest-rate structure of the country, the growth in brokers' loans for the account of "others." The Kansas City and St. Louis Federal Reserve Banks reported that discount-rate changes have only an indirect effect in those districts and serve mainly to call attention to business or credit conditions. The Dallas Federal Reserve Bank reported that administrative control, in addition to discount-rate policy, proved an important concomitant factor. The Chicago Federal Reserve Bank called attention to the fact that business had not responded to the reductions in rediscount rates through 1930, although any obstacles from this direction to business recovery had been removed.

QUESTION No. 3.—Relative to whether discount-rate changes were better timed on upward or downward movements.

Seven Federal reserve banks reported that discount-rate changes were better timed on downward than upward movements. The Federal Reserve Banks of Atlanta and Minneapolis replied that, in their opinion, discount-rate changes had been equally well timed on upward and downward movements. The Federal Reserve Bank of Cleveland stated that rate changes appeared to be more effective on upward movements.

QUESTION No. 4.—Relative to the efficacy of large changes as compared with small changes in rates of rediscount.

The consensus of opinion of the Federal reserve banks was that larger increases on upward movements were apt to be more effective. Increases of 1 per cent at a time rather than the customary increase of one-half of 1 per cent were recommended. On downward movements, reductions of one-half of 1 per cent at a time were favored.

The Federal Reserve Bank of Boston indicated that to have emphatic effect discount-rate increases should be fairly large and made at infrequent intervals.

QUESTON No. 5.—Relative to the transfer of increases in rates of rediscount by member banks to their own customers in the form of higher interest charges.

The replies received indicated that changes in rates of rediscount have little effect outside of money-market centers. Rates charged borrowers by banks in agricultural sections of the country are standardized and apparently there is little response even to very wide swings in interest rates in the financial centers. Assuming that member banks in the financial centers are not operating solely on their own resources, in other words that they are in debt to the reserve bank, changes in rates of rediscount affect quickly rates of interest charged by the larger banks on security loans, on loans to correspondent banks, and to those commercial customers who are competitively able to shop around for the credit they require. Rates of interest charged by banks of smaller size in the financial centers respond only after a lag.

The Federal Reserve Bank of New York pointed out that one consequence of changes in rates of rediscount at the Federal reserve banks is to affect the availability of credit, in that banks in the larger centers scrutinize loan applications the more carefully.

QUESTION No. 6.—Relative to the effect of high or low rates of rediscount on increases and decreases in the volume of member bank borrowings.

The Federal Reserve Banks of Atlanta, Dallas, Kansas City, Richmond, and St. Louis reported that changes in rates of rediscount had only a slight, if any, effect on the volume of member bank borrowings. The reason given by the Atlanta Reserve Bank was that member banks borrow for actual requirements regardless of rate.

The Federal Reserve Bank of Minneapolis stated that member bank borrowings increased as rates of rediscount rise.

The Federal Reserve Bank of New York pointed out that the volume of member bank borrowings is more a function of currency demand, gold movements, and of changes in the holdings of acceptances and securities on the part of the reserve banks than of fluctuations taking place in rates of rediscount.

The Federal Reserve Banks of Cleveland, Philadelphia, and San Francisco reported that increases in rates of rediscount tend to curtail rediscounting. On the other hand, decreases in rates do not seem to stimulate borrowing.

QUESTION No. 7.—Relative to whether rates of rediscount at the Federal reserve banks should be uniform over the country.

With the exception of the Federal Reserve Bank of New York, the reserve banks held to the principle of nonuniformity in rates of rediscount. It was emphasized that rates of rediscount should be regulated in accordance with conditions prevailing in the several districts.

The Kansas City Federal Reserve Bank made the point that the differential in rates of rediscount should not be great enough to cause an unnatural shifting of funds. The St. Louis bank concluded that a differential of 1 per cent probably should exist between the New York and the strictly agricultural Federal reserve districts.

QUESTION No. 8.—Relative to whether differentials in rate of rediscount have promoted an interdistrict flow of funds.

Most of the Federal reserve banks reported that differentials in rates of rediscount had to a certain extent prompted an interdistrict flow of funds. The Federal Reserve Bank of Boston was an exception to this general rule and replied that only under abnormal conditions do discount rates affect transfers of funds and then only to a limited extent. On the other hand, the Federal Reserve Bank of Minneapolis stated that the interdistrict flow of funds had been appreciably affected.

The St. Louis and San Francisco Reserve Banks declared that interdistrict fund transfers occurred in the main with the Federal Reserve Bank of New York.

QUESTION No. 9.—Relative to whether rates of rediscount should be changed frequently excepting at those reserve banks located in the financial centers.

The consensus of opinion was that frequent discount rate changes were not required. The Federal Reserve Bank of Boston stated that to be effective changes in rates of rediscount should occur only at infrequent intervals and should be large enough in amount to lend emphasis to the change.

The Federal Reserve Banks of Philadelphia and St. Louis concluded that rates of rediscount should be changed as needed, however frequently might be the case.

QUESTION No. 10.—Relative to whether the rate charged on member bank promissory notes secured by United States Government obligations should stand above the yield borne by those obligations.

The Federal reserve banks concluded that rates of rediscount should not be determined by the yield borne by Government obligations. Member banks should be charged the going rediscount rate.

QUESTION No. 11.—Relative to whether discriminatory rates should be imposed on the promissory notes of member banks secured by Government obligations.

General opposition was expressed to this idea. The Federal Reserve Bank of Boston was an exception in declaring it a debatable question and suggesting that it might be desirable to attempt such an experiment.

QUESTION No. 12.—Relative to whether discriminatory rates on member banks' promissory note secured by United States Government obligations would prevent the seepage of Federal reserve credit into speculative security loans.

If the rate were sufficiently high, the Federal Reserve Bank of Chicago thought that such might be the case, but at the cost of penalizing necessary and warrantable borrowings. The Federal Reserve Bank of Atlanta replied that the result indicated might be achieved, but concluded that discriminatory rates should not be applied excepting in an emergency. The other Federal reserve banks were not in agreement with the suggestion.

QUESTION No. 13.—Relative to whether rates of rediscount should vary with the maturity of the paper offered for rediscount.

The Federal reserve banks stated that there would be little advantage in having graduated rates; that this would lead to subterfuges and would penalize the country as against the city bank. Several of the Federal reserve banks stated that the adoption of this change would have little, if any, effect on the control of credit.

QUESTION No. 14.—Relative to whether rates of rediscount should stand above market rates of interest on bank loans to prime customers.

The Federal Reserve Banks of Chicago, Cleveland, and St. Louis thought that this should be the case. The Federal Reserve Banks of Richmond and Dallas seemed to be in agreement in principle with the suggestion. The other Federal reserve banks were not sympathetic to the proposal.

QUESTION No. 15.—Relative to why the European practice of maintaining rates of rediscount above market rates has not been established in the United States.

Among the reasons cited were: (1) The undeveloped character of the country; (2) dissimilar banking practices; (3) lack of experience in credit control; (4) wide sectional differences in interest rates; (5) the varying high statutory contract rates; (6) the unit type of banking system; (7) standardized levels in interest rates; (8) the fact that rediscounting for a profit is nonexistent.

The Federal Reserve Bank of Chicago reiterated the theory that rates of rediscount should be maintained at a point equal to or silghtly in excess of minimum rates accorded to prime borrowers in financial centers.

QUESTION No. 16.—Relative to the rates of interest which should be taken as constituting a measure of market rates.

In addition to the rates of interest prevailing in the several divisions of the New York money market, the following local rates of interest were cited as among those which should be considered in computing an average of interest rates: (1) The minimum rates accorded prime borrowers who are able to borrow in several districts; (2) the rate accorded prime borrowers who borrow entirely within one district; (3) rates charged customers on commodity and security loans; (4) rates charged on farm mortgages; (5) the yield on local municipal bonds; (6) and the rates prevailing on interbank loans.

QUESTION No. 17.—Relative to whether the rate on bankers' acceptances may be included in computations of market rates of interest.

The Federal Reserve Banks of Atlanta, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, St. Louis, and San Francisco were of the opinion that the rate on bankers' acceptances should not be included at all or only infrequently in computations of market rates of interest.

QUESTION No. 18.—Relative to the enactment of a provision permitting the application of progressive rates of rediscount.

The Federal Reserve Banks of Cleveland, Philadelphia, Richmond, and St. Louis answered favorably to this proposal. The others were opposed on the ground that the introduction of progressive rates would penalize the small country bank; that administrative control is preferable; that member banks borrow simply for actual requirements; that the use of progressive rates had been found unsatisfactory, in effectual as a measure of credit control, psychologically bad, and the source of an ill-timed liquidation.

QUESTION No. 19.—Relative to charging borrowing member banks which have funds on the brokers' loan market a rate of interest equal to or above the average call-loan renewal rate.

The Federal reserve banks were generally opposed to this suggestion. It was pointed out that any misuse of Federal reserve credit could be handled administratively.

QUESTION No. 20.—Relative to measures taken to prevent member banks from profiting by the differential between rates of rediscount and the lending rates in the market.

To rectify an abuse of the rediscounting privilege or the use of Federal reserve credit for other than legitimate purposes, the Federal reserve banks have resorted to personal interviews, moral suasion, and the direct refusal to extend credit.

QUESTION No. 21.—Relative to changes which should be incorporated in the Federal reserve act regarding the provisions relating to changes in the rates of rediscount.

The Federal Reserve Banks of Boston, Dallas, St. Louis, and San Francisco favored the clarification of the present provisions of the Federal reserve act. The other Federal reserve banks saw no occasion for any change. The Federal Reserve Banks of Boston and Dallas would restrict the function of the Federal Reserve Board to a veto power. The Federal Reserve Bank of San Francisco would not permit changes in rates of rediscount without the concurrence of the board of directors of a Federal reserve bank and the Federal Reserve Board.

Replies Received from the Different Federal Reserve Banks, Tabulated by Questions

1. List the various more important considerations which induced your board of directors, on the occasion of each change in rates of rediscount since January, 1924, to vote for such changes.

Atlanta.—There follows a list of the changes made in the rediscount rates of the Federal Reserve Bank of Atlanta, since January, 1922:

January, 1922, effective rate, 4½ per cent.
June 18, 1924, decreased from 4½ to 4 per cent.
August 13, 1927, decreased from 4 to 3½ per cent.
February 11, 1928, increased from 3½ to 4 per cent.
May 26, 1928, increased from 4 to 4½ per cent.
July 14, 1928, increased from 4½ to 5 per cent.
December 9, 1929, decreased from 5 to 4½ per cent.
April 12, 1930, decreased from 4½ to 4 per cent.
July 12, 1930, decreased from 4 to 3½ per cent.
January 10, 1931, decreased from 3½ to 3 per cent.

For the purpose of aiding agriculture, commerce, and industry with our credit facilities, in June, 1924, our rate was placed at 4 per cent, which we considered a normal rate. This rate continued until August, 1927. At that time we reduced our rate to 3½ per cent to aid in our district, and with the purpose of participating in Federal reserve policy to the end that European markets might more easily buy American products, notably cotton, from our district. Our rate was raised successively in 1928 to 4, 4½, and 5 per cent in an effort to restrain the prevalent speculative tendency, and to make such restraint more effective in our district. The lowering of the rate in December, 1929, and to the rate in effect at the present time was prompted by the desire to make money easier in an effort to stimulate a revival of business and trade.

Boston.—There are many factors that are taken into consideration by our board of directors at the time it votes to change the prevailing rate of discount. While the recommendation invariably comes from the governor and the chairman of the board, many of the factors that influence the vote being passed are not only indefinite but are difficult to recall at a later date; as, for example, the temper of the minds of the officials of our member banks and of the public at large and the effects that such change may have on the supply and price of credit for industry and agriculture. During the period under consideration every change in discount rate that has been voted by the directors of this bank has been made by the unanimous vote of all directors present at the meeting when such change has been voted. The following schedule shows the action upon discount rate taken by our board of directors from January 1, 1924, to December 31, 1930.

Date of meeting	Vote by board of directors or executive committee	Changing rate		Approved by Federal Reserve Board	
		From—	To—	On	Effective
		Per cent	*Per cent*		
June 11, 1924	Directors	4½	3½	June 11, 1924	June 12, 1924
Sept. 23, 1925	do	3½	4	(1)	
Oct. 21, 1925	do	3½	4	Nov. 9, 1925	Nov. 10, 1925
Aug. 2, 1927	Executive committee	4	3½	Aug. 4, 1927	Aug. 5, 1927
Feb. 7, 1928	do	3½	4	Feb. 7, 1928	Feb. 8, 1928
Apr. 17, 1928	Directors	4	4½	Apr. 19, 1928	Apr. 20, 1928
July 18, 1928	do	4½	5	July 18, 1928	July 19, 1928
Mar. 27, 1929	do	5	6	(1)	
Apr. 4, 1929	Executive committee	5	6	(1)	
Apr. 24, 1929	Directors	5	6	(1)	
May 8, 1929	do	5	6	(1)	
May 22, 1929	do	5	6	(1)	
June 5, 1929	do	5	6	(2)	
Nov. 20, 1929	do	5	4½	Nov. 20, 1929	Nov. 21, 1929
Feb. 12, 1930	do	4½	4	Feb. 12, 1930	Feb. 13, 1930
May 7, 1930	do	4	3½	May 7, 1930	May 8, 1930
July 2, 1930	do	3½	3	July 2, 1930	July 3, 1930
Dec. 31, 1930	do	3	2½	Dec. 31, 1930	Jan. 3, 1931

[1] Not approved.
[2] Not approved; rescinded by directors June 19.

On June 11, 1924, the directors voted a reduction in the discount rate from 4½ to 3½ per cent. At the time this rate was reduced the country at large was in a state of depression following a year of declining producton, pay rolls, and commodity prices. In New England this was felt in the shoe and leather and the cotton industries. Member banks were in an easy position with deposits high and commercial loans comparatively low. Open-market money rates on bankers' acceptances and Treasury bills were out of line with the discount rate, being substantially below it. There had been an increasing accumulation of gold in the country and ease of the money market had been demonstrated by the oversubscription that this bank received on the 2¾ per cent certificates of indebtedness that were issued on June 16, 1924. On June 11 the reserve of the Federal Reserve Bank of Boston was 87.5 per cent and of the system 82.4 per cent.

On September 23, 1925, the board of directors voted an increase in discount rate from 3½ to 4 per cent. From the summer of 1924 to this date there had been a steady increase in business activity here in New England. Production, pay rolls, and commodity prices were all at a high level. Stock market prices and brokers' loans were high as measured by previous experience. The member banks had worked themselves into a rather tight position, having experienced considerable expansion in both commercial and collateral loans. Reflecting this situation, open money market rates had gotten out of line with the discount rate, the open market asking rate on 90-day bills being equal to the Federal reserve discount rates at Boston, New York, Philadelphia, Cleveland, and San Francisco.

On November 10, 1925, the reserve of the Federal Reserve Bank of Boston was 63.8 per cent and of the system 72.3 per cent.

There had been a meeting of the Federal reserve advisory council in Washington on September 21, and the member from this district had advised us of the opinion expressed at that meeting concerning discount rates and stated that while the council had made no recommendation to the Federal Reserve Board regarding discount rates it was suggested that the present situation was one that should be watched with particular care.

On August 2, 1927, the executive committee voted to reduce the discount rate from 4 to 3½ per cent. Although industrial activity was still at a high plane, it was showing a tendency to decline not only in the New England district but elsewhere in the country, and did decline to a considerable degree before the end of the year. Commodity prices had been dropping steadily. Speculative activity was very great, with stock market prices and brokers' loans rising daily to new high levels. The governor read the report of the meeting of the open market investment committee held in Washington on July 27. It was pointed out in that report that "because of heavy foreign payments which are likely to increase with the fall movement of commodities to Europe, there was a continued drain on European central bank gold reserves, which made it more than likely that central bank rates in Europe would need to be further advanced this fall." "The foreign situation was very critical at the moment." It was felt that without this concerted support to the foreign situation it might be difficult or impossible to market American crops when they came on the market during the fall months of the year. It was recognized that these developments would have a depressing effect upon business abroad and might tend to restrict the freedom of purchase of goods in this country at the usual season. It was recognized that the only possible adverse development resulting from a general lowering of discount rates would be in the speculative security markets, but that this possibility should not stand in the way of the execution of an otherwise desirable policy. It was the general feeling of the committee that a system policy of lower discount rates should in general prevail, although it was pointed out that "local conditions in some of the interior reserve districts did not indicate any demand for rate reductions in those districts." The governor referred to the reduction in discount rate in the Federal Reserve Bank of Kansas City on July 29 from 4 to 3½ per cent.

On August 5, 1927, the reserve of the Federal Reserve Bank of Boston was 83.7 per cent and of the system 77.1 per cent.

On February 7, 1928, the executive committee voted to increase the discount rate from 3½ to 4 per cent. The low money rates prevailing over the year end having served their purpose in facilitating the marketing of American crops and the marked improvement in industrial activity not only in the New England district but the country as well, it was considered important to recognize and point out the dangers that had developed in the situation as a result of continued speculative activity. The stock market and the brokers' loan situation were getting out of hand; the member banks were finding themselves in a less comfortable position owing to declining deposits and expanding loans; open-market rates were showing evidence of getting out of line with the low discount rate. The necessity of increasing the discount rate had been discussed at previous meetings and the directors were no doubt influenced by the increases that had been made in the discount rate of the Federal Reserve Bank of New York on February 3, the increase being felt by the member banks in this district.

On February 7, 1928, the reserve of the Federal Reserve Bank of Boston was 66.6 per cent and of the system 74 per cent.

On April 17, 1928, at a special meeting the directors voted to raise the discount rate from 4 to 4½ per cent. This increase in the discount rate, as well as the increase on July 19, 1928, from 4½ to 5 per cent were designed to supplement the increase that has been made in February, the considerations motivating that change having become even more aggravated during the following months and the financial situation becoming more strained.

April 16, 1928, the reserve position of the bank was 56.2 per cent, the earning assets having increased to $139,000,000 as compared with $51,000,000 on April 16, 1927. Commercial paper was selling in this market from 4¼ to 4¾ per cent. While the system as a whole was 70.2 per cent, the condition of the reserves of the Boston bank and the local money market warranted this increase.

On July 18, 1928, at a meeting of the board of directors the directors voted to raise the discount rate from 4½ to 5 per cent. On this date the reserve of the Federal Reserve Bank of Boston was 74 per cent and of the system 69.5 per cent. The financial situation had continued to show more strain from month to month. While the reserve position of the bank had increased to 74 per cent, the system as a whole had gone down to 69.5 per cent, and the general financial situation, especially as it affected member banks' security loans and the stock-market activity, had not improved. The member banks had increased time deposits which they had invested largely in collateral loans and securities and rediscounts at the reserve bank were still high. The New York bank had increased its rate on July 13, and the effects of this increase in rate and the fact that the discount rate was out of line with the ruling money rates of the district were important factors in arriving at the decision.

From March 27, 1929, through to June 5, 1929, at every directors' meeting and one executive committee meeting during that period, votes were passed increasing the discount rate from 5 to 6 per cent. These votes, however, were not approved by the Federal Reserve Board, and on June 19, 1929, this vote was rescinded. During this period the discount rate of 5 per cent was below the ruling money rates of all bank investments except short-time United States securities, and the reserve ratio of the Federal Reserve Bank of Boston was not only below the average for the system but had been as low as 55.2 per cent. From the middle of April, 1928, until midsummer of 1929 the deposits of the member banks in the New England district had been falling steadily, and although the banks had reduced their investments and collateral loans they were obliged to borrow at the reserve bank steadily increasing amounts until at one time these borrowings were well over $100,000,000. From the middle of 1929 until well into October deposits increased and banks reduced their borrowings steadily at the reserve bank.

The reserve ratios of the Federal Reserve Bank of Boston and the system were as follows:

	Boston	System		Boston	System
	Per cent	*Per cent*		*Per cent*	*Per cent*
Mar. 27, 1929	70.1	71.3	May 22, 1929	59.6	75.9
Apr. 4, 1929	70.8	71.5	June 5, 1929	63.8	74.4
Apr. 24, 1929	70.6	74.3	June 19, 1929	66.8	75.8
May 8, 1929	64.0	74.3			

On November 21, 1929, the discount rate was reduced from 5 to 4½ per cent.
On February 13, 1930, the discount rate was reduced from 4½ to 4 per cent.
On May 8, 1930, the discount rate was reduced from 4 to 3½ per cent.
On July 3, 1930, the discount rate was reduced from 3½ to 3 per cent.
January 2, 1931, the discount rate was reduced from 3 to 2½ per cent.

The reserve ratios of the Boston bank and the system on these dates were as follows:

	Boston	System		Boston	System
	Per cent	*Per cent*		*Per cent*	*Per cent*
Nov. 21, 1929	86.5	71.2	July 3, 1930	82.7	79.9
Feb. 13, 1930	84.5	78.7	Jan. 2, 1931	73.5	73.3
May 8, 1930	84.2	83.2			

The stock market collapse which marked the end of the great 1929 boom occurred during the first half of November, 1929. Following that collapse a serious industrial depression set in which during 1930 assumed major proportions. The frequent reductions in discount rates were designed to aid this situation. New England banks in particular had been able to liquidate their position between October, 1929, and the summer of 1930 to such an extent that they were in a relatively comfortable position as compared with banks in other sections of the country. Money rates were excessively weak, and at most times during this period were out of line with the discount rate, indicating that the discount rate was rather slow in following the open market down. It was also desired to stimulate a bond market by means of easy money rates. Federal reserve banks were more nearly in control of the money market because of the substantial reduction in brokers' loans by others than banks.

Chicago.—The only change in our rediscount rate in the year 1924 was when the rate was reduced from 4½ to 4 per cent on June 14. The New York and Boston Federal reserve banks had reduced their rates on June 12 to 3½ per cent. Open market rates for commercial paper had dropped from 4½ to 4 per cent and there was a surplus of funds in the money market in excess of the demand. It was felt that our rate of 4½ per cent was out of line with market rates for commercial paper and inasmuch as there was very little speculative demand for credit that no harm could be done by reducing the rate to 4 per cent and that it might help business, which was reported as being rather dull at that time.

Our rate remained at 4 per cent from June 14, 1924, until September 7, 1927, when it was reduced to 3½ per cent by order of the Federal Reserve Board. At that time our board felt that a reduction in the rate would cause further expansion of speculative credit. Whatever good purposes might be served would be more than offset by the disastrous consequences of a further inflation of security prices. The rate remained at 3½ per cent until January 25, 1928, when our directors voted to raise the rate to 4 per cent. This action was taken because of the heavy increase in bank credit which had gone into loans on stocks and bonds with no increase in the volume of commercial credit extended, and also because the objects to be attained by the 3½ per cent rate, which was to relieve credit conditions abroad, apparently had been accomplished. The rate remained at 4 per cent from January 25 until April 20, 1928, when it was increased to 4½ per cent because of the increased demand for speculative credit, as indicated, particularly by the large increase in brokers' loans, which in the week preceding the advance in our rate had increased $153,000,000. The rate remained at 4½ per cent from April 20 to July 11, 1928, when it was increased to 5 per cent. This increase was voted by our directors on June 29, and was approved by the Federal Reserve Board on July 10. The reason for this increase was that there still continued a strong demand for money and that counter rates of Chicago banks for commercial loans were from 1 to 1½ per cent above our rediscount rate. The increase in the going rates for money was caused by the increased demand for speculative credit, call money having advanced to 6½ per cent on June 22.

The rate remained at 5 per cent from July 11, 1928, to November 23, 1929, although efforts had been made as early as March 15, 1929, to get the Federal Reserve Board's approval to an advance in our rate. At a meeting of our board of directors on March 28, 1929, a recommendation was made that the rediscount rate be advanced to 6 per cent and it was unanimously voted that in the opinion of our board the most effective means of protecting Federal reserve credit against misuse is through adjustment of the rediscount rate. The result of an informal vote, which was favorable to raising the rate to 6 per cent was submitted to the Federal Reserve Board at Washington. On April 4, 1929, it was voted to establish a rediscount rate of 6 per cent, which recommendation was not concurred in by the Federal Reserve Board. In the period from April 4, 1929 to May 31, 1929, this request was renewed on several occasions with the same result. The rate therefore remained at 5 per cent until after the crash in the security markets in the fall of 1929 and it was reduced to 4½ per cent on November 23, 1929, in the hope that it would help, at least to some extent, to restore confidence in the business situation. It remained at 4½ per cent from November 23, 1929, to February 8, 1930, when it was reduced to 4 per cent with the idea of removing any obstacle which might tend to retard business recovery.

It remained at 4 per cent from February 8, to June 21, 1930, when it was reduced to 3½ per cent. In the meantime the Federal Reserve Bank of New York had reduced its rate to 2½ per cent and while it was the concensus of opinion that a reduction in our rate would not stimulate business, the disparity between our rate of 4 per cent and that of 2½ per cent in New York was too large a differential and for this reason a reduction was thought advisable. It remained at 3½ per cent from June 21, 1930, to January 10, 1931, when it was reduced to 3 per cent. Inasmuch as the Federal Reserve Bank of New York had a rate of 2 per cent, the differential of 1½ per cent between New York and Chicago was considered too large and the rate was therefore reduced to 3 per cent.

Cleveland.—On June 2, 1924, the discount rate of this bank was lowered from 4¼ to 4 per cent, the former rate having been effective from February, 1922. This change was the result of three factors:

(*a*) A sharp drop during the previous 60 days in the volume of discounted bills.

(*b*) The influence exerted by a 4 per cent New York rate adopted May 1. (A lower rate in adjoining districts ordinarily causes borrowers with banking connections both within and without our district to seek the market with the lowest rate.)

(*c*) An effort to revive business activity, which had turned downward in March.

The following reduction to 3½ per cent on August 15, 1924, was occasioned by a continuation of the business recession and a further sharp drop in production; the influence of lower rates at Boston, Philadelphia, and New York, and the fact that member bank borrowing had been reduced to the lowest level since 1917.

On November 17, 1925, following a rapid increase in discounts during September and October, the rate was increased to 4 per cent. This rate was instituted primarily because a substantial part of the increased borrowings apparently was finding its way into security loan channels. Fourth district reporting member banks loan account on collateral security at the beginning of November was $100,000,000 higher than at the first of the year.

On August 16, 1927, the rate was again reduced to 3½ per cent. The factors influencing this change were:

(*a*) A reduction in discounts to a level approximating the lowest sice 1916 with the single exception of 1924.

(*b*) A desire to stimulate business activity, which had exhibited a downward trend since March.

(*c*) As part of a concert of effort to discourage further importations of gold, or to encourage an outward movement of the metal, to relieve the tension existing or developing in the international exchange markets.

In March of 1928, by reason of the lack of seasonal liquidation in January and February, a loss of gold reserves, and the influence of higher rates in all other districts, our rate was increased one-half per cent. A sharp unseasonal increase in member bank borrowings, which took place in April and May, occasioned a further rise to 4½ per cent on May 25. A further loss of gold (reducing the gold reserve of this bank to the lowest point in six years) plus a further heavy increase in demands for accommodation by member banks, and again plus the influence of higher rates in every adjoining district, prompted the rate increase of 5 per cent on August 1.

This rate was maintained until 1930, when in keeping with increasingly easy money conditions developing generally the rate was reduced by one-half per cent steps to the 3 per cent figure inaugurated December 27.

In all cases changes in rates were made as a result of unanimous board action.

Dallas.—Changes in rediscount rates of the Federal Reserve Bank of Dallas since January, 1924:

July 16, 1924, from 4½ to 4 per cent.
August 12, 1927, from 4 to 3½ per cent.
February 8, 1928, from 3½ to 4 per cent.
May 7, 1928, from 4 to 4½ per cent.
March 4, 1929, from 4½ to 5 per cent.
February 8. 1930, from 5 to 4½ per cent.
April 8, 1930, from 4½ to 4 per cent.
September 9, 1930, from 4 to 3½ per cent.

July 16, 1924, change from 4½ to 4 per cent: Extract from minutes of meeting of board of directors, August 19, 1924 (from report of Governor McKinney):

"Acting upon authority vested in it by the resolution adopted by this board at its meeting June 13, our executive committee, on July 10, unanimously voted to reduce our rediscount rate on all maturities from 4½ to 4 per cent. The Federal Reserve Board approved this action under date of July 15, and the new rate was made effective the following day. Our committee was influenced in its action by several factors. Some liquidation had set in from our wheat section, and the stronger and larger banks which normally come into the market for some credit at that season appeared to be making their arrangements according to the best advantage with reference to rates. Our committee felt that the facilities of this bank should not be made unavailable to member banks by reason of the opportunity to fill their needs elsewhere at a lower cost, particularly in view of our known ability to care for those needs. In further support of this thought borrowings from us against governments had practically ceased. Our committee also felt that the proceeds of any increase in our loans to member banks directly traceable to this action would be properly used and would therefore do no violence to our policy of administrative treatment in individual cases or to the district itself. In fact, it was the thought of the committee that the new rate might easily have the effect of sustaining business activity rather than increasing it with any inflationary tendency. It was also considered that while borrowing to finance growing crops was pretty well past the new rate, in the judgment of the committee, would fit in nicely with the wheat movement and perhaps assist in orderly marketing, at the same time having a good effect during the movement of the cotton crop. Apparently the reaction toward the reduced rate has been entirely satisfactory and bears out the views of the committee at the time the action was considered."

August 12, 1927, change from 4 to 3½ per cent: Prompted by action of open market investment committee reduction in sympathy with system policy, and in order to bring about a reversal of the gold movement from net imports to net exports, improving the financial position abroad and thereby checking a recession in the general business of this country, which was just beginning to show.

February 8, 1928, change from 3½ to 4 per cent: Prompted by tendency of other Federal reserve banks and system policy to higher interest rates. Evidence of rapid recovery of business from its brief recession of late summer and early fall of 1927.

Conditions abroad were much improved by reason of stabilization of French finances and the heavy exchange balances which European countries had acquired in the United States and elsewhere. It was also apparent that the volume of credit was increasing at a rapid rate and that a considerable part was being used for other than commercial and industrial requirements. As a consequence, the policy of low rates and open market purchases of governments was reversed; discount rates were increased, most banks putting their rates up to 5 per cent by the middle of the year, and governments were sold in greater volume than had been purchased in the previous period.

May 7, 1928, change from 4 to 4½ per cent: Reasons for change stated in following telegram, dated May 7, 1928, from Chairman Walsh to Federal Reserve Board:

"Answering wire this date. In consideration question of change in discount rate Saturday, members our board here of the opinion that the rate question is one primarily to be decided by local board each district as conditions would seem to indicate at time of suggested change; that local board should not necessarily be governed by change in rate in other districts unless system policy would indicate that cooperation would be wise and salutary under particular circumstances existing. They also were of the opinion that a raise from 4 to 4½ per cent was not essential at this time in our district to preserve autonomy of business as related to commerce, industry, and agriculture, but due to the fact that it was estimated that not less than one hundred millions of dollars is now being loaned on the call market in New York from the eleventh district such raise would tend to curb speculation on New York market if the other 11 districts should increase their rates above New York and thus be the means of requiring many call loans in this district to be retired and returned for legitimate demands here. Recent raise from 3½ to 4 per cent in board's opinion served a good purpose here in forcing the group one member banks into the market for the greater amount of increase in our loans made during April, as they preferred to borrow from us rather than call their loans in New York or sell United States securities on a falling market. Conditions in this district are perfectly sound and an increase of one-half of 1 per cent in the rate will have little, if any, effect on country member bank borrowings or increase their rate by reason of the wide spread between 4½ and 8 and 10 per cent obtaining in country bank discounts. This increase, however, will cause larger banks which have surplus funds on call in New York to withdraw those funds and use them here instead of borrowing and to the extent they may withdraw such funds will the supply of money be reduced as long as other Federal reserve districts maintain higher rate than New York."

March 4, 1929, change from 4½ to 5 per cent: This increase was recommended at our board meeting of February 7, 1929, but not approved by the Federal Reserve Board until March 1, 1929, to become effective March 2, 1929.

That date was a holiday, March 3 was Sunday, and the increase did not become effective until March 4. The change was recommended by our board of directors after full consideration of the credit situation both nationally and in the eleventh district. The discussion by our directors was in the light of a special memorandum on the credit situation in this district, prepared by Governor Talley, also the Federal Reserve Board's letter of February 2, 1929, on the general subject of diversion of Federal reserve credit into speculative channels, and requesting an expression from the directors as to how they kept informed of the use made of borrowings by member banks, what methods were being employed to protect this bank against the improper use of its credit facilities, and the effectiveness of such measures.

The action of our directors was therefore based on a desire to support the Federal Reserve Board in its efforts to curb the misapplication of Federal reserve bank credit and restrict the rapid expansion of credit, without affecting the supply for the legitimate business demands of the district.

February 8, 1930, change from 5 to 4½ per cent: Action of our directors governed by evidences of an improved credit situation, extent of liquidation, and in order to be in line with the Federal reserve system policy. The decrease was recommended by the governor, who called attention to the tendency to lower interest rates by the other Federal reserve banks, the reduction in minimum buying rates for bills, and the conclusions reached at a meeting of the open open market investment committee on January 28 and 29, 1930. The principal factors in the conclusions reached by the open-market investment committee were the subsidence of the panicky feeling; the inability to determine the extent or duration of the business recession; the tendency toward cheaper money for commerce and industry; the orderly progress of liquidation; reduction in rediscounts; the desire on the part of member banks to reduce the volume of security loans and that liquidation was slower with country banks than city banks.

April 8, 1930, change from 4½ to 4 per cent: Action of our directors governed by present tendency toward easier rates; decrease in use of credit in this district, and in order to make our rate more in line with that of other Federal reserve banks. In a special memorandum on the credit situation, prepared by Governor Talley, he referred to the meeting of the open-market investment committee on March 24, and the action taken in regard to the credit situation, and the view expressed that there is no occasion for further purchases of Government securities.

The committee favored a reduction in the minimum buying rate on bills, fixed by the Federal Reserve Board, to 2½ per cent, stating, however, that in the absence of developments not then anticipated, bills should not be purchased below 3 per cent.

The governor referred to the demand on the part of makers of existing lines with city banks for a reduction in rate, but the downward course of these rates had lagged very considerably.

Reference was had to the extreme economy in the use of credit and similar trend for the immediate future.

September 9, 1930, change from 4 to 3½ per cent: Action of our directors influenced by evidence of easier financial conditions, and from a desire to cooperate with system policy. In the discussion of credit situation and proposed reduction it was brought out that since the meeting of the directors, on July 7, 1930, five Federal reserve banks had reduced their rate, leaving only two banks (Minneapolis and Dallas) with rates of 4 per cent.

Kansas City.—July 1, 1924, reduction from 4½ to 4 per cent: Made with a view to improving the existing sluggishness in business and industry, including farming operations, by encouraging greater use of the abundant supply of credit available. The bills discounted of this bank had dropped from $59,200,000 the first of the year to $9,200,000 the 1st of July.

July 29, 1927, reduction from 4 to 3½ per cent: Made with a desire to conform to the Federal reserve system policy of easy money, our primary interest in this policy being that it should prevent foreign credits from coming to this country and thus weaken the ability of foreign markets to take our exports. It was also believed that the reduction in this district would emphasize the abundance of Federal reserve credit available for handling and marketing the good crops then harvested or in prospect, and facilitate orderly marketing.

February 10, 1928, increase from 3½ to 4 per cent: Made with a view that the reasons for establishing the 3½ per cent rate were no longer effective, and to bring our rate in line with the rates of most of the other Federal reserve banks.

June 7, 1928, increased from 4 to 4½ per cent: This action was taken to conform to rates set by all the other Federal reserve banks. While credit conditions and practices in this district did not call for a higher rate, it was felt that general conditions in the district were so favorable that an increased rate should have no bad effect, that curtailment of purely speculative credits would be desirable, and that this bank should not hold back in the movement for higher rates when such action might possibly interfere with the desired effect of the increased rates in the other 11 districts.

May 6, 1929, increased from 4½ to 5 per cent: The principal reasons for this action were increasing demand for Federal reserve credit and decreasing member bank reserve deposits, with a consequent lowering of our reserve position. It was felt also that our maintenance of a rate lower than that of nine of the other Federal reserve banks was not benefitting the industry of the district, since the generally higher rates prevailing throughout the country were preventing our lower rate from being passed on, in any noticeable degree, to the borrowers from our member banks. The abnormally high rates prevailing in eastern centers were forcing an unusual demand for loans on the larger banks of our district, from large concerns having contacts and credit lines with our banks, but which under normal conditions do their borrowing in the open market or from eastern banks.

December 20, 1929, decreased from 5 to 4½ per cent: This action was taken because of the reduced demands for loans from this bank, and with a view to encouraging in this district the tendency to lower rates which was apparent in various other sections of the country.

February 15, 1930, decreased from 4½ to 4 per cent: Action taken because of our strong reserve position, and to conform to the lower general market rates. It was felt that this action might lend some encouragement to business.

August 15, 1930, decreased from 4 to 3½ per cent: This action was taken with a view to making credit easy for the movement of crops, and for the carrying and finanacing of livestock.

Minneapolis.—The Federal Reserve Bank of Minneapolis has usually adjusted its discount rate to conform with existing rates in contiguous Federal reserve districts.

CHANGES IN RATE OF REDISCOUNT AT THE FEDERAL RESERVE BANK OF MINNEAPOLIS, 1924 TO 1931

The directors of this bank have consistently felt that financial stability is best supported by infrequent changes of the discount rate and they have been reluctant to make changes until a situation had developed which made such action necessary. In January, 1924, the current rate of rediscount was 4½ per cent. The changes since that date were as follows:

September 8, 1924: Rediscount rate reduced from 4½ to 4 per cent. It was the highest rate then prevailing and was out of line with contiguous districts.

September 13, 1927: The rediscount rate reduced from 4 to 3½ per cent. The rate was high and out of line.

February 7, 1928: Rediscount rate was raised from 3½ to 4 per cent to conform with the rate in adjoining districts.

April 24, 1928: Rediscount rate was advanced from 4 to 4½ per cent because it was out of line with the rate in Chicago district.

May 13, 1929: Rate was advanced from 4½ to 5 per cent. It was out of line with rates in contiguous districts.

February 8, 1930: Rediscount rate reduced from 5 to 4½ per cent for the same reason.

April 15, 1930: Rediscount rate reduced from 4½ to 4 per cent to conform with rates in adjoining districts.

September 12, 1930: Rediscount rate reduced from 4 to 3½ per cent for the same reason.

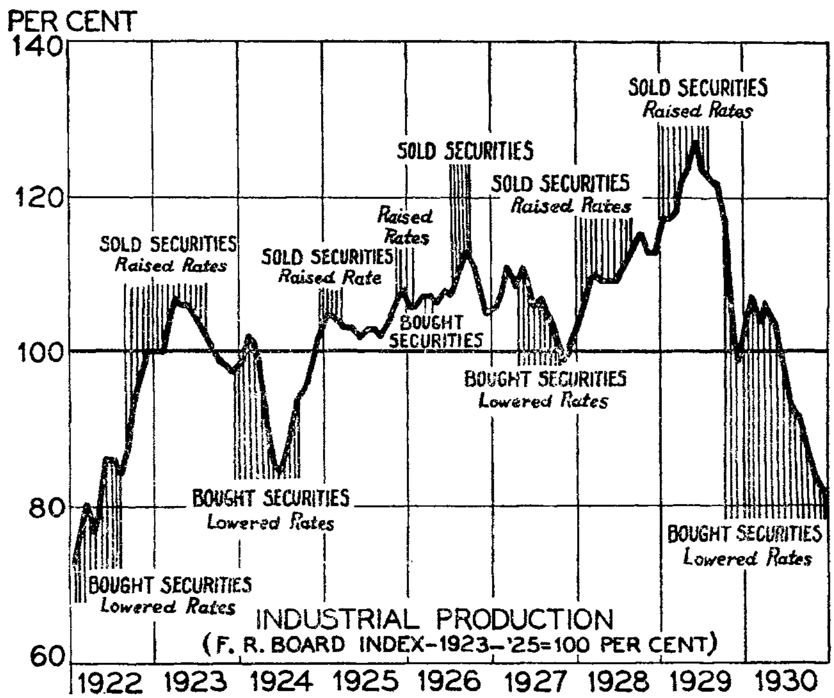
In common with adjoining districts, the current rate is 3½ per cent.

New York.—Before discussing the circumstances of particular changes in discount rate since 1924 it seems appropriate to make a brief statement with regard to the general considerations which have been factors in discount rate decisions by the directors of the Federal Reserve Bank of New York during the past decade. Additional comments on the general policies pursued are contained in the reply to question 2 of questionnaire 9 relating to open-market operations.

The traditional guides to bank of issue policy have been of little help since 1921. In the past banks of issue of necessity determined discount policy largely in relation to changes in their gold reserves or in relation to the foreign exchanges, anticipating probable gold movements. Since the end of 1921 the gold reserves of the Federal reserve system have been so large and the reserve ratio so high that no discount rate increase has been forced by the depletion of reserves. Gold required consideration not as the traditional automatic dictator of policy but in quite a different rôle, as will be suggested later.

There has been, it is true, one semiautomatic guide to policy having historical precedent which has proved serviceable. To some extent discount rate adjustments have been directly in response to changes in the market price for money. Generally speaking, it is desirable that member banks should secure Federal reserve credit at a fair price for that kind of money; that is, at a price which neither encourages excessive borrowing nor discourages necessary borrowing.

It is clear, however, that other considerations have to be weighed, for, with the periodic changes which take place in business and financial psychology, a rate in perfect technical adjustment with other money rates may at one time be stimulating and at another time depressing. Money rates alone are not a sufficient guide to discount policy. In addition, the whole range of consequences which may result from rate changes must be considered. The economic life of this country moves in a constantly changing current from depression to prosperity and back again. Broadly speaking, it has been the policy of this bank to exercise its influence toward restraint at times when business and speculative activity appeared to be excessive, and to remove credit restraints at times of business depression in the hope that this policy might aid in avoiding the extremes of business expansion and contraction and encourage greater business stability. This broad program of policy is illustrated in the accompanying chart:



Timing of purchases and sales of Government securities and discount rate changes compared with changes in the volume of industrial production

Possibly the general guide to discount and open-market policy of the bank which has been found of most value has been the observation of changes in the total volume and velocity of bank credit which is, in effect, a measure of the country's purchasing power. The studies made by the research staff of the bank over a period of years have demonstrated that when the volume of credit grows at a rate proportionate with the long-time growth of business in the country the dangers of either inflation or deflation are least. On the other hand, any expansion in credit beyond such normal growth of business and trade appears likely to result sooner or later in inflation of one form or another, not necessarily in commodity prices but in excessive speculation, overbuilding, or some of the other forms of overexpansion. Conversely, a less rapid growth in credit than the growth in business and trade leads to deflationary tendencies, to lower prices, and a repression of business activity. The evidence on this point over a period of years seems unmistakable, and it also appears that Federal reserve discount rates have a definite influence on the rate of growth of the total volume of credit.

Generally speaking, therefore, we believe it to be the responsibility of a Federal reserve bank in periods of unduly rapid expansion of credit; that is, expansion beyond the normal growth of the country's business and trade, to apply the restraining influence of increases in discount rates. This principle we believe to be generally applicable whether a too rapid expansion of the country's credit is due to speculation in securities, to overproduction or speculation in commodities, to speculation in real estate, or to an expansion in business activity or inventory beyond a normal and healthy growth. In other words, whatever the cause of growth or expansion in the country's credit structure, if the growth is at a rate greater than that at which experience has shown the country's business can grow on a sound and secure basis, then Federal reserve authorities have the responsibility, however unpopular, of lending their efforts, either through open-market operations or discount rates or both, toward restraint. Conversely, in a period of credit contraction or of less than the normal rate of growth, whether caused by business recession, declining prices, wages and employment, or any other cause, Federal reserve policy, in our opinion, should be to lend its efforts toward making money and credit plentiful and cheap.

It is our belief that it is in this direction that the Federal reserve system can most effectively exert an influence to prevent excessive speculation and to mollify business depression rather than in any attempt to control directly the use to which Federal reserve credit is put. Efforts by the reserve system to control the particular uses of credit are, we believe, impracticable and ineffectual, whereas the system does have a considerable influence over changes in the total volume of credit and its cost.

At this point it should be noted that during the past decade the reserve system was not free to consider solely the effect of its action on the volume of bank credit. It was not possible to follow an ideal policy with respect to domestic credit because of gold movements. The influence of gold was not the traditional one, as noted earlier, but quite the reverse—there was too much gold coming to this country. The tendency for gold to flow to the United States was an influence upon the growth of the country's bank credit which could never be ignored. Gold imports were inflationary in their effect upon credit, and, while this effect might be postponed and modified, it could not be wholly avoided. Dealing with this gold flow was one of the major problems of the reserve system. A policy of high rates would have increased the gold flow and increased the danger of later inflation. Moreover, the loss of the gold by other countries would have postponed the time when they could restore monetary stability and set up monetary conditions which would enable them to retain their gold. But worse than that, a continued sucking of Europe's gold to this country and sterilizing it here might, indeed, have led to an abandonment of the gold standard and brought chaos and anarchy to the world's economic structure. To all such changes in the world economy our own trade and prices were immediately responsive. The volume of exports of farm products and the prices of these products were particularly sensitive to conditions abroad. So it was necessary during this period constantly to balance against each other the influence of Federal reserve action upon the rate of growth in bank credit in the United States and its influence upon gold movements with the consequences these movements involved.

The following is a list of the rate changes during the years 1924 to 1930, inclusive, with a brief statement of conditions as they existed at the time of each change:

1923—February 23, 4½ per cent.

1924—May 1, 4 per cent.

June 12, 3½ per cent.

August 8, 3 per cent.

The three rate reductions in 1924 were made during a period of depression in business, considerable unemployment, gold imports, and of declining credit volume. The rate changes accompanied reductions in open-market money rates.

1925—February 27, 3½ per cent.

Rapid expansion in business, rising commodity prices, rapid increase in bank credit.

1926—January 8, 4 per cent.

The preceding months had produced very substantial gains in business and in speculative activity, accompanied by a large increase in bank credit.

April 23, 3½ per cent.

Some loss of confidence and a considerable drop in business activity.

August 13, 4 per cent.

Revival of business with a renewed expansion in bank credit.

1927—August 5, 3½ per cent.

A period of business recession, some decline in commodity prices; and gold imports, and weakness in foreign exchange.

1928—February 3, 4 per cent.

May 18, 4½ per cent.

July 13, 5 per cent.

1929—August 9, 6 per cent.

A period of rapid expansion of credit accompanying increasing speculation.

(On February 14, 1929, and for a number of weeks thereafter the directors of this bank voted to increase the discount rate to 6 per cent. These increases were not approved by the Federal Reserve Board.)

November 1, 5 per cent.

November 15, 4½ per cent.

A period of rapid liquidation, which brought about a cessation of the speculative activity; unsettled business conditions.

1930—February 7, 4 per cent.

March 14, 3½ per cent.

May 2, 3 per cent.

June 20, 2½ per cent.

December 24, 2 per cent.

A period of rapidly declining business, falling commodity prices, and increasing unemployment, declining credit volume.

Philadelphia.—June 19, 1924, 4½ to 3½ per cent: The rates of money were declining rapidly, borrowing from this bank was reduced greatly, as had been the total amount of reserve credit in use. Industrial production was very low; the reduction of the discount rate brought it in line with the rate for money in this district.

November 20, 1925, 3½ to 4 per cent: The rate for commercial paper had advanced considerably, there had been a large increase in the amount of Federal reserve credit in use, and the amount of borrowing from this bank had increased 200 per cent.

September 8, 1927, 4 to 3½ per cent: Borrowing from this bank had declined one-third from peak of previous year; there had been a large decline in rates charged for money by Philadelphia banks as well as in the market rate for commercial paper, amount of Federal reserve credit in use had been reduced considerably, and industrial production had declined (foreign conditions).

February 16, 1928, 3½ to 4 per cent: Because of increased borrowing from us, of advances in the rates for money in this market, and adverse trade balances of this district, as a result of which the bank was losing gold.

May 17, 1928, 4 to 4½ per cent: Due to increase in amount of Federal reserve credit in use, in gold exports, in the market rate for commercial paper and bankers' bills, and the change in the condition of member banks, due to large increases in their loans and investments.

July 26, 1928, 4½ to 5 per cent: This increase was made for the same reasons as above.

January 16, 1930, March 20, 1930, and July 3, 1930: On account of the rapid reduction in the amount of Federal reserve credit in use, the decrease in the amount of borrowing from this bank, the decline in the market rates for money, the reaction in business, and the great decline in industrial production.

Richmond.—In fixing rediscount rates our directors have been consistently governed by uniform principles: (1) The position of banking and credit in this district; (2) the reserve position of this bank; (3) the condition of banking and credit in the country at large; (4) international considerations, such as a desire to stimulate the export market for this country's surplus products. We have been compelled to a degree to change rates in this district in order to reduce or flatten out the differential between our rate and that of neighboring districts.

St. Louis.—On June 19, 1924, we decreased our rate from 4½ to 4 per cent, since Cleveland, Atlanta, and Chicago, all of which have parts of States in this district, had decreased their rates. We hoped to give agriculture and business the benefit of a lower rate in crop-moving time.

Our next change in rate was on August 4, 1927, when it was reduced to 3½ per cent. This was done hoping it would give cheap money for crop purposes and business, as there was plenty of money.

On February 21, 1928, the rate was increased to 4 per cent after increases had been made by all reserve banks except Cleveland and we were in danger of burdening this district with borrowing that belonged to other districts.

On April 23, 1928, we increased to 4½ per cent, because there was an unseasonable amount of borrowing which we hoped to check also because there was some flow of funds between St. Louis and Chicago. Chicago with a 4½ per cent rate might have diverted some borrowing to St. Louis if we continued a 4 per cent rate.

On July 19, 1928, the rate was increased to 5 per cent mainly for reasons similar to next above. Discounts were increasing, reserve ratio was low, and funds were going from this district to New York market, where rate was higher.

On February 11, 1930, we were the last of the reserve banks to decrease our rate to 4½ per cent and were forced to do so largely by the action of our neighboring districts.

On April 12, 1930, our rate was decreased to 4 per cent and on August 7, 1930, to 3½ per cent, in order to give the eighth district the benefit of rates enjoyed by adjoining districts.

On January 8, 1931, our rate was decreased to 3 per cent because there was little demand at the reserve bank except from localities which had suffered severely from the drought and it was felt that a lowering of the rate would be an encouragement.

San Francisco.—

Reason	Changes	
	Date of change	Rate per cent
With general easing of credit, evidence of business recession and lowering of interest rates generally, there appeared to be no situation in twelfth district which warranted continuance of the 4½ per cent rate	June 10, 1924	4
Continuance of conditions recited in foregoing and the fact that New York rate was 3 per cent and three other Federal reserve banks had reduced their rates to 3½ per cent, seemed to call for further reduction by San Francisco	Aug. 25, 1924	3½
Increasing demand for credit in twelfth district as well as in other districts, firming of open market rates, and fact that all other Federal reserve banks, with exception of New York, were on 4 per cent basis, called for advance in San Francisco's rate	Nov. 23, 1925	4
On request of Federal Reserve Board that directors reconsider their action in recommending no reduction be made in existing rate of 4 per cent	Sept. 10, 1927	3½
A reversal of the policy adopted in September, 1927, which, in light of subsequent events, was found to have been a mistake	Feb. 4, 1928	4
There had come evidences of changes in district making it no longer consistent to remain alone on 4 per cent basis, Kansas City excepted	June 2, 1928	4½
San Francisco's rate was too far out of line with current rates	May 20, 1929	5
Declining tendency in business conditions in district and open market rates	Dec. 6, 1929	4½
Business showing signs of severe recession, declining interest rates and high reserve position (San Francisco 82 per cent) prompted rate reduction	Mar. 21, 1930	4
Economic situation appears to be increasingly serious; San Francisco rate out of line with Federal reserve banks which may properly be classed with San Francisco; wide spread between discount rate and bill rates obviously inconsistent; reserves (87 per cent) also above average of system	Aug. 8, 1930	3½

2. Did the changes in rates of rediscount listed in your answer to the above question bring about the desired results? If not, what circumstances intervened to prevent the aims from being realized?

Atlanta.—Not fully. It would be difficult to guess what might have been the result if such action had not been taken in 1928. The mania for speculation prevented the realization of the aim desired and rendered ineffective many other efforts made.

Boston.—It is difficult to measure the effect of local discount rates upon national problems. For the most part the results desired were accomplished excepting where there was undue delay in making effective the discount rate changes, as, for example, the tardy reversal of policy following the easy money policy of the summer of 1927 and the failure of the July 19, 1928, increase to be followed by other increases when the need for them became evident in 1929. The failure of the 1928 discount rate increases seems to be due principally to the fact that the speculation situation was out of hand and the discount-rate policy was not sufficiently vigorous and aggressive.

Chicago.—The change in our rediscount rate from 4½ to 4 per cent on June 14, 1924, was mainly for the purpose of bringing our rate more in line with the rates which already existed for commercial paper in the open market. We did not follow the reduction in the rate of the Federal Reserve Bank of New York on June 12 to 3½ per cent and on August 8 to 3 per cent, but maintained our rate of 4 per cent until September 7, 1927. While in 1924 the system policy was designed to create an easy money market mainly for the purpose of rendering assistance to the foreign financial situation, our rate of 4 per cent, as compared with 3 per cent of the Federal Reserve Bank of New York, did not prevent this object from being attained. The reduction on September 7, 1927, from 4 to 3½ per cent, which was made by order of the Federal Reserve Board, was also mainly for the purpose of rendering assistance to the foreign situation and also to help the export of our products to foreign countries. This reduction, however, was not made with our consent, and our own board felt that it might encourage further use of speculative credit, which would be more than offset by any advantage that might be gained by reducing the rate. Our increases in 1928 to 4 per cent, 4½ per cent, and to 5 per cent on July 11, 1928, were made for the purpose of discouraging any further increase in speculative credit, but these increases had little, if any, real effect, as call money for brokers' loans was in strong demand during 1928, increasing from 4 per cent at the time of our first rate increase in January to 5 per cent on April 20, the day we increased our rediscount rate to 4½ per cent, and to 6 per cent about the time we increased our rate, on July 11, to 5 per cent. From July 11, 1928, until the stock market collapse on October 23, 1929, call money fluctuated from 6 to 12 per cent, and these high call-money rates dominated all the money rates in this country, drawing money from Europe and other parts of the world as well as tremendous amounts of domestic funds owned by corporations, firms, and individuals to be loaned in the call market, thereby making the Federal reserve rates entirely ineffective and nullifying the effects of the sale of securities from the system open market account, such sales being made for the purpose of controlling the situation through these operations when approval of increases in the rediscount rates could not be obtained from the Federal Reserve Board. The reductions which occurred in our rediscount rates beginning November 23, 1929, up to the present time, resulting in a decrease of fully 2 per cent in our rediscount rate, were made, generally speaking, to assist in the recovery of business after the stock-market break in the fall of 1929, and while doubtless it has removed any obstacle that might be in the way of recovery of business due to interest rates business has not recovered to the extent that it had been anticipated by the reduction in these rates.

During the periods of a strong speculative demand for credti it is the New York call-money rate that dominates the situation rather than the rediscount rates of the Federal reserve banks. It is the most powerful influence in affecting money rates that we have in this country, and has prevented the Federal reserve system from keeping control of the money market either through open-market operations or by increases in discount rates.

Cleveland.—In the main the results achieved by our rate changes have met our expectations. Ordinarily changes in our discount rates reflect the development of conditions within the district affecting the welfare of our member banks, or of conditions developing outside our district which influence such welfare to a point which justify more restrictive or more liberal policies with respect to the use of our credit facilities.

Dallas.—This question may be answered in the affirmative in so far as Federal reserve-bank rates are influential in this district. In the period from May 7, 1928, to February 7, 1929, administrative control was an important concomitant factor with rate increases and became of increasing importance up to and including October, 1929.

Kansas City.—We know of no means of divorcing the effect of rate changes from other factors so that the influence exerted by raising or lowering the discount rate may be measured. The direct effect is naturally slight in any district such as ours, where even the higher discount rates are considerably under rates charged by the banks on most of the customers' loans. Our opinion is that the only important influence exerted by rate changes in this district is indirect to the extent that reductions in rate call attention to continued or anticipated easy money conditions and increases serve as warnings of possible stringencies.

Minneapolis.—Changes in rates of rediscount have brought the desired results.

New York.—During the period from 1924 to 1927, inclusive, it is our opinion that in general the changes in the rates of discount were reasonably effective, although, of course, Federal reserve policy was only one of the influences on the situation. In particular the rate of increase of bank credit and the movement of gold appear to have been influenced by rate changes. The increases during the years 1928 and 1929 were not completely effective. This latter period was one fraught with unusual difficulties. The very rapid increase in brokers' loans "for the account of others" was a circumstance which in considerable measure offset the effectiveness of increases in the discount rate. While the experience of the reserve system with the discount rate is too brief to make possible the drawing of positive conclusions, it is, nevertheless, our view that had the increases in rate during this latter period been made more promptly and been larger they would have produced the desired result. Bank credit proved fairly responsive to rate changes.

Philadelphia.—It is apparent, we think, that the motives of the board of directors of this bank in changing discount rates, were to make our rate harmonize with the rates for credit prevailing in the markets at the times when such changes were made. On March 26, 1929, our board raised the rate with the idea of controlling or checking speculation, but that change was not approved by the Federal Reserve Board. The resolution was repeated in April 3, 1929, to expire by limitation unless approved by the Federal Reserve Board prior to April 6, 1929.

Richmond.—We believe that the changes made in rates of rediscount when made met the situation in this district, as we saw it, and did accomplish or assist in accomplishing the desired result.

St. Louis.—Except the psychological effect changes in rates made little difference, except in St. Louis, where a reaction to the changes was apparent.

San Francisco.—It will be seen from the foregoing answer that adjustments usually were made to bring our discount rate into harmony with the trend (at least) of interest rates.

3. Has the experience in your district shown that discount rate changes have been better timed on upward or downward movements?

Atlanta.—It is our belief that our rate changes were all properly timed.

Boston.—In most cases the discount rate changes were better timed on the downward movements because reductions are more popular than increases.

Chicago.—Generally speaking, over a long period of years we believe that the reductions have been better timed than the advances.

Cleveland.—Discount rate changes in this district appear to be more effective on the upward movements in influencing the use of our credit.

Dallas.—Changes better timed on downward movement.

Kansas City.—As indicated in the answer to question 2, determination of questions of this kind is difficult. We believe, however, that changes have been better timed on downward movements, and that revisions upward have sometimes been delayed more than would have been advisable.

Minneapolis.—We believe discount rate changes have been equally well timed with both upward and downward movements.

New York.—Chart B shows the changes in discount rates during the period from 1922 to 1930, inclusive, in relation to a number of other factors. A comparison of the rate changes with the changes in the other factors will possibly indicate that reductions in rate have been a little better timed than have increases. In making this comparison it should be noted that the factors listed largely relate to domestic developments. Due weight should also be given to the importance of movements of gold. Over most of the period there was a decided tendency toward gold imports into the United States, a tendency which was accelerated by any increase in discount rates. These gold imports had the effect in this country of building up reserves too large for comfort and tending to inflation, and had the effect abroad of raising money rates and interfering with the return of foreign countries to monetary stability, thus injuring our foreign trade. Under these circumstances a rate adjustment somewhat lower than would ordinarily be called for on the basis of domestic considerations alone was probably wise.

Philadelphia.—As our rate changes have been made to meet conditions, rather than to affect them, our experience does not enable us to answer this question.

Richmond.—Downward.

St. Louis.—Better timed on downward movements.

San Francisco.—(See answer to question 2.)

4. Is the efficacy of discount rate changes enhanced by large rather than small changes?

Atlanta.—The efficacy of discount rate changes is enhanced by large rather than small changes.

Boston.—The English policy of increasing discount rates by a full per cent and reducing by a one-half of 1 per cent at a time appears to be more effective in accomplishing results than our practice of making more frequent but smaller changes. To be emphatic, discount rate changes should be fairly large and made at only infrequent intervals.

Chicago.—Our opinion is that when a strong speculative demand for funds is under way an increase in our rediscount rates of 1 per cent is more effective than one-half of 1 per cent, and that when there is a slackening of demand for speculative credit and other credit that adjustments downward of one-half per cent at a time will better fit the situation.

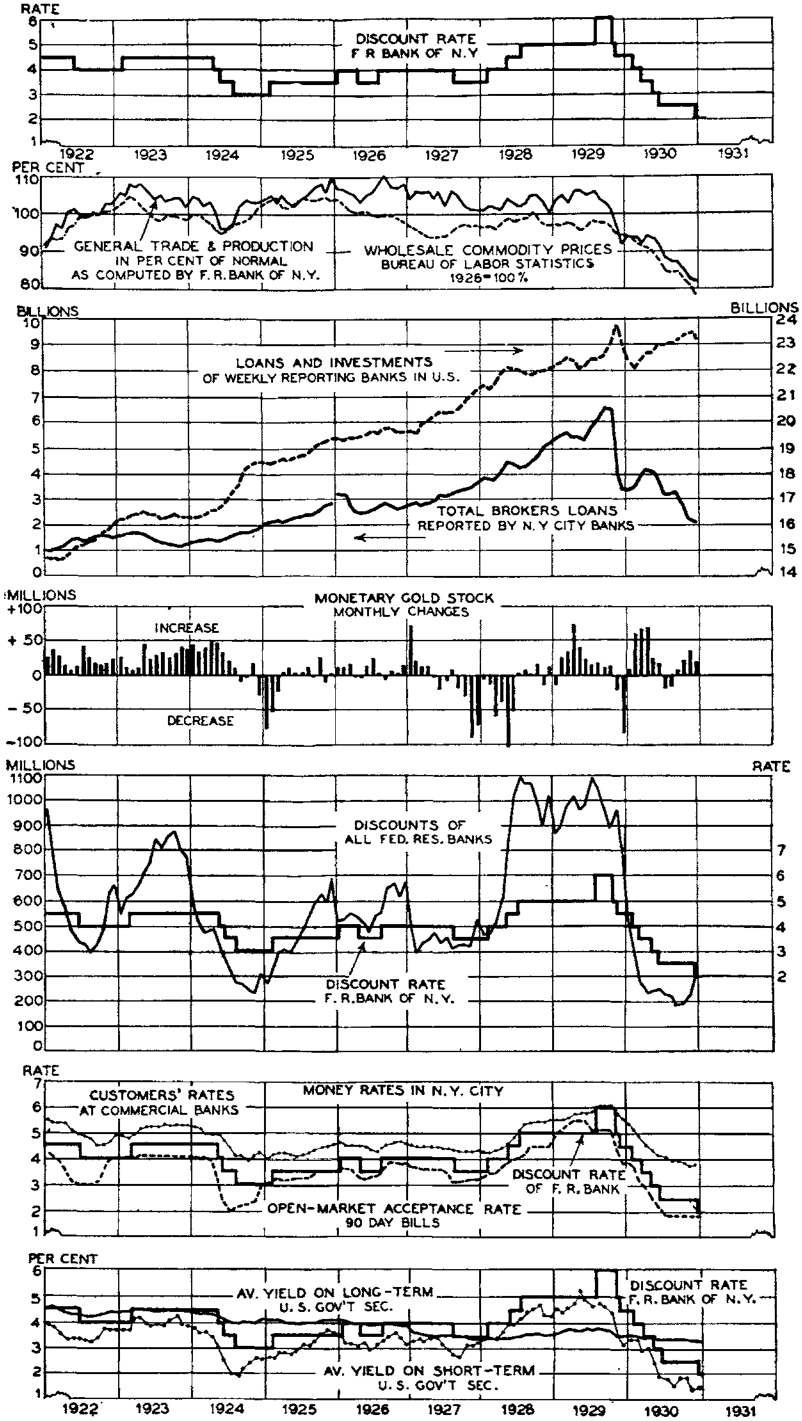
Cleveland.—In our judgment, it would be on upward movements, although this expression is based upon opinion rather than experience. There have been but two occasions in the history of this bank when rates were changed more than one-half per cent. In January, 1915, the rate on 60 to 90 day paper was reduced from 6 to 5 per cent, and on January 28, 1920, the commercial paper rate was advanced from 5 to 6 per cent.

Dallas.—Efficacy of rate change in this district is but slight and almost wholly psychological. It does affect the rates paid by commercial banks on bank balances and to a limited extent the rates to certain classes of borrowers. We are inclined to favor changing the rates upward by a full 1 per cent and downward by a one-half of 1 per cent.

Kansas City.—Yes; but large changes should be made only under unusual conditions, and when the need is clearly apparent. Otherwise harm may be done by overemphasizing the situation to be corrected. We have made no rate changes greater than one-half of 1 per cent.

Minneapolis.—Theoretically large changes in the discount rate are more effective than small, but practically in this district credit conditions are not appreciably affected either way.

New York.—The limited experience of the reserve system with discount rate changes hardly offers an adequate basis for generalization. On the only two occasions when increases of 1 per cent were made—in 1920 and 1929—these changes appear to have been moderately effective, though the events of these periods were so confused that it is impossible to discriminate between the influence of rate changes and the influence of other factors. There were a number of other occasions when rate increases of one-half of 1 per cent appeared to be influential upon the movement of bank credit, as, for example, in the spring of 1923, the spring of 1925, and the summer of 1926. The influence of the rate change appears to depend on the situation, but, generally speaking, it does appear that larger increases are likely to be more effective than smaller


RATE
DISCOUNT RATE
F R BANK OF N.Y
1922 1923 1924 1925 1926 1927 1928 1929 1930 1931
PER CENT
GENERAL TRADE & PRODUCTION
IN PER CENT OF NORMAL
AS COMPUTED BY F. R. BANK OF N.Y.
WHOLESALE COMMODITY PRICES
BUREAU OF LABOR STATISTICS
1926=100%
BILLIONS
BILLIONS
LOANS AND INVESTMENTS
OF WEEKLY REPORTING BANKS IN U.S.
TOTAL BROKERS LOANS
REPORTED BY N. Y CITY BANKS
MILLIONS
MONETARY GOLD STOCK
MONTHLY CHANGES
INCREASE
DECREASE
MILLIONS
RATE
DISCOUNTS OF
ALL FED. RES. BANKS
DISCOUNT RATE
F. R. BANK OF N. Y.
RATE
MONEY RATES IN N. Y. CITY
CUSTOMERS' RATES
AT COMMERCIAL BANKS
DISCOUNT RATE
OF F. R. BANK
OPEN-MARKET ACCEPTANCE RATE
90 DAY BILLS
PER CENT
AV. YIELD ON LONG-TERM
U. S. GOV'T SEC.
DISCOUNT RATE
F. R. BANK OF N. Y.
AV. YIELD ON SHORT-TERM
U. S. GOV'T SEC.
1922 1923 1924 1925 1926 1927 1928 1929 1930 1931

ones. As far as rate decreases are concerned, the evidence is not convincing either way.

Philadelphia.—We feel we have not learned enough from our experience to answer this question positively. The belief is entertained by banks that the rates should be advanced by larger amounts—say, 1 per cent at a time—and reduced by smaller amounts—say, one-half per cent.

Richmond.—By small changes downward and by large changes upward.

St. Louis.—Increases in rate should be by 1 per cent, decreases by one-half per cent.

San Francisco.—Credit is more sensitive to a sharp advance than to a sharp decline.

5. Do member banks tend to transfer increases in rates of rediscount in the form of higher interest charges to their own customers? Summarize the effects of changes in rates of rediscount on rates of interest charged on agricultural, business, and security loans.

Atlanta.—The increase of a rediscount rate naturally tends to stiffen money rates, and a borrowing member bank would naturally pass the increased rate to its customers. It is not felt that this practice applies to our country banks, whose rates are generally stationary.

Boston.—About the only member-bank rates which reflect changes in the Federal reserve discount rates are the rates made on loans by city banks to their country correspondent banks, and also to a very limited extent on the loans made by a few of the larger city banks to competitive commercial borrowers who are in a position to shop around not only between banks in a given locality but also between banks in several of the larger financial centers. In other words, rates on commercial loans to customers are affected by discount-rate changes only in the case of the larger borrowers. Commercial rates in the outlying country banks are practically stationary at all times, regardless of open-market conditions, and even those in the second and third size banks in the larger communities are sensitive to open-market influences only after a substantial period has elapsed. On the other hand, discount-rate changes appear to be reflected fairly promptly in open-market rates for acceptances, certificates of indebtedness, and stock-market loans.

Chicago.—In the larger cities advances in the discount rate made at a time when the member banks are materially in debt to the Federal reserve bank naturally result in an upward adjustment at the counters. This tendency is not so noticeable under conditions where the banks are operating within their own independent resources. Agricultural loans are usually made by rural banks and rates are generally materially above the Federal reserve rediscount rates. Changes in rates of rediscount, therefore, have little or no effect on agricultural loans. Banks, particularly in the larger centers, usually give decided preference to commercial business in a freer lending policy, and lower rates of interest than on security loans; hence declines in rediscount rates are likely to be more quickly reflected in commercial loans than on security loans. Conversely, advances in rediscount rates tend to result in an earlier increase in rates on security loans. These references to security loans apply to those of individuals and brokers in this district and not necessarily to the call-loan market in New York.

Cleveland.—In general practice, the overcounter rate to the ordinary borrower, commercial or agricultural, is not increased. Rates are increased to borrowers who have a national market for their paper and whose borrowing rates normally bear a closer relationship to reserve bank rediscount rates, as well as to local borrowers of the preferred class. On collateral loans the overcounter rate to the ordinary customer is not changed, but borrowers who usually enjoy a preferential rate because of their high credit standing, the value to the bank of their account, or the quality of collateral security offered may have to meet an increase in their rate when our rediscount rate is advanced.

Dallas.—Such changes do not affect rates on agricultural loans. They affect business rates only in competitive categories. Changes in rates, according to our observation, affect security loans more than any other class. Following you will find a tabulation and chart reflecting changes in our rediscount rate and changes in rates charged by commercial banks on business and security loans over a period of years.

Eleventh Federal reserve district discount rates

[Arithmetic average of rates in Dallas, Houston, and San Antonio]

PRIME COMMERCIAL PAPER WITH MATURITY OF 90 DAYS OR UNDER

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	6.42	6.17	-------	5.83	5.58	5.21	5.21	5.67	6.08
February	6.33	6.00	6.33	5.67	5.83	5.83	5.29	5.75	6.00
March	6.33	6.33	6.33	5.58	5.92	5.92	5.25	6.08	6.00
April	6.42	6.33	6.00	5.50	5.79	5.79	5.29	6.00	5.83
May	6.42	6.33	5.67	5.50	5.58	5.58	5.29	6.00	5.83
June	6.50	6.17	5.96	5.92	5.32	5.33	5.33	6.08	5.50
July	6.33	6.00	5.92	5.83	5.50	5.50	5.50	6.08	5.50
August	6.33	6.33	5.83	5.67	5.09	5.09	5.79	6.08	5.50
September	6.17	6.25	5.50	5.71	5.21	5.21	5.92	6.08	5.42
October	6.33	6.33	5.67	5.71	5.29	5.29	6.00	6.00	5.50
November	6.33	6.25	6.00	5.75	5.21	5.21	6.00	6.13	5.42
December	5.83	6.33	5.83	5.75	5.25	5.25	5.92	5.92	5.33

COLLATERAL LOANS—TIME

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	6.83	6.67	------	6.50	6.00	6.17	6.17	6.33	6.83
February	6.83	6.67	7.00	6.47	6.17	6.17	6.33	6.50	6.83
March	6.67	6.67	7.00	6.17	6.33	6.33	6.17	6.58	6.83
April	7.00	7.00	6.33	6.50	6.17	6.17	6.08	6.67	6.58
May	6.83	6.83	6.67	6.33	6.17	6.17	6.00	6.67	6.50
June	6.83	7.17	6.33	6.17	6.00	6.00	6.17	6.67	6.50
July	6.67	6.67	6.33	6.17	6.17	6.17	6.17	6.83	6.50
August	6.67	6.83	6.17	6.00	6.00	6.00	6.33	6.83	6.58
September	6.83	7.08	6.33	6.00	6.00	6.00	6.00	6.83	6.33
October	6.83	6.83	6.33	6.00	6.17	6.17	6.58	6.83	6.33
November	7.17	6.67	6.17	6.33	6.00	6.00	6.58	6.83	6.33
December	6.67	6.92	6.50	6.00	6.00	6.00	6.33	6.83	6.25

Kansas City.—No. In general, changes in the Federal reserve bank rate are not passed on to customers of member banks in this district, either on agricultural, business, or security loans. In so far as changes in the discount rate call general attention to ease or firmness in money conditions, such changes do have an effect on rates charged those borrowers who are in a position to shop for credit, such as well-known industrial or business concerns and large scale individual borrowers. Rates to other borrowers are not affected. Rates charged borrowers by country banks in our district are so standardized that they are not affected, generally speaking, even by extreme changes in money conditions.

Minneapolis.—(*a*) City banks do, country banks do not.

(*b*) The discount rate of the Federal Reserve Bank of Minneapolis does not affect the rate which agricultural borrowers pay.

New York.—There is a tendency on the part of member banks to transfer increases in rediscount rates to their customers. This is particularly marked in the case of the larger banks and in their dealings with customers of established credit standing who generally receive the benefit of the best rates. Probably more than 80 per cent of the banks in this district charge but one rate of interest in all seasons and to practically all customers, namely, 6 per cent. Customers of these banks are not affected by changes in the discount rate. Effects on different borrowers may be summarized as follows:

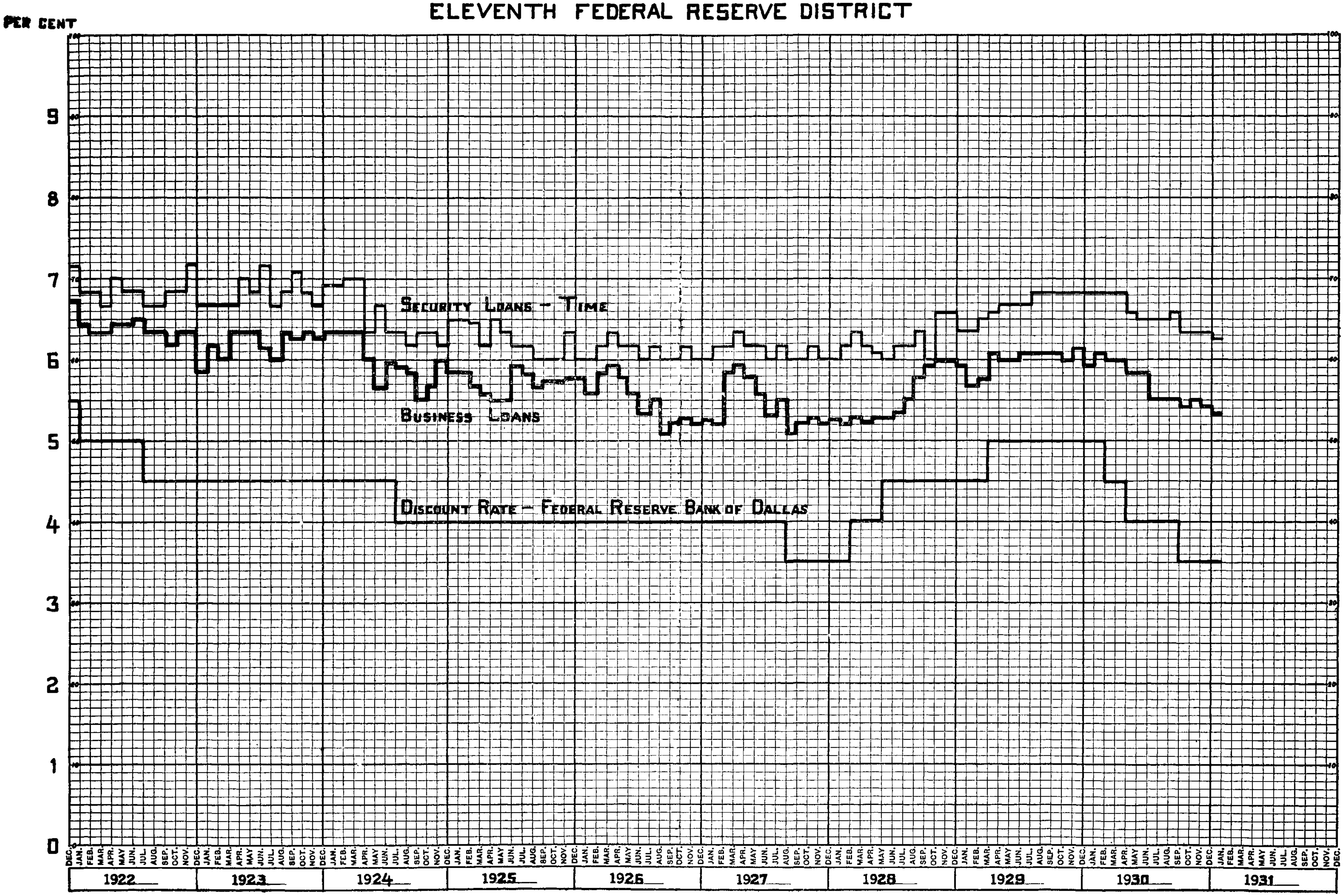
(*a*) There is probably no effect on the rates of interest charged on the bulk of agricultural loans in this district.

(*b*) There is probably no effect on rates of interest charged by banks outside of the large cities on business loans, nor on loans to the smaller business concerns by practically any banks. Rates charged business concerns with an established high-credit standing and, therefore, able to obtain credit in the open market, and with accounts in several localities, are affected.

(*c*) In the smaller banks there is probably no change in rates charged on security loans. In the financial centers rates charged on such loans would tend to be raised with increases in reserve bank discount rates. In addition to the effect on interest rates, discount rate increases affect the availability of credit by making banks more careful in their lending policies.

DISCOUNT AND INTEREST RATES

ELEVENTH FEDERAL RESERVE DISTRICT



34718—31. (Face p. 770.)

Philadelphia.—As to business loans, in Philadelphia changes in our rates affect the rates of interest charged on all loans, except those of customers of quite moderate capital. In the other large cities of this district our changes affect local rates scarcely any. In the argricultural communities never less than 6 per cent is charged on agricultural loans, hence our changes in discount rates have no effect on such loans. Collaterally secured loans: The great bulk of such loans originate in the largest cities, and the rates on them do vary with changes in the Federal reserve banks' discount rates. The rates on loans made by banks in the smaller communities on local securities are not affected by such changes.

Richmond.—Generally no. This is a 6 to 8 per cent district, and our rediscount rate has practically no effect on rates charged by member banks to their customers. Concessions are made to those borrowers who can command competitive credit in the larger centers, where money rates or the rediscount rate may perchance be lower.

St. Louis.—Yes. Changes in discount rate have little effect in the eighth district, except in the city of St. Louis, where rates to customers of member banks tend to move in accordance with our rediscount rate.

San Francisco.—Agricultural rates, the district over, vary from 6 to 10 per cent; very little of the former; average about 8 per cent. In important metropolitan centers large commercial borrowers are affected by changes in Federal reserve discount rates. Customers of banks in agricultural communities are not affected by Federal reserve rate changes.

Discount rate changed	From—	To—	Counter rates of San Francisco banks			Open market		New York acceptances, 90 days	London acceptances, 3 months
			Month	90-day prime commercial	Security (not brokers)	Commercial paper, 4-6 months	New York call		
			1924						
			January	5½-6	5½-6	4¾	4.39	4.09	3.29
			February	5½	5½-6	4¾	4.33	4.07	3.54
			March	5½-6	6	4½-4¾	4.04	4.04	3.20
			April	5½-6	5½	4½	4.21	3.95	3.07
			May	5½	5½-6	4¼-4½	3.38	3.29	3.05
June 10, 1924	4½	4	June	4½-6	5½-6	3½-3¾	2.25	2.45	3.03
			July	5	5 -6	3¼-3½	2.10	2.01	3.59
Aug. 25, 1924	4	3½	August	4½-5½	5 -6	3 -3¼	2.00	2.10	3.79
			September	4½-5½	5 -6	3¼	2.07	2.33	3.74
			October	4½-5	5 -6	3 -3¼	2.32	2.21	3.72
			November	5 -5½	5 -6	3¼-3½	2.42	2.37	3.72
			December	5 -5½	5 -6	3½-3¾	3.49	2.89	3.73
			1925						
			January	5 -5½	5 -6	3½	3.32	3.00	3.80
			February	5 -5½	5 -6	3¾	3.60	3.08	3.83
			March	5 -5½	5 -6	4	3.97	3.25	4.48
			April	5 -5½	5 -6	4	3.86	3.14	4.30
			May	5 -5½	5 -6	3¾-4	3.82	3.17	4.59
			June	5 -5½	5 -6	3¾-4	3.97	3.25	4.44
			July	5 -5½	5 -6	3¾-4	4.09	3.25	4.35
			August	5 -5½	5 -6	4 -4¼	4.19	3.27	3.94
			September	5 -5½	5 -6	4¼	4.62	3.50	3.68
			October	4½-5½	5 -6	4¼-4½	4.87	3.50	3.57
Nov. 23, 1925	3½	4	November	5 -5½	5 -6	4¼-4½	4.74	3.50	3.92
			December	5 -5½	5½-6	4¼-4½	5.32	3.50	4.67
			1926						
			January	5	5½-6	4¼-4½	4.33	3.67	4.76
			February	5 -5½	5½-6	4¼	4.85	3.63	4.31
			March	5 -6	5 -6	4¼-4½	4.55	3.63	4.37
			April	5 -6	5½-6	4¼-4½	4.06	3.42	4.33
			May	5 -5½	5½-6	4	3.81	3.20	4.37
			June	5	5½-6	4	4.15	3.32	4.27
			July	5 -5½	5 -6	4 -4¼	4.27	3.38	4.26
			August	5 -5½	5½	4¼-4½	4 52	3.57	4.45
			September	5 -5½	5 -5½	4½-4¾	5.02	3.88	4.54
			October	5 -5½	5 -5½	4½-4¾	4.75	3.88	4.69
			November	5 -5½	5½-6	4½	4.56	3.79	4.57
			December	5 -5½	5 -6	4½	5.16	3.83	4.53

Discount rate changed	From—	To—	Month	Counter rates of San Francisco banks: 90-day prime commercial	Counter rates of San Francisco banks: Security (not brokers)	Open market: Commercial paper, 4–6 months	Open market: New York call	New York acceptances, 90 days	London acceptances, 3 months
			1927						
	....	....	January	5 –6	5 –6	4 –4½	4.32	3.69	4.17
	....	....	February	5 –6	5 –6	4 –4¼	4.03	3.69	4.19
	....	....	March	5 –6	5 –6	4 –4¼	4.13	3.63	4.33
	....	....	April	4½–5½	5 –6	4 –4¼	4.18	3.63	4.04
	....	....	May	4½–5½	5 –6	4 –4¼	4.26	3.63	3.88
	....	....	June	4½–5½	5 –6	4¼	4.33	3.63	4.34
	....	....	July	4½–5½	5 –6	4¼	4.05	3.50	4.33
	....	....	August	4½–5½	5 –6	4	3.68	3.13	4.33
Sept. 10, 1927	4	3½	September	4½–5½	5 –6	4	3.83	3.13	4.32
	....	....	October	4½–5½	5 –6	4	3.90	3.25	4.32
	....	....	November	4½–5½	5 –6	4	3.60	3.25	4.33
	....	....	December	5 –6	5 –6	4	4.38	3.25	4.31
			1928						
	....	....	January	4½–5½	5 –6	4	4.24	3.36	4.19
Feb. 4, 1928	3½	4	February	4½–5	5 –6	4	4.38	3.51	4.18
	....	....	March	4½–5	5 –6	4 –4¼	4.47	3.52	4.12
	....	....	April	4½–5	5 –6	4¼–4½	5.08	3.81	4.02
	....	....	May	4½–5	5½–6	4½	5.70	3.94	3.97
June 2, 1928	4	4½	June	4½–5	5½–6	4¾–5	6.21	4.05	3.82
	....	....	July	4½–5½	5½–6	5 –5¼	6.05	4.32	3.99
	....	....	August	4½–5½	5½–6	5¼–5½	6.87	4.62	4.27
	....	....	September	4½–5½	5½–6	5½–5¾	7.26	4.50	4.23
	....	....	October	4½–5½	5½–6	5½	6.98	4.50	4.35
	....	....	November	4½–5½	5½–6	5¼–5½	6.67	4.50	4.38
	....	....	December	4½–5½	5½–6	5¼–5½	8.60	4.50	4.37
			1929						
	....	....	January	5½–6	5½–6	5¼–5½	7.05	4.84	4.37
	....	....	February	5½–6	5½–6	5½	7.06	5.15	5.05
	....	....	March	5½–6	6	5¾–6	9.10	5.34	5.33
	....	....	April	5½–6	6	6	8.89	5.46	5.21
May 20, 1929	4½	5	May	5½–6	6	6	8.91	5.48	5.21
	....	....	June	5¾–6	6 –7	6	7.70	5.49	5.32
	....	....	July	5¾–6	6 –7	6	9.23	5.16	5.38
	....	....	August	6	6 –7	6 –6¼	8.23	5.13	5.47
	....	....	September	5¾–6	6 –7	6¼	8.50	5.13	5.59
	....	....	October	5¾–6	6 –7	6¼	6.43	5.01	6.13
	....	....	November	5¾–6	6 –7	5¼–6¼	5.44	4.23	5.35
Dec. 6, 1929	5	4½	December	5¾–6	6 –6½	5	4.83	3.90	4.76
			1930						
	....	....	January	5¾–6	6 –6½	4¾–5	4.64	3.88	4.07
	....	....	February	5½–6	6 –6½	4½–5	4.32	3.81	3.82
Mar. 21, 1930	4½	4	March	5½–6	6 –6½	3¾–4¾	3.69	3.13	2.78
	....	....	April	5 –6	6 –6½	3¾–4	4	2.94	2.48
	....	....	May	5 –6	6	3½–4	3.12	2.50	2.16
	....	....	June	5 –6	6	3¼–3¾	2.62	2.13	2.31
	....	....	July	5 –6	5½	3 –3½	2.20	1.88	2.37
Aug. 8, 1930	4	3½	August	5 –6	5 –5½	3	2.21	1.88	2.21
	....	....	September	5 –6	5½	3	2.19	1.88	2.07
	....	....	October	5 –5½	5 –6	3	2	1.88	2.09
	....	....	November	5½	5 –6	2¾–3	2	1.88	2.18
	....	....	December	4½–5	5 –6	2¾–3	2.23	1.88	....

[From Monthly Review of Business Conditions, San Francisco, Calif., April 21, 1930]

Interest Rates in the Twelfth Federal Reserve District

Certain relationships between the discount and acceptance buying rates of the Federal Reserve Bank of San Francisco and various rates charged customers of commercial banks in the twelfth district may be observed in the recorded movements of interest rates. These relationships are most clearly defined in San Francisco, the principal money market of the district and the banking center in which borrowings from the reserve bank usually are in greatest volume. The more important of them may be illustrated in a comparative study of the following rates:

(1) The reserve bank discount rate.

(2) The reserve bank buying rate for 90-day acceptances.

(3) Weighted average rates charged customers by a group of member and nonmember banks for loans on:

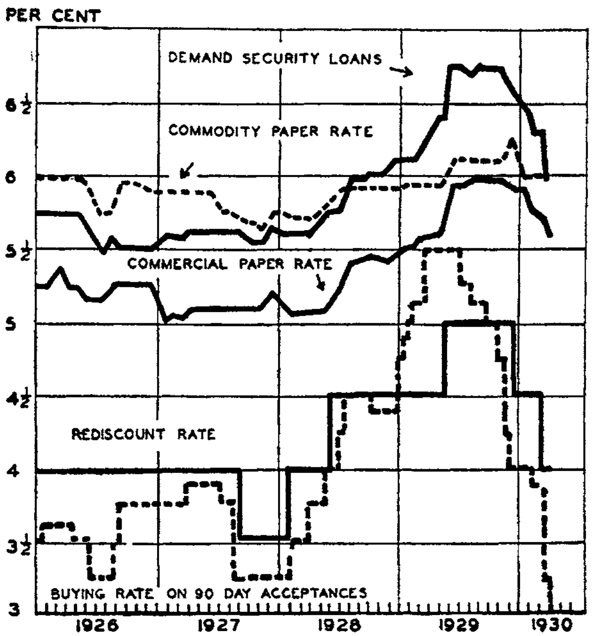
(*a*) Prime commercial paper eligible for rediscount.

(*b*) Time and demand loans secured by prime stock exchange collateral.

(*c*) Commodity paper, or loans secured by warehouse receipts.

The rates just enumerated are shown in the accompanying chart, which presents them for San Francisco only. Changes in the discount rate have ordinarily followed rather closely upon the major downward or upward movements of the acceptance rate during the past 10 years, and the latter rate has been lower than the discount rate during the entire period, with but one exception in 1929.[1]

The interest rate on prime commercial loans is particularly significant in that it reflects the ever shifting balance between demand for commercial credit and the available supply of funds and thus may be taken as fairly representative of open market rates in San Francisco. Comparison of the commercial paper rate



INTEREST RATES, SAN FRANCISCO

Commodity paper loans, demand security loans, and commercial loans—average rates at middle of month.

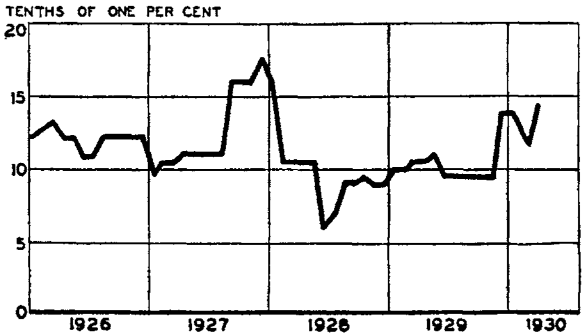
Discount rate, Federal Reserve Bank of San Francisco.

Acceptance rate, Federal Reserve Bank of San Francisco.

in San Francisco with the discount rate shows that the former has followed a course almost consistently at a level of about 1 per cent above the discount rate. Whether continuing previous trends or reversing them, the more important changes in this rate ordinarily have occurred within a period of a few weeks after changes in the discount rate have been made, both rates moving in the same direction. Observation of the chart also shows that shorter period fluctuations of the commercial paper rate have conformed reasonably well with the pattern of the reserve bank's acceptance buying rate, allowing for the lapse of a relatively brief period of time. But this timing of the movements has not been entirely uniform. Twice since 1926 (late in 1927 and during recent months) the commercial paper rate has failed to adjust itself to the average differential of 1 per cent above the discount rate within the usual period of time and its

[1]As indicated later on in this discussion the acceptance buying rate of this bank is practically identical to that of the Federal Reserve Bank of New York which in turn is influenced chiefly by open-market rates in the national money market.

reactions to changes in the acceptance buying rate have been retarded. During both of these periods of retarded adjustment betweeen the rates there has been considerable recession in general business activity.



DIFFERENTIAL BETWEEN DISCOUNT AND COMMERCIAL LOAN RATES, SAN FRANCISCO

The base line of this chart represents the discount rate of the Federal Reserve Bank of San Francisco. That rate is shown as a straight line regardless of changes in it, and the difference between the discount rate and the rate on prime commercial loans in San Francisco, in terms of tenths of 1 per cent, is shown by the irregular line.

Rates on security loans have followed the commercial paper rate rather closely, but at a level approximately one-half of 1 per cent above that rate. The widening of this differential during the last half of 1929 was due almost entirely to the action of securities markets during that period. There has been less fluctuation in commodity paper rates than in either prime commercial or security loan rates, and they have constantly been maintained at higher levels than have rates on paper eligible for rediscount at the reserve bank. The more important factors influencing commodity paper rates appear to have been the longer-term trends of other rates and of supply and demand conditions in the money markets.

It may be said that the various over-the-counter and open-market interest rates in the twelfth district, as represented by San Francisco, move in different planes, and that their main trends are similar to the main trends of the reserve bank's discount rate, while their shorter-term fluctuations are more nearly like those of the reserve bank's acceptance-buying rate. Furthermore, it is evident that the discount rate is influenced by the major upward and downward movements of the acceptance-buying rate. These facts may be related to the national money market by observing that the acceptance-buying rate of this bank has been maintained practically identical to the corresponding rate of the Federal Reserve Bank of New York during recent years. Changes in that rate occupy about the same position with respect to other rates in New York as in San Francisco, and in New York are particularly sensitive to the fluctuations of open-market rates. It is evident, therefore, that the course of interest rates in San Francisco, particularly the more sensitive open-market rates, presents about the same picture as does the course of similar rates in New York, the San Francisco rates generally moving at slightly higher levels.

Commercial loans, San Francisco, average rate at middle of month.

Commercial loans, New York, averate rate at middle of month.

Commercial paper, New York, monthly average open-market rate on four to six months prime commercial paper.

Acceptances:

(Heavy line) monthly average open-market rate on bankers' 90-day acceptances, New York City.

(Light line) buying rate on 90-day acceptances, Federal Reserve Bank of New York.

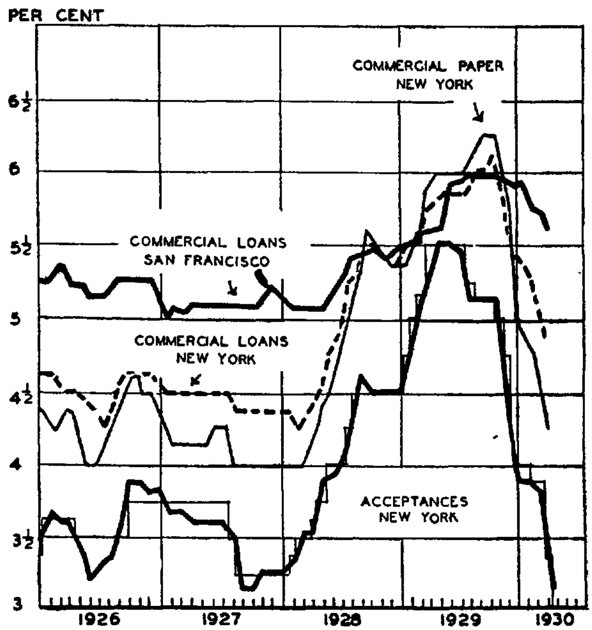
6. What has been the effect of high or low rates of rediscount on increases and decreases in the volume of member-bank borrowings?

Atlanta.—The volume of member-bank borrowings has been little affected by high or low rates of rediscount. With few exceptions, our member banks borrow for actual requirements, regardless of the rate.

Boston.—Member-bank borrowings tend to drop following a rise in Federal reserve discount rates and to rise following a drop in discount rates. This, however, is only a general tendency, and exceptions are not difficult to find. For example, member-bank borrowings continued to rise with only seasonal interruptions throughout 1928 and the first half of 1929, in spite of steadily rising discount rates in 1928. This, perhaps, was due, as indicated above, to the fact that the increases in the discount rate throughout this period were not sufficiently prompt nor aggressive.

Chicago.—The periods during which our highest discount rates have been current have been attended by the strongest demand from member banks, and the effect of increased rates thereon did not materialize until some time had elapsed after such rates became effective.

Low rates of discount do not appear to have increased member-bank borrowings to any appreciable extent.



INTEREST RATES IN NEW YORK AND SAN FRANCISCO

Cleveland.—With the exception of 1928 and 1929 increases in our rate appear to have checked any tendency to excessive borrowing. It is observed that in 1924 and 1927 the reduction in rates was followed by increased rediscounting, largely seasonal, however, in both instances. In 1928 successive rate increases did not discourage borrowing until the rate was advanced to 5 per cent. In 1929 member-bank borrowing was at a level substantially in excess of previous years, notwithstanding that the 5 per cent rate was maintained throughout the year. It must be taken into account, however, that business acivity in this district in 1928–29 was maintained at unusually high levels. (See accompanying chart.)

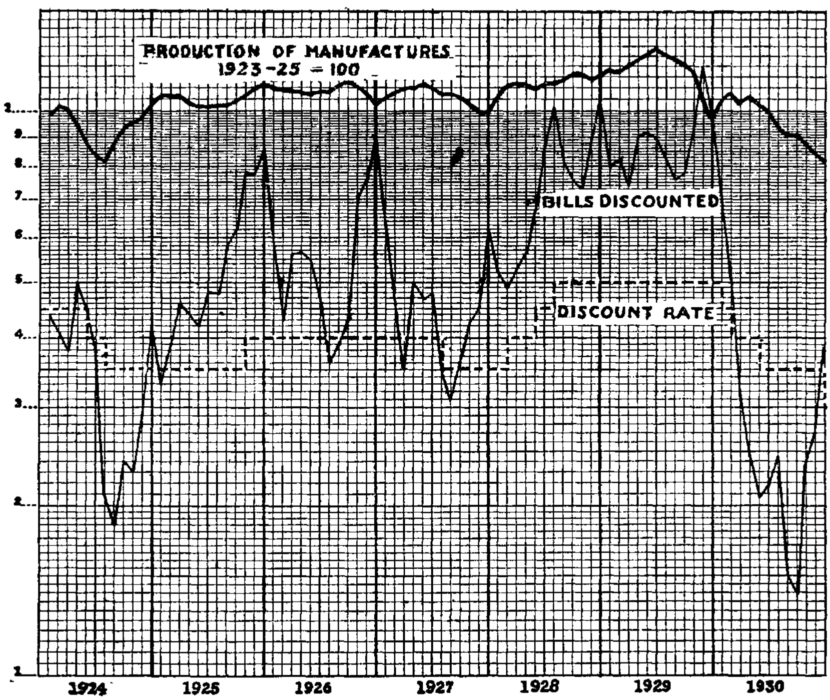
Dallas.—Slight.

Kansas City.—In this district very little noticeable effect. Increases over a considerable period of time undoubtedly result in some stiffening of credit policies of member banks and consequent reduction in borrowings, but because of high commercial rates usually prevailing in the district, the effect is mostly psychological. Reductions in rates should have opposite effects, but experience does not indicate to what extent.

Minneapolis.—The volume of member-bank borrowings usually increases as the discount rate goes up.

New York.—Changes in the rates of rediscount undoubtedly have had their effect upon the borrowings of member banks. Since such changes in rate have almost invariably been accompanied by open-market operations, which have a more immediate effect upon the borrowings of member banks, and since there are also other factors which affect discounts, such as gold movements and changes in currency in circulation, it is not possible to separate the effect of discount rate changes, or to present any figures illustrating changes, which have taken place. The effects of discount-rate changes are more apparent in member-bank credit than in the amount of reserve-bank discounts. It is clear from chart B that, generally speaking, increased rates have tended to check credit expansion, and lower rates to encourage it. It appears clear from these movements that the credit policy of member banks is responsive to changes in Federal reserve rates. But changes in their borrowings at reserve banks are dependent not only on their policy in advancing credit but more largely upon currency demand, gold movements, and changes in Federal reserve holdings of acceptances and Government securities.

Philadelphia.—In the larger cities, if monetary conditions are normal, increases in our rates have a tendency to curtail rediscounting, but lowering of the rate does not necessarily tend to increase borrowing. The lowering of our rate generally is coincident with declines in business, which declines always reduce borrowing from banks. In the smaller communities and rural districts, where the prevailing rate for loans is 6 per cent, our increasing of the rate of



discount has little effect on member banks' borrowing until our rate goes above 5 per cent. Then it so reduces the profit on rediscounting that member banks' borrowing is somewhat affected. With monetary conditions abnormal, as they were in 1928 and 1929, the raising of our rates presumably only would act as a warning, indicating that we felt that borrowing was excessive and that the credit available for additional loans was being used up, and that it would be difficult to obtain the additional credit necessary to support further advances in the market.

Richmond.—We do not believe the rate has exercised a material effect on borrowings for agricultural purposes, but in the cities the rate has the effect of restraining or encouraging borrowing.

St. Louis.—Very little, if any.

San Francisco.—High rates tend to lessen the borrowing of banks in metropolitan centers. The borrowings of country banks are seasonal and are not noticeably affected by rate changes in financial centers. Whether or not low rates stimulated the use of Federal reserve credit by member banks depended largely upon business conditions and the public's inclination to use credit merely because it was for the moment cheap.

7. Should rates of rediscount vary from reserve district to reserve district, or should they be uniform throughout the entire country?

Atlanta.—They should be applicable to conditions in each district, modified only by requirements of conditions in the United States or abroad, or to comply with some formulated Federal reserve policy.

Boston.—In general, discount rates should be influenced (but not necessarily controlled if national considerations dictate otherwise) by the supply of credit in each Federal reserve district. Discount rates, therefore, need not necessarily be identical in each Federal reserve district. The principal index or criterion for determining rates is the relationship of the open market for prime bankers' acceptances in those districts where there is an open market for them. In other districts, it should be a combination of the rates charged in the local centers on line of credit loans advanced by banks to those customers which are in a position to shop around for loans in other cities, and the rates charged by eastern correspondents in the case of those banks which prefer to borrow other than from their local Federal reserve bank. In this way, even the interior Federal reserve districts find their discount rate policies tied up to the open market rate in the large financial centers and, therefore, frequently tend to gravitate to the same level.

Chicago.—While conditions may arise which would justify uniformity of rates in all districts, as a general rule the rates should be regulated in accordance with the conditions prevailing in the several districts.

Cleveland.—We do not believe that the establishment of uniform rates of rediscount would be practicable. Changes in conditions, the effect of which may be largely or entirely local, might justify changes in the rediscount rate of the reserve bank whose district is affected. To raise or lower rates in unaffected sections might easily prove to be a serious disturbance to business in those areas. Also we believe that the fact that going rates of discount charged by banks in the various sections of the country vary so widely raises an effective barrier to the establishment of uniform rediscount rates.

Dallas.—A uniform rate throughout the entire country would be too arbitrary. The differences in rate will tend to narrow and rates will approach uniformity naturally by reason of increased borrowings in districts where rates are low and decreasing borrowings in districts where rates are high. We think rates should be based primarily upon conditions existing in each district and adjustments should be permitted to occur naturally. If rates were arbitrarily made uniform it would destroy the principle of having 12 reserve banks and tend to establish a central bank principle.

Kansas City.—The discount rate should have some relationship to bank rates in the district. It follows, therefore, that discount rates should vary in the different districts and that the discount rate in this district, where bank rates are high and not responsive to changed money conditions, should frequently be higher than the discount rates in districts which are not comparable to ours in this respect. Differences in rates should not be great enough, however, to cause an unnatural shifting of demands for Federal reserve credit from one district to another.

Minneapolis.—The rediscount rates in districts which are largely agricultural should not conform necessarily to the rediscount rates prevailing in the eastern money centers.

New York.—Generally speaking the factors operating for or against uniform discount rates throughout the country appear to be the following:

1. *Movement of funds between districts.*—In a number of instances a differential in rates between districts has caused so large a flow of funds between districts that it has become important to equalize the discount rates, though the extent of this interdistrict flow of funds appears to vary greatly from time to time, and ordinarily does not assume great importance.

2. *Effect of rates on member bank borrowing.*—The individual reserve bank has to consider not alone the movement of funds to and from other districts, but also the influence of its own rate changes on the borrowing attitude of its

member banks. The rate has an important function in discouraging excessive borrowing and encouraging necessary borrowing. Generally speaking this consideration would usually appear to indicate the desirability of higher discount rates in interior reserve banks than at New York, since customers rates are usually higher in the interior.

3. *The psychological effect.*—Probably the strongest pressure for uniform rates has been the pressure from the business of a district upon a reserve bank to give as favorable terms as the reserve bank of any other district.

Philadelphia.—Rates of rediscount should be established upon conditions existing in the district. As conditions vary more or less from time to time in every district, discount rates in the different districts should vary accordingly. It would be contrary to good principles to require them to be uniform. As a matter of coincidence, they might at times be uniform in all or most of the districts.

Richmond.—At times it may seem desirable to have uniform rates, but as a rule there is no necessity for uniformity, nor is it believed desirable.

St. Louis.—They should be initiated according to the needs of the various districts and so will vary, but will work toward a uniform rate throughout the country. There probably should be a differential in rate of about 1 per cent between New York and the strictly agricultural districts.

San Francisco.—Rates should vary among the several districts under some conditions. If there were one rate uniform in all districts, it would usually be a rate determined in the principal money center, New York, and usually be an improper rate in many other districts. There should also be at times variation influencing the flow of funds from one district or section to another.

8. Have differences in rates of rediscount prevalent in the several reserve districts affected the interdistrict flow of funds?

Atlanta.—Yes; to some extent. Businesses of national scope seek the lowest interest rate obtainable.

Boston.—The flow of funds between Federal reserve districts probably has much less relation to Federal reserve discount rates than is sometimes supposed. This flow occurs in payment of commercial transactions which would take place in any case, regardless of discount rates, or else it occurs in connection with stock-market loans. The latter represent usually surplus funds which are being placed in the New York stock market in order to avoid their remaining idle, and this transfer is made more or less regardless of discount rates. Only in periods when conditions are more or less abnormal do discount rates affect such transfers, and then probably only to a limited extent.

Chicago.—To a moderate extent. As between Chicago and New York, large commercial borrowers having borrowing facilities in both cities have borrowed in the New York market instead of in the Chicago market when the New York discount rate has been lower. However, as a general rule Chicago commercial banks meet the rates offered to these borrowers by the New York banks.

Cleveland.—Yes, to some extent.

Dallas.—Yes. In varying degrees, however.

Kansas City.—To some degree in this district.

Minneapolis.—Yes. We believe they have quite appreciably affected the interdistrict flow of funds.

New York.—There have been several instances when differences in reserve bank discount rates in the various districts have appeared to influence the interdistrict flow of funds. For example, in the spring of 1928, advances in discount rates in several other districts appeared to check, at least temporarily, the flow of funds to New York; and near the end of 1929, a lower discount rate in New York than in other districts clearly resulted in some flow of funds to other districts. Usually these movements have been hard to trace, partly because considerable rate differentials have seldom continued over an extended period.

Philadelphia.—As concerns the third district, to a moderate extent.

Richmond.—We believe it has.

St. Louis.—Yes; as between St. Louis and New York, and perhaps, to a small extent between St. Louis and Chicago; but very little, if any, between St. Louis and the other Federal reserve bank cities.

San Francisco.—As for the San Francisco district, a prolonged variation between its rate and that of New York would result in a considerable flow of funds.

It would be in evidence to a lesser degree if the variation were with other important Federal reserve banks, but it would not if the variation were with Kansas City, Minneapolis, Richmond, Atlanta, St. Louis, and Dallas.

9. Need rates of rediscount be changed frequently excepting at those reserve banks located in the financial centers?

Atlanta.—They need not.

Boston.—In order to be most effective, discount rate changes should be at infrequent intervals and sufficiently great in extent to lend emphasis to the change. Frequent changes lose emphasis, and such control is better handled through open-market operations. All Federal reserve bank cities would appear to be financial centers. The size and the nature of the business done in each financial center, the sensitiveness of its money market to discount rate changes and open-market operations should be the determining factors as to the policy of rate changes, whether the finnacial center was the center of local surrounding territory primarily or subject to national and international influences in finance.

Chicago.—No.

Cleveland.—No; except on the basis of marked changes in conditions governing the use of credit in districts outside financial centers.

Dallas.—Frequency of rate changes in any district depends primarily upon the money market and economic conditions.

Kansas City.—No. The effect of rate changes in this district is largely indirect and would be lessened if changes were made frequently.

Minneapolis.—No; except as important changes in contiguous districts make changes necessary.

New York.—This question can be answered more appropriately by the other reserve banks, since this bank has not sufficiently intimate knowledge of the forces working upon an interior bank.

Philadelphia.—Discount rates should be changed as conditions require. That may be at long intervals or frequently, depending upon circumstances.

Richmond.—We think not.

St. Louis.—Rates should be changed when the needs of any district make a change desirable.

San Francisco.—Each Federal reserve bank city is a financial center, at least in its own district, and while under some circumstances frequent changes would be unnecessary, even at those reserve banks located in the principal money markets the interflow of credit between the San Francisco district and the principal money markets is sufficient to indicate the necessity for carefully considering and usually following the rates in such principal money markets, especially New York.

10. Should the rate charged on member bank promissory notes secured by Government obligations be above the yield borne by those obligations?

Atlanta.—The rate on member bank promissory notes secured by Government obligations should be the same as the rate on discounted notes secured by eligible paper.

Boston.—There appears to be no good reason why a discriminatory rate should be made either in favor of or against loans secured by Government securities. A discriminatory rate, which is simply designed to be higher than the yield borne by Government obligations, might result in sales of such obligations to the reserve banks or to the open market rather than discounts of such obligations at the reserve banks.

Chicago.—Such rates should be the same as regular rediscount rates and should have no relation to the yield of Government bonds.

Cleveland.—The rate of return on Government securities should have no relation to the rediscount rate.

Dallas.—Not unless this principle were uniformly applied to all forms of borrowing.

Kansas City.—Member banks should be charged the prevailing discount rate at time of borrowing on such paper, without regard to the yield of the collateral.

Minneapolis.—We believe that the member banks should be charged the going rediscount rate regardless of the yield of Government obligations.

New York.—For some years past the discount rate has been almost constantly above the yield rate on short-term Government obligations, as shown in chart on page 768, while it has but a part of the time been below the yield rate on long-term Government securities. This situation seems likely to continue, especially during the period when the Government is gradually reducing the amount of its outstanding obligations; but other considerations in fixing discount rates are so much more important than the yields on the particular paper offered as collateral for loans, that there would seem to be no reason for establishing an arbitrary rule in this regard.

Philadelphia.—The rate charged on loans secured by Government obligations should depend upon financial conditions, not upon the rate of interest borne by the obligation.

Richmond.—In our opinion the discount rate should bear no necessary relation to the yield borne by Government obligations.

St. Louis.—Yes.

San Francisco.—No. A uniform rate should apply to all borrowings. (See answer to question 7 of questionnaire No. 7, for borrowing against United States Government obligations.) To determine the margin of profit or loss the member bank sustains in its borrowing operations, there should be taken the difference between the rate charged for the use of Federal reserve credit and the rate collected in the employment of such funds.

The member bank's earning position is not affected by reason of its selecting 2 per cent Government bonds instead of 6 per cent customers' paper to facilitate the act of borrowing at the Federal reserve bank.

11. Should a higher rate be imposed on the promissory notes of member banks secured by Government obligations than on rediscounts of commercial and agricultural paper?

Atlanta.—Not in normal times. A recurrence of a speculative era would cause us to consider every means to restrict the abuse of reserve credit.

Boston.—This is a debatable question. At any rate the Federal Reserve Board and the Federal reserve banks have ample authority under the present law to establish different rates on different classes of paper, and it might be desirable to try out the suggestions for varying rates when a favorable opportunity occurs.

Chicago.—No.

Cleveland.—No. Borrowing or rediscounting is the result of a need for funds to meet demands or other current operations of member banks. When they borrow, it will be on the collateral which will give them the advantage of the best rate and involve the least labor and inconvenience on their part.

Dallas.—No.

Kansas City.—No.

Minneapolis.—No.

New York.—There is no particular advantage in establishing a higher rate upon borrowings secured by Government obligations than on rediscounts of commercial and agricultural paper. The practical effect of such a rate policy would be merely to change the form of borrowing by member banks. There have been only rare instances where member banks borrowing on the security of Government obligations could not have borrowed equally well upon the security of eligible paper taken from their own portfolios. The fact is that it is considerably more convenient for banks to borrow against the security of Government obligations, and for this reason they do it. This practice is followed by a large number of country banks which like to carry a block of Government obligations feeling that they represent a secondary reserve against which they can readily borrow in case of need, and in practically all cases where Government bonds are owned, borrowing will be against them before resorting to the use of eligible paper, purely as a matter of convenience. In the interests of sound banking it is desirable for banks to carry a reasonable amount of Government securities in their investment account, and their ability to borrow upon them encourages them to do this. In many cases if borrowing could not be accomplished on governments, except at a higher rate, banks would be inclined to substitute bonds of a higher yield but lower quality. The principal result would be to reduce the liquidity and soundness of banks, and that would be undesirable. This question relates closely to questions No. 7 and No. 8 of questionnaire No. 7, in the replies to which the principles here involved are discussed more fully.

Philadelphia.—No.

Richmond.—We think not. Loans on Government obligations are often used by banks in this district for commercial and agricultural purposes.

St. Louis.—No. It would be desirable always to have a discount rate above the rate that can be procured by customers who are enabled to get the benefit of a competitive money market.

San Francisco.—No. The earning capacity of investments (whether United States bonds or promissory notes or bills of exchange) used as a basis for obtaining credit at the Federal reserve bank is not important. For instance, if the rate of discount is 4 per cent and the average worth of loanable or investment funds to the member bank is 5 per cent, the use of Federal reserve funds gives a profit of 1 per cent. This profit is neither enlarged nor diminished by the earning rate on the specific collateral or paper used as the basis for obtaining the funds from the Federal reserve bank.

It would be a mistake to say the borrowing bank lost 2 per cent if the specific collateral pledged to secure an advance were yielding 2 per cent, or it made a profit of 2 per cent if the specific notes discounted yielded 6 per cent. A bank might wish to borrow a given sum at 4 per cent to relend in a given transaction at 8 per cent. It would not change the rate of profit if the bank used as a basis for obtaining the funds at the Federal reserve bank its promissory note secured by United States bonds yielding 2 per cent or discounted its customers' paper yielding 6 per cent.

12. Would the imposition of such discriminatory rates help to prevent the seepage of Federal reserve credit into speculative security loans?

Atlanta.—It might, but it should not be applied, if at all, except in the emergency of a speculative era, and then it should be considered in connection with other legitimate remedies.

Boston.— ——— do not believe that discriminatory rates would prevent the seepage of Federal reserve credit into speculative security loans.

Chicago.—No.

Cleveland.—If the rate were sufficiently high, yes; but such rates would penalize warrantable and necessary borrowings by many of our member banks.

Dallas.—We think not.

Kansas City.—No. This can best be controlled by direct pressure on offending member banks.

Minneapolis.—No. We do not think so.

New York.—The application of discriminatory rates on loans secured by Government obligations would have very little, if any, effect upon the use made of the credit thus released. There is no reason to suppose that credit obtained through the discount of notes secured by Government obligations is more likely to be used for speculative purposes than credit released through the rediscount of commercial and agricultural paper. When a bank adjusts its reserve position and finds it necessary to borrow to do so, it does not concern itself with the method of borrowing, but only with the fact of needing to adjust its reserves, and if loans secured by Government obligations carried a higher rate than those secured by commercial and agricultural paper, very few such loans would be made. The type of collateral offered for a loan, according to our experience, has little, if anything, to do with the use made of the proceeds, and discriminatory rates would only be effective after banks had borrowed to the limit of their capacity on eligible paper. Such capacity is too great to permit of reliance upon discriminatory rates to check speculation. This question also relates closely to questions No. 7 and No. 8 of questionnaire No. 7, in the replies to which this question is discussed more fully.

Philadelphia.—No.

Richmond.—Not in this district.

St. Louis.—No.

San Francisco.—No. This must be closely controlled by the discretionary powers given to Federal reserve banks in the extension of credit to member banks.

13. Would efforts at the control of credit be made more effective if rates of rediscount should vary, as was once the case, with the maturity of the paper offered for rediscount?

Atlanta.—Not in this district.

Boston.—Our experience has led us to believe that it is desirable for us to maintain uniform rates on all classes of paper. ——— believe that rates of rediscount should not vary with the maturity of the paper offered. ——— believe that it would have little or no effect on the control of credit.

Chicago.—No.

Cleveland.—It might; but it would probably result in banks requiring customers to execute paper of short maturity, with a renewal privilege to cover the customers' normal liquidating period, for the purpose of obtaining the most favorable rate should they find borrowing or rediscounting necessary.

Dallas.—Probably to some extent, but such a method of control would be dependent almost entirely on the liquidation of the paper offered.

Kansas City.—Probably so, but in this district it would result in penalizing the small country banks offering agricultural paper of long maturity. In furtherance of our policy of making the cost of Federal reserve credit equal to all member banks, it is our practice to permit rediscounts to be taken up at any time and to rebate unearned discount.

Minneapolis.—In our opinion it would not.

New York.—There would seem to be little, if any, advantage in graduated rates of discount according to the maturity of the paper offered. Such rates would be somewhat discriminatory as between banks according to the character of their portfolio. There would be little other result. The larger banks in the financial centers ordinarily have the greater proportion of paper of short maturity. Any use of graduated rates, therefore, would impose the burden first, and to the greatest extent, upon the smaller country banks. It is believed such rates would have little, if any, beneficial effect in the control of credit. The volume of very short paper held by the reserve system both in discounts and bills is so large that the amount of Federal reserve credit outstanding now is adjusted to changing demand with great rapidity.

Philadelphia.—No.

Richmond.—We do not think so; a higher rate on long-time paper would have the effect of penalizing borrowers in agricultural communities.

St. Louis.—No.

San Francisco.—No. It would lead to subterfuge, shortening maturities, and granting renewals, and be ineffective.

14. Should rates of rediscount stand above market rates of interest on bank loans to prime customers in your district?

Atlanta.—They should not.

Boston.—Discount rates could not stand above market rates of interest on bank loans to prime customers. A rate sufficiently high to accomplish this could not be made effective. Even nation-wide borrowers who can shop around from city to city pay rates that are anywhere from one-half to 1 per cent higher than Federal reserve discount rates under ordinary conditions, and prime customers who can not shop around from city to city pay an even wider spread not infrequently.

Chicago.—The rediscount rate under normal conditions should be kept at a point equal to, or slightly in excess of, the minimum rates available to prime customers in the large financial centers in this district.

Cleveland.—Under normal conditions; yes.

Dallas.—We would answer this question in the affirmative were it not for the existence of a large volume of agricultural paper in this district and the high statutory contract rates applicable to such paper. As the situation now stands if the rediscount rate were above the rate on bank loans to prime customers it would be a discrimination against city banks.

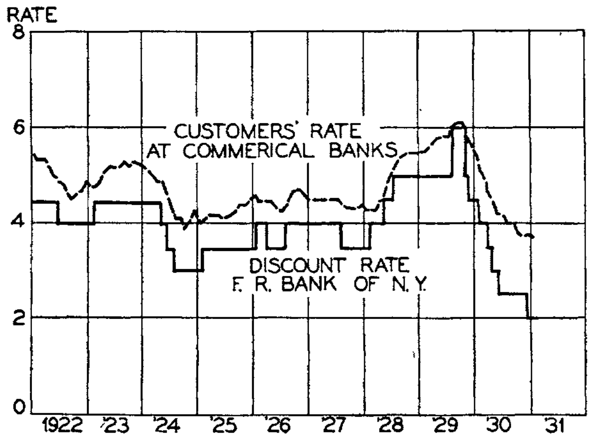
Kansas City.—No. Should this be done our discount rate would be higher during much of the time than rates which could be made to our member banks by large commercial banks in the financial centers, and would thus impair the relationship between this bank and its members and occasion an unnatural shifting of demands for Federal reserve credit from one district to another.

Minneapolis.—We believe it is impractical to charge a rediscount rate higher than the commercial rate.

New York.—The answer to this question depends largely upon one's judgment as to the probable consequences of an attempt to place the discount rate above the bank customers' rate.

The question may first be asked whether the maintenance of such a relationship is possible. There is in the first place a wide difference between rates to prime customers in various localities, and a discount rate above the customers' rate in small centers would be prohibitive in larger centers. But restricting the question to the lowest customer rate in large cities, there have been twice in the history of the system when the discount rate has been above these rates. The first was for a few months in the early history of the system when the member banks were not borrowing. The only other time was in 1920 when a number of reserve banks had a 7 per cent rate. At other times rates to customers have been kept above reserve bank rates. Raises in Federal reserve rates have been followed promptly by changes in bank customer rates except in a few cases where the discount rate followed customer rates at some distance. These relations are shown in the following chart. Generally speaking, banks may be expected to charge their customers more than the Federal reserve discount rate. This relationship of customer rates and bank of issue discount rates is maintained generally in other countries. The only way for the reserve system to achieve a different relationship would appear to be through such large purchases of Government securities as would put the banks out of debt at the reserve banks. As soon as the banks again became borrowers customers' rates might be expected to go above the discount rate again.

But even if we assume that some plan could be devised for placing the discount rate above the bank rate to customers a second question would arise as to the economic consequences of a discount rate which under these circumstances would be considerably higher than the rates which have been customary in the past. It is difficult to see how such a rate position could be maintained without attracting further gold imports and consequently exerting considerable pressure upon the international money markets and thus indirectly upon American prices and trade.



Discount rate Federal Reserve Bank of New York compared with rate charged bank customers of New York City banks on prime commercial paper

As far as the theoretical aspects of the question are concerned it has been our observation that carefully operated banks do not feel that they make a profit by borrowing at the reserve bank at a discount rate somewhat lower than the rate they charge their best customers. For in the case of the loans to customers the bank has to assume the cost of administration of the loan and the risk involved which must be added to the cost of securing money from the bank of issue. The discount rate has usually been higher than the rate which a bank figures it can afford to pay for money and relend profitably. This has almost always been true of the large city banks.

We should not wish to take the position, however, that the precise relationships between discount rates and other money rates which have characterized the past 10 years are necessarily permanent and unchangeable. It may be that in the future a somewhat higher discount rate relative to other money rates may be desirable and possible, particularly if accompanied by an open market policy under which only small amounts of member bank borrowing are necessary. The solution of this problem can be worked out only in the light of the future experience and will depend upon any changes which may occur in the attitude of member banks toward borrowing, the influence of the rate on gold movements, and other factors.

Philadelphia.—The rates of interest on bank loans to prime customers are made by the banks. It will be found that if reserve banks discount rates are properly adjusted to market conditions that the rates on bank loans to prime customers generally will be maintained somewhat above the established discount rate. The established discount rate should be an accurate indicator of the demand for credit, the amount available for use, and other monetary conditions. As the member banks may have to rediscount at such rates, it is only natural that they should fix their loaning rate slightly above that.

Richmond.—In theory it would seem so, but we believe it to be entirely impracticable.

St. Louis.—Yes. See No. 11, above.

San Francisco.—No. That practice would be discriminatory, in that it would lead to fixing rate involving a loss upon some borrowing banks and still leave others, particularly rural banks, with a considerable margin of profit derived from rediscounting.

15. Assuming that European central banks have found it desirable to maintain rates of rediscount above market rates, what factors have made the adoption of this practice unnecessary in the United States?

Atlanta.—In the first place, ours is a comparatively new and undeveloped country. Secondly, in our district, member banks rediscount ordinarily for the purpose of maintaining their reserves and of supplying the needs of their customers, and not primarily to profit by the difference between the rediscount rate and the rate charged customers. The apparent difference in the rate policies of European central banks and that of the Federal reserve banks may be due in part to the fact that in England the bank rate is the rate which applies to bankers' acceptances, while in this country, the rediscount rates of the Federal reserve banks apply to customers' paper. In both countries the bank rate is higher than the open market rate on bankers' acceptances and is lower than the rate on customers' or open market commercial paper.

Boston.—There is some question as to the definition of what constitutes "keeping above the market." It would be difficult for a Federal reserve bank in the interior to keep above its local market if measured by local bank rates to prime commercial customers. The criterion for determining discount rates in such interior districts, as in financial centers, is the open market rate and in those districts where no acceptance market exists, the best measure might be the rate charged by eastern correspondent banks to banks located in such interior district; or, if these banks have nation-wide commercial borrowers, the rate which they could obtain from such commercial customers might have a bearing. Even in this case, however, it would be impracticable to keep the discount rate above the market. On the other hand, if we compare the discount rate with the open market rate on acceptances as being the measure of the open market, it would be found that the Federal reserve bank discount rates are above the market in much the same sense as European rates are above the market. Furthermore, in the case of the Bank of England the published discount rate does not correspond exactly with our published discount rates since the rate at which the Bank of England makes certain advances is invariably one-half of 1 per cent higher than the published discount rate. Furthermore, it must be remembered that advances are made to commercial customers by the joint-stock banks in London largely on overdrafts, and I believe that this overdraft rate fluctuates with the Bank of England rate, generally being 2 per cent above that rate. This brings the relationship that exists in this country between our Federal reserve discount rate and the rates made to commercial customers by the member banks.

Chicago.—It is our belief that the rediscount rate in this country should be maintained at a point equal to or slightly in excess of the minimum rates accorded to prime borrowers in the financial centers.

Cleveland.—In our opinion the controlling factor, war financing, made such a policy inexpedient, but there are other reasons, such as dissimilar banking practices that obtain abroad, smaller territory covered with fewer banking units than obtain here, direct operations and contact with the public by central banks abroad, dissimilar commercial customs affecting the types of paper issued in trade abroad as against our direct borrowing to enjoy discounts offered by the trade, etc.

Dallas.—We do not know of the existence of any factors that have made it unnecessary, but feel that it is probably at this time undesirable or at least impracticable. We mention again the varying high statutory contract rates in the several States. Usury laws are matters of State legislation. While it would be desirable fundamentally for Federal reserve banks to penalize rediscounting transactions, it would seem to be wholly futile to attempt it under the present system of banking in the United States. Credit extension in European countries is concentrated in a few banking institutions. The countries are older and the science of credit has progressed far beyond what it has in the United States, while in this country the banking business is carried on by approximately 25,000 separate banking units under all sorts of conditions and individual ideas of credit extension. The only approach to credit control through the discount rate would, in our opinion, be the establishment of rates of rediscount fractionally higher than the rate at which the paper offered had been originally discounted for the maker by the offering bank. This would insure that the banks would rediscount at the Federal reserve bank only for adjustment purposes and would, therefore, discourage the use of reserve credit as supplementary credit, as well as discourage the overextension of credit generally. Barring emergencies, it would more nearly confine banks' loan operations to their own resources, and borrowing at the Federal reserve bank would normally be of short duration.

Kansas City.—There is such a variance between rates in different sections of this country and in different cities or sections of a single Federal reserve district, and bank rates in many sections of this country are so high, that maintenance of discount rates in excess of market rates would be unwise.

Minneapolis.—Because of the variation of rates in different parts of this country, we believe that the European practice will prove impractical. The comparison made with the foreign countries is with the current bill rate. Using the same comparison in this country, the Federal reserve rediscount rate is normally above the bill rate.

New York.—The commonly quoted rates in European countries, above which central bank discount rates in the respective countries ordinarily are maintained, are bill rates corresponding in this country to offering rates for bankers' acceptances. It is usually the case in this country that Reserve bank discount rates are above bill rates. In most European countries there is nothing corresponding closely to our commercial paper rates, which are so frequently taken as representative of open market rates here. Rates charged on loans or advances to customers are usually above central bank discount rates in European countries, the same as in this country. Some of the more important European central banks do not make direct loans to the commercial banks, and their discount rates, therefore, have an entirely different application so that it is difficult to make valid comparisons. For instance, the official discount rate of the Bank of England is the minimum rate at which the bank will purchase bills at its head office.

Philadelphia.—Is it true that conditions have made the adoption of this practice unnecessary? To what does the European bank rate refer? If to bankers' bills, then we have been in harmony with their practice as the rate for bankers' acceptances always is below our discount rate. This question involves a matter of terms. It should be noted that the market rate in London is that at which prime bankers' bills are sold; in this country we have market quotations for three kinds of obligations—call loans, commercial paper and bankers' bills. European banks do not know call loans and commercial paper as we do, so in a way we do not talk the same language. Further, the Bank of England is not restricted to the use of one rate. It has the established rate which seems to be officially recognized as the standard for money rates in London, but it also uses what it calls its "current rates," which are fixed by the nature of the risk, its time to run, and other conditions, and are constantly changing and never are made public.

Richmond.—The great extent of the country; the very large number of banks; the varying interest rates in different States and sections. There is thus no uniform market rate. Central bank rates abroad, as we understand it, are related more intimately to the bill rate, which is a more dominant factor in foreign money markets than in our market.

St. Louis.—It has not been unnecessary, but is impracticable on account of the varying rates allowed by law in the different States.

San Francisco.—(*a*) The wide variation in conditions.

(*b*) The wide variation in loaning rates. The general disposition, still obtaining in a large number of banks, particularly in banks in the country, to maintain a permanent level of rates uninfluenced by fluctuations in the money market.

16. What rates of interest in your district should be taken as constituting a measure of market rates of interest?

Atlanta.—To the extent that the banks in the sixth district invest their funds in the New York money market, the rates effective in that market are applicable to the member banks of this district. Rates of interest originating in and constituting a measure of market rates in the sixth Federal reserve district are:

1. Rates charged by banks to customers on prime commercial loans.
2. Rates charged customers on security and commodity loans.
3. Rates charged customers on farm mortgages.
4. The yield on local municipal bonds.

Boston.—1. Open market asking rate for bankers' acceptances.

2. Ruling rates on commercial paper handled by brokers.

3. Rates charged by Boston banks to best commercial customers.

Chicago.—The minimum rates accorded prime borrowers in the financial centers.

Cleveland.—The rate made to prime borrowers with credit available in more than one district and the rate to prime borrowers who borrow entirely within the district.

Dallas.—That rate which is granted the customers of city banks who fall in the class of being able to borrow at the lowest rate level in the country, or whose position is subject to natural competitive influences.

Kansas City.—Nominal rates in the four Federal reserve bank and branch cities of the district, as reported by representative banks for November, 1930, were as follows:

	Kansas City	Omaha	Denver	Oklahoma City
Prime commercial paper	4½–5	4½–5	5½–6	5–5½
On prime stock exchange collateral	5½–6	6 –6½	5½–6	8
Secured by warehouse receipts	5 –6	6	6 –7	6–8
Inter-bank loans	5½–6	5½–6	6	6

Country bank rates to customers range from 6 to 10 per cent. Loans at 6 per cent are unusual, but in some sections 8 or 10 per cent are customary and apply to practically all loans made. From the foregoing the difficulty of determining a measure of market rates is apparent. A reasonably satisfactory measure would seem to be the average of rates charged by representative banks in the four cities named above.

Minneapolis.—The weighted average of the commercial rates made by large banks to their prime customers in the cities of St. Paul and Minneapolis.

New York.—The various rates of interest quoted in this district represent an appraisal of the credit factor with respect to the loaning of money. The lowest rates are the yields upon bankers' acceptances and short-term Government obligations. These rates may be said to represent the going rates for money practically without credit risk and with the minimum of risk of changing values. The higher rates yielded by longer term Government obligations also relate to an obligation with minimum credit risk, but carrying some measure of risk as to intermediate market value due to the changes in money and security market conditions. This rate, therefore, is somewhat higher than on short-term obligations. Rates on commercial paper and customers' loans, in comparison with those charged on acceptances and short-term Governments, reflect a charge for the use of the money, plus a charge for the assumption of a degree of risk which is involved in the making of such loans or investments. Rates on street loans at call or on time against stock-exchange collateral represent little risk but reflect their ineligibility for rediscount by a reserve bank. Since these various rates apply to loans made under different conditions, it is not possible to say that one constitutes a better measure of market rates than another. These rates will generally move in the same direction and with about the same relative spread between them.

Philadelphia.—The rates of interest in this district are effected, first, by the rates for call and time money in New York because of the facility with which our banks can loan money there; second, by the rates for commercial paper which are more or less national; third, by the market for excess reserve bank balances; fourth, by the commercial demand for money; fifth, by the reserve condition of the banks; and sixth, by the trend of business.

Richmond.—In five divisions of this district the legal rate of interest is 6 per cent; in one State it is 8 per cent. Favored customers or large customers obtain better or different rates in all sections. It is not believed that there is any uniform measure of market rates of interest in this district.

St. Louis.—The rate charged by banks to customers able to take advantage of a competitive money market. As these are mostly located in St. Louis, this market rate generally exists here. Other cities in the district usually have a higher market rate.

San Francisco.—A composite of open-market rates for prime "commercial" paper and the counter rate charged large borrowers whose unsecured obligations are available for discount at the Federal reserve bank. At times the rates governing prime bankers' acceptances also should be taken into consideration.

17. May the rate on bankers' acceptances be included in computations of market rates of interest, inasmuch as the reserve banks, buying for own and for foreign account, have constituted the principal market?

Atlanta.—The bankers' acceptance is used only to a limited extent in this district, and in only one city to a considerable extent. It is undoubtedly true that the Federal reserve banks have been largely instrumental in initiating and building up a market for acceptances in this country, and in so doing they have exercised a very powerful influence on open market rates. As the dependence of the market on the Federal reserve banks for a demand for acceptances is decreased, to that extent will the rate on acceptances be more strictly an open-market rate.

Boston.—Yes. Because acceptance rates are the most sensitive of any of our various classes of money rates (exclusive of brokers' call money) and even though Federal reserve banks furnish the principal market for acceptances these rates move more quickly and are more sensitive than the rate on prime brokers' commercial paper or rates made to customers by the banks.

Chicago.—No.

Cleveland.—Not in this district, because of the limited amount of bankers' acceptances made or purchased.

Dallas.—We believe that bankers' acceptance rates can rapidly become an element in the computation of market rates of interest as the market becomes broader and is confined less to Federal reserve banks and foreign accounts. We believe that the volume of bankers' acceptances held by Federal reserve banks will become more and more an index of the oversupply or undersupply of funds in the market as the market for bankers' bills is broadened and the volume of Government securities declines. We have had the feeling from time to time that the rates for the purchase of bankers' bills by Federal reserve banks have been made too low, and arbitrarily so through an overanxiety as to the possibility that higher rates might unduly restrict the volume of bills offered to the Federal reserve banks.

Kansas City.—Do not think it should be in this district, where there is no active acceptance market and where acceptances are used to such slight extent in financing or as investments for member banks.

Minneapolis.—In this district, we do not think so.

New York.—Rates on bankers' acceptances must be included in any consideration of market rates of interest. Reserve bank buying rates generally follow rather than lead the market for bankers' acceptances. Purchases of bills made by the reserve banks for foreign account are made at market rates and not at the reserve bank buying rate. In recent years the general movements of acceptance rates have been very similar to movements in other rates, such as commercial-paper rates. (See accompanying chart showing reserve-bank holdings in relation to outstanding acceptances, also chart showing various money rates.) Reference is made to the answer to question 12 of questionnaire 10, which is closely related to this subject.

Philadelphia.—Yes.

Richmond.—We believe that the rate on bankers' acceptances may be included.

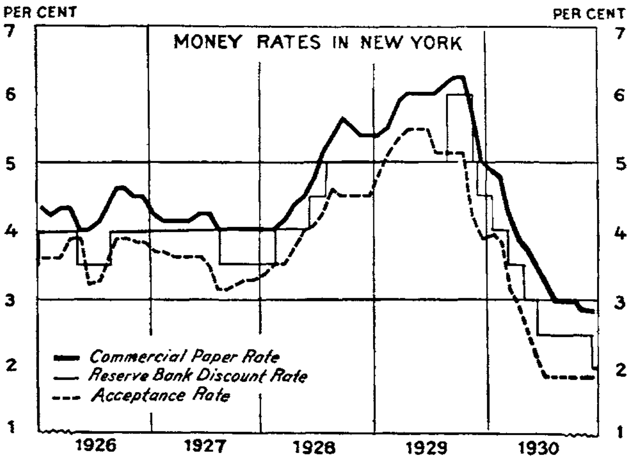
St. Louis.—Not in this district.

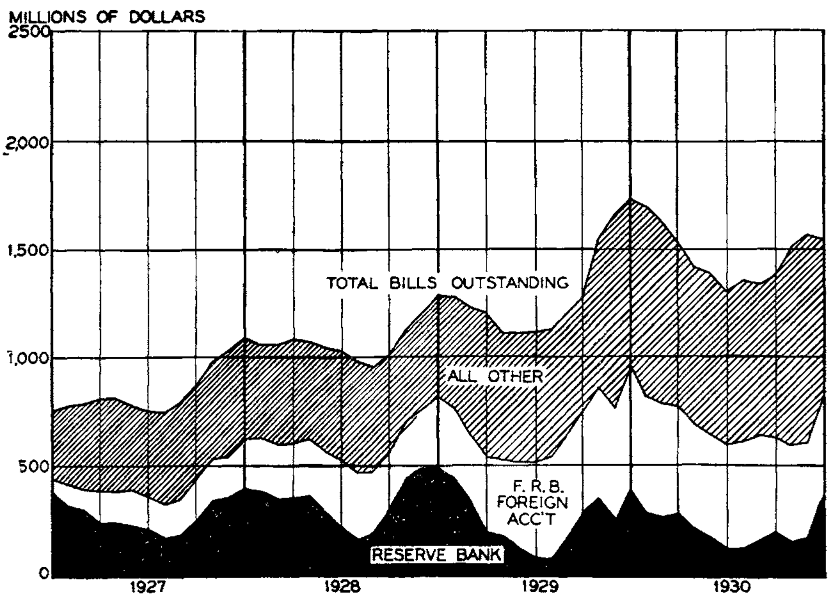
San Francisco.—It can not be disregarded at a time when there is (outside the Federal reserve banks) an active investment demand for bills. Apparently, in recent years, buying for foreign account has had more effect in fixing the rate than has buying by the reserve banks for their own account. It is probable that discontinuance of buying for foreign account would result in better adjustment of rates and better distribution of bills.

18. Would it give the reserve banks a greater measure of credit control to enact a provision permitting the application of progressive rates of rediscount?

Atlanta.—Theoretically it would give a greater measure of credit control, and it would seem to be especially fair to the member banks not using a large amount of reserve-bank credit to be able to use such credit at a fair rate rather than at the maximum rate which might have been put into effect to hold down the excessive borrowings of certain banks. On the other hand, the banks in this district, with few exceptions, borrow only to meet the actual requirements of their customers, and the application of progressive rates of rediscount would serve only to unduly penalize a bank that needed to borrow most. Our experience with progressive rates of discount has shown them to be unsatisfactory and ineffectual as a measure of credit control.

Boston.—Progressive discount rates were proven dangerous and ineffective during the postwar inflation period. They did not afford satisfactory credit control.





Volume of bankers' acceptances outstanding showing proportion held by Federal reserve banks for own account, proportion held for foreign correspondents of Federal reserve banks, and the proportion held by others, 1927-1930

Chicago.—No; in the light of experience gained in other districts which have given progressive rates a trial.

Cleveland.—Yes.

Dallas.—We prefer administrative control to the application of progressive rates of rediscount.

Kansas City.—Probably so, but in this district the penalty of payment of maximum rates would fall for the most part on small banks which are legitimately serving commerce and agriculture or which are forced to borrow relatively large amounts because of financial difficulties. The theory of progressive rates appears sound, but past experience indicates its psychological effect to have been bad. Operation of the progressive discount rate in this district caused ill feeling between member banks and the Federal reserve bank, and, in some cases, forced a poorly timed liquidation of loans on livestock and other commodities.

Minneapolis.—We are opposed to the application of progressive rates of rediscount as a method of credit control.

New York.—Progressive rates of rediscount would presumably be enforced against banks borrowing large amounts in relation to their size or for longer periods of time. It is our experience that the banks which would most frequently be subject to progressive rates are those banks the total of whose borrowings has no material effect upon the credit structure. Since small banks generally borrow proportionately more than large banks, such progressive rates would be applied principally to small country banks. The borrowings of large banks in the financial centers, measured by any yardstick which would not impose a hardship upon the majority of small banks, would seldom be subject to the progressive rate.

Philadelphia.—Probably it would.

Richmond.—We believe it would.

St. Louis.—Yes.

San Francisco.—No. Progressive rates of rediscount, while perhaps theoretically attractive, are extremely inequitable. The attempt to apply progressive rates led to situations which were vicious and which probably justified the violent antagonism aroused by that practice.

19. Would it be desirable to enact a provision permitting the reserve banks to charge borrowing member banks, which have funds on the brokers' loan market, a rate of interest equal to or above the average call loan renewal rate?

Atlanta.—No. In an era of excessive speculation a reserve bank should refuse to advance to a member bank which has funds invested in brokers' loans.

Boston.—No. This would be a provision which would be almost impossible to enforce, owing to lack of up-to-the-minute data and to inevitable evasion of the provision. It is doubtful if it possibly could accomplish any good, and might in emergencies seriously aggravate a strained credit situation.

Chicago.—No; not practicable.

Cleveland.—While it would be effective, we believe it would not be desirable because other means of control can be exercised.

Dallas.—This provision might be desirable if it could be inaugurated at a time like the present and kept in step with the increased volume of loans on stock-exchange collateral; but, if suddenly applied as a penalty, might invite disaster. However, the method of administrative control is preferable in this district.

Kansas City.—No. Instead of this indirect method of preventing abuses of the use of Federal reserve credit, direct action should be taken by withholding Federal reserve credit whenever such action is deemed advisable by the Federal reserve bank concerned or by the Federal Reserve Board.

Minneapolis.—No.

New York.—In our opinion it is impracticable to attempt to impose such restrictions upon the use of Federal reserve credit, and we think it would not be desirable to enact such a provision. This question is discussed more thoroughly in our answer to question No. 8 of questionnaire No. 7.

Philadelphia.—No. For years it has been good banking practice for banks to loan money on their brokers' loan market. The ability to do that gave a flexibility and steadiness to the money market that otherwise would have been impossible. Such loans are criticizable when banks are abusing their discount privilege with their Federal reserve banks to do it. The officers of any reserve bank can know when a member bank is doing that and take measures to stop it. We do not recommend any change in law in that respect.

Richmond.—We do not believe so.

St. Louis.—A bank having excess money on call may in a day or so lose a substantial amount of deposits which it has every reason to believe is only very temporary. It would seem reasonable to allow such a bank to discount without penalty until it found that the loss of deposits was permanent; then some penalty provision might be desirable.

San Francisco.—No. It would not be expedient and should not be necessary as a means of credit control. The misuse of Federal reserve credit by a borrowing bank is sufficient justification for limitation or denial of credit.

20. What measures have been taken in your district to prevent member banks from borrowing from the reserve bank to profit by the difference between rates of rediscount and the lending rates in the market?

Atlanta.—Under date of February 2, 1929, this bank received a letter from the Federal Reserve Board stating that a member bank was not within its reasonable claims for rediscount facilities at its Federal reserve bank when it borrowed for the purpose of making or maintaining speculative security loans. The Federal Reserve Bank of Atlanta expressed itself as being in full accord with this stated policy of the Federal Reserve Board, and a letter was addressed by an officer of this bank to each member bank in the district, requesting their cooperation in restricting the diversion of Federal reserve credit into speculative channels. The response to this letter by the member banks was very gratifying. A check was made of the condition reports of member banks for the call of March 27, 1929, and there were only six banks which were rediscounting at the Federal reserve bank and at the same time had loans to brokers and dealers in New York. On April 30, 1929, a letter was addressed to these banks by an officer of the Federal reserve bank, calling their attention to the opposition of their condition to the policy of bank on this question. Again in May, 1929, an officer of this bank wrote a letter to each of the larger banks in the district which were rediscounting with the Federal Reserve Bank of Atlanta, asking for specific information regarding their loans on securities. The replies to these letters were altogether satisfactory, and the steps taken to correct the evils in the existing situation at this instance were satisfactorily and immediately effective.

Boston.—Usually individual persuasion and moral pressure. This has been effective in that there are very few steady borrowers in this district. Of course, practically all money borrowed from reserve banks is reloaned at a profit by the member banks, but in so far as these borrowings are of a temporary nature to meet seasonal or emergency conditons, the Federal reserve bank is fulfilling its purpose in making such advances. Only where this privilege is abused, as indicated by steady borrowing, does it require correction and the scarcity of steady borrowers in this district indicates that such correction has been promptly administered.

Chicago.—Personal interviews with officers of such banks as are suspected of such practice.

Cleveland.—When it appeared to us through reports, conferences, or correspondence that there was a tendency to borrow for profit we have had no hesitancy in conferring or corresponding with the offending banks and insisting upon correction. In most cases the banks have cooperated without the need of additional pressure. In some few instances active steps were taken to effect correction. The latter meant threat of or actual refusal to grant loans or rediscounts until the desired correction was made.

Dallas.—Calling the line of the borrowing bank indulging in the practice, which has been done, however, only in one instance (on October 7, 1929), after exchange of voluminous correspondence and by declining to extend credit where it was obvious that such purpose was to profit by this practice. We have had only one other case where there was any evidence of lack of cooperation. Fortunately we have not had many instances of that sort.

Kansas City.—The policy of the bank, as expressed from time to time in correspondence and public statements, has always been that member banks should not borrow from the Federal reserve bank for the purpose of reloaning at a profit. Aggravated cases of such practices have been dealt with individually. Early in 1929, when the abnormally high call-loan rates were attracting bank funds, including funds of some banks which were borrowing from us, a letter reiterating the bank's policy was sent to each member bank in the district. A copy of this letter follows:

FEDERAL RESERVE BANK OF KANSAS CITY,
Kansas City, February 18, 1929.

To the member banks of district No. 10:

The Federal Reserve Board statement made public on February 7, 1929, dealing with the importance of preventing the seepage of Federal reserve credit into uses not contemplated by the Federal reserve act is attached hereto for your information and consideration. It is requested that all member banks in this district give their support to the policy therein set forth.

The position outlined in the statement by the Federal Reserve Board is in accord with the policy and practice of this bank, and we are pleased to state that this policy has heretofore been followed by our member banks almost universally and that we confidently expect it to have the support of all member banks.

Very truly yours,

M. L. McClure,
Chairman Board of Directors.

The following statement, which will be printed in the Federal Reserve Bulletin for February, 1929, was made public by the Federal Reserve Board on February 7, 1929:

The United States has during the last six years experienced a most remarkable run of economic activity and productivity. The production, distribution, and consumption of goods have been in unprecedented volume. The economic system of the country has functioned efficiently and smoothly. Among the factors which have contributed to this result, an important place must be assigned to the operation of our credit system and notably to the steadying influence and moderating policies of the Federal reserve system.

During the last year or more, however, the functioning of the Federal reserve system has encountered interference by reason of the excessive amount of the country's credit absorbed in speculative security loans. The credit situation since the opening of the new year indicates that some of the factors which occasioned untoward developments during the year 1928 are still at work. The volume of speculative credit is still growing.

Coming at a time when the country has lost some $500,000,000 of gold, the effect of the great and growing volume of speculative credit has already produced some strain, which has reflected itself in advances of from 1 to 1½ per cent in the cost of credit for commercial uses. The matter is one that concerns every section of the country and every business interest, as an aggravation of these conditions may be expected to have detrimental effects on business and may impair its future.

The Federal Reserve Board neither assumes the right nor has it any disposition to set itself up as an arbiter of security speculation or values. It is, however, its business to see to it that the Federal reserve banks function as effectively as conditions will permit. When it finds that conditions are arising which obstruct Federal reserve banks in the effective discharge of their function of so managing the credit facilities of the Federal reserve system as to accommodate commerce and business, it is its duty to inquire into them and to take such measures as may be deemed suitable and effective in the circumstances to correct them; which, in the immediate situation, means to restrain the use, either directly or indirectly, of Federal reserve credit facilities in aid of the growth of speculative credit. In this connection, the Federal Reserve Board, under date of February 2, addressed a letter to the Federal reserve banks, which contains a fuller statement of its position:

"The firming tendencies of the money market which have been in evidence since the beginning of the year—contrary to the usual trend at this season—make it incumbent upon the Federal reserve banks to give constant and close attention to the situation in order that no influence adverse to the trade and industry of the country shall be exercised by the trend of money conditions, beyond what may develop as inevitable.

"The extraordinary absorption of funds in speculative security loans which has characterized the credit movement during the past year or more, in the judgment of the Federal Reserve Board, deserves particular attention lest it become a decisive factor working toward a still further firming of money rates to the prejudice of the country's commercial interests.

"The resources of the Federal reserve system are ample for meeting the growth of the country's commercial needs for credit, provided they are competently administered and protected against seepage into uses not contemplated by the Federal reserve act.

"The Federal reserve act does not, in the opinion of the Federal Reserve Board, contemplate the use of the resources of the Federal reserve banks for the creation or extension of speculative credit. A member bank is not within its reasonable claims for rediscount facilities at its Federal reserve bank when it borrows either for the purpose of making speculative loans or for the purpose of maintaining speculative loans.

"The board has no disposition to assume authority to interfere with the loan practices of member banks so long as they do not involve the Federal reserve banks. It has, however, a grave responsibility whenever there is evidence that member banks are maintaining speculative security loans with the aid of Federal reserve credit. When such is the case the Federal reserve bank becomes either a contributing or a sustaining factor in the current volume of speculative security credit. This is not in harmony with the intent of the Federal reserve act nor is it conducive to the wholesome operation of the banking and credit system of the country."

Minneapolis.—Very few such cases have arisen in the ninth Federal reserve district and these have been adjusted readily by our suggestion of the impropriety of such borrowing.

New York.—Where circumstances have indicated to us that there is a definite purpose on the part of the bank to borrow primarily with the view to profit, we have discussed the situation with the officers of the bank, and suggested the propriety of its making such adjustments in its affairs as would bring its borrowings into line with those of other banks. These interviews are usually effective. Generally such influence as we have attempted to exert upon the borrowings of banks other than through the discount rate has been in the direction of restricting either the use of an undue amount of credit, or borrowing for an undue length of time by banks which in either respect were distinctly out of line with other banks doing a similar type of business. Since banks ordinarily borrow at the reserve bank only for the purpose of restoring impaired reserves, it is practically impossible to identify a loan at the reserve bank with any particular loan or loans made by the member bank. Banks do not like to be in debt at the reserve bank more than necessary. They also consider there is some cost to them in making a loan over and above the cost of the money, so that generally speaking we believe there is only a limited amount of borrowing for a profit, confined principally to country banks.

Philadelphia.—We have refused to rediscount for such banks.

Richmond.—Constant efforts have been made to prevent banks from borrowing for profit, both by correspondence and by personal interviews with officials. Continuous borrowing has been uniformly discouraged.

St. Louis.—Moral suasion.

San Francisco.—Invariably, there is some profit in the spread between the Federal reserve bank rate and the rate of interest charged customers. The Federal reserve bank takes no cognizance of this unless it is found that the member bank is using credit obtained from the Federal reserve bank for other purposes than its legitimate needs for the accommodation of its regular customers. Abuses, when observed, have been adjusted promptly by personal contacts with officers of the member banks concerned.

21. What changes, if any, would you suggest be made in the provisions of the Federal reserve act relative to the fixing of rates of rediscount at the reserve banks?

Atlanta.—The provisions of the Federal reserve act. providing for the fixing of rediscount rates by the directors of each Federal reserve bank for that bank, with the approval of the Federal Reserve Board, furnishes all provisions necessary relative to the fixation of such rates.

Boston.—Federal Reserve Board control over discount rates should be advisory rather than direct or mandatory.

Chicago.—No suggestion.

Cleveland.—We see no occasion for any change.

Dallas.—This involves a recognition of two schools of thought. One takes the language of the act literally where it states that such rates of rediscount should be "fixed wth a view to accommodating commerce and business," and takes the position that Federal reserve credit is adjunctive or supplementary credit. The other school believes that Federal reserve credit is reserve credit and therefore should be used only for adjustment purposes or in individual emergencies. The latter school evidently believes that the phrase "with a view of accommodating commerce and business" was intended to include in its connotations the purpose of preventing credit from being administered in such a way as to produce an inflationary, and therefore detrimental, effect upon commerce and business. This question also involves consideration of the principle of permitting a margin of profit between the rate charged by the member bank and the rate of rediscount. Assuming that the directors of the reserve banks are capable and have no self interest to serve, we believe they are the best fitted to establish a rediscount rate in their own districts and should be more conversant than anyone else with the factors underlying the rate structure. There is also the question, which seems to be undetermined, whether the power to "review and determine" is merely a *veto* power or whether it also includes the right of determination or initiation. As to a specific suggestion, we should say that paragraph D of section 14 should be clarified and should state specifically that it is the duty of the directors of each Federal reserve bank, and they shall have the power, to establish from time to time rates of discount to be charged by the Federal reserve bank, and that the power of the Federal Reserve Board shall be that of veto by a vote of five members.

Kansas City.—Existing provisions satisfactory.

Minneapolis.—We think that no changes in this part of the Federal reserve act are necessary.

New York.—None.

Philadelphia.—None.

Richmond.—We think no change should be made.

St. Louis.—The language of the act might perhaps be clarified so that there would be no question about present procedure.

San Francisco.—By clarifying provisions protecting and preserving the autonomy of the Federal reserve banks beyond question. By clarifying provision regarding changing discount rate to make it certain that the rate (having been reviewed and determined by the Federal Reserve Board) can not be changed without concurrence of the board of directors of the bank and the Federal Reserve Board.

QUESTIONNAIRE No. 9

The Open-Market Operations

The open-market policies of the reserve banks have been frequently cited as one factor in the expansion of security loans. Particularly have the purchases of securities in 1924 and in 1927 been held responsible for the rapid increase in member-bank credit that took place during those years. The object of this questionnaire is to inquire into the technique of open-market operations and dealings in United States securities and into the relationship between these and brokers' loans:

CONCERNING OPEN-MARKET ACTIVITIES

1. As of the end of each month since January, 1922, give on an attached schedule:

(*a*) The amount of United States securities held in the portfolio of your reserve bank which were purchased through the open-market investment committee.

(*b*) The amount of United States securities held which were purchased locally or independently of the open-market investment committee.

(*c*) The amount of resale agreements entered into with dealers in United States securities.

2. State the principal reasons for each of the major operations in the purchase and sale of United States securities since January, 1922. What have been the main consequences of each such operation?

3. What, in your opinion, has been the effect since 1922 of changes in the portfolio of United States securities and bankers' acceptances held by all Federal reserve banks, on fluctuations in brokers' loans and on fluctuations in security loans and investments of all member banks and of member banks in your reserve district?

4. Viewed in the light of subsequent events, what policies should the Federal reserve banks have followed in the purchase of United States securities in 1924 and 1927?

5. What changes would you suggest be made in the provisions of the Federal reserve act relative to the purchase and sale of United States Government securities by the reserve banks? Would you favor an amendment to the effect that an affirmative vote of five members of the Federal Reserve Board be required before any large sale or purchase of United States securities be undertaken by the reserve banks?

CONCERNING RELATIONS WITH DEALERS IN UNITED STATES SECURITIES

6. Have the resale agreements entered into by the Federal reserve banks with dealers in United States securities tended to offset on any occasion the open-market policies of the Federal reserve banks?

7. List on an attached schedule the changes in rates of interest charged dealers in United States securities against resale agreements from the inception of such arrangements by your institutions.

8. List the names of the recognized dealers in United States securities in your district. What net worth must a recognized dealer possess? What other standards has your institution set up in determining whether a dealer in United States securities is to be recognized or not?

9. What margin requirements do you habitually exact in lending to dealers in United States securities under the resale agreements?

10. What is the average length of life of the resale agreements entered into with dealers in United States securities?

11. In lending to dealers in United States securities under resale agreements what precautions does your institution take in preventing Federal reserve credit from seeping into the speculative or investment markets?

Digest of Replies Received from the Different Federal Reserve Banks

QUESTION No. 1.—Relative to the volume of United States securities held as of the close of each month since January, 1922, purchased: (*a*) Through the open market investment committee; (*b*) independently; and (*c*) from dealers through the device of resale agreements.

For the data called for under (*a*), (*b*), and (*c*), see statistical appendix.

The Federal Reserve Banks of Atlanta, Dallas, Kansas City, Minneapolis, Philadelphia, Richmond, St. Louis, and San Francisco reported that United States Government securities had not been taken under resale agreements.

QUESTION No. 2.—Relative to principal reasons for, and main consequences of, each of the major operations in the purchase and sale of United States securities since January, 1922.

Purchases and sales of United States Government securities through 1922 and 1923 were conducted before these operations had been placed under the supervision of the open-market investment committee. Details of execution were handled by a committee of governors of the Federal reserve banks. The formulation of policies had not as yet been delegated to the committee and were not until April 13, 1923. The first major operation to be handled in joint-system account was the purchase of securities beginning December, 1923. From that time open-market policies were formulated by the open-market investment committee, as constituted by the Federal Reserve Board, until, on March 25, 1930, it was succeeded by the open-market policy conference.

The main operations in the open market, the reasons for and the consequences of each as given in the replies of the Federal reserve banks follow:

1. January, 1922, to May, 1922, purchase of $400,000,000.

Reasons for.—To enable the Federal reserve banks to meet operating expenses and dividend requirements.

Consequences of.—Reduction of member bank borrowings; decline in interest rates; increase in total volume of bank credit, including investment holdings and security loans; increase in brokers' loans; stimulation of recovery in business and agriculture.

2. June, 1922, to July, 1923, sale of $525,000,000.

Reasons for.—To assist the United States Treasury Department with its redemption operations; to restrain an overexpansion in production; to check commodity price inflation; to make discount rate increases at certain Federal reserve banks effective.

Consequences of.—Reduction of member bank borrowings; decline in interest rates; business expansion checked.

3. December, 1923, to September, 1924, purchase of $510,000,000.

Reasons for.—To relieve tendency toward higher rates; to permit member banks to liquidate their indebtedness to the Federal reserve banks; to encourage foreign borrowing in the American market, which would lead to heavier exports; to induce a business recovery; to place the Federal reserve banks in a position later to check speculative tendencies.

Consequences of.—An increase in bank credit, particularly in speculative loans; a decline in money rates.

4. November, 1924, to March, 1925, sale of $260,000,000.

Reasons for.—To check speculative tendencies; to make discount rates effective; to restrain an overexpansion in business; to check the increase in commodity prices.

Consequences of.—Partial effect in restraining speculative tendencies; the rate of growth in bank credit reduced to normal.

5. April, 1926, purchase of $65,000,000.

6. August, 1926, to September, 1926, sale of $80,000,000.

The Federal Reserve Bank of New York indicated that it was difficult to trace the results of these rather narrow movements.

7. May, 1927, to November, 1927, purchase of $230,000,000.

Reasons for.—To facilitate the financing of agricultural products; to prevent imports of gold; to assist European countries in the purchase of American agricultural products; to strengthen the foreign exchanges; to preserve the gold standard; to facilitate flotation of foreign bonds in the American market; to stimulate a business recovery; to pave way for discount rate reductions; to check decline in commodity prices.

Consequences of.—Foreign exchange rates improved; flotation of foreign bonds encouraged; gold standard movement induced; gold standard maintained; improvement in production; decline in interest rates, firmer level of wholesale prices; stimulation of speculative authority.

34718—31—PT 6——7

8. January, 1928, to April, 1929, sale of $405,000,000.

Reasons for.—To check speculative activity; to pave way for and to make increases in rates of rediscount effective; to force an increase in member-bank borrowings and in interest rates; to make member banks scrutinize loan applications more carefully.

Consequences of.—Interest rates rose; member-bank borrowings increased; speculative activity not checked. The reasons given for the failure of the sale of securities to check speculative activity were the growth in the loans for the account of "others" and the lack of an effective discount rate policy.

9. October, 1929, to December, 1930, purchase of $560,000,000.

Reasons for.—To prevent absolute collapse of security markets; to prevent money panic; to make interest rates easy in order to remove that obstacle to business recovery.

Consequences of.—Lower rates of interest; growth in investment account of member banks.

QUESTION No. 3.—Relative to relationship between fluctuations in portfolio of United States securities and bankers' acceptances held by all Federal reserve banks and fluctuations in brokers' loans, and in member bank security loans and investments.

While not all of the Federal reserve banks expressed an opinion on this controverted question, those that did were in agreement that increases in holdings of United States securities and bankers' acceptances (assuming no offsetting factors) increase the volume of funds available to banks, which permits them to expand their security loans and investments in event the commercial demand for funds is dormant. On the other hand, in case of a decreasing portfolio of United States securities and bankers' acceptances, member banks would normally liquidate investments and security loans and/or rediscount with the Federal reserve banks.

The Federal Reserve Bank of New York expressed the opinion that fluctuations in bankers' acceptances were seasonal in character and bore no relationship to brokers' loan changes excepting in the autumn of 1928.

Sales of securities by the Federal reserve banks in 1928 and 1929 did not check the increase in brokers' loans. The reasons given were that funds were supplied by the "others" and that speculation had become violent and excessive. Nor did purchases of securities increase brokers' loan totals in 1930. The speculative demand was quiescent which is usually true in a period of deflation or depression.

The Federal Reserve Bank of Dallas expressed the opinion that less reliance should be placed on open-market operations. An artificial ease in interest rates is likely to be induced and an artificial bond market created. Regarding the argument that the Federal reserve banks must acquire securities to be able later to affect the market, the Federal Reserve Bank of Dallas concludes that the purchase of securities creates the very conditions, for the correction of which the portfolio has been acquired.

QUESTION No. 4.—Relative to the open-market policies which the Federal reserve banks should have pursued in 1924 and in 1927, in the light of subsequent events.

Federal reserve bank	1924	1927
Atlanta	Worthy objectives and policies beneficial	Worthy objectives and policies beneficial.
Boston	Policy successful	Policy successful, but reversal tardy.
Chicago	Results more satisfactory, if smaller purchases had been made.	Objects accomplished, but offset by loss of control of market.
Cleveland	Purchases should have been suspended earlier.	Situation warranted action taken. Sales in 1928 should have been accompanied by prompt and decisive increases in rediscount rates.
Dallas	Purchases excessive; created period of excessive ease.	Policies continued too long.
Kansas City	Acceleration in rate of increase in security loans due, in part, to purchases of Government securities.	Effort to bring about firmer money should have been made sooner.
Minneapolis	No opinion expressed	Mistaken diagnosis of situation in 1927.
New York	Purchases helpful, but carried further than desirable.	Purchases helpful and desirable.
Philadelphia	Question whether Federal reserve credit needed should be put into market upon initiative of Federal reserve banks.	
Richmond	In neither period should securities have been purchased. The aim should have been to decrease the total volume of Federal reserve credit.	
St. Louis	Policies were sound but not reversed soon enough.	
San Francisco	If easing policy of 1927 had been reversed more promptly, the main courses followed in 1924 and in 1927 would have been justified.	

QUESTION No. 5.—(*a*) Relative to changes that should be made in the provisions of the Federal reserve act regarding purchases and sales of United States Government securities by the Federal reserve banks.

The Federal reserve banks had no changes to suggest. The opinion was expressed generally that the existing plan, under which major policies are determined by the open-market policy conference, subject to the approval of the Federal Reserve Board, was satisfactory.

(*b*) Relative to the desirability of an amendment requiring an affirmative vote of five members of the Federal Reserve Board before any large sale or purchase of United States securities be undertaken by the Federal reserve banks.

All the Federal reserve banks were opposed to this proposal.

QUESTION No. 6.—Relative to whether resale agreements entered into by the Federal reserve banks with dealers in United States securities have tended to offset, on any occasion, the open-market policies of the Federal reserve banks.

The Federal reserve banks, which expressed an opinion on this question, concluded that the resale agreements had been of such a temporary character, so seasonal in nature, so insignificant in amount, and so much under the control of the Federal reserve banks, that open-market policies had not been nullified.

QUESTION No. 7.—Relative to rates of interest charged dealers in United States securities against resale agreements.

Data were supplied by the Federal reserve banks of Boston, Chicago, Dallas, and New York (see replies to questionnaire). The other Federal reserve banks, with the exception of Philadelphia, and there only to a minor extent, had not entered into such arrangements.

QUESTION No. 8.—Relative to names of recognized dealers in United States securities and net worth that each must possess.

Data were furnished by the Federal reserve banks of Boston, Chicago, and New York (see replies to questionnaire). The other Federal reserve banks indicated that there were no recognized dealers in those districts.

QUESTION No. 9.—Relative to margin requirements exacted in lending to dealers in United States securities under resale agreements.

Federal Reserve Bank of Boston: When market price less than 100, securities purchased at one-half point under market value.

Federal Reserve Bank of Chicago: When market value below par, one point in excess of amount advanced required.

Federal Reserve Bank of New York: When market value below par, securities purchased on the average at one-half point below market value.

QUESTION No. 10.—Relative to average life of resale agreements.

Federal Reserve Bank of Boston: Seven and eight-tenths days.

Federal Reserve Bank of Chicago: Estimated at three days.

Federal Reserve Bank of New York: Unweighted average came to five days.

QUESTION No. 11.—Relative to precautions taken to prevent Federal reserve credit from seeping into the speculative or investment markets when resale agreements are entered into.

The Federal reserve banks of Boston, Chicago, and New York stated that there was no particular problem involved.

The life of the resale agreements is so short; the fact the dealers in United States securities are not interested in stock speculation; the fact that resale agreements usually take place when interest rates are firm and member banks are in debt; and the fact that funds extended by the Federal reserve banks are eventually used to reduce member-bank indebtedness rather than to serve as the basis for the creation of credit were among the reasons given.

Replies Received from the Different Federal Reserve Banks Tabulated by Questions

1. As of the end of each month since January, 1922, give on an attached schedule:

(*a*) The amount of United States securities held in the portfolio of your reserve bank which were purchased through the open-market investment committee.

Atlanta.—(See statistical appendix.)
Boston.—(See statistical appendix.)
Chicago.—(See statistical appendix.)
Cleveland.—(See statistical appendix.)
Dallas.—(See statistical appendix.)
Kansas City.—(See statistical appendix.)
Minneapolis.—(See statistical appendix.)
New York.—(See statistical appendix.)
Philadelphia.—(See statistical appendix.)
Richmond.—(See statistical appendix.)
St. Louis.—(See statistical appendix.)
San Francisco.—(See statistical appendix.)

(*b*) The amount of United States securities held, which were purchased locally or independently of the open-market investment committee.

Atlanta.—(See statistical appendix.)
Boston.—(See statistical appendix.)
Chicago.—(See statistical appendix.)
Cleveland.—(See statistical appendix.)
Dallas.—(See statistical appendix.)
Kansas City.—(See statistical appendix.)
Minneapolis.—(See statistical appendix.)
New York.—(See statistical appendix.)
Philadelphia.—(See statistical appendix.)
Richmond.—(See statistical appendix.)
St. Louis.—(See statistical appendix.)
San Francisco.—(See statistical appendix.)

(*c*) The amount of resale agreements entered into with dealers in United States securities.

Atlanta.—None.
Boston.—(See statistical appendix.)
Chicago.—(See statistical appendix.)
Cleveland.—(See statistical appendix.)
Dallas.—None.
Kansas City.—None.
Minneapolis.—None.
New York.—(See statistical appendix.)
Philadelphia.—None.
Richmond.—None.

St. Louis.—We have never had any resale agreements with dealers covering United States securities.

San Francisco.—Government securities not taken under resale agreements.

2. State the principal reasons for each of the major operations in the purchase and sale of United States securities since January, 1922. What has been the main consequences of each such operation?

Atlanta.—The reasons for each of the major operations in the purchase and sale of United States securities since January, 1922, are stated in the minutes of the open-market committee, known later as the open-market policy conference. The policy governing these major operations in Government securities was adopted by the open-market committee, and in each instance approved by the Federal Reserve Board. The operation most discussed was that which occurred in 1927. From our point of view, purchases of United States Government securities were made at this time as a method of providing funds for the orderly movement of our crops. This action was taken to prevent interest rates from rising unduly because of the seasonal increase in the demand for funds. The effect of the enactment of this policy was the orderly movement of the crops without strain on the banks supplying the necessary credit, a strengthening of foreign exchange rates, and an improvement in the purchasing power of foreign markets. That this effect was produced as regards the pound sterling and the price of cotton is demonstrated on Exhibit A.

EXHIBIT A

	Monthly average of daily rate, 1927 (sterling)	Spot cotton prices, monthly		United States Government's monthly average of daily holdings (in thousands of dollars)	
		Average, 10 markets	Average, New Orleans	Total	Atlanta
	Cents	*Cents*	*Cents*		
January	485.2648	12.72	13.17	$310,637	$1,530
February	485.0282	13.45	13.82	306,707	2,088
March	486.4025	13.74	14.10	344,921	2,286
April	485.6546	14.08	14.42	341,081	3,449
May	485.7020	15.36	15.68	291,495	5,722
June	485.6088	16.11	16.47	397,754	10,143
July	485.5056	17.34	17.63	381,081	10,154
August	486.0233	19.16	19.36	438,511	12,863
September	486.3528	21.16	21.19	500,637	13,684
October	486.9676	20.35	20.73	506,177	13,312
November	487.4012	19.74	19.99	579,238	14,526
December	488.2542	18.99	19.26	605,841	14,298

All of the improvement in the pound sterling or in the price of cotton was not attributable to this operation in Government securities, but unquestionably it greatly aided in both respects.

Boston.—Purchases of Government securities made by this bank in 1922 and through March, 1923, were made in order to meet operating expenses and dividend requirements, and these purchases were not made in connection with any system policy. During this time there were also purchases made in connection with the Pitman Act of certificates of indebtedness as security for Federal reserve notes. During February and March, 1923, sales were made to the Treasury Department for redemption operations. From that time on the operations in the purchase and sale of United States securities were conducted in connection with the policy outlined by the open-market investment committee, that committee holding its first meeting on April 13, 1923. From that date until June, 1926, this bank participated on a percentage basis in all securities bought and sold by the open-market committee, and such purchases as were made by this bank locally were considered as a portion of the amount allotted to Boston by the open-market investment committee. From that date on the amount of United States securities held which were purchased locally or independently of the open-market investment committee represents small amounts which were taken in connection with Treasury operations. These purchases of United States securities, together with those allotted this bank through the open-market investment committee, amounted to about 7½ per cent of the total purchased for the system. The policy represented by the purchase or sale of securities, I understand, will be covered in detail by the New York bank. The policy agreed upon by the open-market investment committee has always been reported to and approved by our board of directors.

Chicago.—There have been four major operations in the purchase and sale of United States Government securities since January, 1922. First, in the year 1922, when liquidation and deflation had taken place in commodity prices following the inflation in commodity prices in 1920 and the heavy demand for credit at that time. As a result of this deflation, member bank loans were liquidated at the Federal reserve banks to the point where it was doubtful if they could earn enough to pay their expenses and dividends. The purchases of Government securities at that time were not the result of a system policy, but the purchases were executed by a committee acting on behalf of the individual Federal reserve banks, as many of the banks were desirous of increasing their earnings at that time. It can therefore be said that the purchases in 1922 were largely for the purpose of creating earnings, although such purchases, by making money easier in the open market, doubtless contributed to the business recovery which began in 1922.

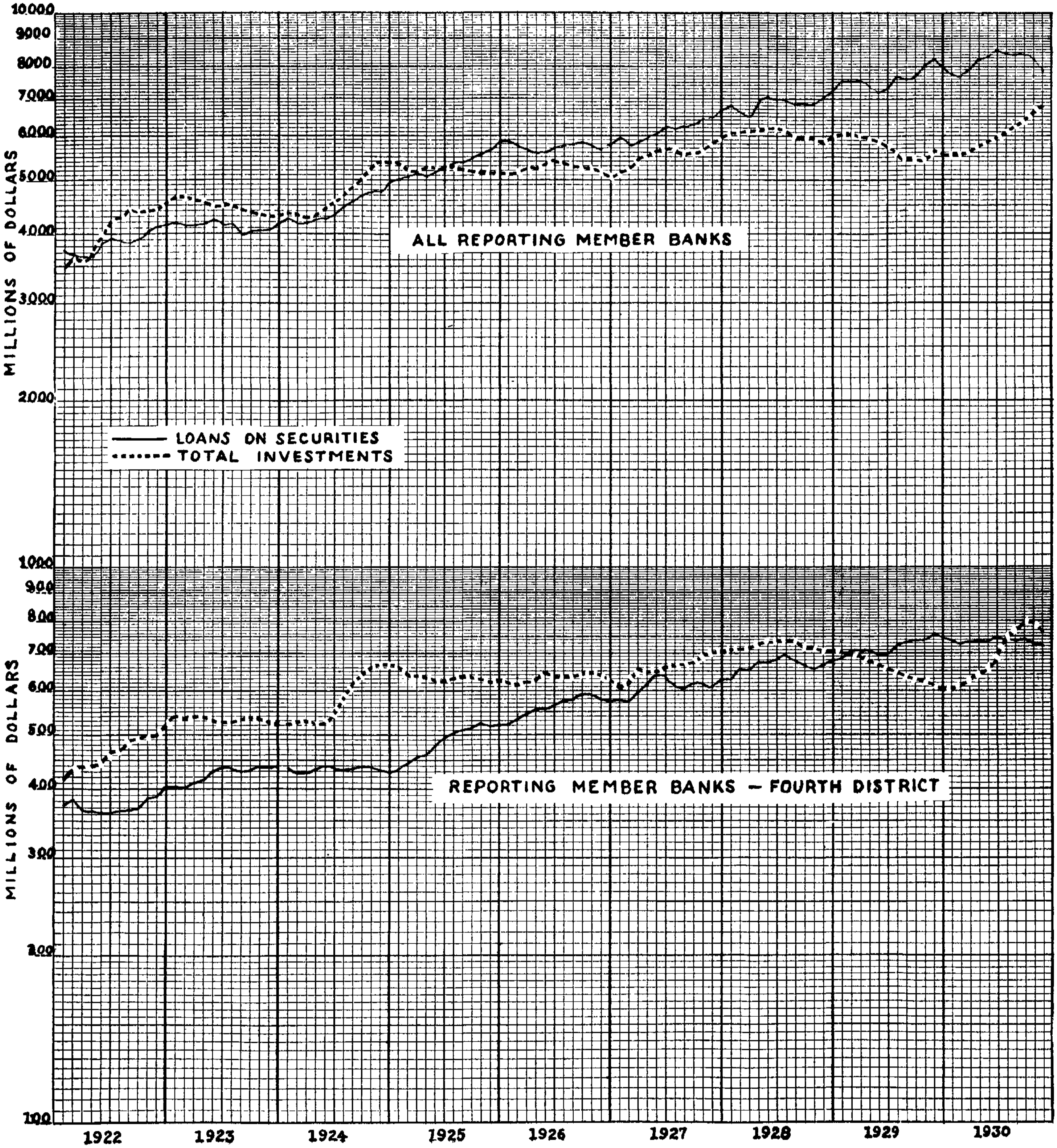
At the present time the policy of the Federal reserve system regarding earnings has materially changed and it is not now considered necessary to purchase Government securities solely for the purpose of creating earnings to cover expenses and dividends, as it is now considered proper to pay dividends out of accumulated surplus, if necessary, rather than create an undesirable market situation of low-money rates by competition with member banks and others in the purchase of such securities at a time when such purchases would not serve as an aid to the general situation. In April, 1923, the Federal Reserve Board urged the Federal reserve banks to sell their holdings of Government securities, as at that time the Treasury Department felt that the purchases of Government securities by the Federal reserve banks was having an adverse effect upon the Treasury's program of purchasing in the open market Government securities for redemption, so the excess amount of such securities held by Federal reserve banks were sold in 1923, leaving only a nominal amount in their portfolios.

The next large purchase of Government securities by Federal reserve banks resulted from a meeting of the open-market investment committee of the Federal reserve system in conjunction with the Federal Reserve Board and it was concurred in by all 12 Federal reserve banks. Purchases were begun early in December, 1923, and continued until early September, 1924. The purposes of this purchase and the results attained are set forth in detail in a memorandum by Governor Strong of the Federal Reserve Bank of New York presented at a hearing before the House Committee on Banking and Currency in April, 1926. His memorandum is in such complete form that there is nothing that we could add to it. However, the purposes indicated in Governor Strong's memorandum appear to have been generally achieved. On the other hand, the easy-money policy led to an increase in speculation accompanied by a substantial increase in speculative loans. In order to offset the speculative demand, sales were made from the system investment account beginning in December, 1924, and continuing until March, 1925. Such sales had at least a partial effect in restraining speculation.

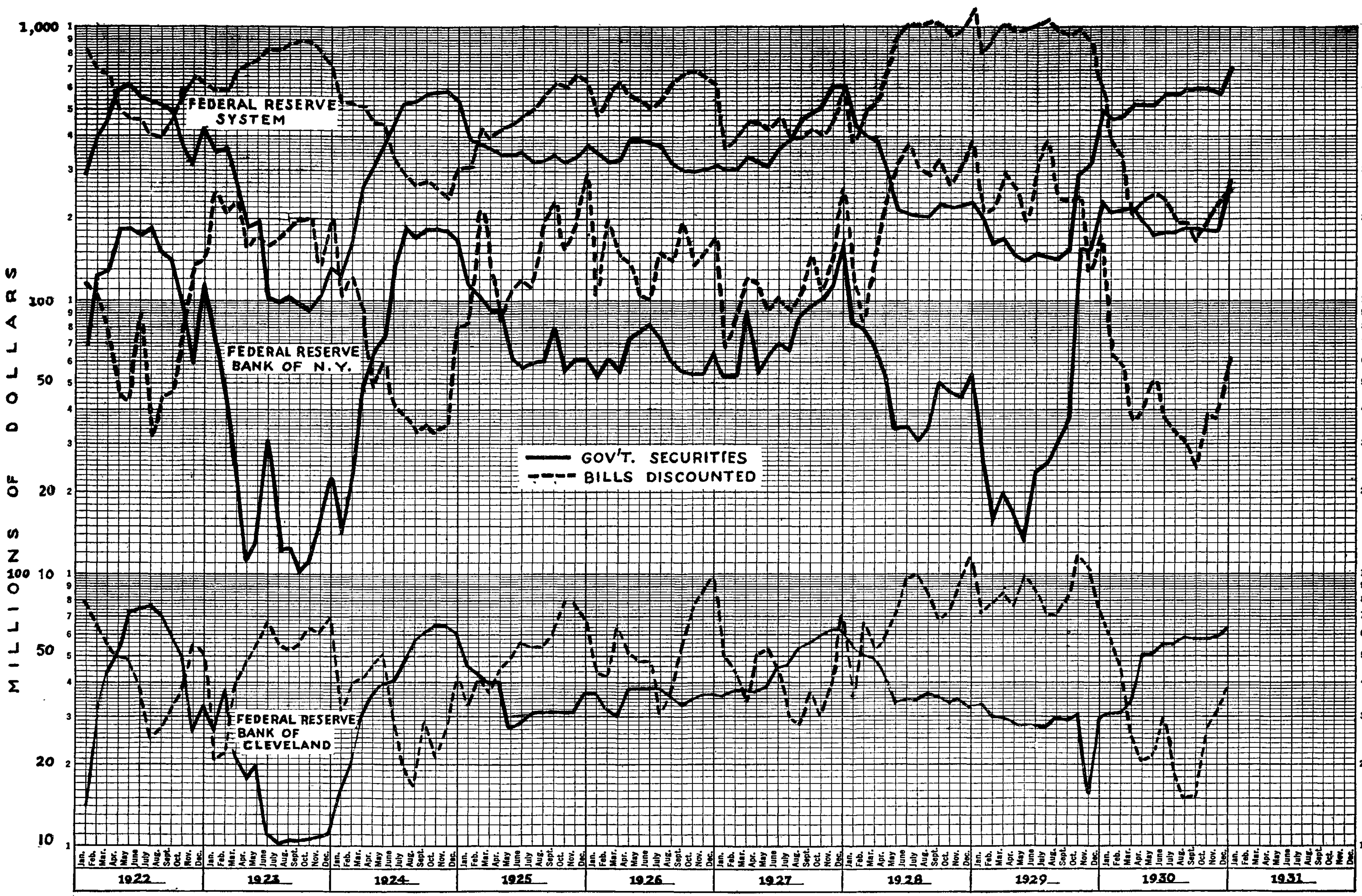
The next large purchase of securities occurred in the summer and fall of 1927, and while this action was taken by the committee of the Federal reserve banks in conjunction with the Federal reserve board, doubt was expressed by some members of the committee that because of the increasing speculative demand for credit a purchase of Government securities would materially increase speculation and might produce disastrous effects. However, it was finally agreed that in order to facilitate the financing of our agricultural products and to assist European countries in the purchase of our products by low-money rates in this market and to prevent imports of gold, that these considerations were more important to business and that whatever increase in speculation occurred could be checked by the sale of securities after these objects were accomplished. However, the securities market had attained such momentum that when sales of Government securities were made in the first six months of 1928 speculation was so violent and had proceeded so far that it was not checked by the sale of these securities and because of the tremendous volume of funds attracted to the call-money market, particularly in the form of loans by others than banks, control of the situation had been lost and the only remedy left was to sharply increase the rediscount rates.

The next major operation in the purchase of Government securities occurred immediately after the stock-market crash in the fall of 1929 and the purpose was to make money easy so that every possible obstacle could be removed in helping to restore business confidence. Further moderate purchases occurred in 1930, with the same purpose in mind, and practically no sales from the system investment account have been made up to date this year.

Cleveland.—In 1922 the purchase of Government securities on the part of the Federal Reserve Bank of Cleveland was occasioned primarily by a sharp drop in earning assets and a desire to maintain them at a point sufficiently high to provide for the bank's expenses and dividends. The effect of this and other open-market operations upon local conditions is obscured by the fact that the bulk of these transactions occurred in New York. Consequently, while such purchases may have had an immediate effect upon conditions in New York City, the results locally may not have been felt until sometime later when, as a result of changed conditions in eastern markets, interest rates in Cleveland territory may have been altered somewhat. It is observed that investment account of fourth district reporting member banks increased during the year 1922, but not as much proportionately as is shown for all reporting member banks in the country (see accompanying chart). It is also observed that street loans in New York increased with system purchases.



34718—31. (Face p. 800.) No. 1



34718—31. (Face p. 800.) No. 2

Sales of securities in 1923 were instituted primarily as a means of restraining what appeared to be a tendency to an overexpansion in production, accompanied by a sharp increase in commodity prices which appeared during the first four months of the year. Also such sales assisted in making effective an increase in the discount rates of the Boston and New York banks from 4 to 4½ per cent.

The purchase of securities in 1924 was intended to relieve a tendency toward higher rates, to permit member banks to liquidate indebtedness to the reserve banks (which at that time was fairly heavy), and to encourage the creation of additional foreign credits in this country to facilitate the exportation of commodities. The effect was to produce an easier money situation in the principal eastern markets, evidenced by reductions to 3½ per cent on the part of Boston, Philadelphia, and Cleveland, and to 3 per cent on the part of the Federal Reserve Bank of New York.

Increased security purchases in 1927 were made in a period when business was showing a reversal of the activity which had characterized immediately preceding years, and at a time when large importations of gold were threatening the maintenance of the gold standard in many European countries. It was considered desirable to lend whatever aid the reserve system could toward a strengthening of foreign-exchange rates in order to enable the free purchase of American products by European consumers. The maintenance of easy money conditions made possible the successful flotation of loans to foreign countries and enabled them to reestablish themselves upon a gold standard. The results of these operations were an improvement in exchange rates and important exportations of gold to countries where the stability of the gold standard was endangered. In our judgment it also assisted materially in a more prompt revival of business activity in this country. To a degree the results of this policy may have encouraged an increase in speculative activity, although in our judgment the extent to which reserve bank policy and operations contributed to the developments of 1928 and 1929 was not so much the direct result of that policy as it was of a failure to reserve it more promptly in 1928.

Sales of securities in 1928 and 1929 were obviously designed to prevent the speculative situation from getting out of hand, but these efforts were offset in large degree through funds or credit being made available to speculative borrowers through nonbanking and uncontrollable channels.

Purchases of securities in the fall of 1929 were required to prevent the absolute collapse of the security markets, and throughout 1930 have been continued to create a money condition which imposes no restriction upon a resumption of business activity. The effects of this policy have been to bring about a marked decrease in the price of credit and to encourage a freer lending policy on the part of member banks as well as an increase in their investment account.

Dallas.—The policies governing these operations, beginning with 1923, were determined by the open-market investment committee as constituted by the Federal Reserve Board. These policies continued to be so developed until the abolition of the open-market investment committee, which was finally succeeded by the open-market policy conference on March 25, 1930. We think that recourse to the minutes of the open-market investment committee from the time of its inception until it was succeeded by the open-market policy conference, and also the minutes of the open-market policy conference since its creation, would give a much more comprehensive answer to this question than we could undertake. These data are no doubt available to the committee or may be readily obtained. Likewise the succeeding preliminary memoranda usually submitted by the chairman of the open-market investment committee to the committee at its meetings, as well as a consideration by the committee of credit conditions at that time and similarly in respect to the proceedings of the open-market policy conference, will show the effect of such policies and their execution.

From the time that the open-market investment committee was established until the time of its abolition and the establishment of the open-market policy conference with an executive committee, the open-market investment committee was composed of representatives of five Federal reserve banks, in which this Federal reserve bank was not included. The policies so established however, with the approval of the Federal Reserve Board, were submitted to all Federal reserve banks with the option of participation. Subsequently to the abolition of the open-market investment committee and the creation of the open-market policy conference, in which all Federal reserve banks are represented, the policies have been formulated by meetings of the members of the open-market policy conference in Washington, and either approved or disapproved by the Federal Reserve Board. While this bank, like other Federal reserve banks, has not always voted in the affirmative for such policies as have been established, the Federal Reserve Bank of Dallas has always been guided by the majority vote of the conference and has always participated in the consequential transactions, subject only to its reserve and collateral positions in reference to Federal reserve notes. The participation of this bank in any policy established, although its representative may have voted in the negative, has been on the ground that our refusal to participate would not in anywise change the effect of the policy.

Kansas City.—No major operations undertaken locally. System operations handled through open-market committee and open-market policy conference. Minutes showing reasons on file with Federal Reserve Board.

Minneapolis.—Due to rapidly declining amount of earning assets, our directors in 1922 authorized the purchase of $7,000,000 (the amount of our earned surplus) in United States securities, to provide a back-log of earning assets. We do not feel that an operation of this size had any appreciable effect in the market. During 1924, when there was a recession in industrial activity, and the attitude of the business community was hesitant, the Federal reserve banks bought for system account approximately $370,000,000 in Government securities. The funds thus placed in the market were used by member banks in repayment of their borrowings and further resulted in a reduction of holdings of acceptances by Federal reserve banks. By these purchases the system put itself in a position, through the subsequent sale of these securities in case undue expansion of credit seemed imminent, to check the same. In the first half of 1927 business was active and gold was flowing into the country. By June, however, a very definite recession in business was apparent and in addition gold began to move out of the country. The member banks' borrowings at the time being relatively heavy, the Federal reserve banks bought during the summer Government securities to offset the gold exported and set aside for earmarking so as to keep money fairly easy for agricultural and commercial purposes. This was accompanied by a reduction in the rediscount rates at all Federal reserve banks from 4 to 3½ per cent.

In the fall, however, with the business demand declining and a decided increase in member bank credit used in investments and loans on securities, the Federal reserve banks reversed this policy and let the continued outflow of gold exert its tightening influence on credit conditions.

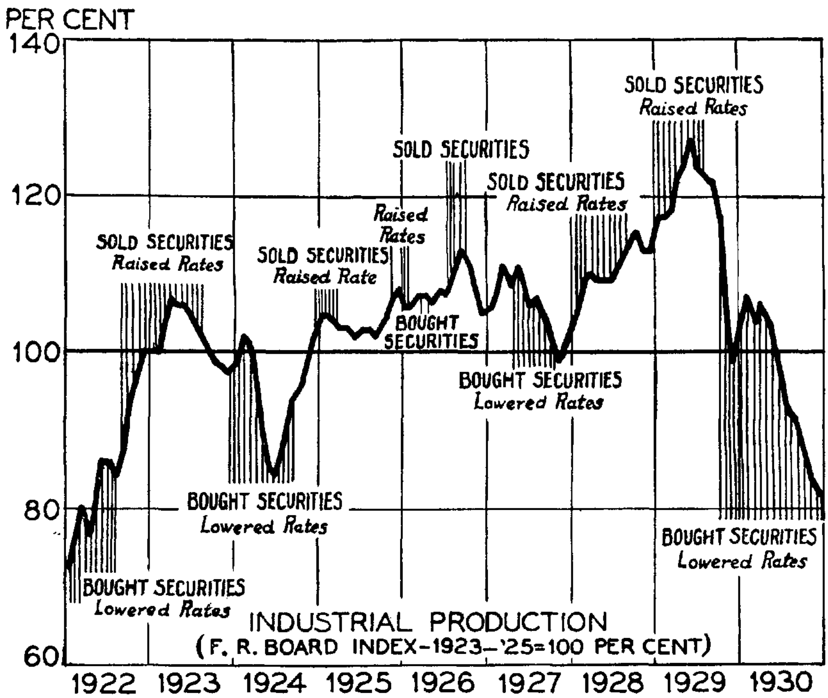
New York.—Before examining particular operations in Government securities a general statement is appropriate with regard to the purposes and consequences of these operations. Generally speaking, purchases of Government securities since 1922 have been made at times of business depression or recession in the United States accompanied by unemployment, declining foreign trade, weak commodity prices, and reduced speculative activity. Broadly speaking, also sales of securities have taken place at times of large industrial activity, full employment, firm commodity prices, and tendencies toward excessive speculation.

These broad considerations are illustrated in the following diagram, which compares the timing of principal security operations with the fluctuations in industrial production in the United States as shown by the index computed by the research division of the Federal Reserve Board, taking the years 1923–1925 as 100 per cent. As a general rule prices, employment, and various forms of trade and speculative activity move roughly simultaneously with production.

Since the purchase of securities has a tendency to make money easier and thus has an influence toward stimulating business activity, and since the sale of securities tends to make money firmer and has an influence toward checking excesses, it may be said that purchases and sales of government securities since 1922 have been such as might reasonably be expected to exercise some influence toward business stability by aiding recovery at times of depression and retarding excesses at times of prosperity.

As to the consequences of purchases or sales of securities, the first result in each case has been to bring about an increase or decrease in the amount of borrowing of member banks at the reserve banks. When the reserve system buys securities the funds thus made available are employed by member banks to reduce their indebtedness at the reserve banks. As a consequence these banks find themselves in a position to lend somewhat more freely and money tends to be easier. Conversely, when the reserve system sells securities member banks find themselves compelled to increase their borrowings at the reserve banks, hence they find their lending power impaired and money tends to be firmer. The relationship between changes in Federal Reserve security holdings and discounts of member banks is shown on the accompanying diagram.

With a few exceptions every considerable purchase or sale of securities over this period of years was in some measure a joint undertaking in which the Federal Reserve Board and the officers and directors of the 12 Federal reserve banks had a part. Any statement of reasons for action must represent an interpretation of what was in the minds of these various participants when decisions to buy or sell were reached. Perhaps the best that can be done is to state the circumstances of the situation which were emphasized at the meetings where the primary decisions for these purchases and sales were made.



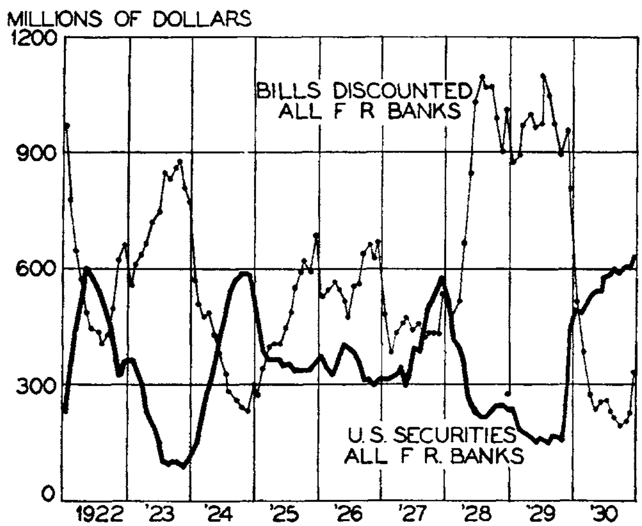
Timing of purchases and sales of Government securities and discount rate changes compared with changes in the volume of industrial production

The principal changes in holdings of Government securities reflecting policy decisions from January 1, 1922, to the present have been—

January, 1922, to May, 1922, purchase of	$400,000,000
June, 1922, to July, 1923, sale of	525,000,000
December, 1923, to September, 1924, purchase of	510,000,000
November, 1924, to March, 1925, sale of	260,000,000
April, 1926, purchase of	65,000,000
August, 1926, to September, 1926, sale of	80,000,000
May, 1927, to November, 1927, purchase of	230,000,000
January, 1928, to April, 1929, sale of	405,000,000
October, 1929, to December, 1930, purchase of	560,000,000

Purchases in 1922 were made before these operations had been placed under the supervision of a system committee, except as to the details of execution. These purchases took place at a time when business had just begun its recovery from the depression of 1921 and when agricultural prices particularly were seriously depressed. The consequence of this operation, together with large gold imports, was to reduce discounts of member banks at the Federal reserve banks from over $1,000,000,000 to $400,000,000, and thus put the banks in a position to advance funds more freely to their customers and to increase their investments. It seems likely that this step aided in some measure the recovery of business and agriculture from the depressed conditions of 1921. Purchases were also followed by reductions in discount rates at several reserve banks and by increases in the total volume of bank credit.

The sale of securities from June, 1922, to July, 1923, similarly was only in part determined upon as a system policy, though sales were recommended by a committee of governors organized in 1922 for the centralization of purchases and sales of Government securities. At that time the Treasury Department had indicated that it believed operations of the Federal reserve system in Government securities had interfered somewhat with an orderly market for these securities. These sales undoubtedly had some effect in retarding growth of bank credit during 1923, pushing money rates to higher levels, and tending somewhat to check the business expansion which had been going forward throughout 1922 and early 1923 at a pace that was alarmingly rapid, accompanied by considerable speculative activity.



Government security holdings of all Federal reserve banks and member bank borrowings at reserve banks (monthly averages of daily figures)

The large purchases of securities from December, 1923, to September, 1924, were the first ones to be handled in a joint-investment account for the Federal reserve system. The reasons for and results of this purchase were set forth by Governor Strong in a memorandum written on December 26, 1924.

It seems reasonable to believe that the rapid recovery of business from the depression and severe unemployment that characterized the summer of 1924 may be partly ascribed to easy money and ample credit facilitated by the purchase of Government securities at that time.

MEMORANDUM BY GOV. BENJAMIN STRONG ON OPEN-MARKET OPERATIONS OF 1924

DECEMBER 26, 1924.

(The following memorandum is intended to give a point of view in regard to the open-market policy of the Federal reserve banks which has never been adequately explained to the public. Because of the failure to do so the Federal reserve system has suffered some criticism, partly uninformed and partly deliberately unfair.)

By the fall of 1923 the bulk of the short-time Government security holdings of the Federal reserve banks had been liquidated. The sales made throughout the previous year had forced member banks to borrow considerable sums from the Federal reserve banks in order to replace the reserves which they lost when payment for the securities was made to the Federal reserve banks. The fall of 1923 saw the members borrowing about $835,000,000 on direct discounts from the reserve banks, of which over $200,000,000 was in New York. At that time considerable importations of gold were being received from Europe. There was developing some recession in business; the New England textile manufacturers had suffered a severe slump; the same being to some extent true of rubber, some branches of the steel, and of other trades. But the most serious difficulty which had developed in any part of the country was the banking situation in the West, especially in the Northwest and Southwest. Banks were failing almost every day.

Notwithstanding imports of gold, there was continued pressure by member banks to liquidate their indebtedness to the reserve banks, causing, in turn, pressure by member banks upon their borrowers to repay loans. The commercial-paper rate was 5 per cent; rates for 90-day bankers' acceptances, 4⅛ per cent; customers' loan rates at New York about 5¼ per cent; time loans upon securities, 5¼ per cent; stock-exchange call money, 4¾ per cent; the discount rate of the Federal Reserve Bank of New York was 4½ per cent, where it had been maintained since February 23, 1923.

The condition of the farming community, including the cattle industry, was coming perilously near a national disaster, and feeling became so strong throughout the West that all sorts of radical proposals for legislation and other Government relief were being urged.

Sterling had declined in November to $4.26 under the influence of a general flight of capital from Europe to this country. Interest rates in London were lower than in New York. "Money" (3-months' bank bills) was quoted from 3 to 3⅜ per cent; tap rate on Treasury bills was 2¾ to 3 per cent, and the official rate of the bank was 4 per cent.

It was under these conditions that the Federal reserve banks undertook the gradual repurchase of short-time Government obligations. The following definite objects were in mind, at least so far as the writer was concerned:

1. To accelerate the process of debt repayment to the Federal reserve banks by the member banks, so as to relieve this weakening pressure for loan liquidation.

2. To give the Federal reserve banks an asset which would be automatically liquidated as the result of gold imports so that later, if inflation developed from excessive gold imports, it might at least be checked in part by selling these securities, thus forcing member banks again into debt to the reserve banks and making the reserve bank discount rate effective.

3. To facilitate a change in the interest relation between the New York and London markets, without inviting inflation, by establishing a somewhat lower level of interest rates in this country at a time when prices were falling generally and when the danger of a disorganizing price advance in commodities was at a minimum and remote.

4. By directing foreign borrowings to this market to create the credits which would be necessary to facilitate the export of commodities, especially farm produce.

5. To render what assistance was possible by our market policy toward the recovery of sterling and the resumption of gold payment by Great Britain.

6. To check the pressure on the banking situation in the West and Northwest and the resulting failures and disasters.

The writer had roughly estimated that it might be possible for Europe to ship us still some $400,000,000, which I thought would likely be distributed over a period, of say, two years, but that, notwithstanding these gold shipments, pressure for liquidation of bank loans would not be reduced promptly enough, except it was accelerated through purchases of securities by the reserve banks.

In pursuance of this policy, the Federal reserve banks gradually purchased over the following eight or nine months a total of $500,000,000 of short-time Government securities, and throughout that period gradually reduced discount rates until the rate of the New York bank was 3 per cent, whereas the Bank of England on July 5, 1923, had raised its rate of discount to 4 per cent and exercised its influence to maintain open-market rates in London at a somewhat higher level than during the previous year.

In reviewing what has happened during the past year, the outstanding event, of course, has been a crop of unusual size and, as to all but corn, of good quality, produced at a time when there was a crop shortage in the rest of the world; that, itself,, gave the country a fortunate recovery from some part of the depression which was growing. If, as indeed was the case, however, the Federal reserve policy hastened the establishment of cheaper money, then the developments directly attributable to cheap money must be considered as in part the outgrowth of that policy. These may be enumerated as follows:

1. The pressure for liquidation of bank loans was gradually relaxed, and in the summer of 1924 bank borrowing from the Federal Reserve Bank of New York and the other large reserve banks had practically all been liquidated; and somewhat similar conditions developed throughout the Middle West, the evidences of credit pressure and of disorganizing liquidation gradually disappearing. The banks of the State of Iowa, as an example, had reduced their debt to the Federal Reserve Bank of Chicago from $98,000,000 to about $12,000,000, due largely to the willingness of the member banks to lend money more freely in that State where credit disasters had developed, and as a result of which banking conditions were stabilized. And the same seems to have been true in the Minneapolis, Kansas City, and Dallas districts.

2. The outcome of the crops made it necessary for Europe to make unprecedented purchases of our small grains at very high prices compared to recent years. But the coincidence of low rates for money in this market and higher rates in London enabled foreign governments and foreign corporation borrowers to place a total of a billion and a quarter of loans in the market, which provided the credit to be used in paying for the crops. Had these foreign loans not been placed in this market it is quite certain that foreign purchasers of our farm produce would have found difficulty in financing these purchases, which could only have been made by short time bank credits; the extensive use of our banking system for financing of that sort would not only have been at high rates, but might have been an influence for the creation and maintenance generally of much higher rates than have prevailed during the crop-moving season. Our crop sales to Europe might have been much restricted.

3. For a period of at least 12 years, as I recall—that is, since about 2 or 3 years before the outbreak of the war—there had been no such market for investment securities as would enable our railroads, public utility, and industrial corporations to make capital issues on reasonable terms, so as to refund short-time loans and provide the money for needed extensions and betterments. The past six months or so has enabled them to do so. There has rarely been a period of easy money in this country where sound financing has been so evident as in this period, and where the absence of promotion and other security issues of doubtful character has been so marked.

4. One of the greatest menaces to our ultimate security against inflation has been the uncontrollable stream of gold coming to this country to make needed payments for which credit was not available. Had our credit not been available to pay for this year's crop exports, the amount of gold coming would undoubtedly have been much larger, or, at least the gold movement would have continued longer. Our loans to Europe and the rest of the world because of lower interest rates in this country than in England, have been an important influence in increasing the value of sterling in terms of dollars to a point where the gold premium in London was constantly reduced and ultimately the bazaar premium in India being finally above the premium in London caused the diversion of the stream of gold from South Africa to Europe or India instead of to this country. A favorable monsoon and a high value for the rupee in terms of sterling assisted in this result, but a lower interest level in America than in England and on the Continent was a further influence in turning the tide of gold away from the United States.

5. The recovery of sterling has now reached a point where it is reasonably possible for the British Government and the Bank of England to consider the resumption of gold payment. Whether they do so or not depends upon their own sense of security for the long future. But this country is still in position to give them needed assurances of credit for a long period if they require it. We have seen the Swedish, Dutch, and Swiss exchange return to par or above; the Austrian and Hungarian currency remain stabilized; and finally the loan to Germany under the Dawes plan readily absorbed and a long stride toward currency stabilization taken by Germany. At least in part these results are to be attributed to the free use of our credit markets by Europe, much facilitated by easier rates than for some years past in this country.

6. It is difficult to state to what extent gradual recovery of confidence and of business in this country can be attributed to ease of credit conditions. It can, however, be definitely stated that if some $500,000,000 of credit had not been furnished the market by the purchases of the Federal reserve banks, the liquidation which was proceeding for the purpose of repaying loans from the reserve banks would have continued for a much longer period, and, instead of having

some expansion of bank credit such as has taken place, we would have had some further contraction and probably a definite further slackening of business and lowering of prices.

On the other hand, there has been no very general advance in the prices of commodities, outside of agricultural produce, and certainly as to those commodities higher prices were imperative. The foreign buying caused the advance, and that was certainly facilitated by cheap money. It was mainly due to crop shortage throughout the world, and it was cheaper credit which aided the distribution. The only definite price advance which can be attributed to cheap money is in the security market. While this has attracted widespread comment and may have been facilitated by easy money, nevertheless, it can largely be attributed to favorable political developments throughout the world, which had a profound effect upon the psychology of people generally. And in any event the readjustment of values which has taken place is probably not greatly out of line, if at all, with the intrinsic value and earning powers of our industries.

7. Finally, it must not be overlooked that one of the developments of the past year, which may in part be attributed to the policy of the Federal reserve system, but also quite largely to favorable crop developments, and to political developments, has been a greater feeling of tranquility and contentment throughout the country than we have experienced at any time since the war. Employment conditions are improving, industry, and transportation in a general way are sound and successful and the relief of the strain on the banking situation throughout the West has done much to arrest the growth of unsound and radical and extreme ideas which might, indeed, have been a menace to both Government finance and a sound monetary and credit policy.

Sales of securities in late 1924 and early 1925 were made at a time when business had made such a rapid turnabout from the depressed conditions of the summer of 1924 that the movement appeared to be going too fast, accompanied by a rapid rise in wholesale prices and a rapid increase in total loans and investments of banks, and an increase in speculation evidenced by an increase in brokers' loans and in security prices. The sale of securities, together with changes in discount rates, appear to have been an important influence in retarding this tendency to excess, bringing bank credit to a more normal growth and retarding speculative movements. These tendencies are illustrated in the accompanying diagrams. The small purchase and sale in 1926 accompanied a temporary loss of business confidence early in the year and a revival in the autumn. The changes in security holdings were accompanied by changes in the discount rate of the Federal Reserve Bank of New York. It is difficult to trace the results of these rather narrow movements.

The purchases of securities in the summer and early autumn of 1927 were made under circumstances similar in some respects to those of 1924 described in Governor Strong's memorandum. It was a time of moderate business recession, gold imports, and accompanying pressure on the position of the central banks in a number of countries which had only recently returned to the gold standard. Wholesale commodity prices had been declining more than a year. The result of the operations was to diminish the discounts of member banks, a change which was followed by a more rapid increase in bank credit and easy money rates. There was a prompt flow of funds from New York to the interior shown through transfers in the gold-settlement fund. Foreign exchange rates which had been very weak and near the point at which gold moved to the United States, immediately strengthened and gold exports began. Before these developments European bankers had been apprehensive of a serious credit stringency, which would bring with it high money rates, depressed business, and greatly reduced foreign purchases of American goods. This danger was averted. Firmer wholesale prices and improved production followed soon after. There was also an increase in speculative activities, which by the beginning of 1928 had reached a point to cause concern.

Sales of securities of 1928 and 1929 were made with a view to checking excessive credit expansion, particularly for security speculation. The sales resulted in a large increase in the discounts of member banks which led banks to scrutinize their loans and investments more closely. The expansion of bank credit was fairly well checked. Security speculation, however, was not permanently checked, partly because other lenders provided the funds for further expansion which banks were reluctant to supply and partly, it seems likely, because the reserve system did not pursue a sufficiently vigorous discount rate policy.

Purchases of securities in October and November, 1929, were made to meet an emergency demand for funds, as the stock market broke and New York banks were called upon to prevent a money panic by supplying funds to replace a part of the huge amounts of funds withdrawn in alarm by other lenders. A contemporary account of these events from the Monthly Review of the Federal Reserve Bank of New York follows herewith. These purchases aided the New York City banks in meeting the emergency and helped prevent the security disturbance from causing a money panic or indeed a serious credit strain. In fact, they made possible a decline in interest rates in the face of an extraordinary demand for funds.

Further purchases in 1930 enabled member banks to liquidate further their indebtedness at the reserve banks, thus reversing the operations of 1928–29 and helping to remove any shortage in the basic supply of funds as a possible obstacle to business recovery.

Money Market in October [1]

The past few weeks have witnessed an abrupt reversal of credit trends which had continued for about two years. Stock prices have turned downward. Bond prices have made some recovery. Loans to brokers and dealers have decreased sharply, and there has been a sudden shift between lenders. Interest rates have declined rapidly and foreign exchange rates have strengthened to points where gold exports have been made.

Of these developments the decline in stock prices has been the most spectacular and in large measure the controlling event. The decline has carried representative price averages below the lowest points heretofore reached this year, though not to points which are low relative to the levels of prices of 1928 or any previous year.

Whereas the gradual recession in stock prices which had taken place in September had not been accompanied by any substantial liquidation in loans to brokers and dealers, partly because of the continued large volume of new stock issues, calling for additional amounts of credit, the drastic declines of the past two weeks have released a considerable amount of funds. For the two weeks from October 16 to October 30 the figures for loans to brokers and dealers reported by the New York City banks for their account and the account of their bank and other customers show a decrease of $1,263,000,000. The distribution of this decrease between lenders is of particular interest. Loans made for account of others than the New York City banks and their out-of-town correspondents decreased $1,432,000,000, and loans made by the New York banks for their out-of-town correspondents decreased $805,000,000. On the other hand, loans to brokers and dealers made by New York City banks for their own account increased $974,000,000, and these banks also increased their loans directly to customers by an additional $260,000,000.

From the point of view of the general credit situation the net result of these movements was to bring about an increase of $1,374,000,000 in the loans and a similar increase in the deposits of the New York City banks, with a consequent increase in the amount of reserve balances they are required to maintain on deposit at the Federal reserve bank. In a period of one week from October 23 to 30 the reserve requirements of these banks were increased more than $200,000,000.

These movements illustrate once more the fact, which has previously been commented upon in this review, that loans to brokers and dealers by lenders other than banks constitute a potential drain upon bank resources, which is most likely to become an actual drain in periods of emergency. The New York City banks were able to handle the huge burden which was shifted to them without any disturbance to the money market by reason of an increase of over $150,000,000 in the security holdings of the reserve banks and a like increase in rediscounts.

After the first week of October the prevailing call loan renewal rate was 6 per cent, compared with 8 and 9 per cent in September. Accompanying ease in call loan rates, time loan rates declined from 9–9¼ per cent at the beginning of October to 6 per cent at the end of the month. Open-market commercial paper rates showed a slight decline from 6¼ per cent to 6–6¼ per cent. Bill rates dropped from 5⅛ to 4⅝ per cent and the yield rate on Treasury certificates declined over three-quarters of a point. On October 31 the rediscount

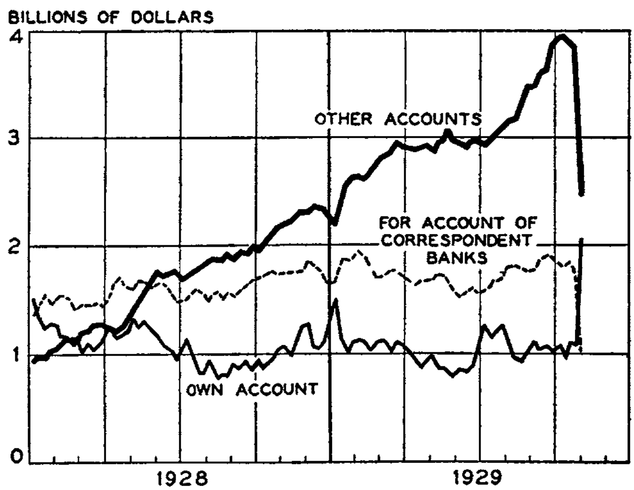
[1] From Monthly Review of Credit and Business Conditions, New York, November 1, 1929.

rate of the Federal Reserve Bank of New York was reduced from 6 to 5 per cent, effective November 1. These changes are summarized in the table following.

Money rates at New York

	Oct. 31, 1928	Sept. 30, 1929	Oct. 31, 1929
Stock exchange call loans	[1] 6½–8	[1] 8–10	[1] 6
Stock exchange 90-day loans	7	9–9¼	6
Prime commercial paper	5½	6¼	6–6¼
Bills—90-day unindorsed	4½	5⅛	4⅝
Customers' rates on commercial loans	[2] 5.47	[2] 6.07	[2] 6.07
Treasury certificates and notes:			
Maturing Dec. 15	4.48	4.62	3.94
Maturing Mar. 15	4.63	4.63	3.97
Federal Reserve Bank of New York rediscount rate	5	6	6
Federal Reserve Bank of New York buying rate for 90-day bills	4½	5⅛	5

[1] Range for preceding week. [2] Average rate of leading banks at middle of month.



The decline in interest rates in the early part of October was a consequence in part of a lessened demand for funds in the security markets, but more largely a cumulative effect of purchases of bankers' acceptances by the Federal reserve banks for a number of weeks in amounts larger than the increasing requirement for funds of the autumn season. Autumn currency requirements were also somewhat less than usual. Under these circumstances, the New York City banks had been able largely to liquidate their indebtedness at the reserve bank, a condition which is normally accompanied by easy money conditions.

The liquidation of the stock market in the last two weeks of the month and the accompanying movement of brokers' loans was not a factor making directly for easier money, for, as has been indicated above, the net result of the changes in brokers' loans was to increase rather than to diminish the call upon bank funds, and the banks were able to meet the huge additional demand for credit only by reason of large security purchases by the Federal reserve banks and an increase in their rediscounts. So that at the end of the months the borrowings of the New York City banks were $170,000,000 compared with $63,000,000 in the early part of the month, and the discounts of the Federal reserve system were $990,000,000 compared with $930,000,000 earlier in the month.

Two accompaniments of the easing tendency in interest rates have been the recovery in bond prices which has raised representative averages about one point, and a vigorous recovery in foreign exchange rates. The recovery in exchange rates has been comparable with that which occurred in the late summer of 1927. On both occasions the principal European exchanges rose rapidly from quotations which were close to the points at which gold tended to move into the United States to quotations close to, if not actually above, the gold export points. In fact, in the case of the French exchange the quotations have recently been such as to show a slight profit in gold exports and a small amount of gold has moved from New York to Paris. Both in 1927 and during the past month this vigorous recovery in the exchanges has appeared to reflect a movement of funds from New York to the principal European centers, largely in response to a differential in money rates between New York and those centers, though in the recent instance it has also accompanied a liquidation in the stock market.

BILL MARKET

During the first part of October, seasonal drawings of bills increased the supply in dealers' hands very substantially, and, although the investment demand also rose materially, dealers' aggregate purchases exceeded their sales. As open market portfolios of bills already were large, the excess of supply over the demand was offered to the reserve system. The development of easier money conditions, however, allowed the dealers to carry an increasing proportion of their portfolios outside the reserve bank.

The continuance of relatively easy-money conditions throughout the balance of the month was accompanied by a large increase in the investment demand, both local and foreign, and as dealers' purchases of new bills were materially reduced, supplies of bills on hand declined to a total between one-third and one-half the volume at the opening of the month. In an effort to replenish their portfolios, the dealers made four successive reductions in their rates, a total decrease of one-half of 1 per cent between October 22 and 29, bringing the offering level for 30 to 90-day unindorsed bills to 4⅝ per cent, the lowest level since January 3 of this year. Offering rates for four months' bills also showed a decline of one-half of 1 per cent to 4¾ per cent, and 5 and 6 months' bills a reduction of five-eighths of 1 per cent to 4⅞ per cent.

A further increase of $72,000,000 in the volume of bankers' acceptances outstanding occurred during September. The total of $1,272,000,000 on September 30 was within $12,000,000 of the peak of outstanding dollar acceptance credits, reached at the end of December, 1928, and was $268,000,000 larger than the total for September of last year and $408,000,000 above the outstandings of September, 1927. Acceptances based on goods stored in or shipped between foreign countries again showed a larger increase than any other class, and it is this type of acceptance financing that accounts for the larger part of the increase in total outstandings over a year ago.

COMMERCIAL PAPER MARKET

Accompanying the lower rates prevailing on stock exchange security loans, some revival of the bank investment demand for open-market commercial paper occurred after the first week of October. Better buying was reported as coming from banks in the Middle West, Southwest, and in New England; and in the New York market there were larger orders reported for the account of out-of-town correspondents than in some months. The rate for prime names declined slightly during the latter part of the month to a range of 6–6¼ per cent, as against the 6¼ per cent rate prevailing when bank investment demand was least active. Even at the slightly lower rate level, the amount of new paper being created by commercial and industrial concerns remained of rather small proportions, and dealers indicated that they were more desirous of acquiring additional paper than they had been in some time.

During September, the amount of commercial paper outstanding through 23 firms declined 1 per cent to $265,000,000 on the 30th. This amount is 38 per cent less than the outstandings at the end of September of last year.

Philadelphia.—The principal reason for those operations was a desire to keep the supply of Federal reserve credit in the market reasonably adjusted to the requirements of commerce and industry. We think these operations, included, as they were, in the general discount policy of the system, accomplished their purposes.

Richmond.—(*a*) This bank has not engaged in any operations except through participation in transactions of the open-market investment committee, and, at times, owing to its reserve position and for other reasons, has refrained from such participation. The principal reason for the major operations has been, we think, to aid in giving stability to the money market and to correct credit tendencies in both directions. Another reason has been to offset the effect of gold imports and exports. (*b*) The main consequences of such operations we think have been, as above indicated, to increase or decrease the volume of credit and stabilize money conditions, and, when undertaken for offsetting the effect of gold movements, to maintain money-market conditions.

St. Louis.—In 1922 and 1923 purchases were made by this bank as a convenience to our member banks and in order to keep our surplus funds working.

When open-market committee was formed we acted in accordance with its recommendations as evidenced by its minutes.

When open-market committee was succeeded by open-market policy conference we acted in accordance with its recommendations.

San Francisco.—

[In approximate millions of dollars]

Date	Purchases	Sales	Comments
February to June, 1922	40	----------	Due to precipitous drop in earning assets, directors believed at the time that the bank should maintain its earnings at a point sufficient to pay dividends.
June, 1922, to June, 1923	----------	50	This movement can be attributed to 2 causes: First, the desire of the Treasury to have Federal reserve banks dispose of holdings of Victories in the market ($10,000,000), and to sell in the market or redeem before maturities notes of specific issues ($24,000,000). There also was disposed of $5,000,000 in bonds securing "bank" notes issued to carry out the provisions of the Pittman Act. Second, because it was believed the system's holdings were too large and the market could absorb a reduction without disturbance, particularly as gold was flowing toward the United States. The remaining reduction of $11,000,000 either took the form of sales to the market or maturities which were not replaced.
January to September, 1924	50	----------	Volume of system's credit was falling off and it appeared desirable (inasmuch as purchases could be made without disturbing the money market, credit conditions generally, and the price of Government securities) to accumulate holdings sufficient to give the system means of firming rates promptly if the necessity for such action should manifest itself.
November, 1924, to March, 1925.	----------	25	Gradual reduction of system's portfolio of Government securities undertaken to maintain the effectiveness of discount rates.

During 1927, the system's holdings of Government securities increased from time to time. In some cases, this took the form of temporary certificates to cover Treasury overdrafts following redemptions of maturing obligations, and also took the form of investments to offset foreign banks earmarking gold in the United States. Owing to San Francisco's earning position, its regular proportion of participation was not at times taken, which accounts for the absence of noticeable changes in its participation account during 1927.

[In approximate millions of dollars]

Date	Purchases	Sales	Comments
December, 1927, to May, 1928	----------	30	This was a reversal of the system's policy during 1927 in which purchases were undertaken to ease the consequences of gold exports, to make effective reduced discount rates granted to stay the business recession showing evidence in the United States. It was believed also that an easier credit condition in the United States would stimulate European purchases of American farm products.
March to December, 1930	30	----------	Following the severe business recession which evidenced itself in the latter part of 1929, the system acquired Government securities with a view of easing the credit situation. San Francisco had not been participating in these purchases, but, in view of its high reserve position, accepted $25,000,000 in March.

In the main, it is believed that the consequences of these operations were generally those intended, as indicated above.

A more prompt and vigorous reversal of the easing policy made effective during the latter part of 1927 might have advanced, and, possibly, measurably modified, the collapse which came in 1929.

3. What, in your opinion, has been the effect since 1922 of changes in the portfolio of the United States securities and bankers' acceptances held by all Federal reserve banks on fluctuations in brokers' loans and on fluctuations in security loans and investments of all member banks and of member banks in your reserve district?

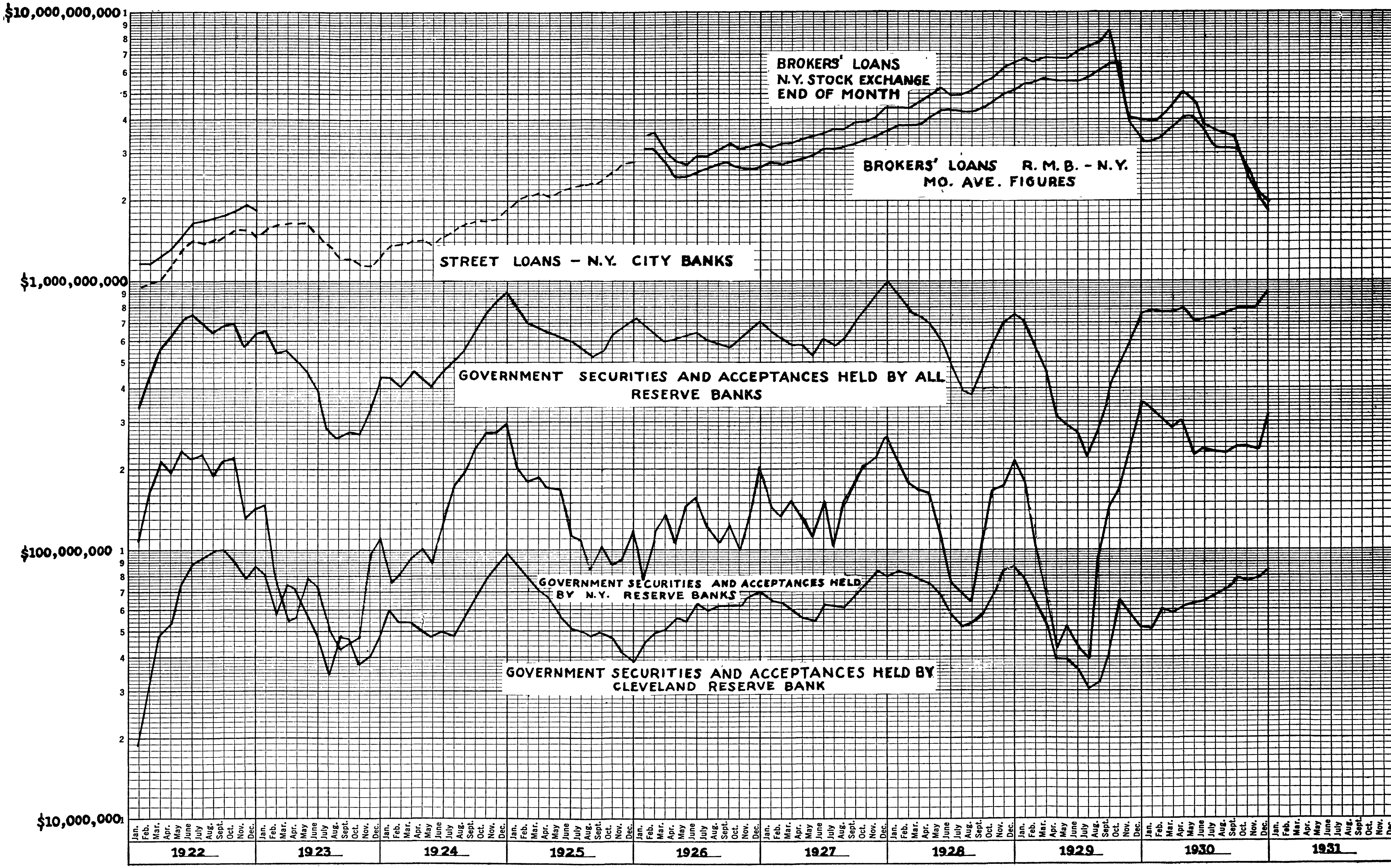
Atlanta.—Increases in the portfolio of the United States securities and bankers' acceptances held by all Federal reserve banks normally increase the supply of funds available to banks and the money market, with the result that money becomes easier. Decreases in the portfolio of United States securities and bankers' acceptances normally reduce the supply of funds available to the banks and the money market, with the result that money becomes tighter. At times when the supply of funds exceeds the demand of commercial borrowers at constant or declining rates of interest, the banks resort to security loans and investments for the full utilization of their funds, encouraged by the more attractive rates of these types of paper. When through the open-market operations of the reserve banks the supply of funds is reduced, the banks normally either liquidate their security loans and investments or increase their rediscounts as the demand of their commercial borrowers maintains its level or increases. It is our opinion that the changes in the portfolio of the Federal reserve banks since 1922 have resulted in these usual conditions.

Boston.—There has been little if any correlation so far as collateral loans and brokers' loans held by member banks is concerned; on the other hand, it is possible that credit released through the Federal reserve open-market operations may have had some bearing in the large increase of member banks' holdings in volume of securities.

Chicago.—The purchase of United States securities and bankers' acceptances in 1924 and in 1927, which were both major operations, undoubtedly tended to increase brokers' loans and security loans and investments of the larger member banks in our district because in both those years, particularly in 1927, there was a strong demand for speculative credit. Any easing in money-market rates during a period of speculative demand naturally increases that demand because of the additional amount of funds available in the money market at low rates. However, during 1930 brokers' loans and other security loans did not increase, notwithstanding the easier money rates and at the present time with open-market money rates as easy, if not easier, than they have ever been in the history of this country, there is very little speculative demand for credit. This is usually true in a period of deflation or depression. The sale of securities produces just the opposite effect ordinarily as long as the Federal reserve system can control the rates in the money market. However, in 1928 these sales did not produce the desired effect, as indicated above, for the reason that speculation had long passed the incipient stage and had become violent and excessive, and borrowers for speculative purposes paid no attention to high money rates, the high rates for call money having attracted funds from nearly all countries of the world and particularly funds from corporations, firms, and individuals represented in brokers' loans as "Loans by others." These outside funds could not be controlled by the Federal reserve system and the high call-money rates in New York, instead of serving to decrease the amount of loans had just the opposite effect as they attracted more funds to New York from the sources mentioned.

Cleveland.—There does not seem to be any definite relationship between the volume of Government securities and bankers' acceptances combined held by all reserve banks and brokers' loans. (See accompanying chart.) From the beginning of 1924 brokers' loans showed almost continuous and uninterrupted advance until October, 1929, despite wide fluctuations in the total amount of securities and acceptances held by the reserve banks. We believe that the volume of open-market paper held by the reserve banks does influence investment and security-loan policy of member banks through the effect that changes in holdings of such paper usually have upon rates of interest.

In the fourth district changes in money conditions that may be a reflection of open-market activity in New York apparently influence the volume of investment securities held to a much greater degree than the volume of collateral loans. This is particularly true in periods of extreme money ease.



$10,000,000,000
$1,000,000,000
$100,000,000
$10,000,000
BROKERS' LOANS
N.Y. STOCK EXCHANGE
END OF MONTH
BROKERS' LOANS R. M. B. - N.Y.
MO. AVE. FIGURES
STREET LOANS - N.Y. CITY BANKS
GOVERNMENT SECURITIES AND ACCEPTANCES HELD BY ALL
RESERVE BANKS
GOVERNMENT SECURITIES AND ACCEPTANCES HELD
BY N.Y. RESERVE BANKS
GOVERNMENT SECURITIES AND ACCEPTANCES HELD BY
CLEVELAND RESERVE BANK
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931

Dallas.—Our answer to this question will be found largely in our answer to the preceding question. In so far as the purchase of Government securities by the Federal reserve banks is concerned, as open-market operations are excessive (as the result of an arbitrary determination of the amount), artificial ease of credit conditions is created; the volume of rediscounts with Federal reserve banks declines below what it would be normally, and to the extent that excess reserves are created member banks are induced to seek investments. It is for this reason that we believe that less and less dependence should be put upon the purchase and sale of Government securities and more and more dependence put upon the volume of bills offered to the Federal reserve system and the proper adjustment of system buying rates for such bills. The principal obstacle which we see to successful open-market operations is the fact that the Federal reserve system has nothing which it can sell into the market in order to harden rates or restrict the expansion of credit when that seems desirable, and has therefore been more or less forced to acquire assets which may be used for that purpose; but in acquiring them there is the tendency to create the very condition for the correction of which it desires to have the assets in its portfolio. The result has been that the process of purchasing Government securities, on the one hand, or, on the other hand, selling Government securities, has continued probably over too long periods of time.

Kansas City.—Detailed statistics answering this question can be obtained from Federal Reserve Board, division of research and statistics.

Minneapolis.—Very little, if any, in our district.

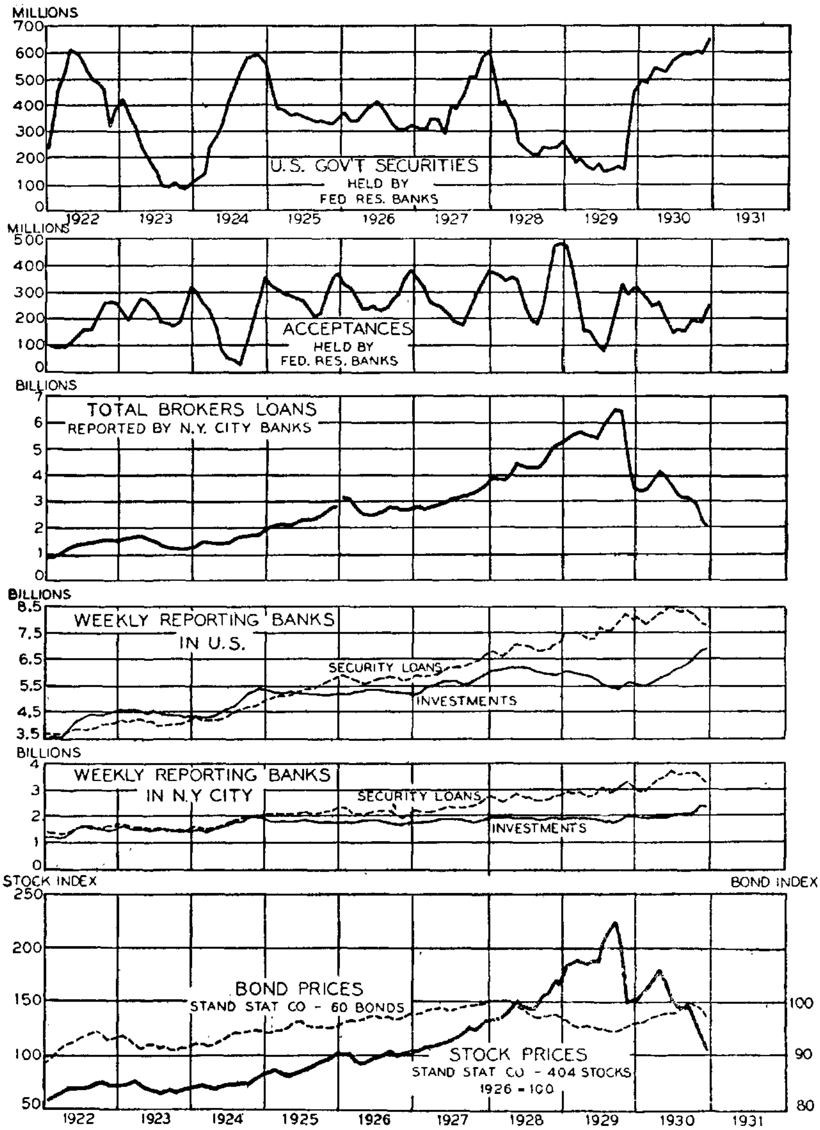
New York.—The following diagram illustrates the relationships between open-market operations in Government securities and bankers' acceptances and the fluctuations of brokers' loans, security prices, bank security loans, and bank investments. The most direct and obvious relationship indicated by these figures is the relationship between bank investments and Government security operations of the reserve banks. Purchases of Government securities by the reserve banks have relieved member banks from their indebtedness at the reserve banks and have placed them in a position to increase their investments and, conversely, the sales of Government securities have been followed by increases in the indebtedness of the member banks and declines in their investments as they sought to liquefy their positions. There is a somewhat similar connection between security operations at the reserve banks and the security loans of the member banks, though the relationship is much less direct.

Both the figures and the consideration of what actually takes place indicates some relationship between Government security operations and fluctuations in brokers' loans. There is evidently a tendency for security purchases by the reserve banks to be accompanied or followed by some increase in brokers' loans, and sales to be followed by a decrease or a pause in the advance, though this tendency is less marked than the case of bank investments. The most violent fluctuations in brokers' loans, however, in recent years have been directly opposite to what might be expected from the changes in Federal reserve security holdings. Sales of securities in 1928–29 did not prove effective in checking a rapid rise of brokers' loans, nor were purchases in late 1929 and 1930 followed by any stay in the decline in brokers' loans. At times when loans by banks were the dominating element in brokers' loans, they appear to have been somewhat influenced by Federal reserve security operations, but the growth of loans for account of others was partly responsible for the lack of effectiveness of Federal reserve policy.

Changes in acceptance holdings, as shown by the diagram, have been largely seasonal and have provided, without the strain involved in discounts, a considerable part of the seasonal requirements for Federal reserve credit. The free movement of acceptances into and out of the reserve banks in response to trade demands has done much to remove seasonal credit strains and plethoras. Generally speaking, there has been little noticeable relation between Federal reserve holdings of bankers' acceptances and fluctuations in brokers' loans or bank security loans and investments. The autumn of 1928 was perhaps an exception, when an unusual rise in acceptance holdings was accompanied by an increase in brokers' loans. Even in this case, however, the expansion of brokers' loans was based largely on credit from nonbanking lenders.

Philadelphia.—The use of Federal reserve credit augments the loaning power of the member banks. Purchases of Government securities release money already invested in securities, and it is more than likely that the sellers of such securities naturally would invest the proceeds of such sales in other securities and cause more or less activity in the security market. On the other hand, they might have been used for loans on securities, or on call, or for commercial loans. But it is impossible to follow the trail of credit when released. The purchases of bankers' bills were made with the purpose, for the most part, of establishing and maintaining a discount market. It is impossible to say whether or not the proceeds of those purchases found their way into the investment market and/or loans on securities, or again into commercial loans.

Richmond.—As indicated in the answers to No. 2, changes in the portfolio of United States securities and bankers' acceptances held by all Federal Reserve



Banks have tended to increase or decrease the volume of credit and have had some effect upon rates, and so have tended to influence fluctuations in brokers' loans and fluctuations in security loans and investments of all member banks in the country at large. The direct effect upon member banks in this district we think has never been material, if traceable.

St. Louis.—In the eighth district the effect has been small, even in St. Louis, and practically negligible in other portions of the district.

San Francisco.—The public's desire to share in what was regarded, for a time at least, as a new era of industrial prosperity, has had considerable to do with the change in form of credit from bank loans to securities.

However, during the earlier period under review, the changes in character of Federal reserve assets did not noticeably manifest themselves in important fluctuations in brokers' loans, security loans, and investments of member banks. Later, the release of Federal reserve credit, regardless of whether it took the form of increased discounts or purchase of United States Government obligations or purchase of acceptances, had an expansive effect on credit for which there was an increasing demand by industry for capital purposes.

What may be said for the Nation as a whole is applicable to the twelfth district.

4. Viewed in the light of subsequent events, what policies should the Federal reserve banks have followed in the purchase of United States securit es in 1924 and 1927?

Atlanta.—The objectives which the Federal reserve banks hoped to accomplish through their purchases of United States Government securities in 1924 and 1927 were worthy objectives, and their policies adopted on these occasions were followed by the very beneficial results for which they were intended. That these policies were not allowed to function normally would not affect my opinion that their purpose was valid, and that the attainment of this purpose was beneficial.

Boston.—Both of these purchase operations appear to have been successful. The principal criticism might be with the tardy reversal in the latter part of 1927 when the need for this stimulus had been passed.

Chicago.—It is possible that in 1924 too much money was put into the market by the purchase of Government securities that year and the results might have been more satisfactory if smaller purchases had been made but it was, of course, difficult to determine in advance the extent of the effect the purchases would have on our domestic situation, although it seems that the objects to be attained were accomplished and during a period of speculative demand for money it is not possible to keep funds that are put into the market from getting into speculative channels. In 1927 the danger of putting money into the market was greater than in 1924 as speculation was well under way, and it would now appear that the objects which were accomplished at that time were more than offset by the loss of control of the money-market situation which continued through 1928 up to the fall of 1929.

Cleveland.—In the light of what subsequently transpired, we believe that it would have been better had purchases of securities been suspended earlier in 1924. In 1927, however, we believe that the situation warranted the action taken although, as indicated in reply to question 3, we believe that the sale of securities which took place in early 1928 should have been accomplished by prompt and decisive increases in rediscount rates. Such action was not taken for fear of possible harmful consequences to business but in the light of developments it is believed that whatever harmful effects this might have had would have been preferable to a continuation of the then existing speculative situation and the extremely harmful results which it ultimately brought about.

Dallas.—We have no comment or criticism as to the objective sought by the policy of 1924. It is, however, to some extent, clear that in view of the large gold imports between 1920 and 1924 the purchases of Government securities were excessive and continued over too long a period of time, as a result of the arbitrary determination of the amount purchased. This result was no doubt brought about by a desire on the part of the open-market investment committee to acquire a portfolio for use later on in the correction of any undue ease, but it aggravated and extended if not actually created a period of excessive ease.

In the light of subsequent events the policies formulated and put into practice in August, 1927, probably continued too long—that is, in the initiation of the policy Government securities should have been purchased either in smaller installments or more slowly, so that the effect of the policy could have been more accurately determined before proceeding further in an execution of the policy; or policies should have been modified, tightened, or reversed sooner than they were through an earlier sale. This would have maintained a better balance in the money market. It was not unnatural, with an experience of only 13 years in Federal reserve bank operation, that the amount of credit injected into the market through the purchase of Government securities or the amount of money taken from the market through sales of Government securities would not be accurately determined. Experience since that time tends to indicate that open-market policies once instituted have not been modified or reversed as quickly as they probably should have been.

Though it may not be entirely germane to the question or this discussion, the management of this bank does not feel that it is the function of the Federal reserve system to make a bond market or that artificial ease of the money market should be undertaken in order to induce member banks to buy securities. We rather believe that the bond market, as well as the mortgage market, should depend on the amount of the savings of the country, and therefore the amount of new wealth and the availability of new capital through the sale of securities should be measured accordingly. We think that experience also shows that less initiative on the part of the system than has been exercised in the past is desirable.

Kansas City.—The purchases made in 1927 were advisable, but subsequent events indicate that an effort to bring about firmer money conditions should have been made sooner than was the case. Our ideas relative to purchases made in 1924 are not quite so definite, but the acceleration in the rate of increase in security loans, which began in 1924, may have been due, in part, to the large volume of purchases of Government securities during the first part of the year.

Minneapolis.—Possibly the banks made a mistaken diagnosis of the situation in 1927 and did not put up the rediscount rates early enough or high enough or reduce the holdings of Government securities sufficiently promptly.

New York.—Two general approaches might be taken in a critical review of Federal reserve open-market policy in 1924 and 1927. One approach would involve a study of the correlation between open-market purchases and sales and other economic developments such as the movement of business indexes, commodity prices, bank credit, and the course of speculation. If this approach is taken diagrams 1 and 3 on preceding pages provide most of the necessary data. They show that purchases both in 1924 and 1927 were made at times of business recession, though the recession was more serious in 1924 than in 1927. It is now clear that purchases were continued in 1924 for two or three months after business had begun to improve, though they were discontinued about as soon as the then available statistics clearly indicated the improvement in business. In 1927 purchases were discontinued before there was any marked recovery in business. In both periods the quantities of securities purchased were in general related to the extent of the recession. Total purchases in 1924 were $510,000,000, and those in 1927 were $230,000,000. Comparison may also be made with the movement of bank credit. Such a comparison would lead to the general conclusion that when purchases were begun in 1924 bank credit was relatively stable or declining, but that a rapid increase had taken place before purchases were discontinued. In 1927 bank credit was rising all during the period of purchases. If this criterion alone were applied it might suggest that the 1924 operations were helpful but continued slightly too long, and it might raise some question as to the necessity for the 1927 operations. In addition, however, to these purely domestic considerations it is important to refer also to the gold movement, for in both cases purchases were begun at a time of gold imports which were bringing to this country gold which we did not want and which others could ill afford to lose. In 1924 the gold movement was reversed after the completion of security purchases. In 1927 it was reversed while purchases were still being made. In 1924 this was of special importance because the reversal of movement doubtless facilitated a return of Great Britain to the gold standard. In 1927 the reversal of the gold movement was important because a number of the countries of Europe were under severe credit strain. In both these cases it would be extremely difficult to determine whether as effecitve an influence on the gold movement would have been exerted with a smaller amount of purchases.

A second and different approach to this whole problem would be to view the period since 1922 as a whole and consider the operations of 1924 and 1927 as parts of the larger unit. In the light of subsequent events it appears that this span of years was marked by inflationary tendencies in the United States. The increase of bank credit during the period was more rapid than is usually required by the normal growth of business. This rise in credit was not accompanied by any inflation of commodity prices, but some measure of inflation undoubtedly occurred in other directions, particularly in prices of securities and real estate. From the point of view of our domestic economy considered by itself, a somewhat higher level of money rates and a somewhat smaller growth in bank credit over this entire period would have been wholesome, and there is no doubt but that the open-market operations of 1924 and 1927 were particularly stimulating to the growth in bank credit. But conclusions upon this point must be qualified by a recognition that the domestic economy could not be considered wholly independently of world changes. To the extent that firmer money rates had been maintained here, additional amounts of gold would have been drawn from the rest of the world and credit stringency accentuated in European money centers during the period when European countries were struggling back to monetary stability and attempting to recover from serious economic disorganization. These conditions closely affected American trade and American prices, especially prices of farm products. Even as it was world prices were steadily depressed over most of the period. Moreover, the continued piling up of gold reserves in the United States through gold imports constituted in itself a threat of future inflation. It appeared to be safer at these two periods to establish conditions which would keep the gold out, even at the risk of the dangers of easy money, than to let the gold imports continue. In view of the various aspects of this problem, it is our opinion that purchases of securities in both 1924 and 1927 were most helpful and desirable. There does appear, however, to be valid ground for criticizing succeeding action. The 1924 purchases were carried further than now appears to have been desirable, leading to an unnecessarily rapid growth in bank credit until the reversal of policy in early 1925, which placed an effective check upon expansion. After 1927 there was not sufficiently clear recognition of the dangers in the growth of credit, influenced by speculation. Security sales and discount rate changes similar in amount to those of 1925 proved inadequate when applied in 1928. More vigorous measures were necessary.

Philadelphia.—We feel we have no positive means of determining it and do not feel justified in admitting that there have been any developments during the years 1924 to 1927 to indicate that the right policy had not been followed. It always will be a question whether or not the amount of Federal reserve credit at times required should be put into the market upon the initiative of the Federal reserve banks, i. e., by so-called open-market operations, or by the direct action of member banks through rediscount operations.

Richmond.—In the light of subsequent events, we think United States securities should not have been purchased in these periods, and the aim should have been to decrease rather than augment the total supply of Federal reserve credit.

St. Louis.—Policies when initiated in both 1924 and 1927 were sound. However, in neither year were they reversed soon enough.

San Francisco.—The two periods should be regarded as interrelated. Had the easing policy made effective during the latter part of 1927 been reversed more promptly and vigorously, it would have justified the main courses followed in 1924 and 1927.

5. What changes would you suggest be made in the provisions of the Federal reserve act relative to the purchase and sale of United States Government securities by the reserve banks? Would you favor an amendment to the effect that an affirmative vote of five members of the Federal Reserve Board be required before any large sale or purchase of United States securities be undertaken by the reserve banks?

Atlanta.—I would suggest no change. The open market policy conference, in which each reserve bank is represented, recognizes and preserves the automony of each reserve bank as provided for in the Federal reserve act, and at the same time promulgates a unified system policy that must be approved by the Federal Reserve Board.

Boston.—I do not believe that any changes in the provision of the Federal reserve act relative to the purchase and sale of United States Government securities by the reserve banks are necessary, nor do I believe it desirable for any additional control over the operations of the open market investment committee, representing, as it does, the closest financial touch with the money market. Considering the unsettled conditions of finance throughout the world, in my judgment the operations of the open-market committee have been handled with rather unusual consideration and judgment.

Chicago.—1. No suggestion.

2. No.

Cleveland.—(A) We see no occasion for any change at the present time in the provisions of the act relative to the purchase and sale of United States Government securities by the reserve banks.

(B) We should be opposed to an amendment requiring an affirmative vote of five members of the board before any large scale open-market operations be undertaken by the reserve banks.

Dallas.—(*a*) None. A gradual reduction of the flow of Government securities outstanding would decrease the facility for such sales and purchases and would gradually bring about a greater dependence upon bankers' acceptances as the medium for open-market operations of Federal reserve banks and increase the efficacy of the rediscount rate.

(*b*) No.

Kansas City.—The existing plan, under which major policies are determined by the Open Market Policy Commission and approved by the Federal Reserve Board, should afford ample safeguard against ill-considered actions.

Minneapolis.—No. A large purchase might be imperative to take care of some emergency and five members of the board not be available for such action. At this date there are only five members of the board, and the absence of any one of these from the city would tie the hands of the banks.

New York.—We would not suggest any changes in the provisions of the Federal reserve act relative to the purchase and sale of Government securities. The act is and should be in broad terms, leaving considerable flexibility for the development of proper methods of procedure. This latter problem has offered some difficulties, the major difficulty being that a system operation in Government securities under the present organization has to represent a compromise between divergent views, and system policy, therefore, tends to have too great inertia, to be too slow, and when once started tends to go too far. This difficulty should diminish as time goes on and as experience in operation indicates what gradual modification of procedure will tend to make Federal reserve open-market operations more effective. The requirement that an affirmative vote of five members of the board should be prerequisite to any operation would in our judgment be a step in the wrong direction and make even more difficult the necessary flexibility of operations. In a deliberative body of 8 members of whom 2 are ex officio and engrossed in other duties it is naturally often difficult to secure an attendance of 5 at a meeting and very difficult indeed to secure an affirmative vote of five members for any important proposal affecting varying interests in various ways.

Philadelphia.—Do not favor any changes in the act relative to the purchase and sale of United States Government securities by the reserve banks.

Richmond.—We do not believe that any changes in existing provisions are necessary.

St. Louis.—(1) None.

(2) No.

San Francisco.—No change suggested relative to purchase and sale of United States securities. Would not favor requiring an affirmative vote of five members of Federal Reserve Board before banks may undertake large transactions involving purchase or sale of United States securities. A majority vote of the board is now 5 and the absence of 2 ex officio members and 1 appointed would leave the board unable to function without unanimous agreement, a potentially dangerous situation.

6. Have the resale agreements entered into by the Federal Reserve Banks with dealers in the United States securities tended to offset, on any occasion, the open-market policies of the Federal reserve banks?

Atlanta.—Do not know.

Boston.—The resale agreements by this bank with dealers in United States securities in this market during past years have been so insignificant in amount that it has had little, if any, effect on the Boston market, and I should feel that these resale agreements were so temporary in character and so well within the control of the Federal reserve banks that they could not have offset any policy agreed upon by the Federal reserve banks.

Chicago.—The volume of resale agreements with Federal reserve banks by dealers in United States securities has not been large enough at any time to have interfered with the open-market policies of the Federal reserve system.

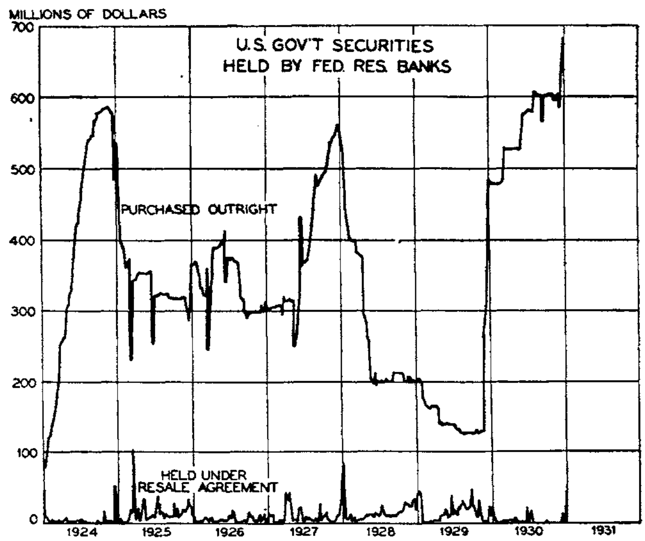
Cleveland.—We have no local transactions of this type. There are no recognized dealers in Government securities in this district, other than a few local offices of New York houses. For these reasons we are without experience upon which to base a reply to questions 6 to 11, both inclusive.

Dallas.—Not to any great extent. At year-end periods repurchase agreements increase in volume and offset to that extent the purchases of Government securities which otherwise might be made by the open-market committee.

Kansas City.—We have had no resale agreements with dealers in United States securities in this district.

Minneapolis.—As resale agreements are made only by and with the approval of the Federal reserve banks and are in no way compulsory, it seems inconceivable that the banks would by indirection take action which would interfere with or negative the policy they were trying to carry out.

New York.—The relationship between operations representing policy decisions of the reserve system and purchases on sales contracts subject to resale agreement is shown on the accompanying diagram. It indicates clearly that pur-



Government securities purchased outright by the reserve banks compared with amounts purchased under resale agreement (weekly data)

chases on sales contracts subject to resale agreement have been so small in amount and so timed in connection with seasonal currency and credit requirements that they have not interfered with major-policy operations.

Philadelphia.—They might, but we do not know that they have.

Richmond.—We have made no resale agreements in this district, and so far as we are aware such agreements have not tended to affect in any material manner the open-market policies of the Federal reserve banks.

St. Louis.—Have had no resale agreements with dealers in United States securities in this district.

San Francisco.—Can not recall any instance in which it was noticed that open-market policies were offset by any Federal reserve bank or banks taking United States securities under resale agreements. Do not believe, however, Federal reserve banks should acquire or sell United States Government securities under repurchase agreements.

7. List on an attached schedule the changes in rates of interest charged dealers in United States securities against resale agreements from the inception of such arrangements by your institution.

Atlanta.—No such resale agreements have been made in this district.

Boston.—

Changes in rates of interest charged dealers in United States securities against resale agreements from the inception of such agreements by this institution

Date	All issues	Certificates of indebtedness	Treasury notes	Coupon rate
	Per cent	*Per cent*	*Per cent*	
Nov. 22, 1921				(1)
Aug. 22, 1922 [2]		3½	4	
Nov. 6, 1922 [2]		3¾	4¼	
Dec. 18, 1922 [2]		4	4¼	
Feb. 23, 1923 [2]	4½			
June 12, 1924 [2]	3½			
Dec. 16, 1925 [2]	3¾			
Jan. 8, 1926 [2]	4			
Aug. 5, 1927	3½			
Feb. 8, 1928	4			
Apr. 20, 1928	4½			
July 19, 1928	5			
Aug. 9, 1929	5⅛			
Nov. 21, 1929	4½			
Feb. 13, 1930	4			
May 8, 1930	3½			
July 3, 1930	3			

[1] From the inception of the resale agreements until Aug. 22, 1922, United States securities were pur chased at the coupon rate of the security purchased. During this period United States securities were purchased at the following rates: 3½, 4¼, 4⅜, 4½, 4¾, 5, 5¼, 5½, 5¾, and 6.
[2] From Sept. 27, 1922, to Jan. 8, 1926, it was the policy of this bank to charge dealers one-quarter of 1 per cent above the then existing carrying rate on any renewal granted.

Chicago.—

Rates on sales contracts with dealers in United States securities

	Per cent
Nov. 2, 1921, to Sept. 30, 1925	(1)
Oct. 1, 1925, to Jan. 8, 1926	3½
Jan 9, 1926, to Apr. 27, 1926	4
Apr. 28, 1926, to Aug. 12, 1926	3½
Aug. 13, 1926, to Sept. 9, 1927	4
Sept. 12, 1927, to Jan. 25, 1928	3½
Jan 26, 1928, to Apr. 20, 1928	4
Apr. 21, 1928, to July 10, 1928	4½
July 11, 1928, to Nov. 22, 1929	5
Nov. 24, 1929, to Feb. 8, 1930	4½
Feb. 9, 1930, to June 21, 1930	4
June 22, 1930, to Dec. 31, 1930	3½

Since October 1, 1925, advances made to dealers have been at the same rate as our discount rate.

Cleveland.—None. See answer to question 6.

Dallas.—Up to about three years ago we permitted the execution of repurchase agreements on Government securities sold to us by member banks that actively dealt in Government securities, but these advances were made at the rediscount rate. We discontinued this practice, however, and at present there are no active dealers in Government securities in this district in the sense in which the term is used in your question.

Kansas City.—None.

Minneapolis.—This bank has not carried United States securities under repurchase agreements.

[1] Coupon rate of the issue.

New York.—

Changes in rates at which United States Government securities were purchased from dealers under sales contract agreements and the rediscount rates for corresponding periods.

Date effective	Discount rate	Sales contract rate	Date effective	Discount rate	Sales contract rate
Jan. 23, 1920	6	----------	Feb. 27, 1925	3½	----------
Apr. 13, 1920[1]	----------	5⅛	Apr. 9, 1925	----------	3½
June 1, 1920	7	----------	Jan. 8, 1926	4	4
Apr. 1, 1921	----------	5¾	Apr. 23, 1926	3½	----------
May 5, 1921	6½	----------	Apr. 29, 1926	----------	3½
June 16, 1921	6	----------	Aug. 13, 1926	4	4
July 21, 1921	5½	----------	Aug. 5, 1927	3½	3½
Aug. 2, 1921	----------	5¼	Feb. 3, 1928	4	4
Sept. 22, 1921	5	----------	May 18, 1928	4½	4½
Oct. 31, 1921	----------	4½	July 13, 1928	5	5
Nov. 3, 1921	4½	----------	Aug. 9, 1929	6	5⅛
Mar. 23, 1922	----------	4	Oct. 25, 1929	----------	5
June 22, 1922	4	----------	Nov. 1, 1929	5	----------
Feb. 23, 1923	4½	----------	Nov. 15, 1929	4½	4½
Apr. 10, 1923	----------	4½	Feb. 7, 1930	4	4
May 1, 1924	4	4	Mar. 14, 1930	3½	3½
June 12, 1924	3½	----------	May 2, 1930	3	3
Aug. 8, 1924	3	----------	June 20, 1930	2½	2½
Nov. 6, 1924	----------	2½	Dec. 23, 1930	----------	2
Nov. 28, 1924	----------	3	Dec. 24, 1930	2	----------

[1] Date of first sales contract agreement with dealers.

Philadelphia.—We never have held any appreciable amount of securities under repurchase agreement, so have no schedule to submit.

Richmond.—This bank has never had such arrangements.

St. Louis.—No such arrangements.

San Francisco.—San Francisco has not engaged in this practice.

8. List the names of the recognized dealers in United States securities in your district. What net worth must a recognized dealer possess? What other standards has your institution set up in determining whether a dealer in United States securities is to be recognized or not?

Atlanta.—There are no recognized dealers in United States securities in this district.

Boston.—The names of the recognized dealers in United States securities in this district are as follows: First National Old Colony Corporation, Shawmut Corporation of Boston, Salomon Bros. & Hutzler, R. L. Day & Co., C. F. Childs & Co., Gertler Devlet & Co.

We do not require any stated amount of net worth. While the net worth must be substantial in amount and adequate for the volume of business transacted and the character of assets of such grade as to enable the dealer to readily take care of his obligations, the dealer must possess sufficient knowledge and experience to warrant recognition.

Chicago.—Bankers Co., of New York,[1] C. F. Childs & Co., Continental Illinois Co., First National Old Colony Corporation of Boston, Salmon Bros. & Hutzler.

We have never fixed a limit of the amount of capital necessary for a dealer in Government securities to have before being recognized as such as long as they are able to establish credit at local banks in amount sufficient to enable them to carry a portfolio of securities to supply the demand arising in this district. We have maximum amounts of advances we will make to any dealer of $2,000,000, and the issues we will purchase under sales contracts are restricted to short-term certificates and notes. In recognizing dealers in Government securities, the same principle would apply for both acceptances and Government securities; that is, dealers should be in a position to make a market for round amounts of all issues, and publish and circulate regular quotations.

[1] The Bankers Co. of New York and the Continental Illinois Co. of Chicago are considered dealers in Government securities in this market, but we make no sales contracts with either of these companies.

Cleveland.—None in this district other than a few local offices of New York houses. See answer to question 6.

Dallas.—See answer to question 7.

Kansas City.—Since we have entered into no purchase and resale agreements with dealers in this district, we assume this question does not apply to us.

Minneapolis.—There are no recognized dealers in United States securities in this district other than the local representatives of New York and Chicago houses. As we do not carry any securities for dealers, we have not set up any requirements.

New York.—(The Federal Reserve Bank of New York requested that its reply to this question be omitted.)

Philadelphia.—Same answer as No. 7.

Richmond.—In this district we have not what may properly be called recognized dealers in United States securities, although some of the larger dealers of other districts have branch offices in one or two of the largest cities in this district.

St. Louis.—No occasion to determine requirements of a recognized dealer.

San Francisco.—See answer as to question 7.

9. What margin requirements do you habitually exact in lending to dealers in United States securities under the resale agreements?

Atlanta.—No resale agreements are made in this district.

Boston.—As the average life of a resale agreement on United States securities is only 7.8 days, we do not require any marginal collateral when the market price of the United States securities purchased is 100 or better. When the price of the United States securities is less than 100, we buy them at approximately one-half a point under the market value and carry them on our books at a book value equal to the purchase price. Renewals, if granted, would be taken based on the market value of the security at the time of the renewal.

Chicago.—As stated in question No. 8, we purchase only limited amounts of the short maturities of United States Treasury certificates and notes, and where these issues are selling at par or better we advance the face amount to the dealer under sales contract. Where the market is below par we ask at least one point in excess of the amount advanced to secure the sales contract.

Cleveland.—See answer to question 6.

Dallas.—See answer to question 7.

Kansas City.—None. See question 6.

Minneapolis.—See answer to question 7.

New York.—We do not make loans to dealers. Under the terms of our sales contract we purchase securities from dealers subject to their agreement to repurchase a like amount of the same securities at the same price plus interest at the agreed rate at or before the expiration of 15 days from the date of the original purchase. When the market value of the securities is par or better, securities are purchased at par. When the market is below par, they are purchased at prices slightly below the market value, the average price being approximately one-half point below market value. A list of illustrative cases follows:

Illustrations of Government securities purchased under sales contracts

Date purchased	Securities purchased	Dated	Due	Series	Par value
	Per cent				
Nov. 14, 1928	3½ T/N	Mar. 15, 1927	Mar. 15, 1932	A–1932	$1,900,000.00
Mar. 5, 1929	4¼ C/I	Dec. 15, 1928	Sept. 15, 1929	TS2–1929	500,000.00
May 7, 1929	4¾ C/I	Mar. 15, 1929	Dec. 15, 1929	TD2–1929	700,000.00
Do	3½ T/N	Sept. 15, 1927	Sept. 15, 1932	B–1932	150,000.00
July 15, 1929	3½ T/N	Mar. 15, 1927	Mar. 15, 1932	A–1932	1,900,000.00
Do	4¾ C/I	Mar. 15, 1929	Dec. 15, 1929	TD2–1929	400,000.00
Dec. 6, 1929	3½ T/N	Mar. 15, 1927	Mar. 15, 1932	A–1932	1,050,000.00
Do	3½ T/N	Sept. 15, 1927	Sept. 15, 1932	B–1932	350,000.00

Illustrations of Government securities purchased under sales contracts—Con.

Date purchased	Price purchased under sales contract	Amount paid to dealer	Market price on purchase date	Market value excluding interest accrued on securities
Nov. 14, 1928	97½	$1,852,500.00	97 31/32	$1,861,406.25
Mar. 5, 1929	99½	497,500.00	99 22/32	498,437.50
May 7, 1929	99½	696,500.00	99 26/32	698,687.50
Do	96½	144,750.00	96 28/32	145,312.50
July 15, 1929	97	1,843,000.00	97 30/32	1,860,812.50
Do	100	400,000.00	100 2/32	400,250.00
Dec. 6, 1929	99½	1,044,750.00	99 26/32	1,048,031.25
Do	99½	348,250.00	99 26/32	349,343.75

Philadelphia.—Same answer as No. 7.

Richmond.—We have no such agreements in this district.

St. Louis.—No such arrangements.

San Francisco.—See answer to question 7.

10. What is the average length of life of the resale agreements entered into with dealers in United States securities?

Atlanta.—No such transactions are made in this district.

Boston.—The average length of life of a resale agreement entered into with dealers in this district in United States securities is 7.8 days.

Chicago.—The average life of a sales contract could be estimated as approximately three days, although for the most part securities are held with us only overnight.

Cleveland.—See answer to question 6.

Dallas.—See answer to question 7.

Kansas City.—See answer to question 6.

Minneapolis.—See answer to question 7.

New York.—Average length of life of resale agreements entered into by the Federal Reserve Bank of New York with dealers in United States Government securities since January, 1922, computed for two months of each year as a sample: 1922, 7½ days; 1923, 5½ days; 1924, 3½ days; 1925, 6 days; 1926, 4 days; 1927, 6 days; 1928, 5½ days; 1929, 4 days; 1930, 4½ days. Average (unweighted) life of agreements for entire period, 5 days.

Philadelphia.—Same answer as to No. 7.

Richmond.—See answer to question 9.

St. Louis.—No such arrangements.

San Francisco.—See answer to question 7.

11. In lending to dealers in United States securities under resale agreements, what precautions does your institution take in preventing Federal reserve credit from seeping into the speculative or investment markets?

Atlanta.—No such transactions are made in this district.

Boston.—We have had practically no experience in lending to dealers in United States securities under resale agreements within recent years, and these resale agreements in the past were always for a very short period, and we have never made any effort to follow the use that was made by those dealers of such Federal reserve credit as they had obtained.

Chicago.—We do not see how lending to dealers in United States securities under resale agreements can have any effect on the amount of credit in speculative or investment markets, as the dealers are carrying United States securities for the purpose of selling them as promptly as possible, their business depending largely on the volume of quick turnover, rather than to maintain a speculative position in such securities. Generally speaking, these dealers are not interested in the prices of stocks, as their operations are principally in Government securities and short-term obligations, which are regarded as nonspeculative.

Cleveland.—See answer to question 6.

Dallas.—See answer to question 7.

Kansas City.—See answer to question 6.

Minneapolis.—See answer to question 7.

New York.—As stated in the answer to the last question, we do not make loans to dealers but we purchase securities from dealers subject to their agreement to repurchase a like amount of the same securities at the same price plus interest at the agreed rate at or before the expiration of 15 days from the date of the original purchase. As far as the first use of the credit put out in this way is concerned, we are constantly informed as to the business of the dealers entitled to the sales-contract privilege and know that they only secure funds from us to carry their portfolios of Government securities. As to the eventual destination of Federal reserve credit put into use through purchases of securities under sales contract the principles set forth in the reply to question 7 of questionnaire 7 are applicable. The destination is the same as that of Federal reserve credit put into use through discounts or through any of the other channels. The dealer who receives a Federal reserve check as a result of a sales-contract operation uses the funds either to pay off a bank loan or to pay for Government securities which he has purchased. If he uses it to pay off a bank loan, the bank finds itself in possession of a check on a reserve bank, which it promptly deposits to its account in a reserve bank, and thus finds itself with its reserve deposit increased exactly as though it had obtained funds by discounting.

In the alternative case, in which the dealer uses the Federal reserve check to pay a seller of Government securities, the seller of these securities, if not a bank, deposits the funds in a bank, and the funds immediately find their way into that bank's reserve deposit account at the reserve bank, just as though that bank had borrowed. Thus the Federal reserve funds put into use through sales-contract operations flow into the same channel as those put out in other ways, and the considerations set forth in the replies to questions 7 and 8 in questionnaire 7 are applicable. It also may be noted that dealers only come into the Federal reserve bank to secure funds under sales-contract arrangements when they can not obtain money at favorable rates outside the Federal reserve banks. This means that they come in only at times when money is relatively firm, and at such times the member banks are almost always in debt at the reserve banks, and Federal reserve funds which they receive are used to retire debt at the reserve banks. Moreover, funds put out in this way are withdrawn again so promptly that they can hardly form a basis for new creation of credit. These Federal reserve assets are liquidated more rapidly than any other assets the reserve banks possess.

Philadelphia.—Same answer as No. 7.

Richmond.—We have no such agreements.

St. Louis.—No resale agreements.

San Francisco.—See answer to question 7.

Statistical Appendix

1. As of the end of each month since January, 1922, give on an attached schedule:

(*a*) The amount of United States securities held in the portfolio of your reserve bank which were purchased through the open market investment committee.

(*b*) The amount of United States securities held which were purchased locally or independently of the open market investment committee.

(*c*) The amount of resale agreements entered into with dealers in United States securities.

FEDERAL RESERVE BANK OF ATLANTA

(a) Amount of United States securities held in portfolio of bank which were purchased through the open-market investment committee as of the end of each month since January, 1922

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January					14,008		7,053	2,208	6,226
February				813	12,097		6,415	1,271	6,226
March				738	12,528		6,230	1,102	6,228
April				1,023			3,753	685	6,228
May				13,926		4,323	2,031	597	6,228
June				12,132		4,889	2,091	510	8,824
July				12,054		5,794	2,103	510	8,824
August				11,983		9,954	2,280	815	10,147
September				12,097		9,887	1,992	820	10,147
October				12,097		9,791	2,080	4,197	10,147
November				12,097		9,860	2,300	6,226	5,147
December				15,097		9,936	2,208	6,226	5,147

(*b*) *Amount of United States securities held which were purchased locally or independently of the open-market investment committee as of the end of each month since January, 1922*

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	12,781	3,541	2,738	3,366	2,818	1,799	3,542	2,661	2,562
February	7,981	9,990	4,685	2,713	3,072	2,222	3,600	2,554	2,588
March	7,444	2,521	5,607	3,029	4,102	2,469	2,665	2,628	2,564
April	7,563	668	107	2,801	3,463	3,962	3,177	2,555	2,565
May	7,009	488	78	2,863	3,804	5,335	3,221	2,555	2,614
June	8,912	361	93	2,119	2,338	4,796	6,316	2,809	2,603
July	8,359	240	1,596	2,341	1,888	4,833	3,115	2,546	2,623
August	7,240	249	2,231	2,414	1,884	4,659	3,097	2,568	2,557
September	5,192	223	3,082	2,075	1,821	3,214	3,454	2,777	2,559
October	4,665	243	3,271	2,827	2,208	3,937	3,190	2,561	2,547
November	3,693	238	3,966	3,139	1,872	5,054	3,066	2,711	2,550
December	2,371	384	3,785	4,667	1,890	3,650	5,047	3,718	2,730

(*c*) *Amount of resale agreements entered into with dealers in United States securities as of the end of each month since January, 1922*

None.

FEDERAL RESERVE BANK OF BOSTON

United States securities held in investment account at the close of business on the last day of each month since January, 1922:

(*a*) *The amount of United States securities held in portfolio purchased through the open-market investment committee.*

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	--------	--------	4,307	21,094	5,170	8,810	23,191	6,585	26,129
February	--------	--------	7,753	18,985	1,985	8,766	21,091	3,790	26,680
March	--------	--------	16,047	17,241	2,486	9,044	20,496	3,280	39,616
April	--------	--------	19,978	17,580	12,054	8,826	12,346	2,049	39,616
May	--------	--------	25,125	339	12,054	11,969	6,678	1,779	39,616
June	--------	--------	29,167	293	12,054	13,537	6,873	1,509	43,555
July	--------	--------	33,838	293	12,054	14,996	6,913	1,509	43,555
August	--------	--------	34,681	292	9,773	21,704	8,114	3,110	45,473
September	--------	--------	35,294	1,985	8,592	23,092	6,734	2,646	45,473
October	--------	--------	35,294	1,985	8,767	28,851	6,187	6,322	45,473
November	--------	--------	34,584	1,985	8,809	31,821	6,842	11,389	47,058
December	--------	--------	31,676	6,985	9,306	32,669	6,585	25,106	49,236

(*b*) *The amount of United States securities held, which were purchased locally or independently of the open-market investment committee.*

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	37,485	27,443	3,575	3,575	5,237	848	708	1,607	762
February	38,265	27,443	3,575	3,575	5,237	848	708	1,607	762
March	36,537	10,068	3,573	3,575	5,236	548	707	2,057	707
April	49,629	5,374	3,573	3,575	5,236	548	707	2,058	707
May	48,529	5,373	3,573	3,573	5,535	547	706	2,055	707
June	45,940	3,572	3,571	5,061	845	707	704	1,759	706
July	47,942	3,570	3,571	4,908	845	706	728	1,758	705
August	48,404	3,569	3,570	4,907	844	705	703	1,756	704
September	27,887	3,568	3,569	5,235	843	705	702	756	704
October	26,490	3,560	3,561	5,234	842	703	701	755	701
November	18,679	3,560	3,561	5,226	829	689	689	744	689
December	27,429	5,810	3,575	5,218	829	689	1,589	744	689

(c) The amount of resale agreements entered into with dealers in United States securities

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928	1929	1930
January		1,626	910	245		95			
February		749		192	839	655			
March			710	135	45	192	436		
April		169		18		906		47	
May		256		370					
June		474		1,574				28,121	
July		475		3,375					
August	570	214		1,178					
September	2,263	385		545	100	627	643		
October	1,054	1,085		1,644		817			
November	1,047	1,075	400	1,565		1,725			
December	2,165	4,052	1,410	532	30				

FEDERAL RESERVE BANK OF CHICAGO

United States securities held by Federal Reserve Bank of Chicago which were purchased by the open market investment committee

Jan. 31, 1922, to Dec. 31, 1923	None.
Jan. 31, 1924	$8,357,800
Feb. 29, 1924	15,043,600
Mar. 31, 1924	31,118,200
Apr. 30, 1924	38,699,300
May 31, 1924	48,616,500
June 30, 1924	54,651,600
July 31, 1924	65,862,600
Aug. 30, 1924	67,884,600
Sept. 30, 1924	70,258,500
Oct. 31, 1924	70,258,500
Nov. 29, 1924	68,849,000
Dec. 31, 1924	63,076,500
Jan. 31, 1925	42,072,000
Feb. 28, 1925	37,865,000
Mar. 31, 1925	34,387,000
Apr. 30, 1925	35,064,000
May 29, 1925	24,064,000
June 30, 1925	20,826,500
July 31, 1925	20,826,500
Aug. 31, 1925	20,703,500
Sept. 30, 1925	22,010,500
Oct. 31. 1925	22,010,500
Nov. 30, 1925	22,010,500
Dec. 31, 1925	31,010,500
Jan. 30, 1926	27,743,500
Feb. 27, 1926	22,010,500
Mar. 31, 1926	23,011,500
Apr. 30, 1926	36,071,000
May 29, 1926	36,071,000
June 30, 1926	36,072,500
July 31, 1926	36,072,500
Aug. 31, 1926	29,243,500
Sept. 30, 1926	25,708,500
Oct. 30, 1926	26,233,000
Nov. 30, 1926	26,360,000
Dec. 31, 1926	27,847,500
Jan. 31, 1927	26,364,500
Feb. 28, 1927	26,233,500
Mar. 31, 1927	27,062,500
Apr. 30, 1927	26,409,500
May 31, 1927	29,813,000
June 30, 1927	$33,719,500
July 30, 1927	36,471,500
Aug. 31, 1927	49,122,000
Sept. 30, 1927	50,542,500
Oct. 31, 1927	58,106,000
Nov. 30, 1927	63,368,000
Dec. 31, 1927	65,215,500
Jan. 31, 1928	46,294,500
Feb. 29, 1928	42,102,500
Mar. 31, 1928	40,911,500
Apr. 30, 1928	24,645,500
May 31, 1928	13,330,500
June 30, 1928	13,720,000
July 31, 1928	13,801,000
Aug. 31, 1928	12,258,500
Sept. 29, 1928	12,258,500
Oct. 31, 1928	12,402,500
Nov. 30, 1928	13,717,000
Dec. 31, 1928	13,197,500
Jan. 31, 1929	13,197,500
Feb. 28, 1929	7,594,500
Mar. 30, 1929	6,571,500
Apr. 30, 1929	4,103,500
May 31, 1929	3,562,500
June 29, 1929	3,021,500
July 31, 1929	3,021,500
Aug. 31, 1929	5,628,000
Sept. 30, 1929	4,947,000
Oct. 31, 1929	12,296,000
Nov. 30, 1929	22,055,000
Dec. 31, 1929	48,473,000
Jan. 31, 1930	50,448,500
Feb. 28, 1930	51,412,000
Mar. 31, 1930	50,456,500
Apr. 30, 1930	50,456,500
May 31, 1930	50,456,500
June 30, 1930	57,629,500
July 31, 1930	57,629,500
Aug. 30, 1930	61,201,000
Sept. 30, 1930	61,201,000
Oct. 31, 1930	61,201,000
Nov. 29, 1930	64,259,500
Dec. 31, 1930	62,675,500

United States securities purchased and held by the Federal reserve bank, Chicago

Jan. 31, 1922	$44,863,100
Feb. 28, 1922	67,255,350
Mar. 31, 1922	82,293,750
Apr. 29, 1922	91,051,850
May 31, 1922	95,167,900
June 30, 1922	49,798,550
July 31, 1922	31,227,600
Aug. 31, 1922	34,672,600
Sept. 30, 1922	31,974,600
Oct. 31, 1922	41,348,600
Nov. 29, 1922	38,948,600
Dec. 30, 1922	50,001,900
Jan. 31, 1923	67,223,600
Feb. 28, 1923	72,187,400
Mar. 31, 1923	41,796,900
Apr. 30, 1923	24,047,900
May 31, 1923	24,050,900
June 30, 1923	6,257,900
July 31, 1923	6,527,900
Aug. 31, 1923	6,257,900
Sept. 29, 1923	6,257,900
Oct. 31, 1923	6,257,900
Nov. 30, 1923	6,257,900
Dec. 31, 1923	6,557,900
Jan. 31, 1924	6,257,900
Feb. 29, 1924	6,257,900
Mar. 31, 1924	6,257,900
Apr. 30, 1924	6,257,900
May 31, 1924	6,257,900
June 30, 1924	6,257,900
July 31, 1924	6,504,900
Aug. 30, 1924	7,381,000
Sept. 30, 1924	11,029,300
Oct. 31, 1924	14,881,550
Nov. 29, 1924	16,439,800
Dec. 31, 1924	17,293,500
Jan. 31, 1925	17,260,100
Feb. 28, 1925	19,260,100
Mar. 31, 1925	17,272,600
Apr. 30, 1925	17,516,100
May 29, 1925	17,516,100
June 30, 1925	18,673,650
July 31, 1925	19,161,000
Aug. 31, 1925	19,690,000
Sept. 30, 1925	19,999,300
Oct. 31, 1925	19,999,300
Nov. 30, 1925	19,999,300
Dec. 31, 1925	20,186,800
Jan. 30, 1926	19,986,800
Feb. 27, 1926	19,986,800
Mar. 31, 1926	19,986,800
Apr. 30, 1926	19,986,800
May 29, 1926	19,986,800
June 30, 1926	19,986,800
July 31, 1926	$19,986,800
Aug. 31, 1926	19,986,800
Sept. 30, 1926	19,986,800
Oct. 30, 1926	19,986,800
Nov. 30, 1926	19,986,800
Dec. 31, 1926	19,927,400
Jan. 31, 1927	19,927,400
Feb. 28, 1927	19,927,400
Mar. 31, 1927	19,935,900
Apr. 30, 1927	19,935,900
May 31, 1927	19,935,900
June 30, 1927	19,927,400
July 30, 1927	19,927,400
Aug. 31, 1927	19,927,400
Sept. 30, 1927	19,933,700
Oct. 31, 1927	19,931,200
Nov. 30, 1927	19,927,400
Dec. 31, 1927	19,927,400
Jan. 31, 1928	19,927,400
Feb. 29, 1928	19,927,400
Mar. 31, 1928	19,927,400
Apr. 30, 1928	19,927,400
May 31, 1928	19,927,400
June 30, 1928	19,927,400
July 31, 1928	19,927,400
Aug. 31, 1928	19,927,400
Sept. 29, 1928	19,927,400
Oct. 31, 1928	19,927,400
Nov. 30, 1928	19,927,400
Dec. 31, 1928	19,937,400
Jan. 31, 1929	19,937,400
Feb. 28, 1928	19,937,400
Mar. 30, 1929	19,937,400
Apr. 30, 1929	19,937,400
May 31, 1929	19,937,400
June 29, 1929	19,937,400
July 31, 1929	19,937,400
Aug. 31, 1929	19,937,400
Sept. 30, 1929	19,937,400
Oct. 31, 1929	19,937,400
Nov. 30, 1929	19,927,400
Dec. 31, 1929	19,927,400
Jan. 31, 1930	19,927,400
Feb. 28, 1930	19,927,400
Mar. 31, 1930	19,927,400
Apr. 30, 1930	19,927,400
May 31, 1930	19,927,400
June 30, 1930	19,927,400
July 31, 1930	19,927,400
Aug. 30, 1930	19,927,400
Sept. 30, 1930	19,927,400
Oct. 31, 1930	19,927,400
Nov. 29, 1930	19,927,400
Dec. 31, 1930	19,927,400

United States securities purchased and held by the Federal Reserve Bank, Chicago, under repurchase agreement

Jan. 31, 1922	$456,000	July 31, 1926	$1,128,000
Feb. 28, 1922	1,585,000	Aug. 31, 1926	1,895,000
Mar. 31, 1922	6,278,200	Sept. 30, 1926	970,000
Apr. 29, 1922	3,131,900	Oct. 30, 1926	1,766,000
May 31, 1922	1,793,100	Nov. 30, 1926	1,935,000
June 30, 1922	7,625,900	Dec. 31, 1926	983,000
July 31, 1922	2,782,100	Jan. 31, 1927	1,130,000
Aug. 31, 1922	3,330,000	Feb. 28, 1927	340,000
Sept. 30, 1922	6,261,400	Mar. 31, 1927	3,558,250
Oct. 31, 1922	1,545,200	Apr. 30, 1927	1,920,000
Nov. 29, 1922	1,004,500	May 31, 1927	1,183,000
Dec. 30, 1922	12,830,900	June 30, 1927	1,617,000
Jan. 31, 1923	741,000	July 30, 1927	5,681,900
Feb. 28, 1923	2,313,100	Apg. 31, 1927	1,860,000
Mar. 31, 1923	5,025,600	Sept. 30, 1927	3,856,450
Apr. 30, 1923	1,587,550	Oct. 31, 1927	1,600,000
May 31, 1923	3,394,400	Nov. 30, 1927	720,000
June 30, 1923	5,168,700	Dec. 31, 1927	4,855,000
July 31, 1923	4,040,200	Jan. 31, 1928	2,000,000
Aug. 31, 1923	3,460,400	Feb. 29, 1928	2,750,000
Sept. 29, 1923	2,170,700	Mar. 31, 1928	870,000
Oct. 31, 1923	3,411,000	Apr. 30, 1928	1,070,000
Nov. 30, 1923	1,481,700	May 31, 1928	2,000,000
Dec. 31, 1923	4,198,900	June 30, 1928	2,100,000
Jan. 31, 1924	1,232,200	July 31, 1928	970,000
Feb. 29, 1924	1,259,800	Aug. 31, 1928	2,000,000
Mar. 31, 1924	1,626,300	Sept. 29, 1928	3,145,000
Apr. 30, 1924	909,000	Oct. 31, 1928	1,995,000
May 31, 1924	309,000	Nov. 30, 1928	3,165,000
June 30, 1924	None.	Dec. 31, 1928	2,715,000
July 31, 1924	None.	Jan. 31, 1929	2,710,000
Aug. 30, 1924	None.	Feb. 28, 1929	None.
Sept. 30, 1924	None.	Mar. 30, 1929	None.
Oct. 31, 1924	None.	Apr. 30, 1929	2,545,000
Nov. 29, 1924	None.	May 31, 1929	800,000
Dec. 31, 1924	None.	June 29, 1929	2,420,000
Jan. 31, 1925	1,050,000	July 31, 1929	2,339,500
Feb. 28, 1925	None.	Aug. 31, 1929	1,020,000
Mar. 31, 1925	285,000	Sept. 30, 1929	355,000
Apr. 30, 1925	447,500	Oct. 31, 1929	150,000
May 29, 1925	286,000	Nov. 30, 1929	920,000
June 30, 1925	2,533,000	Dec. 31, 1929	446,000
July 31, 1925	1,534,500	Jan. 31, 1930	100,000
Aug. 31, 1925	2,608,500	Feb. 28, 1930	40,000
Sept. 30, 1925	1,214,500	Mar. 31, 1930	210,000
Oct. 31, 1925	3,809,000	Apr. 30, 1930	80,000
Nov. 30, 1925	4,165,500	May 31, 1930	695,000
Dec. 31, 1925	1,605,000	June 30, 1930	330,000
Jan. 30, 1926	1,205,000	July 31, 1930	200,000
Feb. 27, 1926	670,000	Aug. 30, 1930	75,000
Mar. 31, 1926	2,210,000	Sept. 30, 1930	320,000
Apr. 30, 1926	2,860,000	Oct. 31, 1930	None.
May 29, 1926	340,000	Nov. 29, 1930	None.
June 30, 1926	1,961,000	Dec. 31, 1930	7,000,000

FEDERAL RESERVE BANK OF CLEVELAND

Holdings of United States securities last reporting date of each month

	Bought locally	Bought through open-market investment committee
1922		
January	$21, 724, 300	----------
February	37, 460, 800	----------
March	46, 311, 800	----------
April	59, 752, 800	----------
May	72, 510, 800	----------
June	75, 821, 200	----------
July	75, 847, 700	----------
August	70, 714, 700	----------
September	59, 699, 100	----------
October	43, 551, 100	----------
November	26, 684, 800	----------
December	25, 739, 000	----------
1923		
January	26, 324, 400	----------
February	37, 569, 800	----------
March	21, 300, 100	----------
April	17, 564, 600	----------
May	19, 469, 300	----------
June	10, 400, 600	----------
July	10, 201, 600	----------
August	10, 243, 600	----------
September	10, 289, 100	----------
October	10, 562, 100	----------
November	10, 763, 100	----------
December	11, 195, 100	----------
1924		
January	11, 334, 100	$4, 973, 600
February	11, 334, 100	8, 952, 500
March	11, 930, 100	18, 613, 000
April	11, 935, 600	23, 163, 000
May	11, 947, 600	29, 113, 800
June	6, 715, 600	33, 858, 600
July	9, 097, 600	45, 069, 600
August	9, 292, 600	46, 923, 100
September	11, 451, 600	50, 290, 500
October	14, 463, 100	50, 290, 500
November	14, 745, 600	49, 288, 500
December	14, 866, 400	45, 183, 500
1925		
January	15, 098, 900	30, 251, 500
February	15, 098, 900	27, 226, 500
March	14, 722, 900	24, 726, 500
April	14, 723, 900	25, 209, 900
May	14, 732, 900	12, 920, 000
June	18, 581, 400	11, 182, 500
July	19, 531, 400	11, 182, 500
August	19, 531, 400	11, 116, 500
September	19, 323, 900	11, 651, 500
October	19, 328, 900	11, 651, 500
November	18, 778, 900	11, 651, 500
December	18, 757, 900	17, 651, 500
1926		
January	18, 832, 400	15, 473, 500
February	19, 907, 400	11, 651, 500
March	17, 861, 700	12, 367, 500
April	18, 957, 700	18, 152, 500
May	19, 081, 050	18, 152, 500
June	19, 262, 050	18, 152, 500
1926		
July	$20, 265, 550	$18, 152, 000
August	20, 465, 550	14, 716, 000
September	20, 188, 050	12, 938, 000
October	21, 488, 050	13, 202, 000
November	22, 093, 050	13, 268, 000
December	22, 139, 650	14, 015, 000
1927		
January	22, 129, 650	13, 269, 000
February	23, 295, 700	13, 202, 500
March	23, 314, 000	13, 620, 000
April	23, 388, 200	13, 291, 500
May	23, 397, 700	17, 558, 000
June	24, 614, 150	19, 858, 000
July	24, 695, 250	21, 330, 000
August	24, 775, 250	28, 093, 000
September	25, 532, 600	29, 277, 500
October	26, 100, 100	32, 739, 500
November	26, 200, 800	34, 656, 000
December	26, 235, 600	35, 275, 000
1928		
January	26, 965, 600	25, 041, 500
February	26, 865, 600	22, 774, 000
March	26, 308, 600	22, 128, 500
April	26, 308, 600	13, 320, 000
May	26, 308, 600	7, 208, 000
June	26, 435, 600	7, 418, 500
July	26, 435, 600	7, 462, 000
August	26, 478, 700	8, 757, 700
September	27, 071, 100	7, 268, 500
October	26, 482, 800	6, 803, 000
November	26, 482, 800	7, 524, 000
December	25, 738, 800	7, 223, 000
1929		
January	25, 738, 800	7, 223, 000
February	25, 738, 800	4, 157, 000
March	25, 710, 800	3, 614, 500
April	25, 710, 800	2, 251, 500
May	25, 710, 800	1, 954, 500
June	25, 706, 700	1, 658, 000
July	25, 706, 700	1, 658, 000
August	25, 706, 700	3, 970, 000
September	25, 706, 700	3, 300, 500
October	25, 706, 700	5, 180, 500
November	10, 548, 750	5, 180, 500
December	10, 164, 800	19, 314, 000
1930		
January	10, 164, 800	20, 101, 000
February	10, 164, 800	20, 525, 000
March	10, 164, 800	24, 830, 500
April	10, 165, 300	39, 830, 500
May	10, 165, 800	39, 830, 500
June	10, 165, 300	45, 176, 500
July	10, 165, 800	45, 176, 500
August	10, 165, 800	47, 690, 000
September	10, 164, 800	47, 690, 000
October	10, 164, 800	47, 690, 000
November	10, 164, 800	49, 842, 000
December	10, 164, 800	52, 760, 000

United States securities purchased under repurchase agreement

November 8 and 9, 1929	$1,818,950

FEDERAL RESERVE BANK OF DALLAS

Amount of United States securities held in portfolio of the Federal Reserve Bank of Dallas which were purchased through the open market investment committee as of the end of each month since January, 1922

[None prior to January, 1924]

1924	
Jan. 31	$763,800
Feb. 29	3,347,000
Mar. 31	10,313,300
Apr. 30	11,533,600
May 31	12,774,600
June 30	14,476,200
July 31	18,706,400
Aug. 30	18,989,900
Sept. 30	19,469,200
Oct. 31	19,469,200
Nov. 30	19,033,200
Dec. 31	16,998,000
1925	
Jan. 31	15,935,500
Feb. 28	14,342,500
Mar. 31	13,025,500
Apr. 30	13,265,000
May 29	25,771,000
June 30	22,305,500
July 31	22,305,500
Aug. 31	22,174,500
Sept. 30	22,143,500
Oct. 31	22,143,500
Nov. 30	22,143,500
Dec. 31	25,143,500
1926	
Jan. 30	24,054,500
Feb. 27	22,143,500
Mar. 31	22,499,500
Apr. 30	25,392,000
May 29	25,392,000
June 30	25,392,500
July 31	25,392,500
Aug. 31	20,587,000
Sept. 30	18,097,500
Oct. 30	18,467,000
Nov. 30	18,555,000
Dec. 31	19,603,000
1927	
Jan. 31	18,559,000
Feb. 28	18,466,500
Mar. 31	19,051,000
Apr. 30	18,591,000
May 31	15,927,000
June 30	18,013,500
1927	
July 30	$18,586,000
Aug. 31	21,216,000
Sept. 30	22,083,500
Oct. 31	25,774,500
Nov. 30	27,784,500
Dec. 31	22,959,500
1928	
Jan. 31	16,298,500
Feb. 29	14,822,500
Mar. 31	14,401,500
Apr. 30	8,674,500
May 31	4,692,000
June 30	4,830,000
July 31	4,859,000
Aug. 31	4,316,000
Sept. 29	4,316,000
Oct. 31	4,300,500
Nov. 30	4,756,500
Dec. 31	None.
1929	
Jan. 31	None.
Feb. 28	None.
Mar. 30	2,279,000
Apr. 30	1,423,500
May 31	1,236,000
June 30	1,048,500
July 31	1,048,500
Aug. 31	1,048,500
Sept. 30	1,274,000
Oct. 31	3,902,500
Nov. 30	6,905,000
Dec. 31	15,035,000
1930	
Jan. 31	15,647,500
Feb. 28	10,647,500
Mar. 31	15,649,500
Apr. 30	15,649,500
May 31	15,649,500
June 30	18,182,500
July 31	18,182,500
Aug. 30	19,241,000
Sept. 30	19,241,000
Oct. 31	19,243,000
Nov. 29	20,147,000
Dec. 31	21,332,500

Amount of United States securities held in portfolio of the Federal Reserve Bank of Dallas, which were purchased locally or independently of the open market investment committee, as of the end of each month since January, 1922

1922	
Jan. 31	$4,529,500
Feb. 28	4,529,500
Mar. 31	4,965,500
Apr. 30	4,965,500
May 31	4,965,500
June 30	5,980,500
July 31	6,480,500
Aug. 31	5,980,500
Sept. 30	5,480,500
Oct. 31	13,025,000
Nov. 30	13,163,750
Dec. 31	11,308,000
1923	
Jan. 31	7,258,000
Feb. 28	11,618,000
Mar. 31	11,504,500
Apr. 30	9,379,500
May 31	8,379,500
June 30	1,779,500
July 31	1,779,500
Aug. 31	1,779,500
Sept. 30	1,779,500
Oct. 31	11,779,500
Nov. 30	6,279,500
Dec. 31	6,679,500
1924	
Jan. 31	7,266,000
Feb. 29	7,888,500
Mar. 31	9,657,900
Apr. 30	9,946,500
May 31	10,328,500
June 30	6,132,000
July 31	6,961,100
Aug. 30	7,895,100
Sept. 30	8,326,100
Oct. 31	8,326,100
Nov. 30	8,300,000
Dec. 31	8,498,500
1925	
Jan. 31	2,055,000
Feb. 28	3,609,350
Mar. 31	7,082,500
Apr. 30	7,082,500
May 29	6,846,600
June 30	5,702,900
July 31	6,500,350
Aug. 31	7,146,500
Sept. 30	7,161,100
Oct. 31	8,197,700
Nov. 30	8,921,150
Dec. 31	6,685,900
1926	
Jan. 30	7,487,550
Feb. 27	7,711,700
Mar. 31	8,041,450
Apr. 30	8,392,900
May 29	8,203,450
June 30	2,978,450
July 31	$2,373,950
Aug. 31	1,438,950
Sept. 30	3,169,250
Oct. 30	2,970,550
Nov. 30	2,910,050
Dec. 31	3,736,350
1927	
Jan. 31	5,674,550
Feb. 28	5,784,550
Mar. 31	6,538,050
Apr. 30	6,336,900
May 31	8,274,600
June 30	8,495,950
July 30	8,003,000
Aug. 31	7,964,550
Sept. 30	8,866,450
Oct. 31	8,414,850
Nov. 30	9,696,500
Dec. 31	9,029,500
1928	
Jan. 31	10,302,350
Feb. 29	9,993,850
Mar. 31	10,149,850
Apr. 30	11,124,850
May 31	11,291,900
June 30	10,593,850
July 31	11,010,400
Aug. 31	11,710,400
Sept. 29	10,246,350
Oct. 31	11,607,850
Nov. 30	9,987,850
Dec. 31	10,007,850
1929	
Jan. 31	9,982,850
Feb. 28	10,737,850
Mar. 30	9,987,850
Apr. 30	9,987,850
May 31	10,005,950
June 30	10,031,850
July 31	9,996,850
Aug. 31	5,021,850
Sept. 30	9,987,850
Oct. 31	10,087,800
Nov. 30	9,987,800
Dec. 31	9,842,800
1930	
Jan. 31	9,987,800
Feb. 28	9,987,800
Mar. 31	9,987,550
Apr. 30	9,987,550
May 31	9,987,550
June 30	9,987,550
July 31	9,987,550
Aug. 30	9,987,550
Sept. 30	9,987,550
Oct. 31	9,989,550
Nov. 29	10,487,550
Dec. 31	9,983,250

FEDERAL RESERVE BANK OF KANSAS CITY

Open-market operations

	Amount of United States securities held in the portfolio of the Federal Reserve Bank of Kansas City, which were purchased through the open-market investment committee	Amount of United States securities held by the Federal Reserve Bank of Kansas City, which were purchased locally or independently of the open-market investment committee
1922		
Jan. 31		$14,240,050
Feb. 28		24,772,550
Mar. 31		39,583,750
Apr. 30		43,811,900
May 31		41,475,900
June 30		45,615,200
July 31		45,694,150
Aug. 31		45,203,450
Sept. 30		43,868,950
Oct. 31		42,198,450
Nov. 30		39,192,400
Dec. 31		39,188,350
1923		
Jan. 31		38,521,450
Feb. 28		46,058,250
Mar. 31		37,415,750
Apr. 30		35,611,750
May 31		33,098,550
June 30		13,487,650
July 31		7,356,650
Aug. 31		11,240,150
Sept. 30		11,554,650
Oct. 31		8,593,650
Nov. 30		7,416,750
Dec. 31		14,418,300
1924		
Jan. 31	$1,743,400	6,989,300
Feb. 29	3,137,800	7,001,600
Mar. 31	6,474,300	7,997,100
Apr. 30	10,672,200	8,619,950
May 31	12,763,100	8,385,400
June 30	17,283,600	10,727,100
July 31	21,951,900	8,710,750
Aug. 31	22,797,400	9,332,250
Sept. 30	24,554,600	9,794,900
Oct. 31	24,554,600	11,181,900
Nov. 30	24,064,100	11,550,750
Dec. 31	22,052,500	11,328,350
1925		
Jan. 31	14,734,500	10,416,550
Feb. 28	13,261,500	10,641,800
Mar. 31	12,013,000	12,629,000
Apr. 30	12,343,500	13,876,300
May 31	23,152,000	14,277,700
June 30	20,037,500	12,610,800
July 31	20,037,500	12,462,550
Aug. 31	19,920,000	12,317,450
Sept. 30	20,844,000	12,147,950
Oct. 31	20,844,000	12,273,800
Nov. 30	20,844,000	12,575,300
Dec. 31	24,844,000	12,615,700
1926		
Jan. 31	23,392,000	12,615,700
Feb. 28	20,844,000	12,615,700
Mar. 31	21,272,500	11,690,300
Apr. 30	24,743,500	11,690,300
May 31	24,743,500	13,245,900
June 30	24,743,500	11,774,400
1926		
July 31	$24,743,500	$10,024,400
Aug. 31	20,060,500	10,374,400
Sept. 30	17,635,000	10,004,400
Oct. 31	17,995,000	10,004,400
Nov. 30	18,081,000	10,504,400
Dec. 31	19,102,000	10,122,900
1927		
Jan. 31	18,085,000	9,572,900
Feb. 28	17,995,000	9,572,900
Mar. 31	18,564,000	9,880,000
Apr. 30	18,115,500	9,480,000
May 31	17,336,500	10,363,000
June 30	19,608,500	9,933,000
July 31	20,364,000	9,583,500
Aug. 31	23,832,500	9,753,500
Sept. 30	24,738,500	9,813,500
Oct. 31	27,162,500	9,813,500
Nov. 30	28,339,000	9,814,300
Dec. 31	28,708,500	9,633,100
1928		
Jan. 31	20,380,500	11,383,100
Feb. 29	18,535,500	10,433,100
Mar. 31	18,010,500	13,233,100
Apr. 30	10,849,500	12,733,100
May 31	5,868,000	11,983,100
June 30	6,039,500	11,992,300
July 31	6,075,500	12,482,300
Aug. 31	6,585,000	11,432,300
Sept. 30	5,754,000	10,232,300
Oct. 31		11,482,300
Nov. 30		9,732,300
Dec. 31		10,513,300
1929		
Jan. 31		9,763,300
Feb. 28		9,763,300
Mar. 31		9,793,400
Apr. 30		9,793,400
May 31		7,755,700
June 30		
July 31		
Aug. 31	1,304,000	
Sept. 30	927,000	3,000
Oct. 31	3,060,000	3,000
Nov. 30	3,060,000	3,000
Dec. 31	3,060,000	3,000
1930		
Jan. 31	3,060,000	3,000
Feb. 28	3,060,000	3,000
Mar. 31	5,921,500	3,000
Apr. 30	5,921,500	3,000
May 31	15,921,500	303,000
June 30	28,733,000	3,000
July 31	28,733,000	3,000
Aug. 31	28,733,000	3,000
Sept. 30	28,733,000	3,000
Oct. 31	28,733,000	3,000
Nov. 30	29,979,500	3,000
Dec. 31	31,608,500	3,000

FEDERAL RESERVE BANK OF MINNEAPOLIS

United States securities holdings of the Minneapolis Federal Reserve Bank 1922–1930

	Purchased in open market	Purchased independently
1922		
January		$4,896,160
February		5,665,160
March		10,925,910
April		13,660,260
May		14,858,860
June		13,555,960
July		12,178,010
August		9,856,110
September		18,972,160
October		11,866,160
November		11,757,160
December		13,071,460
1923		
January		9,941,260
February		12,299,310
March	$2,582,770	15,174,910
April	652,268	12,779,610
May		14,820,510
June		12,884,610
July		11,564,610
August		12,314,610
September		13,616,610
October		7,503,310
November		7,866,310
December		10,036,410
1924		
January	1,384,600	8,559,760
February	2,491,900	7,738,860
March	7,768,500	7,935,810
April	12,133,700	9,239,110
May	13,902,400	7,665,810
June	16,345,500	9,780,310
July	19,148,200	7,533,310
August	19,485,200	7,457,310
September	20,100,600	8,019,310
October	20,100,600	7,681,810
November	19,696,600	7,476,310
December	18,043,500	7,744,910
1925		
January	12,021,500	9,072,010
February	10,818,500	7,660,310
March	9,825,000	7,558,010
April	9,788,000	7,557,710
May	9,788,000	7,557,710
June	8,471,000	7,557,710
July	8,471,000	7,557,710
August	8,420,500	7,557,710
September	9,020,000	7,557,710
October	9,020,000	7,557,710
November	9,020,000	7,557,710
December	11,520,000	7,557,710
1926		
January	10,612,500	7,557,710
February	9,020,000	7,557,710
March	9,377,500	7,557,710
April	12,270,000	7,557,710
May	12,270,000	7,557,710
June	12,270,500	7,557,710
July	$12,270,500	$7,557,710
August	9,947,000	7,562,710
September	8,745,000	14,562,710
October	8,923,500	8,562,710
November	8,966,000	7,567,710
December	9,471,500	7,567,710
1927		
January	8,968,000	7,557,710
February	8,923,500	7,557,710
March	9,206,000	7,557,710
April	8,894,000	7,557,710
May	9,482,000	7,557,710
June	10,724,000	7,557,710
July	11,281,500	7,557,710
August	13,847,000	7,557,710
September	14,764,000	7,557,710
October	18,939,000	7,557,710
November	15,718,500	7,557,710
December	16,342,000	7,557,710
1928		
January	11,600,500	7,557,710
February	10,550,000	7,584,810
March	10,253,000	7,584,810
April	6,177,500	7,584,810
May	3,342,000	7,584,810
June	3,439,500	7,584,810
July	3,460,000	7,584,810
August	3,750,000	7,584,810
September	3,276,500	7,584,810
October	3,121,500	7,584,810
November	3,452,500	7,584,810
December	3,322,500	7,584,810
1929		
January	3,322,500	7,584,810
February	1,911,500	7,584,810
March	1,654,000	7,602,910
April	1,032,500	7,602,210
May	896,500	7,718,345
June	760,500	7,944,395
July	760,500	7,671,520
August	1,531,500	7,627,510
September	1,308,000	7,676,950
October	943,500	7,847,630
November	2,184,000	7,779,330
December	8,789,500	8,083,830
1930		
January	9,147,500	7,633,898
February	9,340,000	7,688,420
March	10,766,000	7,627,985
April	10,766,000	7,711,666
May	15,766,000	8,024,833
June	17,454,500	7,936,807
July	17,454,500	7,723,976
August	18,248,500	7,682,764
September	18,248,500	7,777,220
October	18,248,500	8,037,002
November	18,927,500	8,936,644
December	19,563,500	7,738,683

FEDERAL RESERVE BANK OF NEW YORK

Government securities purchased through the open-market investment committee and held in the portfolio of the Federal Reserve Bank of New York at the end of each month since January, 1924

[In millions of dollars]

Last day of—	1924	1925	1926	1927	1928	1929	1930	Last day of—	1924	1925	1926	1927	1928	1929	1930
January	14	112	51	53	80	23	97	July	170	52	73	64	24	5	67
February	25	100	51	53	73	13	99	August	176	52	59	86	28	11	74
March	52	91	53	54	70	14	94	September	186	51	52	90	23	9	74
April	64	92	73	53	42	7	79	October	186	51	53	103	21	23	74
May	81	61	73	56	23	6	64	November	182	51	53	110	24	42	80
June	135	52	73	64	24	5	67	December	167	51	56	112	23	93	87

Government securities held by the Federal Reserve Bank of New York at the end of each month since January, 1922, which were purchased locally and independently of the open-market investment committee

[In millions of dollars]

Last day of—	1922	1923	1926	1927	1928	1929	1930	Last day of—	1922	1923	1926	1927	1928	1929	1930
January	50	55	-----	-----	7	2.0	112	July	155	-----	-----	2.0	7	0.5	112
February	126	26	-----	-----	2	.2	112	August	135	-----	-----	.1	12	.5	112
March	99	10	-----	-----	-----	4.0	112	September	98	-----	-----	.1	16	2.0	107
April	165	-----	-----	9.0	-----	1.0	113	October	48	-----	-----	-----	4	96.0	112
May	159	1	0.9	-----	7	-----	111	November	45	17	-----	-----	1	112.0	108
June	139	-----	-----	-----	2	21.0	11	December	98	-----	-----	16.0	-----	122.0	158

NOTE.—Above statement excludes certificates of indebtedness issued to cover Treasury overdraft.

Government securities held by the Federal Reserve Bank of New York under resale agreement at the end of each month since January, 1922

[In millions of dollars]

Last day of—	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	12	23	0.1	0.5	--------	--------	2	--------	2
February	--------	22	--------	17.0	5	10.0	5	3	3
March	8	15	3.0	19.0	--------	26.0	4	6	8
April	5	5	--------	.7	4	2.0	9	20	2
May	12	12	--------	--------	4	5.0	10	5	2
June	16	11	--------	32.0	9	--------	28	37	9
July	9	16	--------	4.0	--------	2.0	6	18	--------
August	10	20	--------	7.0	1	1.0	5	22	--------
September	52	14	--------	27.0	3	14.0	22	34	--------
October	13	10	--------	5.0	--------	.5	21	50	--------
November	8	18	6.0	19.0	4	.5	28	3	--------
December	51	36	2.0	4.0	2	52.0	25	22	36

Government securities held by the Federal Reserve Bank of New York under resale agreement on the 20th day of each month since January, 1922

[In millions of dollars]

20th day of—	1922	1923	1924	1925	1926	1927	1928	1929	1930
January	3	23	--------	6.0	--------	--------	--------	17.0	--------
February	11	23	0.1	--------	3	--------	--------	--------	3
March	--------	8	--------	--------	10	--------	--------	.4	--------
April	14	2	--------	2.0	--------	14	7.0	16.0	0.6
May	2	7	--------	8.0	3	--------	4.0	15.0	--------
June	14	19	--------	5.0	4	--------	4.0	9.0	1.0
July	14	11	--------	7.0	10	--------	.7	16.0	--------
August	10	5	--------	--------	--------	2	2.0	23.0	--------
September	21	4	--------	.4	2	4	13.0	35.0	--------
October	22	4	--------	7.0	--------	2	21.0	3.0	--------
November	8	6	--------	10.0	3	--------	25.0	4.0	--------
December	31	5	--------	23.0	7	15	9.0	13.0	--------

NOTE.—There is so much fluctuation in these holdings, partly due to more or less regular monthly movements, that data are given both for the 20th and the end of the month.

FEDERAL RESERVE BANK OF PHILADELPHIA, PA.

United States securities held as of the end of each month

	Purchased through open-market investment committee	Purchased independently of open-market committee	Total
1922			
January	------------	$21,792,000	$21,792,000
February	------------	22,751,100	22,751,100
March	------------	22,750,600	22,750,600
April	------------	30,488,600	30,488,600
May	------------	30,370,600	30,370,600
June	------------	33,879,450	33,879,450
July	------------	33,990,450	33,990,450
August	------------	34,613,850	34,613,850
September	------------	34,863,350	34,863,350
October	------------	31,764,650	31,764,650
November	------------	27,634,800	27,634,800
December	------------	29,190,300	29,190,300
1923			
January	------------	29,183,600	29,183,600
February	------------	27,070,100	27,070,100
March	------------	25,417,600	25,417,600
April	------------	24,785,600	24,785,600
May	------------	24,796,700	24,796,700
June	------------	17,386,000	17,386,000
July	------------	17,381,000	17,381,000
August	------------	17,381,000	17,381,000
September	------------	17,408,000	17,408,000
October	------------	17,406,000	17,406,000
November	------------	12,603,000	12,603,000
December	------------	12,951,500	12,951,500
1924			
January	$4,151,300	17,567,000	21,718,300
February	5,569,500	17,367,000	22,936,500
March	5,569,500	17,412,500	22,982,000
April	6,825,500	19,556,000	26,381,500
May	10,692,600	20,674,000	31,366,600
June	7,143,100	21,788,000	28,931,100
July	8,753,200	22,046,500	30,799,700
August	8,737,200	22,399,500	31,136,700
September	8,808,100	22,644,000	31,452,100
October	8,808,100	22,644,000	31,452,100
November	8,582,100	22,591,000	31,173,100
December	12,441,000	17,447,800	29,888,800
1925			
January	7,525,100	18,208,200	25,733,300
February	7,457,500	17,447,800	24,905,300
March	6,773,000	17,497,800	24,270,800
April	7,208,000	17,497,800	24,705,800
May	435,000	17,497,800	17,932,800
June	376,500	17,497,800	17,874,300

	Purchased through open-market investment committee	Purchased independently of open-market committee	Total
1925			
July	$370,500	$17,503,800	$17,874,300
August	374,000	17,497,800	17,871,800
September	1,565,000	17,497,800	19,062,800
October	1,565,000	17,497,800	19,062,800
November	1,565,000	17,497,800	19,062,800
December	6,565,000	17,497,600	24,062,600
1926			
January	4,750,000	17,497,600	22,247,600
February	1,565,000	17,497,600	19,062,600
March	2,137,500	16,958,100	19,095,600
April	6,765,000	16,958,100	23,723,100
May	6,765,000	16,958,100	23,723,100
June	6,764,500	14,958,100	21,722,600
July	6,764,500	14,958,100	21,722,600
August	5,484,000	14,958,100	20,442,100
September	4,821,500	15,008,100	19,829,600
October	4,920,000	15,008,100	19,928,100
November	4,944,000	15,008,100	19,952,100
December	5,222,000	15,008,100	20,230,100
1927			
January	4,944,000	15,008 100	19,952,100
February	4,919,500	15,008,100	19,927,600
March	5,075,000	14,734,600	19,809,600
April	4,952,500	14,734,600	19,687,100
May	10,235,500	14,734,600	24,970,100
June	11,577,500	15,184,600	26,762,100
July	13,033,000	15,184,600	28,217,600
August	19,724,500	15,184,600	34,909,100
September	20,494,500	15,184,600	35,679,100
October	26,269,500	15,184,600	41,454,100
November	29,545,000	15,184,600	44,729,600
December	30,478,000	15,185,600	45,663,600
1928			
January	21,636,000	15,185,600	36,821,600
February	19,677,500	15,185,600	34,863,100
March	19,121,000	15,187,100	34,308,100
April	11,519,000	15,187,100	26,706,100
May	6,230,500	15,187,100	21,417,600
June	6,413,000	15,196,600	21,609,600
July	6,451,000	15,196,600	21,647,600
August	6,992,000	15,196,600	22,188,600
September	6,109,500	15,196,600	21,306,100
October	5,848,000	15,223,600	21,071,600
November	6,468,000	15,223,600	21,691,600
December	6,224,000	15,222,600	21,446,600

United States securities held as of the end of each month—Continued

	Purchased through open-market investment committee	Purchased independently of open-market committee	Total		Purchased through open-market investment committee	Purchased independently of open-market committee	Total
1929				1930			
January	$6,224,000	$15,222,600	$21,446,600	January	$27,876,000	$15,021,600	$42,897,600
February	3,581,500	15,222,600	18,804,100	February	28,463,500	15,021,600	43,485,100
March	3,099,000	15,011,600	18,110,600	March	31,114,500	15,010,100	46,124,600
April	1,927,000	15,011,600	16,938,600	April	31,114,500	15,010,100	46,124,600
May	1,681,000	15,011,600	16,692,600	May	31,114,500	15,010,100	46,124,600
June	1,435,000	15,023,100	16,458,100	June	35,195,000	15,007,100	50,202,100
July	1,435,000	15,023,100	16,458,100	July	35,195,000	15,007,100	50,202,100
August	3,155,000	15,023,600	18,178,100	August	37,245,000	15,007,100	52,252,100
September	2,657,000	15,021,600	17,678,600	September	37,245,000	15,007,100	52,252,100
October	6,607,500	15,021,600	21,629,100	October	37,245,000	15,007,100	52,252,100
November	12,050,000	15,021,600	27,071,600	November	39,001,500	15,007,100	54,008,600
December	26,784,500	15,021,600	41,806,100	December	41,297,000	12,907,100	54,204,100

FEDERAL RESERVE BANK OF RICHMOND

United States securities held on last day of each month, 1922–1930, inclusive

	Purchased through open-market investment committee	Purchased independently of open-market investment committee
1922		
January		$4,993,400
February		4,793,400
March		4,793,400
April		4,793,400
May		4,793,400
June		4,793,400
July		4,750,900
August		4,700,900
September		4,700,900
October		4,200,900
November		3,200,900
December		1,290,900
1923		
January		1,340,900
February		1,340,900
March		1,340,900
April		1,340,900
May		1,340,900
June		1,340,900
July		1,340,900
August		1,340,900
September		1,340,900
October		1,340,900
November		1,340,900
December		1,340,900
1924		
January	$2,102,300	1,340,900
February	3,784,200	1,340,900
March	3,784,200	1,340,900
April	3,784,200	1,340,900
May	3,784,200	1,340,900
June	3,784,200	1,340,900
July	3,784,200	1,340,900
August	3,784,200	1,340,900
September	3,651,700	1,340,900
October	3,651,700	1,340,900
November	3,576,700	1,340,900
December	3,270,000	1,340,900
1925		
January	2,157,500	1,340,900
February	1,941,500	1,340,900
March	1,763,000	1,340,900
April	2,044,500	1,340,900
May	4,884,500	1,340,900
June	4,228,000	1,340,900

	Purchased through open-market investment committee	Purchased independently of open-market investment committee
1925		
July	$4,228,000	$1,340,900
August	4,203,000	1,340,900
September	4,102,500	1,340,900
October	4,102,500	1,340,900
November	4,102,500	1,340,900
December	7,602,500	1,340,900
1926		
January	6,332,000	1,340,900
February	4,102,500	1,340,900
March	4,531,000	1,340,900
April	8,002,000	1,340,900
May	8,002,000	1,340,900
June	8,001,000	1,340,900
July	8,001,000	1,340,900
August	6,486,500	1,340,900
September	5,702,000	1,240,900
October	5,818,500	1,240,900
November	5,846,500	1,240,900
December	6,176,000	1,240,900
1927		
January	5,847,500	1,240,900
February	5,818,500	1,240,900
March	6,003,000	1,240,900
April	5,857,500	1,240,900
May	8,251,500	1,240,900
June	14,334,500	1,240,900
July	15,785,500	1,240,900
August	24,285,500	1,240,900
September	26,286,000	1,240,900
October	11,136,000	1,240,900
November	11,213,500	1,202,700
December	11,299,000	1,152,700
1928		
January	8,021,000	1,152,700
February	7,295,500	1,152,700
March	7,089,000	1,152,700
April	4,270,500	1,152,700
May	2,310,500	1,152,700
June	2,377,000	1,152,700
July	2,391,000	1,152,700
August	2,123,500	1,152,700
September	2,123,500	1,152,200
October	2,271,500	1,152,200
November	2,512,000	1,152,200
December	2,275,000	1,152,200

United States securities held on last day of each month, 1922–1930, inclusive—Continued

	Purchased through open-market investment committee	Purchased independently of open-market investment committee		Purchased through open-market investment committee	Purchased independently of open-market investment committee
1929			1930		
January	$2,275,000	$1,152,100	January	$8,749,500	$1,152,100
February	1,309,500	1,152,100	February	8,934,000	1,152,100
March	1,204,000	1,152,100	March	11,487,500	1,152,100
April	656,500	1,152,100	April	11,487,500	1,152,100
May	656,500	1,152,100	May	11,487,500	1,152,100
June	656,500	1,152,100	June	14,441,500	1,152,100
July	656,500	1,152,100	July	14,441,500	1,152,100
August	656,500	1,152,100	August	15,830,500	1,152,100
September	656,500	1,152,100	September	15,830,500	1,152,100
October	656,500	1,152,100	October	15,830,500	1,152,100
November	656,500	1,152,100	November	17,019,500	1,152,100
December	8,407,000	1,152,100	December	12,755,000	1,152,100

Regarding statistics furnished in answer to questionnaire No. 9, item 1, (*a*), (*b*), and (*c*), the United States securities held in January, 1922, consisted of the following:

Liberty loan bonds, taken over from subscribers at time of original allotments	$81,300
Panama bonds purchased from member banks as required by sec. 18 of Federal reserve act	237,000
United States consols purchased from member banks as required by sec. 18 of Federal reserve act	915,100
Pittman Act certificates (2 per cent) purchased under the terms of Pittman Act as security for Federal bank notes	3,760,000
Total	4,993,400

No United States securities have been purchased by this bank independently of the open-market investment committee since January, 1922; the Liberty loan bonds have been sold or redeemed; the Pittman Act certificates have been redeemed by the Treasury Department from time to time as the Federal reserve banks discontinued issuing Federal reserve bank notes; and the balance on hand at present, $1,152,100, consists entirely of the original purchases of Panama bonds and United States consols.

FEDERAL RESERVE BANK OF ST. LOUIS

United States securities as of the end of each month for the period January, 1924, to December, 1930, which were purchased through the open-market investment committee

1924	
January	$1, 794, 800
February	3, 230, 100
March	6, 747, 800
April	6, 965, 800
May	6, 965, 800
June	8, 089, 100
July	13, 694, 300
August	14, 873, 800
September	16, 769, 000
October	16, 769, 000
November	16, 439, 000
December	15, 087, 500

1925	
January	10, 169. 500
February	9, 152, 500
March	8, 312, 000
April	8, 626, 500
May	34, 378, 000
June	29, 753, 000
July	29, 753, 000
August	29, 577, 000
September	18, 872, 500
October	18, 872, 500
November	18, 872, 500
December	21, 872, 500

1926	
January	20, 783, 500
February	18, 872, 500
March	18, 872, 500
April	18, 872, 500
May	18, 872, 500
June	18, 872, 000
July	18, 872, 000
August	15, 299, 500
September	13, 450, 500
October	13, 725, 000
November	13, 792, 000
December	14, 569, 500

1927	
January	$13, 793, 500
February	13, 725, 000
March	14, 158, 500
April	13, 817, 500
May	13, 590, 000
June	10, 371, 500
July	16, 118, 000
August	19, 547, 500
September	19, 778, 500
October	20, 669, 500
November	21, 280, 000
December	21, 543, 500

1928	
January	15, 294, 000
February	13, 909, 000
March	13, 517, 000
April	8, 142, 000
October	4, 151, 000
November	4, 591, 000
December	4, 417, 500

1929	
January	4, 417, 500
February	2, 542, 500
October	3, 942, 000
November	8, 446, 000
December	20, 641, 000

1930	
January	10, 641, 000
February	10, 641, 000
March	10, 642, 500
April	10, 642, 500
May	10, 642, 500
June	14, 017, 500
July	14, 017, 500
August	15, 274, 000
September	15, 274, 000
October	15, 274, 000
December	17, 757, 500

United States securities as of the end of each month for the period January, 1922, to December, 1930, which were purchased locally or independently of the open-market investment committee

1922	
January	$8, 247, 000
February	14, 719, 000
March	20, 579, 600
April	24, 963, 500
May	29, 144, 800
June	25, 507, 500
July	26, 457, 050
August	29, 225, 500
September	26, 563, 500
October	23, 684, 550
November	21, 710, 000
December	19, 551, 500

1923	
January	26, 755, 600
February	28, 889, 700
March	25, 522, 700
April	18, 203, 900
May	14, 933, 400
June	7, 250, 600
July	7, 250, 600
August	3, 668, 300
September	3, 668, 300

1925	
February	297, 900
March	577, 900
April	670, 400
May	721, 400
June	721, 400
July	1, 200, 500
August	1, 290, 500
September	1, 290, 500
October	1, 515, 000
November	1, 615, 000
December	2, 474, 500

1926	
January	3, 991, 500
February	5, 035, 000
March	6, 670, 500
April	6, 869, 500
May	9, 869, 500
June	7, 579, 100
July	5, 456, 600
August	5, 883, 250
September	5, 793, 250
October	5, 884, 750
November	6, 073, 250
December	6, 502, 850

1927	
January	$7, 039, 650
February	8, 790, 300
March	13, 841, 700
April	13, 841, 700
May	13, 841, 700
June	14, 461, 700
July	11, 063, 950
August	13, 569, 000
September	16, 619, 500
October	16, 619, 500
November	16, 619, 500
December	16, 619, 500

1928	
January	18, 009, 500
February	18, 009, 500
March	16, 625, 000
April	16, 625, 000
May	10, 625, 000
June	7, 125, 000
July	7, 125, 000
September	11, 625, 000
October	16, 625, 000
November	16, 625, 000
December	16, 625, 000

1929	
January	16, 625, 000
February	16, 625, 000
March	16, 862, 500
April	11, 337, 500
May	13, 625, 000
June	13, 625, 000
July	13, 625, 000
October	8, 625, 000
November	8, 625, 000
December	8, 625, 000

1930	
January	8, 625, 000
February	8, 625, 000
March	8, 625, 000
April	8, 625, 000
May	8, 625, 000
June	8, 625, 000
July	8, 625, 000
August	8, 625, 000
September	8, 625, 000
October	8, 625, 000
November	8, 625, 000
December	8, 625, 000

FEDERAL RESERVE BANK OF SAN FRANCISCO

End of month	Participation in open-market investment account	Other holdings	Total
1922			
January			[1] $19, 258, 000
February			18, 626, 000
March			[2] 38, 089, 000
April			[2] 58, 659, 000
May			[2] 60, 009, 000
June			[2] 62, 104, 000
July			[2] 57, 977, 000
August			[2] 52, 977, 000
September			[2] 51, 976, 000
October			[2] 47, 367, 000
November			[2] 36, 802, 000
December			[2] 34, 766, 000
1923			
January			34, 766, 000
February			34, 747, 000
March			27, 617, 000
April			27, 641, 000
May			27, 641, 000
June		[3] $9, 185, 000	9, 185, 000
July		9, 185, 000	9, 185, 000
August		9, 185, 000	9, 185, 000
September		9, 185, 000	9, 185, 000
October		9, 185, 000	9, 185, 000
November		9, 185, 000	9, 185, 000
December		9, 185, 000	9, 185, 000
1924			
January	$4, 666, 000	9, 185, 000	13, 852, 000
February	8, 398, 000	9, 185, 000	17, 584, 000
March	17, 421, 000	9, 188, 000	26, 609, 000
April	21, 683, 000	9, 190, 000	30, 873, 000
May	27, 258, 000	9, 192, 000	36, 450, 000
June	34, 446, 000	9, 196, 000	43, 642, 000
July	44, 723, 000	9, 197, 000	53, 921, 000
August	46, 914, 000	9, 200, 000	56, 114, 000
September	51, 133, 000	9, 206, 000	60, 339, 000
October	51, 133, 000	9, 207, 000	60, 341, 000
November	50, 112, 000	9, 208, 000	59, 321, 000
December	45, 930, 000	9, 213, 000	55, 143, 000
1925			
January	30, 713, 000	9, 218, 000	39, 931, 000
February	27, 641, 000	9, 220, 000	36, 861, 000
March	25, 103, 000	9, 221, 000	34, 324, 000
April	35, 527, 000	9, 227, 000	44, 754, 000
May	39, 867, 000	9, 232, 000	49, 099, 000
June	34, 505, 000	9, 236, 000	43, 741, 000
July	34, 505, 000	9, 487, 000	43, 992, 000
August	34, 302, 000	9, 488, 000	43, 791, 000
September	34, 281, 000	9, 650, 000	43, 932, 000
October	34, 281, 000	9, 653, 000	43, 934, 000
November	34, 281, 000	9, 655, 000	43, 936, 000
December	40, 281, 000	9, 656, 000	49, 938, 000
1926			
January	38, 103, 000	9, 660, 000	47, 763, 000
February	34, 281, 000	9, 662, 000	43, 943, 000
March	34, 925, 000	9, 664, 000	44, 589, 000
April	40, 131, 000	9, 669, 000	49, 800, 000
May	40, 131, 000	9, 670, 000	49, 802, 000
June	40, 131, 000	9, 674, 000	49, 806, 000

End of month	Participation in open-market investment account	Other holdings	Total
1926			
July	$40, 131, 000	$9, 676, 000	$49, 807, 000
August	32, 536, 000	9, 679, 000	42, 215, 000
September	28, 604, 000	9, 681, 000	38, 285, 000
October	29, 187, 000	9, 681, 000	38, 868, 000
November	29, 327, 000	9, 683, 000	39, 010, 000
December	30, 983, 000	9, 684, 000	40, 667, 000
1927			
January	29, 333, 000	9, 686, 000	39, 019, 000
February	29, 188, 000	9, 687, 000	38, 875, 000
March	30, 110, 000	9, 689, 000	39, 799, 000
April	29, 383, 000	9, 690, 000	39, 073, 000
May	26, 622, 000	9, 690, 000	36, 312, 000
June	30, 109, 000	9, 691, 000	39, 800, 000
July	31, 243, 000	9, 693, 000	40, 936, 000
August	36, 451, 000	9, 694, 000	46, 146, 000
September	36, 205, 000	9, 695, 000	45, 900, 000
October	35, 854, 000	9, 698, 000	45, 552, 000
November	36, 105, 000	9, 693, 000	45, 798, 000
December	36, 382, 000	9, 693, 000	46, 075, 000
1928			
January	25, 828, 000	9, 693, 000	35, 521, 000
February	23, 488, 000	9, 695, 000	33, 183, 000
March	22, 822, 000	9, 697, 000	32, 519, 000
April	13, 746, 000	9, 680, 000	23, 426, 000
May	7, 435, 000	9, 682, 000	17, 117, 000
June	7, 653, 000	9, 683, 000	17, 336, 000
July	7, 698, 000	9, 683, 000	17, 382, 000
August	9, 035, 000	9, 684, 000	18, 720, 000
September	7, 499, 000	9, 682, 000	17, 181, 000
October	6, 951, 000	9, 684, 000	16, 635, 000
November	7, 687, 000	9, 687, 000	17, 374, 000
December	7, 397, 000	9, 705, 000	17, 102, 000
1929			
January	7, 397, 000	9, 705, 000	17, 102, 000
February	4, 256, 000	9, 706, 000	13, 962, 000
March	3, 683, 000	9, 706, 000	13, 389, 000
April	2, 301, 000	9, 706, 000	12, 007, 000
May	1, 998, 000	9, 707, 000	11, 705, 000
June	1, 694, 000	9, 708, 000	11, 402, 000
July	1, 694, 000	9, 708, 000	11, 402, 000
August	3, 711, 000	9, 708, 000	13, 419, 000
September	3, 127, 000	9, 709, 000	12, 836, 000
October	2, 173, 000	9, 710, 000	11, 883, 000
November	2, 173, 000	9, 710, 000	11, 883, 000
December	2, 173, 000	9, 642, 000	11, 816, 000
1930			
January	2, 173, 000	9, 642, 000	11, 816, 000
February	2, 219, 000	9, 642, 000	11, 861, 000
March	27, 052, 000	9, 642, 000	36, 695, 000
April	27, 052, 000	9, 642, 000	36, 695, 000
May	27, 052, 000	9, 642, 000	36, 695, 000
June	27, 052, 000	9, 642, 000	36, 695, 000
July	27, 052, 000	9, 642, 000	36, 695, 000
August	29, 367, 000	9, 642, 000	39, 009, 000
September	29, 367, 000	9, 642, 000	39, 009, 000
October	29, 367, 000	9, 642, 000	39, 009, 000
November	31, 349, 000	9, 642, 000	40, 991, 000
December	33, 940, 000	17, 142, 000	51, 082, 000

[1] Includes approximately $8,000,000 securing bank notes issued in connection with Pittman Act.
[2] Holdings were increased through purchases in New York, Chicago, San Francisco, and from member banks.
[3] Separate records not previously maintained.

OPERATION OF THE NATIONAL AND FEDERAL RESERVE BANKING SYSTEMS

QUESTIONNAIRE NO. 10

Bankers' Acceptance

Federal reserve officials have called attention to the fact that, at times, the dependence of the acceptance market on the reserve banks has interfered with the credit policies in force at the moment. The purpose of these questions is to inquire into the nature of and the extent of the dependence of the acceptance market on the reserve banks and the relationship between the volume of acceptance purchases by the reserve banks and the expansion and contraction of credit:

OF A GENERAL NATURE

1. What are the factors that in your opinion have made for the increasing concentration of the acceptance business of the country in the hands of a few institutions located in New York, Boston, Chicago, and San Francisco, and that have militated against the establishment of discount markets in other centers?

2. In the very rapid increase in acceptance totals from the beginning of 1926 to the present time, what factors were responsible for the increase in acceptances drawn for foreign storage and shipment; for the marked increase in acceptances arising against goods stored in domestic warehouses in 1927 and 1929; for the increase in export bills in 1927 and 1928; for the increase in dollar exchange bills in 1929; for the failure of bills arising from import trade to increase excepting in 1929; for the failure of acceptances arising from domestic shipments to increase materially through the period under review?

3. What effect will the board's liberalizing ruling of 1929 have on the volume of acceptances arising from domestic shipments?

4. It has been suggested that the increase in acceptances arising from foreign storage and shipment is to be explained by the curtailment of capital exports to Central Europe through 1929. What light does the experience in your own district throw on this problem?

5. Would it facilitate the growth of acceptance markets in the various reserve districts for the reserve banks to establish foreign agencies or branches in foreign countries?

6. To what degree has the increase in acceptance totals represented a growth in self-liquidating paper? A substitution for other forms of credit instruments? A growth in credit which will eventually be funded into longer term obligations?

7. State the experience in your district with various abuses in the use of the acceptance, i. e., with acceptance renewals, with the drawing of acceptances for a longer period than the life of the underlying transaction, with the use of the acceptance for refinancing purposes, with the use of the acceptance for the purpose of extending credit beyond the limitations imposed by section 5200 of the Revised Statutes, with the use of acceptance for the purpose of holding goods in storage for speculative purposes, and with the practice of accepting institutions discounting their own acceptances.

8. To what extent have you seen evidence of multiple acceptances arising out of successive transfers of ownership of the same goods held in warehouse or in course of shipment?

CONCERNING THE DEMAND FOR ACCEPTANCES

9. To what extent does an investment demand for acceptances exist in your district? To follow the investment demand on the part of member banks append statistics for as frequent intervals as possible, beginning January, 1922, of the acceptance liabilities of the member banks of your district, together with the amount of their own acceptances and of the acceptances of other banks held in portfolio.

10. To stimulate an investment demand for acceptances, would you be in favor of changing the present provisions of the Federal reserve act relating to the reserve requirements of member banks, permitting member banks to carry smaller reserves provided that they held a portfolio of bills equal to a certain percentage of their deposit liabilities? If so, what specific change would you suggest?

11. To stimulate an investment demand for acceptances, should the reserve banks follow a policy of refusing to purchase acceptances unless the accepting institutions hold bills, accepted by other institutions, equal to a substantial percentage of their own acceptance liabilities?

12. Would the dependence of the acceptance market on the reserve banks be lessened if the reserve banks should hold their buying rates above the market rate on acceptances? What would be the effect of this change of policy on the acceptance market? To what extent, in your opinion, has the market rate on acceptances been an artificial one in the sense that it has been primarily determined by the buying rates of the reserve banks?

OF A LEGAL NATURE

13. Would you favor a change in the Federal reserve act limiting the accepting of time bills of exchange on the part of member banks simply to those growing out of bona fide shipments in foreign trade and to those made for the purpose of creating dollar exchange?

14. Append a digest of the laws of those States included within your district respecting the acceptance powers of State banks, the limitations on the amount of acceptances which State banks may discount, and the provisions of any State law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

PURCHASES FOR FOREIGN ACCOUNT

15. Append by countries, as of the last reporting date in each month since January, 1922, data on the volume of bills held purchased for foreign account.

16. Is the buying rate on bills bought for foreign account lower than that on bills bought for own account? Are bills purchased for foreign account acquired solely from dealers? If the bulk of bills purchased for foreign account is acquired from dealers, state the reason for this practice.

17. What is the rate of commission that the reserve banks receive for indorsing the bills purchased for foreign account? Are all such bills indorsed? Is the indorsement placed on each bill or is the indorsement in the nature of a blanket agreement with the foreign clients for which the purchases are made?

OF A TECHNICAL AND STATISTICAL NATURE

18. Append statistics on the volume of bills in your portfolio that have been purchased locally from dealers, that have been purchased locally from accepting banks, that have been purchased locally from other sources, and that have been acquired through the open-market investment committee, for the last reporting date of each month from January, 1922.

19. What policy does your institution follow in buying bills directly from the accepting bank? Are such bills discounted?

20. Append a classification of bills held for own account on the last reporting date in each month since January, 1922, by the type of currency in which the bills are stated. What were the reasons for the increase in the amount of bills stated in foreign currencies in 1927, in 1929, and 1930?

21. Does your institution ever acquire bills from other reserve banks to serve as a cover for Federal reserve notes? State on attached schedule the amounts and occasions of such purchases.

22. Present on attached schedule the buying rates on acceptances of different maturities which have been in force at your institution, with the date of each change, since January, 1922.

23. Does your institution ever discriminate in the buying rate established on bills on the basis of the self-liquidating or nonself-liquidating nature of the transaction from which the bill arose?

24. What has been the effect of changes in acceptance buying rates of the Federal reserve banks on the total volume of bills outstanding?

25. What are the factors responsible for the decline in the acceptance commissions charged by American accepting institutions over the past six years?

CONCERNING THE RELATIONS WITH THE DEALERS

26. Present a list of the recognized dealers in acceptances; i. e., of those dealers whose indorsement is recognized by your institution. State the net worth that a recognized dealer must possess. What other standards has your institution imposed to which a recognized dealer must attain? What factors are considered in determining the dealers' lines of credit?

27. On an attached schedule, present since January, 1924, weekly statistics of the volume of acceptances held in the portfolios of dealers operating in your district.

28. In connection with the data presented in answer to the above question, estimate the amount of acceptances in the dealers' portfolios that they have acquired directly from the accepting institutions, from drawers of bills, and from other sources.

29. State on attached schedule the amount of acceptances held under resale agreement by your institution on the last reporting date in each month since January, 1922.

30. Present statistics of the rate prevailing in respect to the resale agreements against acceptances with changes in the rates and the date of each change, since the inception of such agreements.

31. To prevent the seepage of Federal reserve credit into the speculative or investment market, does your institution inquire into the use of the funds extended to dealers under resale agreements?

32. Append statistics showing the average life of resale agreements since January, 1922.

33. What, in the experience of your institution, has been the relationship between changes in the amount of acceptances held under resale agreement and the amount held in the dealers' portfolios? The relationship of the resale agreement rate in force at your institution and market rates of interest, on acceptances as regards the volume of bills held under resale agreement?

Digest of Replies Received from the Different Federal Reserve Banks

Of a general nature

Question No. 1. Relative to the factors making for an increased concentration of the acceptance business in the hands of a few institutions located in New York, Boston, Chicago, and San Francisco.

Among the reasons cited by the Federal reserve banks were, the concentration of banking resources in the cities named; their importance as domestic and foreign trade centers; their importance as settlement points; the volume of surplus funds concentrated in those centers and the prevailng low rates of interest; the fact that banking institutions located therein are better known and that their acceptances consequently command prime rates in the market.

Question No. 2. Relative to the reasons accounting for the rapid increase from 1926–1930 in acceptances arising from various transactions.

Reasons given for rapid increase in acceptances drawn against foreign storage and shipment:

The liberalization in Febuary, 1927, of the acceptance rulings of the Federal Reserve Board; the inability of parties interested to obtain acceptance credits in Europe; nervousness regarding the stability of the European exchanges; the shortage of capital in Germany and other central European nations (which means that the acceptance credits granted can not be reduced until long-term loans are floated in the United States, England, or France); the relatively low level of interest rates in the New York money market (though one Federal reserve bank concluded that interest rates had probably had little effect); the increase in industrial activities in foreign countries, accompanied by increases in external trade.

Reasons given for increases in domestic storage credits:

A heavy volume of American cotton awaiting shipment, owing to heavy stocks and lower prices prevailing in England; heavy and early crops in 1929, combined with falling commodity prices; assistance given to the orderly marketing of crops; the shifting from direct loans against commodities into acceptance credits; sluggishness in movement of staple commodities; the creation of bills by member banks indebted to the Federal reserve banks.

34718—31—PT 6——10

Reasons given for increase in export bills:

In 1927 growth was stimulated by the easy-money policy of the Federal reserve banks; rise in commodity prices; increase in volume of exports; the substitution of the acceptance for other forms of credit instruments in the financing of export trade.

Reasons given for increase in dollar exchange bills:

A reflection of the exceedingly tight credit conditions abroad; the inability of South American countries to market their commodities; the depressed exchanges of the South American countries; curtailment of South American borrowings in the New York capital market; the need of South American countries to provide dollar exchange to pay for their imports.

Reasons for increase in import acceptances in 1929:

Increase in imports due to prospective tariff legislation; reflection of silk imports at fairly high prices; an increase in imports of raw sugar from Cuba.

Reasons given for failure of acceptances arising from domestic shipments to increase materially through the period under review:

Borrowing for all commercial purposes at a low ebb, inasmuch as borrowers had secured funds through security issues; little need for domestic shipment acceptances since plenty of counter credit available; the fact that sight and demand drafts, with bills of lading covering shipments are eligible for rediscount at the Federal reserve banks; the fact that such documentary drafts afford a most desirable form of self-liquidating paper; the fact that in domestic trade goods are sold under the open-book-account cash-discount system; delay in the liberalization of the rulings of the Federal Reserve Board covering this type of transaction.

Question No. 3. Relative to the effect of the Federal Reserve Board's liberalizing ruling of 1929 on the volume of acceptances arising from domestic shipments.

The Federal Reserve Banks of Atlanta, Boston, Dallas, Kansas City, New York, Philadelphia, and St. Louis were of the opinion that the liberalizing ruling of the Federal Reserve Board should increase the volume of domestic shipment acceptances. The reasons given were that the cost of borrowed money to the purchaser of goods should be less; that a substitution of acceptance obligations for discounted notes should take place; that domestic acceptance financing had been made easier to handle and that many of the technical discrepancies had been eliminated.

The Federal Reserve Banks of Chicago, Cleveland, Minneapolis, Richmond, and San Francisco reported either that there had been or was likely to be no increase in the use of acceptance credits for such purposes.

Question No. 4. Relative to the curtailment of capital exports to central Europe through 1929 as a reason for the increase in acceptances arising from foreign storage and shipment.

Seven of the Federal reserve banks volunteered an expression of opinion on this point. Of these, the Federal Reserve Banks of Chicago, Dallas, Philadelphia, and San Francisco concluded that the curtailment of capital exports had been an important factor in the increasing volume of acceptances of this character.

The Federal Reserve Bank of Atlanta reported that the suggestion seemed theoretically sound but that there was no substantiating evidence in that district. While the curtailment of capital exports probably had some bearing, the most important factors in the situation, in the opinion of the Federal Reserve Bank of Boston, were the lower rates of interest in the American money market and the more adequate facilities. The Federal Reserve Bank of New York concluded that the curtailment of capital exports was not a particularly important factor.

Question No. 5. Relative to the desirability of the Federal reserve banks establishing foreign branches or agencies as a means of facilitating the growth of acceptance markets.

The Federal Reserve Bank of Boston was the only one which appeared favorably disposed toward this suggestion. Even it replied, however, that there are so many other contingent elements affecting the desirability of establishing such foreign agencies or branches that the whole question is "open to serious debate."

Question No. 6. (*a*) Relative to the extent to which the increase in acceptance totals has represented a growth in self-liquidating paper.

The Federal reserve banks reported that acceptance totals had increased tremendously the total volume of self-liquidating paper.

The Federal Reserve Bank of Dallas concluded that there probably had been no increase in the volume of self-liquidating paper, since the volume of self-liquidating paper could only be measured by the character of the originating transactions.

(*b*) Relative to the extent to which the bankers acceptance has been substituted for other forms of credit instruments.

The consensus of opinion seemed to be that some substitution of the acceptance for other types of credit instruments had taken place. This had been in the case of domestic shipment and storage transactions and to an extent in the case of export trade, a part of which had been financed formerly on the basis of counter credits. The greater part of the increase in acceptance totals, however, had occurred in the export and import trade and in foreign storage and shipment transactions which had not been financed previously on the basis of other types of domestic credit instruments.

(*c*) Relative to the eventual funding of any portion of acceptance totals into longer term obligations.

The Federal reserve banks foresaw no need to fund outstanding acceptances into long-term obligations excepting in the case of a portion of those acceptances drawn for the purpose of financing foreign storage and shipment transactions.

QUESTION No. 7. Relative to various abuses which have developed in the use of the acceptance.

The Federal reserve banks reported that the previous abuses in the use of the acceptances were disappearing. The acceptance had definitely been placed on a higher plane. The misuse of the acceptance in the past had arisen largely from a misinterpretation of the provisions of the Federal reserve act or from a lack of familiarity with the rulings and regulations of the Federal Reserve Board.

The Kansas City Federal Reserve Bank reported that there had been a few instances of banks swapping acceptances, with the object of selling these to the Federal reserve bank at preferential rates.

The Federal Reserve Bank of Richmond pointed out that subsequent to the liberalization of section 5200 of the Revised Statutes, in February, 1927, the use of the acceptance as a means of granting a larger volume of credit to individual borrowers than could be granted by direct loans had disappeared.

The Federal Reserve Bank of San Francisco recommended that the use of the domestic storage acceptance be confined to the financing of the major staple crops stored in the United States (cotton, grain, etc.) which are in such volume as to make financing through the open investment market desirable in order to lift the burden from the comparatively smaller financial institutions situated in the sections wherein the crops are produced. This would eliminate such abuses as have arisen in connection with the use of the domestic storage acceptance.

QUESTION No. 8. Relative to evidence of a number of acceptances arising from successive transfers of ownership of the same goods held in warehouse or in the course of shipment.

All the Federal reserve banks replied that no such cases had come to their attention.

QUESTION No. 9. Relative to the extent to which an investment demand for acceptances exists in the several Federal reserve districts.

The Federal Reserve Banks of Atlanta, Cleveland, Kansas City, Philadelphia, Richmond, St. Louis, and San Francisco reported that only a light investment demand for acceptances existed in those districts.

The Federal Reserve Bank of Dallas replied that there had been a gradual but steady growth in the demand for acceptances in that district.

The Federal Reserve Bank of Boston indicated that a real investment demand for acceptances occurred only when the open-market rates were sufficiently high to attract banks and other investors from a standpoint of yield, or when money is in abundance and yields low enough to make the acceptance attractive from the standpoint of safety and liquidity.

When rates of interest are high, according to the Federal Reserve Bank of New York, considerable amounts of bills are sold to individuals, corporations, and small interior banks. When market rates are on a low level demand from those sources decreases and the purchases of larger banking institutions, which have increased amounts of cash not otherwise employed, become more important.

QUESTION No. 10. Relative to permitting member banks to carry a part of their required reserves in the form of bankers' acceptances in order to stimulate an investment demand.

The Federal reserve banks were generally opposed to this suggestion. The reasons given were that the acceptance does not in itself constitute a genuine reserve; that the stimulation of an investment demand for acceptances is not sufficient justification for lowering reserve requirements; that reserve requirements are too low now; that this change would open the door for further demands for use of member bank reserves; that the provisions of the banking statutes should not be complicated further.

The Federal Reserve Bank of San Francisco pointed out that the development of a better investment demand would take place if the Federal reserve banks supported the acceptance market to a lesser degree.

QUESTION No. 11. Relative to a suggested plan that the Federal reserve banks should refuse to purchase acceptances, unless the accepting institutions held bills, accepted by other institutions, to a substantial percentage of their own acceptance liabilities. The purpose of this change would be that of stimulating an investment demand for acceptances.

All Federal reserve banks opposed this proposed change. The reasons cited were that the strength and breadth of the discount market would be impaired; that a further artificial situation would be created in the bill market; that the object to be attained could be defeated by subterfuge; that it would immobilize bank assets; that the total volume of bankers' acceptances outstanding would be reduced; that it would interfere with the mobility of short-term capital; that during the season of the year when the acceptance liabilities of banks are heaviest, their funds available for investment are at a low point.

The Federal Reserve Bank of San Francisco indicated that a more constructive proposal would consist in the Federal reserve banks educating all accepting banks to the desirability of extending at all times (even when borrowing from the Federal reserve bank) reasonable lines of credit to dealers in acceptances at a cost not greater than that bid for 90-day bills.

QUESTION No. 12. (*a*) Relative to whether the dependence of the acceptance market on the Federal reserve banks would be lessened if their buying rates on acceptances were held above the market rate on acceptances.

(*b*) Relative to the effect of this change in policy.

The Federal Reserve Banks of Atlanta, Chicago, Philadelphia, Richmond, and San Francisco affirmed that the dependence of the acceptance market on the Federal reserve banks would be lessened if the buying rates at the Federal reserve banks were held consistently above the market rate on acceptances.

The Federal Reserve Bank of Philadelphia concluded, however, that this proposal would probably not be practicable in the present artificial market.

The result of this change in policy, according to these Federal reserve banks, would be to effect a broader distribution of bills, would result in an improved discount market, would stimulate dealers in seeking a wider market, and would give accepting banks an incentive to support those dealers who are active in merchandising their acceptances.

The Federal Reserve Bank of Boston feared that the results of this policy would be to divert a part of the acceptance business of this country to Europe.

The Federal Reserve Banks of Cleveland and New York declared that their effective buying rates are generally and normally above market rates. The Federal Reserve Banks of Dallas and Kansas City replied that it is the present policy to maintain buying rates on acceptances above market rates.

(*c*) Relative to the artificiality of the market rate on acceptances.

The Federal Reserve Banks of Boston, Cleveland, Dallas, Kansas City, and New York replied that the market rate on bankers' bills was not as artificial as generally believed.

The Federal Reserve Bank of Chicago declared that the time had passed for the reserve banks to continue to give artificial support to the market.

The Federal Reserve Bank of Philadelphia stated that the buying rates at the reserve banks had practically determined the market rate for bills and would continue to do so until a broader discount market developed.

The Federal Reserve Bank of Richmond stated that the market rate had at times been an artificial one, and the San Francisco reserve bank concluded that such had been the case more than necessary during recent years.

Of a legal nature

QUESTION No. 13. Relative to limiting the accepting of time bills of exchange simply to those growing out of bona fide shipments in foreign trade and to those drawn for the purpose of creating dollar exchange.

With the exception of the Federal Reserve Bank of San Francisco, all of the Federal reserve banks were opposed to this proposed limitation.

The Federal Reserve Bank of San Francisco would favor the elimination of all storage credits excepting those arising out of the storage, within the United States, of important domestically raised staples, such as cotton, grain, wool, tobacco, etc.

QUESTION No. 14. Relative to the acceptance provisions of state banking statutes. (See appendix.)

Purchases for foreign account

Question No. 15. Relative to the data of the volume of bills purchased for foreign account classified by countries.

The Federal Reserve Bank of New York refused to submit the data requested.

Question No. 16. Relative to the buying rates on bills purchased for foreign account.

The Federal Reserve Bank of New York indicated that the rate on bills purchased for foreign account is ordinarily below the rates paid on bills of similar maturities bought for own account.

The bills purchased for foreign account are acquired almost entirely from dealers. The reasons are that the available supply is with dealers and that national banks are precluded by law from incurring indorser's liability on notes or bills discounted to the extent that would be necessary if they sold bills to the Federal reserve bank, in substantial amounts for the account of foreign banks.

A final reason is that the Federal Reserve Bank of New York, in this fashion, desires to maintain a broad and stable discount market.

Question No. 17. Relative to the rates of commission received by the Federal reserve banks for indorsing bills purchased for foreign account.

The Federal reserve banks replied that the commission charged amounted to one-eighth of 1 per cent per annum. The bills are not indorsed, but the Federal reserve banks guarantee payment at maturity and agree to buy back the bills at any time. For the purchase of bankers' acceptances without guarantee of payment or agreement to buy back, the charge is one-sixteenth of 1 per cent of the face amount.

Of a technical and statistical nature

Question No. 18. Relative to statistics of sources of bills purchased for own account.

Data may be found in the full replies of the Federal reserve banks.

Question No. 19. Relative to the policy followed by the Federal reserve banks in purchasing bills from, and in discounting bills for, accepting institutions.

None of the Federal reserve banks purchase bills directly from the accepting bank. The Federal reserve banks of Atlanta, Chicago, and Kansas City are willing, however, to rediscount such obligations at the rediscount rate.

The Federal reserve bank of San Francisco held that section 13 of the Federal reserve act does not contemplate the rediscounting on the part of a Federal reserve bank of a member bank's own acceptance.

Question No. 20. Relative to the volume of bills stated in foreign currency held for own account.

Sterling bills were purchased in 1927, 1929, and 1930 to relieve the pressure on the foreign exchanges and to check further imports of gold. These purchases were undertaken during the autumn when the foreign exchanges are normally under pressure and were liquidated when the seasonal strain had passed.

In 1929 pengos were purchased in cooperation with the central banks of England, France, Belgium, and the Netherlands to strengthen the position of the National Bank of Hungary in dealing with Hungary's foreign exchanges.

Through 1929 and 1930 a volume of franc bills were held.

Question No. 21. Relative to whether the reserve banks ever purchase acceptances from one another to serve as cover for Federal reserve notes.

The Federal reserve banks replied that this practice had not been found necessary.

Question No. 22. Relative to buying rates on acceptances in force at each Federal reserve bank.

Data may be found in the replies of the respective Federal reserve banks.

Question No. 23. Relative to whether the Federal reserve banks ever discriminate in the purchase of acceptances on the basis of the self-liquidating or nonself-liquidating nature of the transaction involved.

The Federal reserve banks replied that such had not been their practice, that buying rates are fixed on the established credit standing of the acceptors and indorsers of the bills provided that satisfactory evidence is presented that the bills are eligible.

Question No. 24. Relative to the effect of changes in the acceptance buying rates of the Federal reserve banks on the total volume of bills outstanding.

The Federal reserve banks replied that their buying rates for acceptances constitute but one factor in the determination of the total volume of bankers' acceptances. Prohibitive rates would, of course, tend to destroy the desire to create acceptances, while a constantly low range of rates would offer an inducement to use this form of credit.

A low level of rates relative to other rates of interest in the market and relative to rates of interest in foreign money markets would lead to a substitution of the acceptance for other forms of credit instruments and would lead to a certain shifting of acceptance credits between international monetary centers.

The Federal Reserve Banks of Boston and New York indicated that the acceptance buying rates of the Federal reserve banks were ordinarily only minor factors and that the amount of acceptances outstanding was a function of the volume of business and of market rates of interest on acceptances. In the determination of market rates, the Federal reserve banks are a passive rather than an active factor.

QUESTION NO. 25. Relative to the factors responsible for the decline in the acceptance commissions charged by American accepting institutions over the past six years.

The rates of commission charged on domestic acceptance credits has shown little change. The rates charged on foreign transactions have declined by reason of competition among American banks and by reason of competition between the New York and the London discount markets.

Concerning the relations with dealers

QUESTION NO. 26. Relative to the names of dealers in acceptances whose indorsements are recognized by the Federal reserve banks.

The Federal Reserve Banks of Atlanta, Kansas City, Minneapolis, and St. Louis replied that there were no recognized dealers in acceptances in those reserve districts.

The recognized dealers doing business in the other reserve districts include:

The First-National Old-Colony Corporation.
Shawmut Corporation of Boston.
The National City Co. of Boston.
Salomon Bros. & Hutzler of New York.
The Discount Corporation of New York.
The National City Co. of New York.
The Fort Worth National Co. of Fort Worth, Tex.
The Union National Co., Houston, Tex.
The National City Co. of California.
The American Securities Co. of California.

Whether a dealer's indorsement is recognized or not depends on the possession of a substantial net worth in relation to the business transacted; the experience and the ability of the management; his clientele; character of transactions; rapidity of distribution; his willingness to bid for bills and to circulate at frequent intervals a list of offerings.

QUESTION. NO. 27. Relative to the volume of bills held in the dealers' portfolios.

See data presented in the replies of the various Federal reserve banks.

QUESTION NO. 28. Relative to the amount of acceptances in dealers' portfolios acquired directly from accepting institutions, from drawers of bills, and from other sources.

From the data submitted by the Federal Reserve Banks of Boston, Chicago, New York, and San Francisco, it would appear that the bulk of the bill portfolios of the dealers is acquired from the acceptors.

QUESTION NO. 29. Relative to the amount of acceptances held under resale agreement by the Federal reserve banks on the last reporting date in each month since January, 1922.

Detailed data were supplied by the Federal Reserve Bank of Boston, Chicago, Dallas, New York, and San Francisco, the only ones entering into such arrangements at the present time. See replies of the individual Federal reserve banks to this question.

QUESTION NO. 30. Relative to the rates prevailing at each Federal reserve bank in respect to resale agreements.

Detailed data may be found in the replies of the various Federal reserve banks to this question.

QUESTION NO. 31. Relative to the problem of preventing the seepage of Federal reserve credit granted to dealers against resale agreements into the speculative or investment market.

The Federal reserve banks did not regard this as a problem of importance.

The Federal Reserve Bank of New York pointed out that the dealers seek accommodation simply for the purpose of carrying their portfolios of bills, when outside funds are not available, either in sufficient amounts or at economically possible rates. When the bills are sold or outside money becomes available, the resale agreements are repaid.

The Federal Reserve Bank of San Francisco replied that it is kept informed of the size of the dealers' portfolios and the amount of credit they require, so that there is little opportunity to misuse Federal reserve credit. The resale agreement rate is so fixed at the Federal Reserve Bank of San Francisco that an incentive is created to borrow elsewhere as soon as surplus funds appear on the market. The attitude of the San Francisco reserve bank is that dealers' portfolios should have a direct relationship to dealers' demands and that the Federal reserve bank should not accommodate dealers carrying bills with any other object in mind.

QUESTION No. 32. Relative to the average life of resale agreements.

At the Federal Reserve Bank of Boston, on a yearly average basis, resale agreements have varied from 7.1 days in 1924 to 11.2 days in 1923.

The Federal Reserve Bank of Chicago estimated the average life at about 10 days.

The Federal Reserve Bank of New York pointed out that a more accurate picture of the extent of the accommodation to the market under resale agreements is the average amount of holdings of bills under resale agreements and the number of days in each month during which there are no resale agreements. These data are incorporated in its reply.

The Federal Reserve Bank of San Francisco stated that in an active investment market bills were withdrawn very rapidly. The life of the agreements averages 4 or 5 days at times and at other times 10 to 12 days.

QUESTION No. 33. Relative to the relationship between changes in the amount of acceptances held under resale agreement on the one hand and the size of the dealers' portfolios and market rates of interest on the other.

The Federal Reserve Bank of Boston replied to the effect that the relationship between the volume of resale agreements and the size of dealers' portfolios was rather close. High portfolios were an indication of a slackening investment demand for bills. Resale agreements relieved the dealer of the necessity of dumping his bills on the open market, often at a loss.

The Federal Reserve Bank of Chicago stated that the size of resale agreements is more a function of money-market tightness than of the size of the dealers' portfolios. Inasmuch as the dealer derives no profit through carrying his portfolio with the Federal Reserve Bank of Chicago, it is to his advantage to sell them as quickly as possible in the open market or to borrow against them from commercial banks when the interest rates relax.

The Federal Reserve Bank of New York supplied a chart, which showed a fairly close relationship between the volume of resale agreements and dealers' portfolios. Deviations would be attributed to changes in the relationship of open-market rates and the rates prevailing at the Federal reserve bank.

The Federal Reserve Bank of San Francisco concluded that there is little relationship between the size of dealers' portfolios and the amount carried with the Federal reserve bank under resale agreement. The carrying charge imposed by the Federal Reserve Bank of San Francisco is designed to induce the dealers to borrow elsewhere if funds are available.

Replies Received from the Different Federal Reserve Banks, Tabulated by Questions

1. What are the factors that in your opinion have made for the increasing concentration of the acceptance market of the country in the hands of a few institutions located in New York, Boston, Chicago, and San Francisco, and that have militated against the establishment of discount markets in other centers?

Atlanta.—The concentration of banking resources in the cities named, the importance of foreign trade to the acceptance business, the mature commercial development of the cities and the territory surrounding them, their natural advantages of location, and their importance as financial and trading centers have been factors of importance in the increasing concentration of the acceptance business of the country in the hands of a few institutions located in New York, Boston, Chicago, and San Francisco. The establishment of discount markets in the centers of the Sixth Federal Reserve District has been militated against largely by the fact that the section is comparatively new and undeveloped commercially and industrially, and the development of its natural resources results in such a demand for funds for carrying on the growing business of the district at high rates of interest that there is little money to be attracted by the much lower rate to be had in acceptances.

Boston.—These cities are the centers wherein are located the larger commercial banks. Those located on the seacoast naturally attract more export and import business than the small inland cities. Chicago is a concentration point for acceptance credits, for the reason that it is one of the greatest industrial inland cities and the center of a great agricultural and livestock district. Acceptances of these larger and nationally known banks are readily sold to investors throughout the country, while the smaller and less known banks are not as well known to prospective investors. For this reason discount markets arise in the larger centers because the bills originate there and funds for temporary investments tend to concentrate there. Before the establishment of the Federal reserve act, acceptances were executed in sterling form by several private banking houses.

Chicago.—Out of $1,571,000,000 of bankers' acceptances outstanding on December 1, 1930, $1,352,000,000, or about 86 per cent of the acceptances of the first 40 accepting banks were of banks located in New York, Boston, Chicago, and San Francisco, with the exception of 1 bank at Buffalo, 1 at Cleveland, and 1 at Philadelphia. These four cities are the principal financial centers of the country, Boston, Chicago, and San Francisco being subsidiary to New York and each of the three serving its own particular territory; Boston, the New England States; Chicago, the Central and Western States; and San Francisco, the Pacific coast territory.

With regard to Chicago, acceptance dealers serve a wide territory in the sale of bills, reaching from Cleveland to the Rocky Mountains and from the northern border to the southernmost part of the country, Chicago acceptance dealers filling orders for bills from the principal cities in the territory outlined, the volume of acceptance business not being large enough to justify the establishment of branches in the other important cities in this territory. Furthermore, inasmuch as over 85 per cent of the acceptances originates in the four cities mentioned, it is more necessary for the dealers to be located at the sources of supply of bills, which are also the best markets for the bills, rather than to have offices mostly for the sale of bills only, in the other important cities of the country.

Cleveland.—(*a*) In this district there appears to be a lack of interest in the acceptance privilege granted under section 13 of the Federal reserve act except on the part of a few of our larger member banks.

(*b*) A preference on the part of many banks to loan their funds rather than their credit, even on transactions adaptable to acceptance financing, because of the better rate usually obtainable in loans.

(*c*) With only a few banks in this district availing themselves of the acceptance privilege and little interest on the part of our banks (with few exceptions) in purchasing bills, the volume created as well as the demand for purchases is not sufficient to warrant dealers in maintaining offices or carrying portfolios in this district.

Dallas.—The large capital structures of the banks in the cities mentioned provide for a sufficient volume of outstanding acceptances to make the commission revenue worth while. Moreover, the institutions in those cities are better known and therefore acceptance credits are sought from them, particularly where credits are desired by foreign banks on behalf of their customers, or directly by exporters or importers in foreign countries. Due to the fact that New York has been a settlement point for the country for so long, unemployment funds naturally flow to or accumulate in that center, and surplus funds of New York banks may, therefore, be invested in bankers bills to the extent that they are not invested in stock exchange call loans. The theory of acceptance credit is that it is granted in preference to direct loans, in view of the fact that it absorbs no loanable funds of the grantor of the acceptance credit, but is only a permission to use the accepting bank's credit. This theory holds true whether the accepting bank is short of loanable funds or whether it is "long" of loanable funds. By reason of the acceptance privilege a bank that is well loaned up can grant acceptance credits and in this case the accepting bank is necessarily not a purchaser of acceptances in the market. If it has surplus funds to loan it can still grant acceptance credit and either carry its own acceptances in its portfolio until such time as it desires to sell them, or it may continue to retain the surplus funds to loan whenever the opportunity presents.

This brings us to the thought, therefore, that banks whose capital structure is small, or which for other reasons do not grant acceptance credit, must be largely depended upon to purchase the acceptances of other banks. Therefore, we may say that, ordinarily, accepting banks are not large purchasers of acceptances, and, from the foregoing analysis, we are left to the conclusion that they do not regard it to their own interest to be large buyers of bills in the open market, unless there is no opportunity to invest their funds more profitably. While the distribution of acceptances has grown, and continues to grow, it is a fact that the number of banks which have become familiar and conversant with acceptance practices has not yet reached sufficient proportions to create any large demand for purchasers outside of the centers mentioned. This results in a greater dependence, for the present at least, and probably for some time to come, upon the Federal reserve banks to absorb acceptances that are put out to the extent that they are not absorbed by the purchases made by foreign banks. This is why Federal reserve banks have adopted the policy of buying only indorsed bills, so as to necessitate the negotiation of a bill at least once in the market before it is purchased by a Federal reserve bank. The bill dealers equipped with distribution opportunity, capital structure, and talented management are largely limited to the cities named, and though they are constantly adding to the names which they are buying, it is difficult for them to take on acceptances of banks located in other points than those mentioned, until such names become established and their acceptances will be generally bought.

Kansas City.—So far as this district is concerned, commercial banks have not been interested in the creation of an acceptance market and the amount of acceptances originating in the district is very small, for the reason that our commercial banks have preferred to make direct loans at current rates rather than create acceptances on which they would profit only to the extent of the acceptance commission.

Minneapolis.—The following factors were important in concentrating the acceptance business of the country in New York, Boston, Chicago, and San Francisco:

(*a*) The low rates which bankers' acceptances have yielded, and which make them undesirable as investments for banks in the interior where lending rates are higher and where it is possible to secure almost as large an income from interest on a correspondent bank balance as from investment in the bankers' acceptance.

(*b*) The prevailing use of other types of finance for domestic business, such as open credit, commercial paper, and direct bank loans.

(*c*) The concentration of import and export business in the cities named above.

(*d*) The lack of sufficient volume of open market types of loans in interior cities to warrant the growth of discount markets.

New York.—Important credit business naturally flows to the more important financial centers where are located the largest, strongest, and best known financial institutions. Most of the import and export trade of the country naturally flows through its principal ports and its financing is logically undertaken by the large institutions located in those cities. Discount markets can exist only when associated with and having access to money markets. Local money markets where funds would be available to discount houses and dealers on call and short notice in substantial and fairly constant amounts do not exist outside of the more important financial centers and, in fact, only New York provides credit and money facilities for a considerable discount market.

Philadelphia.—The value of an acceptance depends upon its salability, hence it must be accepted by an institution of the highest standing. Such institutions are located in the large cities, the majority, of course, being in New York. Transactions out of which acceptances originate, generally, are undertaken or finally completed by parties in the larger cities, or by those having financial connections in the large cities. The making of acceptances apparently has not proved attractive to many of the large banks, hence the comparatively few banks that make bills. Some of the smaller and less well-known banks have at times appeared as acceptors, but such bills do not rank as "prime" bills and therefore do not sell at as attractive rates as the better known ones, which leads the drawers of such bills to make acceptance arrangements with banks whose acceptances are made in sufficient volume to support trading in them. Up to this time, New York, Boston, Chicago, and San Francisco are the only cities where they are made in such volume. Further, Federal reserve banks very largely are the buyers, the rates of interest the bills return being so low as to be unattractive to the banks generally. As long as bills are largely sold to the Federal reserve banks there is little likelihood of there being a broad discount market.

Richmond.—In our opinion, the chief factors are: (1) That the dealers, or at least the large dealers, in acceptances are located in the money centers; (2) the accumulation of funds and the consequent slightly lower money rates prevailing in such centers have further tended to concentrate the acceptance business there; (3) the fact that in the interior (in this district, for example) the yield of acceptances is too low to attract banking institutions; (4) the tendency among dealers to encourage making acceptances payable in their centers; (5) a greater diversity in the character of acceptances available in money centers, which naturally prevails.

St. Louis.—In the early days we encouraged several dealers who tried to build up an acceptance business, but they soon gave it up as the banks in the eighth district displayed very little interest in the acceptance business. In the infrequent instances where banks or others were inquiring about the market they seemed to prefer to go to New York.

San Francisco.—First. San Francisco being so far removed from a primary market (New York), by distance as well as by time, makes the creation of a local market possible and to the direct advantage of acceptors and investors.

Second. There is within the San Francisco district an important investment demand for acceptances and an original source of bills accepted by banks having their names well known in the bill markets.

Third. Facilities given bill dealers by the Federal reserve bank to carry bills when accommodation for that purpose is not available at the local banks.

The absence of these features makes it unprofitable for local dealers to operate in those Federal reserve districts which can be adequately served from central points near at hand.

2. In the very rapid increase in acceptance totals from the beginning of 1926 to the present time, what factors were responsible for the increase in acceptances drawn for foreign storage and shipment; for the marked increase in acceptances arising against goods stored in domestic warehouses in 1927 and 1929; for the increase in export bills in 1927 and 1928; for the increase in dollar exchange bills in 1929; for the failure of bills arising from import trade to increase excepting in 1929; for the failure of acceptances arising from domestic shipments to increase materially through the period under review?

Atlanta.—Do not know.

Boston.—It should not be difficult to determine the factors responsible for the increase in acceptances drawn for foreign storage and shipment since 1926. There is no previous precedent against which to measure this type of credit, and therefore the importance of this marked increase may be overemphasized. There has been a steady increase in the volume of bills of this class of credit, rising steadily from $17,000,000 at the end of 1925 to $561,000,000 at the end of 1930. This steady increase has been maintained during periods of both advancing and falling rates, so it must be concluded that rates influenced the volume but little, if any. Federal Reserve Board regulations dated from February, 1927, liberalized the drawing of foreign credits, and while this liberalization undoubtedly stimulated the making of these bills, the advance in volume had begun early in 1926. From the above facts it would therefore appear that the very rapid increase in acceptances drawn for foreign storage and shipment was due primarily to two factors—first, the inability of foreign shippers to obtain funds easily and on a favorable basis in European centers, and to some extent even to nervousness regarding the stability of some of the European currencies. Second, and probably the most logical cause for this increase, was due to the ever-increasing volume of our commerce, which was financed by the use of the acceptance credit more than ever before, shippers finding this means of financing more satisfactory and cheaper. As our foreign trade expands, so will this class of foreign credit expand, and to-day's volume may look small when compared to the volume a few years hence.

Domestic warehouse bills gained from $115,000,000 in 1926 to $196,000,000 at the end of 1927. Statistics indicate a large part of this gain was due to American cotton awaiting shipment owing to heavy stocks and lower prices prevailing in England. Heavy and early crops, combined with falling commodity prices was indoubtedly the principal factor responsible for the increase in warehouse credits during 1929.

There was little difference in the average monthly amount of goods exported from the United States during 1926 and 1927, but statistics show that the exports for these two years were even lower than 1925. It, therefore, can not be said that the increase in the amount of export bills was due to any increase of our goods exported. It would appear, therefore, that the growth in 1927 was undoubtedly stimulated by the easy-money policy of the Federal reserve banks, which policy was embarked upon for the avowed purpose of facilitating the marketing of American crops at a time when they could not be financed in Europe. The growth of the export bills in 1927 was to quite an extent a matter of policy, while the growth in 1928 appears to be a seasonal movement similar to that which occurred in 1929, and to a somewhat less extent in 1925 and 1926, when the use of American acceptances was less familiar.

The increase in dollar exchange bills during 1929 was probably a reflection of the exceedingly tight credit conditions abroad.

The 12 months ending June, 1929, was the only year since 1925 when the volume of imports of merchandise into the United States had shown a substantial increase, therefore, there is no special reason for expecting the volume of import bills to increase materially in other years. The failure of acceptances arising from domestic shipments to increase materially during the period under review is probably due to the fact that commercial borrowing of all descriptions during this period was at a low ebb, borrowers having obtained funds through security issues which to a considerable extent supplanted previous channels, such as acceptances, brokers' commercial paper, and customers' commercial loans from banks.

Chicago.—With regard to the large increase in the volume of acceptances drawn for foreign storage and shipment between foreign countries, it appears that a substantial amount of this business originates in Germany and other central European countries and that it results at least to some extent from a continued shortage of capital and is not likely to be reduced until long-term loans can be floated in this country or in London or Paris. If long-term capital were readily available, it is the belief that the amount of this class of bills would be reduced to a considerable extent. We are unable to determine the cause of the increased volume of domestic storage bills in 1927 but are of the opinion that the still greater increased volume in 1929 was caused primarily by the surplus supply of commodities which was much greater than the demand. We are unable to determine the cause of the increase in the volume of export bills in 1927 and 1928. The increase in dollar exchange bills in 1929 was principally in bills executed for South American countries, caused by a surplus of commodities in those countries which they were unable to market readily and also due to the unfavorable exchange situation which created a demand for New York funds. With regard to the volume of import bills which has failed to increase as rapidly as the export bills, we are unable to determine the reason. With regard to failure of acceptances arising from domestic shipments to increase materially, this class of business is done largely through counter credits and is less suitable for acceptance credits. There does not seem to be much need for the development of the acceptance business along this line, as there is always plenty of counter credit available for this purpose.

Cleveland.—(*a*) More favorable rates, increased prestige of dollar credits abroad, and a lack of capital and sufficient banking facilities in Central Europe to carry on imports of raw materials and exports of finished goods without aid.

(*b*) The increase in domestic storage bills in 1927 over 1926 was approximately $81,000,000, and a large part of this was reported as being drawn against cotton awaiting export.

The increase in 1929 over 1928 was approximately $181,500,000, largely accounted for by agricultural products, grain, cotton, etc., awaiting export or other market. The increase reflected a desire to help the process of orderly marketing generally advocated.

(*c*) The increase in the volume of bills covering goods exported from this country in the years mentioned appears to follow the increase in value and volume of goods exported, which in those years were considerably augmented by the increased exportation of automobiles.

(*d*) The reason for the increase in dollar exchange bills in 1929 over 1928 appears to be increased merchandise exports. Coupled with this was the need of South American countries to provide dollar exchange to cover their imports, since their exports did not suffice. Curtailment of South American borrowings in this country during that period also affected the position of their exchanges.

(*e*) Import financing is, of course, subject to changes in the volume and value of our imports, and our import bills did increase every year since 1926. The increases between 1926 and 1928 were not great, but a considerable increase in this class of bills was shown in 1929, reflecting the heavy sugar importations which took place in the fore part of that year and the large imports of silk at fairly high prices which occurred in the latter part of the year.

(*f*) Domestic shipment bills have never been a large factor in total acceptances created, as will be noted from the following schedule of the amounts of such bills created from 1925 to 1929, inclusive: 1925, $25,600,000; 1926, $28,686,000; 1927, $20,959,000; 1928, $16,197,000; 1929, $22,830,000.

This indicates that other practices prevail, such as shipment against open account with a cash discount for payment of the accouht before maturity, shipment against sight draft with bill of lading attached, or shipment against time draft with bill of lading attached. Both sight drafts and time drafts against bill of lading shipments covering commodities are readily discounted by banks for their customers.

Dallas.—During the period mentioned the margin of acceptance ability which the American banks desired to use was large and, due to a shortage of capital or loanable funds in foreign countries, it was probably easier to arrange commercial credits with New York banks than with banks in the countries from which the business came. The use of acceptances for carrying goods stored in domestic warehouses in 1927 was a convenient method of financing the carrying of commodities. During that year many European countries were stabilizing their currencies and it was not until later in that year that gold exports from the United States were sufficient to increase the purchasing power of foreign countries, which made it easier for the commodities stored in this country to be sold and moved out. After the foreign exchanges were stabilized and became stronger, the purchase price of commodities in this country, in terms of conversion to foreign exchange, became more favorable for export transactions as a result of Federal reserve policies inaugurated in the latter part of 1927. The situation in 1929 was reversed, in view of the large gold imports in that year which decreased the purchasing power of foreign countries, and in addition to that the tremendous amount of credit absorbed in speculation required acceptance credit in order to provide for stored commodities. We think the answer to the third secton of this inquiry may be elucidated from the answer to the first question, as relating to 1927 and 1929. The increase in dollar exchange bills in 1929 was due to gold imports into this country and the necessity for creating dollar exchange to cover the tremendous amount of funds flowing into the New York call market. We have not checked the comparison of acceptance rates in years other than 1929, but we have already said that the drawing of foreign bills in reimbursement of export shipments was facilitated in other years than 1929 and by the same reasoning it was not necessary to resort to increasing the acceptance account in export transactions as it was in 1929. Acceptances to finance domestic shipments have never been in important volume, due to the short time that the financing of such shipments ordinarily runs. Reference to the regulations of the Federal Reserve Board will indicate that such acceptances were heretofore limited to the estimated time for shipment to be completed in domestic transactions. Most of the domestic shipments are moved either by short-time credit or sight draft with bill of lading attached. In view of the fact that sight and demand drafts with bills of lading covering shipments are eligible for rediscount at Federal reserve banks, there is no great advatnage in or necessity for undertaking to provide for such shipments by acceptance credits.

Kansas City.—This question can best be answered by the American Acceptance Council, the Federal Reserve Board, or the Federal Reserve Bank of New York, which acts as buying agent for the open-market committee and keeps in close touch with matters affecting the acceptance market.

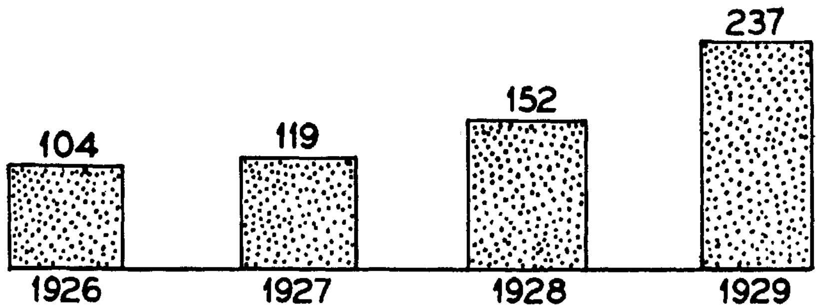
Minneapolis.—Detailed reasons for these changes in acceptance totals can best be given by bankers in the centers where the acceptance business originates.

New York.—Dollar acceptance credit for foreign trade which does not touch our shores and for the storage of staple goods in foreign countries has increased importantly since 1926. The greatest demand for it has come from Central Europe, which since the war has lacked capital and sufficient banking facilities in Europe to carry on their imports of raw materials and exports of finished goods without aid from America. Also, much business of this sort that was formerly financed in London has come to America as the cost of American financing decreased in comparison with the cost in London. While American commissions are somewhat higher, the relative open-market discount rates have, during the greater part of the time, been working in favor of America.

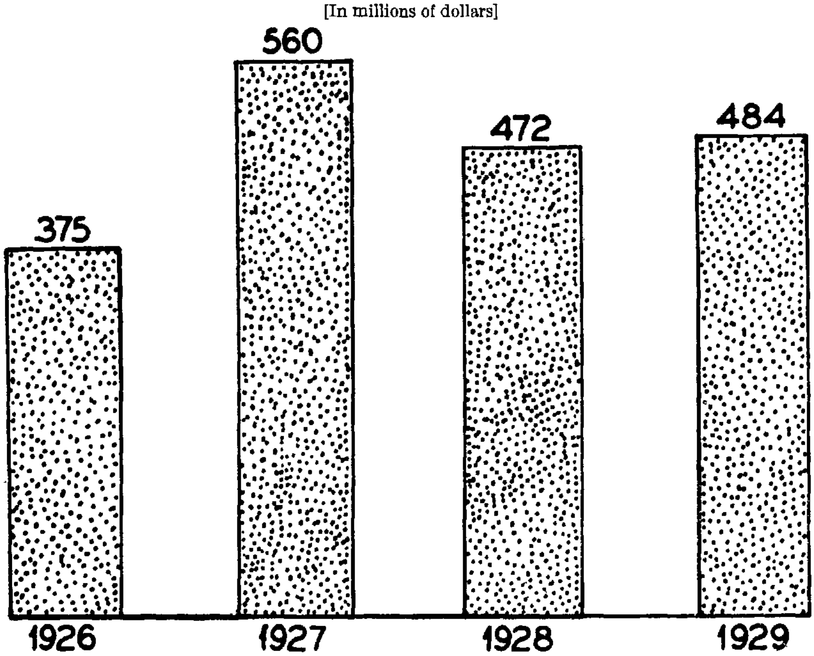
The increase in the volume of acceptance credits against staples stored in domestic warehouses in 1927 and 1929 occurred most importantly during the autumn months of those years and doubtless reflected substantial agricultural production during those seasons, for which there was no immediate market demand. Commodity prices also are reflected in the dollar volume of credit. In 1927 the principal occasion for increased drawings was cotton, with a somewhat unusual amount for sugar at that season; in 1929, the storage of cotton and grain was the occasion for substantial increases in drawings, as shown in the following diagram.

After each autumn increase, shipments within the next ensuing six months substantially reduced the volume of goods in warehouse and the outstanding credit in respect thereof; from a high point of $196,000,000 in December, 1927, the volume reduced by June, 1928, to $117,000,000, and by August, 1928, to $92,000,000. The low point for the year 1929 was in June, $87,000,000, the high point in December, $284,000,000, which was reduced gradually to $137,000,000 in July, 1930, from which point it began to ascend again during the autum and was $271,000,000 at the end of December, 1930. It is a seasonal movement, with fluctuations in volume determined by the size and value of agricultural production and the rapidity of its distribution in channels of consumption.

The increases in volume of export bills, that is, exports from this country, in 1927 and 1928 were: In 1927 from $272,000,000 in January to $390,000,000 in



Estimated value of average visible supply of wheat during last three months of each year
[In millions of dollars]



Estimated value of average volume of cotton in domestic warehouses
[In millions of dollars]

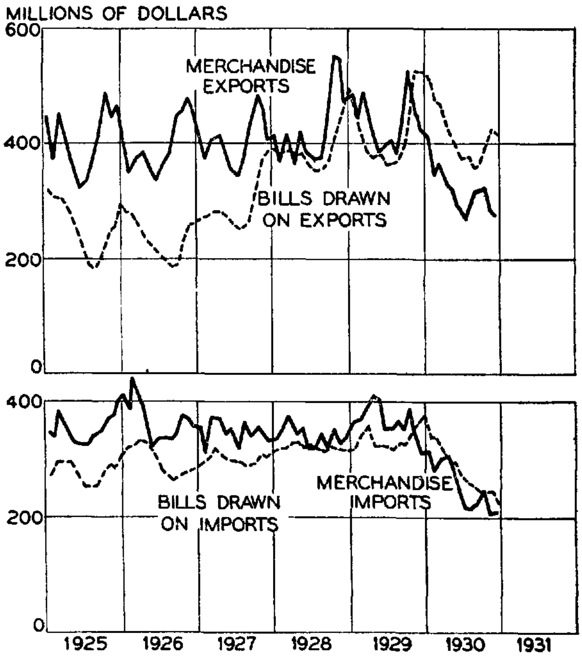
December, and in 1928 from $385,000,000 in January to $496,000,000 in December. These trends and the seasonal fluctuations in them correspond fairly closely to the changes and fluctuations in the value and volume of our exports, which during those years began to be importantly increased by the export of automobiles, that financing supplementing the longer established export trades.

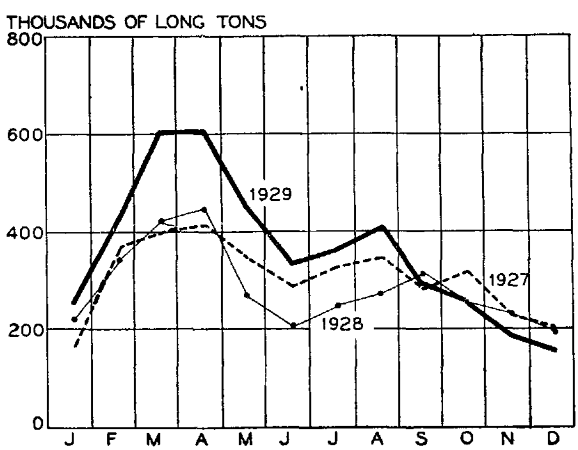
The accompanying diagram indicates the relation of the volume of financing to the volume of exports. From it it will be noticed that during recent years the volume of export bills outstanding has at times exceeded the current volume of exports. This results from the fact that there is a lag between the time of the reduction of the current volume of exports and the maturity of bills outstanding which were created in previous months, also the fact that within the classification of export bills are included bills which arise out of the sale in foreign countries of American products, principally cotton, sold to foreign spinners from stocks of goods held by American shippers in foreign countries, the export statistics on which would have appeared some time before the credit granted in respect of the sale of the commodity. The increase in dollar exchange bills in 1929 occurred principally in the last four or five months of the year, say, from about $49,000,000 in July to $76,000,000 in December, and reflected the increasing difficulties, principally of South American countries, in providing exchange from their own exports with which to pay for their imports from this country. Some curtailment in South American borrowings through bond or note issues in this country during that period also militated against the position of their exchanges and made remittances for imports more difficult. The factors applying to the import trade are similar but the reverse of the export trade. Changes in the volume or value of our imports affect importantly the volume of import financing. The volume of import bills in October, 1927, was $308,000,000, which did not increase importantly until March, 1929, when it reached $360,000,000. That was a period of very heavy imports of raw sugar from Cuba, probably stimulated as to volume through apprehension of increased American tariff against Cuban sugars. From that it declined to $316,000,000 in July, 1929, and from then on to the end of the year increased to $383,000,000. The fluctuations throughout the year 1929 were not unusual and the volume did not greatly exceed 1928 excepting for the months of February and March, and the last three months of the year when silk prices were fairly high and large amount s were being imported. The following diagrams show monthly imports of raw sugar and raw silk into the United States, 1927–1929.

The volume of domestic shipment bills has always been low compared to the volume of bills in other authorized transactions. The relatively slight use of acceptance credit in domestic shipments, we believe, depends principally on the fact that in America goods are so largely sold on open account with cash discount for prepayment of the account before maturity. A further reason until recently has been the ruling of the board that bills drawn in domestic shipment transactions by the buyer of goods should not be drawn for periods longer than the actual transit time of the goods. Since the rescinding of that ruling in its application under certain circumstances, there has been a moderate increase in the use of domestic shipment acceptance credit and it will probably continue to grow moderately as merchants and others become more acquainted with the facility afforded them.

Philadelphia.—The increase in acceptances drawn for foreign storage and shipment, from 1928 to the present time has been due in part to a liberalization by the Federal Reserve Board of its ruling in regard to acceptances of this character. An increasing demand throughout the world for international short-time financing in the form of acceptances; the spread of interest rates between New York and London; a better understanding of bankers' acceptances; the service offered by our accepting banks, plus the stability of the dollar as a medium of exchange, were some of the principal factors responsible for the increase in the acceptances drawn for foreign storage and shipment. A large portion of the gain in 1927 in acceptances arising against goods in domestic warehouses was represented by American cotton awaiting shipment, the sale of which was temporarily checked owing to heavy stocks on hand in England. Goods in domestic warehouses were fairly well liquidated in 1928, but the bills showed an increase in 1929, due to the surplus of wheat and cotton which went into storage, the shifting of domestically commodity loans against grain and cotton in warehouse into acceptances. The increase in export bills in 1927 and 1928 was due to the heavy volume of commerce during these years, a considerable portion of which was financed by means of acceptances. The rates were generally a little more favorable in this country than abroad, so it was only logical that the most economical method of financing foreign trade should be used. The exporter was finding acceptances more convenient and cheaper than other forms of credit. During the latter part of 1928 and 1929, the tightening in credit and high rates for money oth here and abroad had its effect upon the increased use of this facility. For example, grain which is usually handled on a cash, sight bill, and 7-day bill was exported under 30, 60, and 90 days. The increase in this type of acceptance was due to a growing demand for dollar exchange by such countries, mostly South America, as are permitted, under the provision of the Federal reserve act, and the ruling of the Federal Reserve Board, to draw acceptances on American banks for the purpose of obtaining exchange, which under other circumstances, might have been provided by bond issues in New York or London. The failure of bills arising from import trade to increase, excepting in 1929, was due to the recession in imports during 1927 and 1928. The failure of acceptances arising from domestic shipments to increase during this period was due to delay in liberalizing the regulations in this connection (wnich were subsequently modified).

Richmond.—The limited acceptance practice prevailing in this district does not qualify us to answer these questions.





Monthly imports of raw sugar into the United States

St. Louis. Volume of acceptances of banks in the eighth district too small to sned any light on the subject.

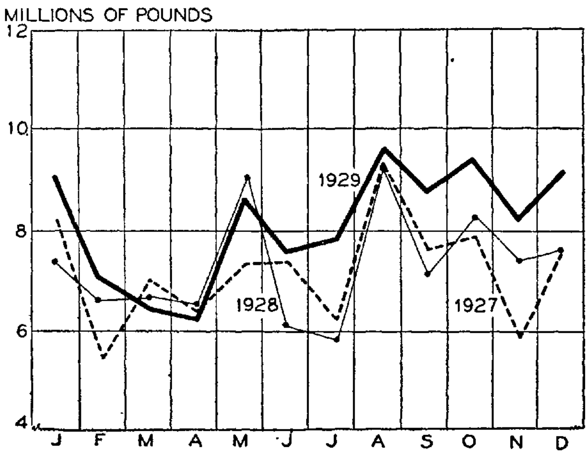
San Francisco.—(*a*) Reason for rapid increase of foreign storage and shipment credits since 1926: (1) Renewed industrial activities in foreign countries, accompanied by increase of their external trade; (2) lack of working capital abroad induced purchases of American raw material which could be financed by American credits; (3) long-term forward sales made European manufacturers call for well-advanced purchases of raw materials so that sale price can be matched against purchase price as a means of hedging.

(b) Reasons for increase of domestic storage credits, 1927 and 1929: (1) Sluggishness in movement of staples; (2) banks generally create bills more freely when they are indebted to Federal reserve bank, to keep down borrowings; (3) bank borrowers are more inclined to submit to secured (acceptance) credits when loan rates are above normal range and business is in a recession.

(c) Reason for increase of export bills during 1927 and 1928: (1) Owing to bill rates in United States being more favorable than in London, exporters used their foreign documentary drafts as a basis of acceptance credits instead of disposing of their bills to banks as foreign-exchange transactions; (2) for the benefit of the lower financing cost obtainable by the shipper in the United States, foreign buyers were willing to assume the risk of fluctuations in exchange.

(d) Reason for increase in dollar exchange bills during 1929: Use of this form of credit not sufficiently general on the Pacific Coast to warrant an expression of opinion.

(e) Reason for failure of import credits to increase except in 1929: (1) Volume of import bills relates closely to volume of trade with the United States. The increase shown in 1929 is primarily due to pending tariff legislation which precipitated rush of shipments to escape higher duties; (2) decline in 1930 is due both to pushing forward in 1929 of shipment dates and to increase of duties.



Monthly imports of raw silk into the United States

(f) Reason for failure of domestic shipment acceptances to increase: Documentary bills offer a desirable form of self-liquidating loan. Banks, therefore, are reluctant to convert these documentary drafts into acceptance credits except during severe credit strains.

3. What effect will the board's liberalizing ruling of 1929 have on the volume of acceptances arising from domestic shipments?

Atlanta.—The liberalizing ruling of 1929 should have the effect of increasing the volume of acceptances arising from domestic shipments. The cost of borrowed money to the purchaser of goods for working capital purposes will be less through the use of acceptances than the rate obtainable on his line of credit at the bank, and some substitution of acceptance obligations for discounted notes should follow. These factors should accrue to the benefit of the seller of goods in the form of a freer flow of goods in a better market with higher prices.

Boston.—The Federal Reserve Board's liberalizing ruling of 1929 probably will, and undoubtedly has, stimulated the making of acceptances arising from domestic shipments. It has made domestic acceptance financing much easier to handle, eliminates many of the technical discrepancies which have previously arisen and will probably result in continued growth of this classification, so long as acceptance discount rates are materially lower than the rates for cash advances.

Chicago.—In our opinion the Federal Reserve Board's ruling of November 8, 1929, liberalizing the use of acceptances arising from domestic shipments has had very little effect on the volume of domestic acceptances. For instance, out of a total of $1,657,000,000 bankers' acceptances outstanding as of November 30, 1929, only $33,000,000 were for domestic shipments of goods.

Cleveland.—It may eventually have the effect of somewhat increasing the volume, but as yet we have seen no appreciable increase. The statistics for the year 1930 are not yet available.

Dallas.—In our opinion, the board's liberalizing ruling of 1929 will undoubtedly increase the volume of acceptances arising from domestic shipments in that it will enable banks to accept for a longer period of time than under the former rulings.

Kansas City.—Very little effect in this district, but should create greater total volume of such bills.

Minneapolis.—There is no great volume of commodities moving domestically which is affected by the board's ruling of 1929.

New York.—The last sentence of the answer to question 2 also answers question 3.

Philadelphia.—It should result eventually in a substantial increase in the volume of bills issued for this purpose.

Richmond.—No appreciable effect, if any, in this district.

St. Louis.—Increase.

San Francisco.—No change has been noticed in the twelfth district.

As stated elsewhere, documentary drafts provide a desirable form of self-liquidating bank loan and banks are not inclined to use them as a basis of acceptance credits except, in a case of credit strain, to minimize liabilities for borrowed money.

4. It has been suggested that the increase in acceptances arising from foreign storage and shipment is to be explained by the curtailment of capital exports to Central Europe through 1929. What light does the experience in your own district throw on this problem?

Atlanta.—The suggestion that the increase in acceptances arising from foreign storage and shipment is to be explained by the curtailment of capital exports to Central Europe through 1929 seems to us to be theoretically sound, but we have found no evidence in the Sixth Federal Reserve District which would support the explanation suggested.

Boston.—Curtailment of capital exports to central Europe through 1929 probably has had some bearing on the increase in acceptances arising from foreign storage and shipment, but see also our answer to question No. 2 of questionanire No. 10. In our opinion the fact that this country offered the cheapest money market with adequate facilities, is a more important factor than the curtailment of capital exports through 1929.

Chicago.—From the information we are able to obtain, we are of the opinion that the lack of capital exports to central Europe since 1929 has been an important factor in causing the increase of American acceptances against foreign storage and shipment of goods between foreign countries.

Cleveland.—Our own experience throws no light on this problem.

Dallas.—We have no direct experience, but our observation would tend to corroborate the explanation given.

Kansas City.—None.

Minneapolis.—Our district has had no experience which would throw light on the increase in acceptances arising from foreign storage and shipment, as outlined in this question.

New York.—Doubtless if central Europe had larger capital resources the industries of those countries would be less dependent upon foreign financing in their import and overseas trade but we do not believe that the curtailment of capital imports to those countries during the year 1929 was very important in increasing the volume of dollar acceptances in respect of their trade. We have heard no comments from our accepting bankers that would indicate that such was the case. In the autumn of 1929 when the open market discount rate for bankers' bills in London advanced to above 6 per cent considerable amounts of acceptance credits were permitted to run off in sterling and as they expired were replaced by dollar credits. Even before the war those countries depended largely upon London and other foreign centers for the financing of their overseas trade.

Philadelphia.—This is undoubtedly true, but I do not think it had any noticeable effect in this district. The acceptance medium of financing is not used very extensively; as a matter of fact, its activities are confined practically to two banks, which are rather conservative in its use.

Richmond.—Our experience in this district does not throw any light on this problem.

St. Louis.—None.

San Francisco.—The increase in the twelfth district evidenced a demand for credit arising in Central Europe.

Due to increased commerce in European countries, a paucity of short-term credit and inability to float long-term obligations, due to world-credit conditions, this form of credit has been made adaptable.

Higher bill rates in London afforded a contributing cause for the increase of American credits.

Acceptances

[In millions of dollars]

	Total, Nov. 30—					San Francisco, Nov. 30—				
	1926	1927	1928	1929	1930	1926	1927	1928	1929	1930
Imports	281	304	317	362	243	13	11	13	12	11
Exports	260	375	448	522	421	8	14	9	13	10
Domestic	20	22	18	20	33	1			1	1
Warehouse	105	186	163	260	273	8	14	8	18	16
Dollar exchange	21	31	32	75	56			1		
Foreign storage and shipment	39	111	221	416	543	2	1	14	21	33
Total	726	1,029	1,199	1,655	1,569	32	40	45	65	71

5. Would it facilitate the growth of acceptance markets in the various reserve districts for the reserve banks to establish foreign agencies or branches in foreign countries?

Atlanta.—It is our opinion that the establishment of foreign agencies or branches of the Federal Reserve Bank of Atlanta in foreign countries would not facilitate the growth of acceptance markets in this district. We think that the possibility of the success of such foreign branches or agencies would be the greatest in the New York, Boston, and San Francisco districts.

Boston.—Undoubtedly the establishment of foreign agencies of Federal reserve banks would facilitate, to some extent, the growth of acceptance markets in the various Federal reserve districts, but there are so many other contingent elements affecting the desirability of establishing such agencies or branches that the question is open to serious debate.

Chicago.—In our opinion it would not.

Cleveland.—We believe not.

Dallas.—We think not.

Kansas City.—Not in this district.

Minneapolis.—It would not facilitate the growth of an acceptance market in the ninth Federal reserve district for the reserve bank to establish a foreign agency or branch.

New York.—As explained in the answer to question No. 1, the establishment of a discount market must depend upon the existence of a money market in which discount houses and dealers can constantly borrow substantial amounts of money at rates low enough to permit them to carry the portfolios of bills which they must carry pending sale or distribution to investing clients. There would seem to be no connection between the existence of such money markets in interior cities in this country or the lack of them and the business which might be undertaken by branches or agencies of Federal reserve banks established in foreign countries. Bills drawn on American banks now reach American discount markets through the American branches or agencies of foreign banks and the head offices of American banks which maintain agencies or branches in foreign countries, and also through the American banking correspondents of foreign banks which do not maintain branches in this country. The stability of the American discount market and its willingness to quote forward discount rates for prime dollar bankers' acceptances to arrive from abroad at very close to the spot rates for similar bills have been very important factors in establishing the dollar bill of exchange in foreign markets, so that in every country where export trade is done in dollars prime dollar bills are bought as freely as sterling, and with confidence that they may be discounted in this country upon arrival or later, at the convenience of the holder.

Philadelphia.—Do not believe the establishment of agencies or branches in foreign countries by Federal reserve banks would facilitate the growth of the acceptance market in the various districts. ——— believe the agencies established by the large city banks are sufficient at this time to take care of any business that may originate in this country.

Richmond.—Our experience in this district up to the present throws no light on this subject, and we are inclined to think it would have no material effect in this district in any event.

St. Louis.—Not in the eighth district.

San Francisco.—No; but the growth may be increased by member banks establishing foreign branches.

6. To what degree has the increase in acceptance totals represented a growth in self-liquidating paper? A substitution for other forms of credit instruments? A growth in credit which will eventually be funded into longer term obligations?

Atlanta.—(1) To an appreciable degree. (2) To a certain extent. (3) To some extent.

Boston.—There has undoubtedly been a large and genuine growth of self-liquidating paper resulting from the increased growth of acceptances.

It is doubtful if acceptances will be commonly substituted for other forms of credit instruments and while there may have been some shifting of credit from one class to another, from time to time, owing to rate consideration, it is believed that no great amount of permanent substitution has resulted. The acceptance credit has its own particular uses, it being drawn for some particular purpose such as financing a shipment, or storage of goods either in this country or abroad, while commercial paper on the other hand is used for general financing purposes. Of the total volume of bills outstanding, the only part of the acceptance business that could be financed by commercial paper is that which is of a domestic nature, this being a very small percentage of a total volume of bills outstanding.

It is doubtful if any of the self-liquidating paper will be funded into the longer-term obligations. This would only apply to those classes of acceptances which are subjected to abuse by renewals.

Chicago.—With regard to acceptances, covering the domestic shipment and storage of goods, funds to finance these transactions were formerly provided for by the use of commercial paper either discounted at the banks or sold in the commercial paper market. The acceptance credits used for these purposes, therefore, are substitution for paper which already existed and which in either case would be equally self-liquidating. This is also true to some extent in the case of export bills, where counter credit formerly took the place of acceptance credits, particularly for shipments of provisions by the meat-packing corporations and others. A very large proportion of American acceptances now used to finance foreign trade represents business that was formerly financed by the use of acceptances in the London market and about 30 per cent of the total amount of acceptances now outstanding represent transactions between and the storage of goods in foreign countries; therefore a substantial amount of our total acceptances outstanding represents transactions that were formerly financed outside of the United States.

With regard to the domestic acceptances, we can find no reason to believe that any part of this class of business will eventually be funded into longer-term obligations. However, with regard to acceptances issued for the shipment between and storage of goods in foreign countries, which has attained a large volume, it is probable that if longer-term obligations could be sold for the benefit of the countries affected, that this class of acceptances would be substantially reduced.

Cleveland.—Any answer we might make to these questions would not be predicated upon known facts.

Dallas.—(*a*) We do not think that the increase in acceptances has represented any particular growth in self-liquidating paper, as the volume of self-liquidating paper can only be measured by the origin of the transactions creating it. It is true, however, that the increase in acceptances has materially decreased the cost of credit where self-liquidating paper is involved. To some extent, no doubt, the acceptance facility has in itself increased the possibility for a larger volume of self-liquidating transactions and has had a bearing on an increase in business in this country which could not be obtained before. It has also been fortunate that American banks were permitted to accept during the period of disturbed financial conditions in foreign countries, because this privilege has greatly facilitated both the import and export trade of the United States.

(*b*) Acceptances have been substituted both for commercial paper formerly sold in the open market, and for paper arising out of over-the-counter loans.

(*c*) We have no fear of the acceptance facility creating a growth in credit that will eventually be funded into longer-time obligations as we see small possibility for any capital loans being obtained under the guise of acceptance credit.

In the first place, the regulations of the Federal Reserve Board are sufficiently rigid to prevent that. Accepting banks do not have sufficient latitude in their accepting transactions to foster extension of capital credit in that way and the market itself probably could not be induced to absorb acceptances of that character.

Kansas City.—Acceptances based upon import and export transactions and shipments between and storage of goods in foreign countries would seem to represent almost wholly growth in self-liquidating paper. Domestic acceptances, on the other hand, represent principally substitution for other forms of credit instruments. It would not seem that any considerable amount of the acceptance totals will eventually be funded into longer-term obligations.

Minneapolis.—The answer to this question can only be given by bankers in centers originating the bulk of acceptances.

New York.—Dollar acceptance in overseas trade has added practically 100 per cent of its volume to the amount of self-liquidating paper outstanding in this country. It does not replace any material amount of other forms of commercial dollar obligations. The business was formerly financed abroad, largely in London, under sterling credits, which, however, are practically as large as before the war. The growth of business now requires the credit facilities of both markets.

The domestic warehouse secured credits have supplemented and possibly replaced to an unknown extent commodity loan paper in this country and the small amount of domestic shipment acceptances has supplemented and possibly replaced a nominal amount of unsecured commercial bank loans.

Excepting as commercial and industrial concerns may further relieve themselves of the necessity for taking bank accommodations in any form as the result of increasing their capital and working funds through capital issues, we do not believe that long-time borrowing will eventually or importantly replace acceptance credit, although the volume of so-called commercial paper, i. e., promissory notes of well-known concerns distributed through the commercial-paper market, has been largely reduced and replaced by capital issues of the larger and better-known firms and corporations that formerly borrowed at their banks and through the commercial-paper market. The nature of the business financed by acceptance credit, i. e., the movement of goods and commodities, with large seasonal variations in the different trades, is not such as, generally speaking, can be economically financed by capital funds borrowed for long periods. The acceptance credit helps materially to accommodate the seasonal demands or peaks in demand for credit.

Philadelphia.—Acceptance totals have increased tremendously the self-liquidating paper. A great many credits financing commodities such as grain, cotton, etc., were formerly on a straight-loan basis but are now covered by acceptances; probably the largest percentages of increase, however, is accounted for by foreign transactions. We have no reason to believe that the increase in the use of acceptances has resulted in a growth of credit which will eventually be funded in long-term obligations.

Richmond.—We are inclined to think that the increase in acceptance totals has represented an appreciable growth in self-liquidating paper, and to some extent is a substitute for other forms of credit instruments. We are not inclined to believe that the increase in acceptance totals represents a growth in credit which will eventually be funded into longer-term obligations to a material extent, if any.

St. Louis.—The bulk of the bills accepted by member banks in the eighth district have resulted in self-liquidating paper. In the majority of instances they represent substitutions for other forms of credit instruments. We know of no instances where eventual funding into longer-term obligations was contemplated.

San Francisco.—Acceptances arising out of import and export transactions represent a highly liquid form of credit.

The growth of domestic storage credits is largely due to a substitution of bank loans by acceptances. This movement is induced somewhat by increased warehousing facilities, making storage credit more readily obtainable.

Storage credits usually are not as liquid as those arising out of import and export transactions because the goods are frequently being held pending future sale. Expediency, however, seems to justify the creation of acceptance credits against the storage in United States of our major crops, such as cotton, grain, etc., so that the investment market can be used to carry a part of the burden which is too heavy for the banks in the producing area. (See questionnaire 10, question 7).

In the case of acceptances arising out of copper in foreign storage and shipment transactions, it might be said that when the raw material has been converted to capital uses (power plants, for instance) the original credits are retired by the sale of long-term bonds.

7. State the experience in your district with various abuses in the use of the acceptance, i. e., with acceptance renewals, with the drawing of acceptances for a longer period than the life of the underlying transaction, with the use of the acceptance for refinancing purposes, with the use of the acceptance for the purpose of extending credit beyond the limitations imposed by section 5200 of the Revised Statutes, with the use of the acceptance for the purpose of holding goods in storage for speculative purposes, and with the practice of accepting institutions discounting their own acceptances.

Atlanta.—Some evidence of the abuse of the acceptance in this district has been found with regard to acceptance renewals, with the drawing of acceptances for a longer period than the life of the underlying transaction and with the use of acceptances for refinancing purposes. Acceptances have been used to a certain extent for the purpose of extending credit beyond the limitations imposed by section 5200 of the Revised Statutes, primarily in the financing of cotton. There has been very little abuse of acceptances drawn for the purpose of holding goods in storage for speculative purposes. Accepting institutions have discounted their own acceptances in a very small amount in the aggregate. Our experience with acceptances has been limited by the comparatively small volume of acceptances originating in this district.

Boston.—During the years when member banks were beginning to do an acceptance business, we found more or less frequent occasion to inquire regarding transactions underlying the creation of acceptances but the abuses in the use of acceptance credits which now come to our attention are comparatively few. Practically the only abuses which are now noted are in acceptances arising out of warehouse transactions when the merchandise stored is neither "goods actually under contract for sale and not yet delivered or paid for" nor "readily marketable staples" as defined by the Federal Reserve Board. In a very few other instances we have found that the goods represented by the acceptances were not stored in an independent warehouse.

When any of the acceptances purchased by us have been found to be ineligible, we usually suggest to the accepting bank the withdrawal of such bills from the market.

Chicago.—While we have had some experiences in the past with abuses in the use of acceptances, these abuses which came to our attention were corrected at the time and we have not seen any avidence of such abuses during the last six or seven years. It is our belief that as a result of experiences of the accepting banks and of the continuous efforts of the Federal reserve banks and of the American Acceptance Council in educating banks to the proper use of acceptance credits that the business now, generally speaking, is conducted on a higher standard than it was 10 or 15 years ago. We find the accepting banks anxious to comply with the rules and regulations of the Federal Reserve Board and a willingness on their part to cooperate with us so that the acceptance business can be conducted on a sound and proper basis.

With regard to the practice of accepting institutions discounting their own acceptances, this bank has not purchased from accepting banks their own acceptances, although we have indicated to them that we are willing to discount such acceptances at our rediscount rate. This rate, however, is invariably higher than the market rate and our buying rate for bills and, therefore, we have not been called upon to do so.

Cleveland.—Abuses when they occurred as far as member banks in this district are concerned, in our opinion, were in the main the result of misinterpretation of the provisions of the Federal reserve act or lack of familiarity with the regulations and rulings of the Federal Reserve Board governing acceptance financing. We have seen no recent abuses of the acceptance privilege, and no instances of storing commodities for speculative purposes under acceptance credits have come to our attention. Since the inception of acceptance financing, banks have always discounted some of their own acceptances, but such discounts we believe have been considered by them as direct-line borrowing of the drawing customer until the bills are sold.

Dallas.—As far as we have been able to observe, the accepting banks in this district have been quite conscientious in undertaking this business. There has been a tendency at times toward an unintentional abuse of the privilege, but on inquiry we have found that this arose from ignorance of principles of the regulations and of the law. At times during the initital use of the acceptance facility some banks had the thought that the bills could be sold to us as soon as created. The use of acceptances to supplement or evade section 5200 seems to us to be unimportant, in view of the fact that the acceptor must be secured for that part of the line that exceeds the legal loan limit; but, at that, we have observed no tendency along that line. None of the categories mentioned in this inquiry has been a problem to us.

Kansas City.—Since banks in this district have not availed themselves to any considerable extent of the privilege of creating acceptances, we have had very little experience in connection with the abuses enumerated. In the few instances where acceptances have been created in the district, however, the extension of credit beyond the limitations imposed by section 5200 of the Revised Statutes was the principal factor prior to the enactment of the amendments to section 5200 in February, 1927. Since that time this reason for the creation of domestic storage acceptances has not been evident in the district. There have, however, been several instances of accepting institutions holding their own acceptances and some few instances of accepting banks trading bills with other banks with the object of immediately selling such bills to the Federal reserve bank and taking advantage of the preferential rate on open-market bills.

Minneapolis.—The volume of acceptances originating in this district is very small, and such abuses as outlined in this question have not been important.

New York.—The practices referred to in this question are practically nonexistant in this district, except that acceptors frequently discount their own acceptances for their customers that are not in touch with discount houses. It is an accommodation to the customers and a method of getting the bills into market and can hardly be called an abuse. At times accepting institutions may withhold their paper temporarily from the market for either of two reasons: (1) That they are so amply supplied with funds themselves that they would have no use for the proceeds of the resale of their bills; (2) that for one reason or another it is not desirable to have added amounts of their acceptances in the market at a given time. This may depend upon the state of the market itself or the amount of the acceptance bank's outstanding liabilities. It sometimes happens that outstadning letters of credit which frequently exceed the legal limit of acceptance liability of a given institution will be availed of by drawers to an extent which, if the bills were permitted by the acceptor to become outstanding would put their acceptance liability in excess of their legal limit. In such case they must either retire outstanding bills or prevent new bills from becoming outstanding.

As to giving acceptance credit for the purpose of extending credit beyond the limitations imposed by section 5200 of the Revised Statutes, that is a statute limiting the amount of indebtedness to a natonal bank for borrowed money. A line of acceptance credit in addition to cash advances is not a violation unless the bills are held in portfolio by the acceptor and the amount so held and cash advances together exceed the limitations contained in section 5200.

Philadelphia.—We do not believe this facility has been abused to any great extent in this district. In one or two instances we found that small banks not familiar with the regulations have drawn acceptances for a longer period than the life of the underlying transaction, and for the purpose of extending credit beyond the limitations imposed by section 5200, but, generally, the banks in this district abide by the regulations. Some of the banks carry their own acceptances in their portfolios but only for the purpose of awiating a favorable turn in the market. These loans, of course, are subject to section 5200 of the national bank act.

Richmond.—In the early days of the Federal reserve system a number of instances came to our attention in which the various abuses above described occurred. This, however, was due to inexperience and lack of understanding of the principles which should govern the creation of acceptances. Before section 5200 was amended there were undoubtedly a number of cases in which the acceptance form of credit was used to grant a larger volume to individual borrowers than could be made by direct loans. Since the provisions of section 5200 have been liberalized, this abuse has greatly lessened, if it has not entirely disappeared, and other abuses rarely come to our attention. It should be remembered, however, that the total volume of acceptances made by banks in this district is extremely small.

St. Louis.—The abuses that did come to our attention, but not recently, were inquiries regarding the creating of acceptances for the purpose of extending credit beyond the limitations imposed by section 5200 of United States Revised Statutes, and the practice of accepting institutions wanting to discount their own acceptances.

San Francisco.—Acceptance renewals and unnecessarily long usance are not prevalent in the twelfth district. Section 5200 has been so liberalized as no longer to make necessary the carrying of excess lines under acceptance credits to avoid loan limitations. The only tendency to abuse arises out of the use of the domestic storage acceptance to take care of a class of credit which, from the standpoint of good banking, is in proper form when carried as a loan.

In this connection, it would seem better to confine the use of the domestic storage acceptance credit to that of financing the major staple crops stored in the United States (cotton, grain, etc.), which are in such volume as to make financing through the open investment market desirable so as to lift the burden from the comparatively smaller financial institutions situated in the sections wherein those crops are produced.

8. To what extent have you seen evidence of multiple acceptances arising out of successive transfers of ownership of the same goods held in warehouse or in course of shipment?

Atlanta.—We have not seen many instances of multiple acceptances arising ou of successive transfers of ownership of the same goods held in warehouse or in course of shipment.

Boston.—From the volume of bills which this bank has purchased, we have not seen any evidence of multiple acceptances arising out of successive transfers of ownership of the same goods held in warehouse, or in course of shipment.

Chicago.—We have seen no evidences of transactions of this kind.

Cleveland.—We have seen no evidence of such practice.

Dallas.—None.

Kansas City.—None.

Minneapolis.—No evidence of multiple acceptances in this district has come to our attention.

New York.—We have seen no evidence of multiple acceptances arising out of successive transfers of ownership of the same goods held in warehouse or in course of shipment. Our banks generally inform us that they are very careful to avoid such positions.

Philadelphia.—None.

Richmond.—No such cases have come to our attention in this district.

St. Louis.—None.

San Francisco.—Not in evidence in the twelfth district.

9. To what extent does an investment demand for acceptances exist in your district? To follow the investment demand on the part of member banks append statistics for as frequent intervals as possible, beginning January, 1922, of the acceptance liabilities of the member banks of your district, together with the amount of their own acceptances and of the acceptances of other banks held in portfolio.

Atlanta.—An investment demand for acceptances exists in this district to a very small extent.

Acceptance liabilities of all member banks, sixth Federal reserve district [1]

Dec. 31, 1929	$30, 732, 000
Dec. 31, 1928	23, 946, 000
Dec. 31, 1927	18, 725, 000
Dec. 31, 1926	19, 529, 000
Dec. 31, 1925	17, 915, 000
Dec. 31, 1924	17, 161, 000
Dec. 31, 1923	18, 852, 000
Dec. 31, 1922	14, 132, 000
Dec. 31, 1921	10, 703, 000

Amount of own acceptances and acceptances of other banks held in portfolio of all member banks, sixth Federal reserve district [2]

Dec. 31, 1930	$3, 011, 000
Sept. 24, 1930	2, 900, 000
June 30, 1930	2, 709, 000
Mar. 27, 1930	4, 029, 000
Dec. 31, 1929	4, 177, 000
Oct. 4, 1929	3, 656, 000
June 29, 1929	5, 667, 000

[1] Includes acceptances executed for customers, and acceptances executed by other banks for account of the reporting banks. Contingent liability on account of indorsement of acceptances of other banks sold is not included.

[2] Includes acceptances owned by member banks payable in the United States and in foreign countries. A detailed classification of loans and investments of member banks was not made by Federal reserve districts prior to June 30, 1929.

Boston.—A real investment demand for acceptances exists in this district only during those periods when the open-market rates are sufficiently high to attract banks and other investors from a yield standpoint, or when money is in abundance and yields low to make the acceptance attractive from the standpoint of safety and liquidity. There have been times when trustees, insurance companies, and savings banks have bought acceptances.

Acceptance liabilities of member banks in district No. 1 together with the amount of their own acceptances and of the acceptances of other banks held in portfolio

[000 omitted]

Date	Acceptance liability	Own acceptances held in portfolio	Acceptances of other banks held in portfolio
1922			
Mar. 10	$40,626	$4,320	$7,736
June 30	39,233	1,092	6,430
Dec. 29	53,705	1,949	7,343
1923			
Apr. 3	72,459	1,707	5,866
June 30	50,796	1,484	5,744
Sept. 14	37,550	857	2,350
Dec. 31	44,000	906	4,779
1924			
Mar. 31	53,323	648	5,161
June 30	37,665	1,429	9,799
Oct. 10	36,847	2,783	11,840
Dec. 31	58,816	2,787	16,758
1925			
Apr. 6	60,132	1,659	8,499
June 30	40,408	1,182	4,767
Sept. 28	36,827	1,477	2,168
Dec. 31	47,715	2,785	4,766
1926			
Apr. 12	56,193	2,217	2,526
June 30	46,011	387	1,036
Dec. 31	45,496	1,777	1,242
1927			
Mar. 23	$51,751	$2,582	$2,709
June 30	48,096	2,614	966
Oct. 10	57,035	2,243	785
Dec. 31	89,807	4,364	678
1928			
Feb. 28	87,614	2,892	729
June 30	82,725	1,833	504
Oct. 3	74,788	851	982
Dec. 31	99,901	3,143	690
1929			
Mar. 27	81,973	1,079	15,323
June 29	78,019	3,852	7,104
Oct. 4	82,539	988	2,310
Dec. 31	108,894	3,949	36,913
1930			
Mar. 27	100,778	613	23,513
June 30	90,341	1,775	342
Sept. 24	76,953	947	22,981
Dec. 31	90,243	1,797	74,395

Chicago.—Dealers' sales of acceptances in the seventh district in 1930 were $178,158,000, and purchases amounted to $219,815,000.

Total holdings of bankers' acceptances of accepting member banks, seventh Federal reserve district, showing holdings of bills of other banks and of own bills, also liability for own acceptances outstanding, and for indorsed bills

[In thousands of dollars]

	Total holdings of bankers' acceptances	Bills of other banks held	Own bills held	Liability for own bills outstanding	Liability for outstandings of other banks sold with indorsement by accepting banks of the district
1922					
Jan. 1			926	37,035	
Mar. 10			1,982	30,876	4,532
June 30			357	40,765	29,149
Dec. 29			352	33,921	9,835
1923					
Jan. 31	5,563	2,478	3,085	37,184	
Feb. 28	4,442	1,741	2,701	38,266	
Mar. 31	4,038	1,458	2,580	35,697	9,145
Apr. 30	1,715	1,408	307	25,589	
May 31	2,631	2,416	215	25,425	
June 30	848	590	258	21,989	5,428
July 31	1,544	1,369	175	24,572	
Aug. 31	1,940	789	1,151	28,901	
Sept. 29	1,807	987	820	26,885	
Oct. 31	2,854	2,093	761	24,602	
Nov. 30	3,397	2,725	672	30,762	
Dec. 31	3,243	2,479	764	33,637	7,908
1924					
Jan. 31	1,345	705	640	35,050	
Feb. 29	3,210	1,335	1,875	32,364	
Mar. 31	3,526	2,040	1,486	36,001	2,278
Apr. 30	4,067	1,943	2,124	34,141	
May 31	4,456	433	4,023	31,172	
June 30	6,910	3,257	3,653	33,493	945
July 31	11,856	4,435	7,421	44,442	
Aug. 30	19,506	6,431	13,075	50,796	
Sept. 30	20,038	7,233	12,805	48,718	
Oct. 31	15,524	2,852	12,672	43,619	
Nov. 29	11,948	1,446	10,502	45,002	
Dec. 31	13,264	1,899	11,365	46,247	7,622
1925					
Jan. 31	11,996	2,442	9,554	48,382	
Feb. 28	11,890	2,899	8,991	48,443	
Mar. 31	11,650	2,542	9,108	47,072	
Apr. 30	6,502	646	5,856	41,812	
May 30	10,282	3,862	6,420	33,752	
June 30	7,535	2,374	5,161	27,156	8,197
July 31	5,026	2,441	2,585	24,205	
Aug. 31	5,991	2,169	3,822	23,717	
Sept. 30	5,068	579	4,489	20,996	5,999
Oct. 31	1,180	571	609	21,503	
Nov. 30	2,596	1,072	1,524	22,413	
Dec. 31	1,162	432	730	21,196	8,085
1926					
Jan. 30	1,657	232	1,425	21,696	
Feb. 27	1,461	444	1,017	23,912	
Mar. 31	2,349	1,125	1,224	24,564	
Apr. 30	2,409	1,934	475	29,899	
May 31	1,856	1,656	200	26,869	
June 30	510	186	324	23,998	2,413
July 31	5,532	4,225	1,307	22,713	
Aug. 31	287	86	201	18,767	
Sept. 30	1,010	305	705	21,449	
Oct. 30	3,418	1,661	1,757	24,810	
Nov. 30	3,832	1,468	2,364	25,419	
Dec. 31	3,139	2,273	866	27,369	9,252

Total holdings of bankers' acceptances of accepting member banks, seventh Federal reserve district, showing holdings of bills of other banks and of own bills, also liability for own acceptances outstanding, and for indorsed bills—Continued

[In thousands of dollars]

	Total holdings of bankers' acceptances	Bills of other banks held	Own bills held	Liability for own bills outstanding	Liability for outstandings of other banks sold with indorsement by accepting banks of the district
1927					
Jan. 31	6,157	3,334	2,823	25,167	
Feb. 28	6,738	2,293	4,445	26,541	
Mar. 31	2,163	584	1,579	27,550	
Apr. 30	3,355	2,258	1,097	27,457	
May 31	4,774	248	4,526	24,417	
June 30	3,548	750	2,798	23,811	8,216
July 30	3,783	483	3,300	25,374	
Aug. 31	10,401	1,081	9,320	34,559	
Sept. 30	7,343	1,607	5,736	33,955	
Oct. 31	7,350	4,314	3,036	33,843	
Nov. 30	5,125	3,451	1,674	34,105	
Dec. 31	5,082	3,291	1,791	37,784	12,696
1928					
Jan. 31	5,609	3,588	2,021	35,584	
Feb. 29	4,936	2,381	2,555	36,953	11,256
Mar. 31	4,419	2,353	2,066	37,215	
Apr. 30	5,451	2,734	2,717	35,557	
May 31	6,694	2,409	4,285	36,723	
June 30	7,866	1,910	5,956	38,114	4,316
July 31	1,789	86	1,703	34,778	
Aug. 31	1,466	201	1,265	33,651	
Sept. 29	3,079	307	2,772	31,855	
Oct. 31	3,615	342	3,273	35,711	
Nov. 30	3,975	264	3,711	39,210	
Dec. 31	5,222	126	5,096	52,269	10,390
1929					
Jan. 31	4,950	527	4,423	54,347	
Feb. 28	4,589	673	3,916	50,947	
Mar. 30	12,620	11,777	843	52,458	3,779
Apr. 30	14,925	11,863	3,062	51,647	
May 31	10,449	7,592	2,857	49,165	
June 29	4,153	438	3,715	48,657	3,289
July 31	5,129	326	4,803	61,235	
Aug. 31	4,246	855	3,391	71,911	
Sept. 30	1,955	839	1,116	78,721	
Oct. 31	12,341	10,181	2,160	86,889	
Nov. 30	13,909	10,093	3,816	95,044	
Dec. 31	11,805	8,865	2,940	99,515	39,814
1930					
Jan. 31	10,785	2,541	8,244	100,894	
Feb. 28	17,652	1,890	15,762	100,257	
Mar. 31	21,951	4,215	17,736	93,453	42,728
Apr. 30	6,908	2,848	4,060	83,117	
May 31	6,724	951	5,773	80,130	
June 30	7,129	1,608	5,521	74,640	50,382
July 31	14,809	7,293	7,516	84,145	
Aug. 30	16,380	8,425	7,955	89,897	
Sept. 30	13,746	6,116	7,630	89,952	[1] 63,000
Oct. 31	31,498	21,966	9,532	96,614	
Nov. 29	39,917	28,007	11,910	94,180	
Dec. 31	24,452	18,157	6,295	86,771	[1] 75,000

[1] Estimated.

Cleveland.—To an extremely limited extent.

Date	Acceptance liability of fourth district member banks	Acceptances purchased or discounted	Acceptances of other banks owned by reporting bank (not available on State reports before 1926)
1930			
Dec. 31	$27,508,000	$3,389,000	$7,883,000
Sept. 24	21,876,000	3,509,000	1,265,000
June 30	21,521,000	1,262,000	49,000
Mar. 27	29,088,000	1,292,000	10,884,000
1929			
Dec. 31	26,961,000	1,896,000	63,000
Oct. 4	23,804,000	2,183,000	7,000
June 29	13,216,000	870,000	2,000
Mar. 27	13,536,000	2,035,000	2,061,000
1928			
Dec. 31	15,099,000	1,294,000	50,000
Oct. 3	13,221,000	2,031,000	7,000
June 30	12,121,000	750,000	302,000
Feb. 28	16,295,000	970,000	859,000
1927			
Dec. 31	14,801,000	1,627,000	4,071,000
Oct. 10	10,961,000	1,443,000	3,098,000
June 30	9,104,000	1,899,000	4,610,000
Mar. 23	10,320,000	1,806,000	3,967,000
1926			
Dec. 31	9,365,000	664,000	110,000
June 20	9,656,000	1,542,000	1,399,000
Apr. 12	10,806,000	1,315,000	572,000
1925			
Dec. 31	7,707,000	1,138,000	393,000
Sept. 28	8,165,000	1,550,000	556,000
June 30	10,262,000	1,830,000	3,588,000
Apr. 6	10,024,000	1,114,000	2,037,000
1924			
Dec. 31	8,282,000	1,659,000	411,000
Oct. 10	6,683,000	2,960,000	606,000
June 30	6,470,000	2,613,000	2,786,000
Mar. 31	10,264,000	3,996,000	1,840,000
1923			
Dec. 31	8,502,000	2,940,000	----------
Sept. 14	8,830,000	1,637,000	141,000
June 30	8,625,000	1,544,000	----------
Apr. 3	5,938,000	1,095,000	3,839,000
1922			
Dec. 29	5,905,000	1,719,000	867,000
June 30	6,707,000	1,158,000	421,000
Mar. 10	8,122,000	1,826,000	34,000

Dallas.—There has been a steady and gradual growth in the demand for acceptances in this district due largely to the recommendation of the Federal Reserve Bank of Dallas for this form of instrument for the investment of surplus funds or to create secondary reserves. In 1929 member banks in this district purchased through the Federal Reserve Bank of Dallas, in addition to their purchases outside, acceptances amounting to $94,000,000. In 1930, due to low rates, and the decline of surplus funds for investment, the demand in this district was negligible. It should be borne in mind that the demand for acceptances on the part of purchasers in this district has far exceeded the amount of acceptances of the member banks in this district outstanding. Bills purchased by banks in this district are not necessarily confined to the bills accepted by banks of this district. We are gradually getting over to our accepting banks the wisdom of selling their own bills in the open market and as they have surplus funds to purchase the bills of other banks.

Acceptances executed for customers by member banks in the eleventh Federal reserve district as of each call for the years 1922 to 1930, inclusive

[Amount in thousands of dollars]

Mar. 10, 1922	1,526	Dec. 30, 1926	5,354
June 30, 1922	1,048	Mar. 23, 1927	2,832
Dec. 29, 1922	3,569	June 30, 1927	2,480
Apr. 3, 1923	1,915	Oct. 10, 1927	6,121
June 30, 1923	1,214	Dec. 31, 1927	6,105
Sept. 14, 1923	1,847	Feb. 28, 1928	4,650
Dec. 31, 1923	3,547	June 30, 1928	3,278
Mar. 31, 1924	732	Oct. 3, 1928	5,826
June 30, 1924	1,073	Dec. 31, 1928	6,825
Oct. 10, 1924	2,118	Mar. 27, 1929	4,722
Dec. 31, 1924	4,062	June 29, 1929	4,544
Apr. 6, 1925	1,622	Oct. 4, 1929	7,376
June 30, 1925	326	Dec. 31, 1929	11,202
Sept. 28, 1925	2,044	Mar. 27, 1930	5,042
Dec. 31, 1925	2,988	June 30, 1930	2,348
Apr. 12, 1926	1,708	Sept. 24, 1930	6,747
June 30, 1926	1,338		

Accepting banks' own acceptances carried in own portfolio as of June 30 each year, 1922 to 1928

[Amount in thousands of dollars]

1922	710	1925	609
1923	383	1927	737
1924	312	1928	1,970

NOTE.—These are partial figures, representing holdings of national banks in Texas. Figures for State member banks not available.
Figures for 1926, 1929, and 1930 are not available.

Acceptances of other banks discounted by national banks in Texas as of June 30 each year, 1922 to 1930, inclusive

[Amount in thousands of dollars]

1922	1,792	1927	5,567
1923	474	1928	12,261
1924	1,608	1929	14,386
1925	2,986	1930	3,930
1926	1,827		

NOTE.—These are the only figures available on the volume of acceptances of "other banks" held in the portfolios of member banks in the Dallas district during the period from 1922 to date.

Kansas City.—There is practically no investment demand for acceptances in this district and the amount of acceptance liability of member banks is very small, as shown by the accompanying schedule.

(*a*) The following statistics, showing acceptance liabilities of all member banks in the tenth Federal reserve district, are as shown in the Federal Reserve Board's abstracts of condition reports of member banks for each call date from March 10, 1922, to September 24, 1930:

Date of call	Acceptances executed for customers	Acceptances executed by other banks for account of reporting banks	Date of call	Acceptances executed for customers	Acceptances executed by other banks for account of reporting banks
1922			1927		
Mar. 10	$1,186,000		Mar. 23	$198,000	$2,000
June 30	356,000		June 30	34,000	
Dec. 29	757,000		Oct. 10	488,000	5,000
			Dec. 31	772,000	
1923			1928		
Apr. 3	233,000		Feb. 28	343,000	13,000
June 30	238,000		June 30	397,000	
Sept. 14	74,000		Oct. 3	425,000	2,000
Dec. 31	1,204,000		Dec. 31	267,000	5,000
1924			1929		
Mar. 31	707,000		Mar. 27	83,000	1,000
June 30	386,000		June 29	67,000	
Oct. 10	50,000		Oct. 10	1,678,000	
Dec. 31	64,000		Dec. 31	793,000	
1925			1930		
Apr. 6	119,000		Mar. 27	548,000	
June 30	11,000		June 30	26,000	
Sept. 28	36,000		Sept. 24	20,000	
Dec. 31	128,000	$1,000			
1926					
Apr. 12	76,000	1,000			
June 30	8,000				
Dec. 31	164,000	2,000			

(*b*) We have no record of the amounts of member banks' own acceptances held in their portfolios. Such acceptances are or should be classified as loans and discounts in all published reports on condition, and we receive no other reports from member banks in which a classification of acceptances is shown.

(*c*) The following statistics of acceptances of other banks held in the portfolios of member banks in this district are taken from the Federal Reserve Board's abstracts of condition reports for report dates from June 29, 1929, to September 24, 1930, inclusive. Prior to June 29, 1929, the abstracts of condition reports do not include separate figures on acceptances held, and because of the small volume of acceptances held by member banks in this district we assume that the figures for the dates given below will serve the purposes of the committee. If it is desired, we can supply this information for other call reports date back to March 10, 1922, by tabulating the data from individual reports of condition in our files.

Date of call	Accept ances payable in United States	Bills, acceptances, etc., payable in foreign countries	Date of call	Acceptances payable in United States	Bills, acceptances, etc., payable in foreign countries
1929			1930		
June 29	$2,107,000	$144,000	Mar. 27	$1,667,000	$126,000
Oct. 10	1,253,000	400,000	June 30	1,208,000	13,000
Nov. 31	608,000	364,000	Sept. 24	1,215,000	34,000

Minneapolis.—Usually the investment demand for acceptances in this district is very small on account of the low yield of acceptances. Occasionally in times of high-money rates, the yield on acceptances rises to a satisfactory figure, and a few banks in this district buy acceptances at such times.

Acceptance liabilities of member banks in the ninth Federal reserve district, amount of own acceptances and of the acceptances of other banks held in portfolio

[Data from abstracts of call reports and annual reports of the Comptroller of the Currency]

	Liability on acceptances executed for customers	Own acceptances held	Other acceptances held		Liability on acceptances executed for customers	Own acceptances held	Other acceptances held
Dec. 31, 1921	$2,867,000			June 30, 1926	$593,000	(3)	[1] $226,000
Mar. 10, 1922	2,885,000			Dec. 31, 1926	4,108,000		
June 30, 1922	2,765,000	[1] $268,000	[1] $765,000	Mar. 23, 1927	769,000		
Dec. 29, 1922	2,789,000			June 30, 1927	744,000	[1] 173,000	[1] 110,000
Apr. 3, 1923	3,931,000			Oct. 10, 1927	818,000		
June 30, 1923	2,886,000	[1] 359,000	[1] 272,000	Dec. 31, 1927	862,000		
Sept. 14, 1923	3,124,000			Feb. 28, 1928	1,008,000		
Dec. 31, 1923	6,250,000			June 30, 1928	2,200,000	[1] 258,000	[1] 140,000
Mar. 31, 1924	4,788,000			Oct. 3, 1928	3,008,000	(4)	1,585,000
June 30, 1924	2,753,000	[1] 1,163,000	[1] 486,000	Dec. 31, 1928	6,787,000		8,885,000
Oct. 10, 1924	2,502,000			Mar. 27, 1929	2,236,000		4,525,000
Dec. 31, 1924	3,131,000			June 29, 1929	1,267,000		1,075,000
Apr. 6, 1925	1,082,000			Oct. 4, 1929	9,423,000		901,000
June 30, 1925	[2] 229,000	[1] 1,049,000	[1] 507,000	Dec. 31, 1929	13,265,000		676,000
Sept. 28, 1925	1,127,000			Mar. 27, 1930	6,784,000		2,132,000
Dec. 31, 1925	2,675,000			June 30, 1930	414,000		586,000
Apr. 12, 1926	2,362,000			Sept. 24, 1930	144,000		851,000

[1] National banks only in Minnesota, North Dakota, South Dakota, and Montana.
[2] Amount is smaller than amount of own acceptances reported held by national banks only. Discrepancy can not be explained from our records.
[3] No report.
[4] Not segregated from other loans after June 30, 1928.

New York.—Following are schedules, covering the period from January, 1925, to December 31, 1930, back of which data are not available, showing as to member banks of the New York Federal reserve district monthly figures of their own acceptances outstanding, their own acceptances held in portfolio, and acceptances of other banks held in portfolio; also the relative figures over the same period for all accepting banks and bankers, not member banks alone, in the United States. There is also an accompanying diagram showing, for the years 1927 to 1930, inclusive, the relative volume of bills held by all Federal reserve banks for themselves and for account of foreign correspondents, and by all other holders.

Statement showing acceptances outstanding of member banks in the New York Federal Reserve District, also own acceptances held, and holdings of acceptances of other banks January, 1925, to December 31, 1930

[In thousands of dollars]

Date	Own acceptances outstanding	Own acceptances held	Acceptances of other banks held	Date	Own acceptances outstanding	Own acceptances held	Acceptances of other banks held
1925				1928			
January	347,900	55,125	76,130	January	541,650	26,112	12,959
February	361,355	47,508	50,064	February	537,371	22,216	15,202
March	356,476	70,755	40,813	March	558,917	25,772	18,215
April	346,799	44,931	85,299	April	565,361	13,706	8,615
May	318,032	42,393	41,640	May	545,971	9,335	14,252
June	323,603	36,258	27,540	June	528,278	7,594	20,445
July	271,432	24,136	33,110	July	512,547	7,530	20,092
August	255,691	23,367	23,714	August	489,431	9,209	12,119
September	288,190	14,962	25,898	September	522,098	13,048	8,739
October	329,921	22,327	25,672	October	591,363	9,005	8,531
November	325,071	21,381	20,508	November	629,168	8,775	8,149
December	314,394	22,890	24,026	December	667,684	8,822	10,027
1926				1929			
January	380,866	41,623	22,248	January	658,345	8,438	24,457
February	377,504	49,734	18,711	February	634,922	11,906	15,545
March	366,317	54,899	23,487	March	599,427	8,157	12,903
April	358,454	45,256	46,609	April	579,532	12,745	4,953
May	349,441	33,585	18,412	May	586,900	7,659	12,572
June	317,190	13,195	11,850	June	595,474	15,608	8,899
July	299,007	9,129	3,533	July	600,131	7,880	11,574
August	281,434	15,919	8,404	August	620,343	15,987	12,045
September	301,952	8,563	7,558	September	659,816	16,269	14,820
October	337,195	9,402	8,330	October	832,922	16,618	23,282
November	354,685	10,082	10,611	November	880,854	47,418	77,458
December	375,732	15,046	13,782	December	920,301	39,416	55,411
1927				1930			
January	377,901	15,894	12,282	January	902,554	45,876	104,783
February	394,407	18,319	18,421	February	855,080	36,185	52,028
March	406,388	35,144	14,299	March	804,383	39,079	43,129
April	415,366	15,184	19,661	April	716,369	31,673	54,421
May	399,572	20,923	26,519	May	710,733	38,754	58,421
June	386,437	10,525	27,828	June	672,633	41,752	89,543
July	389,045	31,822	15,210	July	703,940	35,430	128,674
August	388,606	49,523	20,664	August	709,452	61,028	85,641
September	436,302	26,522	23,400	September	729,720	91,969	112,724
October	485,503	32,309	23,670	October	816,736	131,425	114,034
November	526,268	29,210	37,419	November	858,103	33,612	178,978
December	564,553	37,978	14,742	December	867,527	51,012	134,434

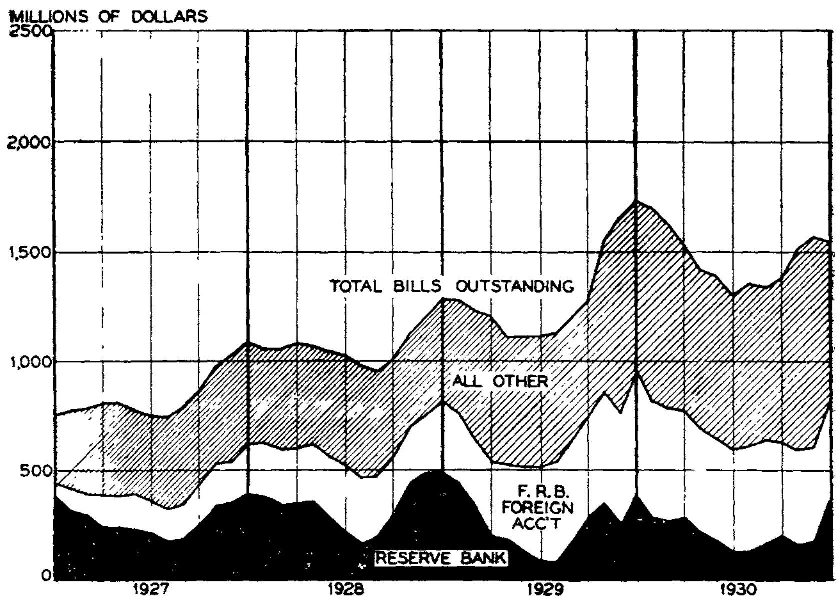
All banks and bankers in the United States

	Total bankers' acceptances outstanding	Own acceptances held by accepting banks in their own portfolio	Acceptances of other banks in the portfolio of accepting banks
1925			
January	$834,824,681	$91,172,095	$131,092,926
February	808,359,126	88,223,170	97,528,544
March	800,137,196	110,622,378	82,372,332
April	757,073,786	67,261,667	118,958,916
May	680,345,502	75,509,443	79,140,527
June	607,941,566	52,732,682	71,872,654
July	569,386,316	46,607,962	69,730,257
August	555,166,837	43,172,031	50,367,291
September	607,025,151	34,416,724	54,461,296
October	674,167,813	41,543,161	62,099,692
November	689,767,871	38,144,830	46,892,361
December	773,735,592	38,034,905	54,484,449

All banks and bankers in the United States—Continued

	Total bankers' acceptances outstanding	Own acceptances held by accepting banks in their own portfolio	Acceptances of other banks in the portfolio of accepting banks
1926			
January	$788, 253, 933	$61, 318, 071	$57, 637, 999
February	767, 127, 116	69, 979, 173	57, 601, 421
March	745, 659, 632	73, 555, 866	58, 547, 603
April	720, 611, 138	58, 973, 822	78, 170, 360
May	685, 333, 098	46, 655, 322	60, 734, 485
June	621, 948, 949	26, 216, 726	40, 599, 930
July	600, 486, 807	25, 288, 289	32, 342, 234
August	582, 634, 951	34, 953, 074	28, 690, 579
September	614, 151, 287	24, 503, 242	23, 131, 308
October	681, 647, 409	23, 965, 856	32, 248, 416
November	726, 394, 811	25, 528, 152	38, 915, 932
December	755, 360, 281	34, 848, 267	42, 159, 103
1927			
January	773, 604, 424	30, 592, 023	24, 394, 597
February	785, 487, 908	73, 004, 139	93, 480, 780
March	809, 445, 721	58, 650, 864	45, 833, 126
April	810, 965, 525	39, 821, 602	47, 154, 424
May	774, 719, 885	46, 236, 768	48, 324, 483
June	751, 270, 173	31, 753, 170	57, 193, 594
July	741, 258, 404	54, 365, 943	32, 045, 520
August	782, 055, 029	82, 296, 567	50, 592, 824
September	863, 823, 006	57, 189, 759	46, 402, 290
October	975, 166, 824	61, 537, 992	56, 628, 524
November	1, 029, 490, 434	49, 737, 324	67, 176, 303
December	1, 080, 580, 565	58, 176, 967	46, 821, 513
1928			
January	1, 057, 980, 196	48, 672, 180	31, 295, 763
February	1, 056, 389, 782	45, 100, 848	44, 988, 562
March	1, 085, 468, 742	48, 101, 189	50, 957, 046
April	1, 070, 712, 002	29, 291, 256	27, 106, 226
May	1, 040, 735, 176	29, 289, 160	28, 893, 770
June	1, 026, 165, 295	27, 159, 115	44, 130, 006
July	977, 863, 926	22, 965, 929	29, 675, 683
August	952, 051, 109	26, 254, 119	24, 077, 208
September	1, 004, 166, 180	29, 210, 355	23, 976, 697
October	1, 122, 746, 889	21, 847, 117	21, 864, 418
November	1, 200, 355, 724	25, 135, 642	25, 209, 037
December	1, 284, 485, 780	27, 083, 964	48, 758, 017
1929			
January	1, 279, 271, 163	24, 568, 176	54, 678, 082
February	1, 228, 027, 796	34, 171, 066	54, 878, 885
March	1, 204, 979, 653	28, 896, 155	88, 534, 049
April	1, 110, 841, 482	31, 614, 214	63, 515, 215
May	1, 107, 168, 852	26, 786, 066	60, 609, 944
June	1, 113, 049, 246	36, 378, 210	47, 906, 237
July	1, 126, 698, 805	24, 185, 409	65, 847, 313
August	1, 200, 536, 146	33, 724, 919	48, 652, 880
September	1, 272, 270, 545	32, 127, 839	38, 639, 665
October	1, 540, 738, 123	31, 109, 525	98, 303, 399
November	1, 657, 899, 924	70, 442, 230	174, 021, 275
December	1, 732, 436, 388	58, 544, 964	132, 515, 645
1930			
January	1, 692, 793, 891	63, 129, 829	157, 336, 552
February	1, 623, 899, 218	70, 736, 889	112, 192, 937
March	1, 539, 285, 798	71, 932, 654	94, 729, 909
April	1, 413, 717, 278	54, 746, 568	102, 780, 328
May	1, 382, 206, 855	62, 629, 690	102, 980, 825
June	1, 304, 831, 222	63, 735, 394	141, 375, 378
July	1, 349, 695, 306	62, 513, 282	216, 129, 315
August	1, 339, 383, 765	95, 127, 103	172, 209, 599
September	1, 366, 734, 157	130, 903, 798	185, 773, 538
October	1, 508, 243, 726	172, 410, 232	211, 762, 830
November	1, 571, 417, 674	180, 206, 994	312, 795, 432
December	1, 555, 966, 201	89, 645, 812	281, 806, 462

From these statistics and diagram it will be seen that the investment demand for bills is not confined to member banks in this and other districts, important as their holdings are at times. The demand of other classes of investors is vastly superior; these include foreign banks, savings banks, insurance companies, corporations, institutions, and individuals, as well as accepting houses and private bankers. The rates at which bills are offered in the market determine to a considerable extent the direction and nature of the investment demand. When rates are high considerable amounts of bills are sold to individuals, corporations, and particularly, small interor banks. When the rates are at a low level that demand decreases and the purchases of larger banking institutions, who at such times are apt to have increased amounts of cash not otherwise employed, become more important. But the major portion of all the bills sold by dealers in the New



Volume of bankers' acceptances outstanding showing proportion held by Federal reserve banks for own account, proportion held for foreign correspondents of Federal reserve banks, and the proportion held by others, 1927-1930

York market is to banking institutions. Over a number of years their sales to local commercial banks and bankers have varied from 50 to 75 per cent of their total sales. These percentages include not only purchases made for their own account but also purchases for their customers. The bank demand for acceptances has recently been increased by the gradual absorption of other forms of short eligible paper. A diminished volume of short Treasury paper, which may be expected eventually, and a continuation of the tendency of other forms of eligible paper to diminish, would tend to make bank demand for bankers bills more constant.

Philadelphia.—Outside of a few accepting banks in this district, there is practically no demand for bills of this character as an investment, except for a short period when the rates were unusually attractive.

Member banks in third district

Date	Acceptance liability	Own acceptances	Acceptances of other banks	Date	Acceptance liability	Own acceptances	Acceptances of other banks
Dec. 31, 1921	$11, 016, 874	$1, 841, 744	$1, 982, 033	Dec. 31, 1926	$12, 190, 122	$1, 687, 590	$289, 074
June 30, 1922	13, 460, 640	1, 794, 724	1, 756, 783	June 30, 1927	15, 723, 394	1, 330, 331	633, 665
Dec. 29, 1922	14, 336, 294	1, 335, 113	1, 160, 521	Dec. 31, 1927	16, 562, 609	631, 570	616, 491
June 30, 1923	13, 514, 772	1, 215, 602	425, 970	June 30, 1928	17, 387, 264	627, 922	2, 074, 254
Dec. 31, 1923	14, 122, 513	1, 089, 577	835, 760	Dec. 31, 1928	20, 567, 975	502, 684	10, 092
June 30, 1924	11, 802, 041	2, 516, 097	1, 015, 198	June 29, 1929	20, 002, 278	551, 608	17, 674
Dec. 31, 1924	13, 902, 227	1, 486, 908	1, 666, 953	Dec. 31, 1929	35, 260, 213	399, 313	12, 939
June 30, 1925	13, 039, 260	2, 578, 532	749, 173	June 30, 1930	27, 016, 663	1, 057, 377	5, 193
Dec. 31, 1925	12, 772, 426	1, 995, 318	1, 725, 040	Dec. 31, 1930	34, 786, 538	334, 499	159, 223
June 30, 1926	11, 593, 334	1, 763, 412	1, 153, 518				

Richmond.—There has been a very slight demand for acceptances in this district for investment purposes. In some cases accepting banks have purchased the acceptances of other banks, but the tendency has been to sell these acceptances almost immediately with the indorsement of the purchasing bank.

Federal Reserve Bank of Richmond

Date of call report	Acceptance liability	Own acceptances held	Acceptances of other banks held	Date of call report	Acceptance liability	Own acceptances held	Acceptances of other banks held
1928				1929			
Feb. 28	$6, 606, 763	$137, 000	$2, 498, 171	Oct. 4	$8, 215, 152	$510, 996	$195, 696
June 30	5, 492, 655	490, 582	424, 351	Dec. 31	13, 751, 048	1, 714, 000	499, 858
Oct. 3	5, 115, 160	275, 157	434, 613				
Dec. 31	11, 707, 044	562, 532	302, 614	1930			
				Mar. 27	9, 052, 683	89, 301	17, 600
1929				June 30	7, 351, 080	87, 000	19, 000
Mar. 27	9, 902, 835	831, 195	38, 494	Sept. 24	5, 479, 719	84, 000	25, 000
June 29	6, 105, 641	561, 666	20, 260	Dec. 31	9, 553, 968	125, 000	....

NOTE.—The volume of acceptances created in this district has been so small that we have not maintained a record up to 1928 which would enable us to give the statistics asked for. We can, however, give the information as of the call dates in 1928, 1929, and 1930, and this information is appended.

St. Louis.—Very little, as indicated by accompanying figures.

Acceptance liabilities

[From call reports published]

National and State bank members	Acceptances executed for customers	Acceptances executed by other banks for account of reporting banks	Acceptances of other banks and bills of exchange drafts sold with indorsement	National and State bank members	Acceptances executed for customers	Acceptances executed by other banks for account of reporting banks	Acceptances of other banks and bills of exchange drafts sold with indorsement
Dec. 31, 1921	$3, 129, 000	None.	(1)	June 30, 1926	$1, 003, 000	$2, 000	(1)
Mar. 10, 1922	1, 964, 000	$25, 000	(1)	Dec. 31, 1926	1, 631, 000	None.	(1)
June 30, 1922	1, 163, 000	None.	(1)	Mar. 23, 1927	806, 000	2, 000	$984, 000
Dec. 29, 1922	2, 214, 000	15, 000	(1)	June 30, 1927	845, 000	None.	506, 000
Apr. 3, 1923	2, 260, 000	19, 000	(1)	Oct. 10, 1927	564, 000	None.	716, 000
June 30, 1923	2, 293, 000	32, 000	(1)	Dec. 31, 1927	2, 509, 000	None.	729, 000
Sept. 14, 1923	2, 559, 000	None.	(1)	Feb. 28, 1928	1, 459, 000	243, 000	1, 063, 000
Dec. 31, 1923	4, 059, 000	18, 000	(1)	June 30, 1928	762, 000	None.	958, 000
Mar. 31, 1924	1, 483, 000	63, 000	(1)	Oct. 3, 1928	1, 458, 000	2, 000	970, 000
June 30, 1924	878, 000	None.	(1)	Dec. 31, 1928	2, 007, 000	10, 000	673, 000
Oct. 10, 1924	771, 000	None.	(1)	Mar. 27, 1929	1, 590, 000	3, 000	1, 055, 000
Dec. 31, 1924	857, 000	None.	(1)	June 29, 1929	1, 054, 000	None.	1, 027, 000
Apr. 6, 1925	592, 000	None.	(1)	Oct. 4, 1929	2, 314, 000	38, 000	1, 021, 000
June 30, 1925	952, 000	2, 000	(1)	Dec. 31, 1929	2, 871, 000	120, 000	2, 005, 000
Sept. 28, 1925	1, 238, 000	None.	(1)	Mar. 27, 1930	2, 367, 000	10, 000	1, 515, 000
Dec. 31, 1925	1, 432, 000	None.	(1)	June 30, 1930	1, 044, 000	2, 000	661, 000
Apr. 12, 1926	651, 000	2, 000	(1)	Sept. 24, 1930	2, 919, 000	35, 000	786, 000

[1] Not shown separately.

HOLDINGS OF ACCEPTANCES

Amount of own acceptances and of acceptances of other banks held in portfolio are not given. However, following figures, which indicate the demand, are available since June, 1929:

National and State member banks	Holdings of acceptance payable in United States	Holdings of bills, acceptances, etc., payable in foreign countries
June 29, 1929	$3,096,000	$986,000
Oct. 4, 1929	2,421,000	1,042,000
Dec. 31, 1929	2,171,000	854,000
Mar. 27, 1930	3,509,000	1,122,000
June 30, 1930	433,000	853,000
Sept. 24, 1930	306,000	565,000

San Francisco.—The following information has been compiled from call reports of about 30 banks which are the principal acceptors and investors. It should be borne in mind that banks, in anticipation of a "call" usually liquidate holdings as easily convertible as acceptances. Consequently these reports do not necessarily show the full extent to which banks regularly carry bills of other banks.

Call date	Own acceptances in hands of investors	Own acceptances in portfolio	Acceptances of other banks held in portfolio	Call date	Own acceptances in hands of investors	Own acceptances in portfolio	Acceptances of other banks held in portfolio
Mar. 10, 1922	$6,624,000	$1,366,000	$15,586,000	June 30, 1926	$20,306,000	$192,000	$1,154,000
May 5, 1922	6,939,000	1,348,000	3,238,000	Dec. 31, 1926	31,256,000	608,000	917,000
June 30, 1922	9,518,000	1,073,000	11,620,000	Mar. 23, 1927	27,725,000	832,000	1,153,000
Sept. 15, 1922	12,193,000	1,660,000	5,263,000	June 30, 1927	27,430,000	1,853,000	606,000
Dec. 29, 1922	15,159,000	771,000	7,875,000	Oct. 10, 1927	33,852,000	1,517,000	1,003,000
Apr. 3, 1923	16,497,000	1,215,000	1,262,000	Dec. 31, 1927	33,102,000	1,788,000	5,794,000
June 30, 1923	12,493,000	1,522,000	7,181,000	Feb. 28, 1928	26,836,000	3,983,000	4,774,000
Sept. 14, 1923	12,202,000	820,000	1,704,000	June 30, 1928	30,711,000	4,618,000	1,487,000
Dec. 31, 1923	15,214,000	491,000	2,082,000	Oct. 3, 1928	36,643,000	1,817,000	1,760,000
Mar. 31, 1924	16,114,000	795,000	7,474,000	Dec. 31, 1928	43,181,000	2,450,000	3,222,000
June 30, 1924	13,370,000	763,000	4,063,000	Mar. 27, 1929	33,869,000	8,888,000	5,340,000
Oct. 10, 1924	12,664,000	3,480,000	8,530,000	June 29, 1929	33,463,000	4,921,000	1,632,000
Dec. 31, 1924	13,250,000	4,939,000	4,924,000	Oct. 4, 1929	44,387,000	3,958,000	1,652,000
Apr. 6, 1925	18,166,000	2,366,000	6,261,000	Dec. 31, 1929	65,201,000	7,790,000	1,538,000
June 30, 1925	15,769,000	1,569,000	3,269,000	Mar. 27, 1930	64,238,000	2,859,000	12,288,000
Sept. 28, 1925	20,167,000	1,181,000	2,722,000	June 30, 1930	53,727,000	4,837,000	14,449,000
Dec. 31, 1925	22,566,000	1,178,000	1,803,000	Sept. 24, 1930	46,309,000	8,224,000	20,051,000
Apr. 12, 1926	18,798,000	1,385,000	849,000	Dec. 31, 1930	56,132,000	8,726,000	14,868,000

10. To stimulate an investment demand for acceptances, would you be in favor of changing the present provisions of the Federal reserve act relating to the reserve requirements of member banks, permitting member banks to carry smaller reserves provided that they held a portfolio of bills equal to a certain percentage of their deposit liabilities? If so, what specific change would you suggest?

Atlanta.—On September 24, 1930, all member banks held investments in acceptances of $267,366,000, an amount equal to 11.5 per cent of their required reserve. This volume represented 19.6 per cent of the total amount of acceptances outstanding on September 30, 1930. On the same date Federal reserve banks held acceptances of $630,367,000, including $197,743,000 for own account and $432,624,000 for foreign account, the total representing 46.1 per cent of the total volume of acceptances outstanding.[1] Permission for member banks to invest a percentage of their now required reserves in bankers' acceptances would broaden and improve the market demand for acceptances, and it would likewise tend to improve the portfolios of member banks. In addition, it would increase the earnings of member banks, and holdings of bills by Federal reserve

[1] Figures on member bank holdings of acceptances and on required reserves are taken from "Member Bank Call Report No. 49" of the Federal Reserve Board. Total volume of acceptances outstanding are from the Acceptance Bulletin of the American Acceptance Council, Dec. 31, 1930.

banks would be decreased. It is my opinion that permission to invest an amount equal to 20 per cent of the now required reserves of member banks would be necessary to enable a great number of the small members in this district to take advantage of this privilege to any degree. I also believe that should 20 per cent be the figure decided upon, there would be a correspondingly large increase (about 200 per cent), if not a greater increase, in the amount of acceptances held by member banks. Without devoting more thought and study to this proposal, I prefer not to commit myself at this time as being in favor of or opposed to the suggested amendment.

Boston.—To stimulate an investment demand for acceptances, this bank would not be in favor of changing the present provisions of the Federal reserve act relating to the reserve requirements of member banks which would permit them to carry smaller reserve, provided they held a portfolio of bills equal to a certain percentage of their deposit liabilities. We believe it to be the better policy to keep complications and legislative requirements at a minimum. The decision to invest loanable funds into highly liquid secondary reserve should be the responsibility of the member bank. It must be admitted that there still remains a great deal of educational work to be carried on before genuine investment demand for bills will exist. This education may be carried on by bill dealers acceptance houses, correspondent city banks, or any other educational propaganda; but we feel that it should not be made a matter of legislation. Any form of interest earning investments, no matter how liquid, is not a reserve with which to meet withdrawals. It is simply a proper liquid investment of the bank's loanable funds.

Chicago.—No.

Cleveland.—The stimulation of an investment demand for bills, in our opinion, would not be sufficient justification for a reduction in the present cash reserve requirements, which we believe to be sufficiently low.

Dallas.—We would not be in favor of this suggestion. The reserve requirements of member banks, in our opinion, are too low now, and the manner in which their funds are invested is a matter of bank management and judgment. The desirability of purchasing bankers' acceptances is a matter of education and therefore naturally of slow growth.

Kansas City.—No. If such a change should be made, it should be only in a general revision of reserve requirements which would give like consideration to other highly liquid assets, such as cash in vault and unpledged, short-term Government securities.

Minneapolis.—No object would be served by such stimulus to the investment demand for acceptances.

New York.—We would not favor reducing required cash reserves by permitting member banks to carry smaller reserves provided they held a given amount of acceptances in portfolio. We believe a fixed minimum cash reserve in the Federal reserve bank should always be maintained regardless of the character of the member bank's own investments. We are of the opinion, however, that some changes in the law relating to the method of calculation and the amount of such cash reserve balances might be advisable but we would prefer not to recommend any such changes pending the completion of the thoroughgoing study of this subject by a Federal reserve committee which is now in process.

Philadelphia.—Undoubtedly the American discount market is broader and stronger than it has been in the 15 years of Federal reserve experience, but notwithstanding this improvement the Federal reserve banks and the foreign banks constitute the only real market for bills, and the further extension of our discount market is of great importance. It is still far from such a stage that it can be considered a completely satisfactory mechanism of our money market. Its growth has been too one-sided and too dependent on the Federal reserve as its reservoir, and if we are to increase our acceptance business in the next years, it will be essential that we develop a much broader market for these bills. The suggestion that acceptances be treated as partial reserve would undoubtedly bring about an immediate improvement in the bill market, but it would not remove entirely the element of artificiality. It would also result in scattering and reducing the amount of reserve carried with the Federal reserve banks, but this of course, would be offset to some extent by a reduction in the holdings of the Federal reserve banks. Another objection, that once the door is open to employed reserves in one form, many other forms may creep in.

Richmond.—We would not be in favor of such a change.

St. Louis.—No.

San Francisco.—Would not be in favor of counting investments in acceptances as part of legal reserves. Believe acceptances should be urged as secondary reserves. The development of a better investment demand would occur if Federal reserve banks supported the acceptance market to a lesser degree. Reduced support by reserve bank might result in urging accepting banks to support dealers in distributing the banks' products and stimulate the desire and necessity of dealers to seek a wider investment field.

11. To stimulate an investment demand for acceptances, should the reserve banks follow a policy of refusing to purchase acceptances unless the accepting institutions hold bills, accepted by other institutions, equal to a substantial percentage of thir own acceptance liabilities?

Atlanta.—We belive that a reserve bank policy of refusing to purchase acceptances unless the accepting institutions held bills, accepted by other institutions, equal to a substantial percentage of their own acceptance liabilities would be very impractical of enforcement, and it would tend to reduce the investment demand for bills as well as to reduce the total volume of bills outstanding. The banks would hesitate to purchase bills which they feared would not be eligible for immediate disposal to the reserve banks. A further point to be considered is the fact that generally the season of the year when a member bank's acceptance liabilities are heaviest corresponds to the season when its supply of funds for investment is lowest. Such a change of reserve policy would interfere with the mobility of short-term capital from one section of the country to another. The method by which the reserve banks can nost effectively encourage the investment demand for acceptances is to stand ready to take eligible bills off the hands of investing member banks at any time.

Boston.—We do not believe that it would be desirable to adopt a definite policy of refusing to buy acceptances from member banks unless the accepting institution holds bills accepted by other institutions equal to a substantial percentage of their own acceptance liabilities. While such a policy might stimulate an investment demand we believe this stimulation should be the result of educational effort, and not by legislative restricitons which are not absolutely necessary and, therefore, more likely to be dangerous than beneficial.

Chicago.—No. This would create an artificial situation in the bill market and in our opinion the market should be free from any such restrictions.

Cleveland.—In theory this might appear an effective means of stimulating an investment demand for acceptances, but it would not be so in actual practice since the purpose could be defeated by subterfuge.

Dallas.—No.

Kansas City.—This would not be practicable.

Minneapolis.—No.

New York.—We believe that reserve banks should not adopt or follow a policy of refusing to purchase the acceptances of a given institution unless the acceptor holds bills accepted by others equal to a substantial per cent of their own acceptance liabilities. Such a policy, if effective, would require the immobilization of a portion of the assets of each accepting bank or banker and the character of the asset to be immobilized, i. e., bankers' acceptances, would be the class of investment which is and should be, we belive, most mobile.

In theory and in practice the accepting bank or banker does not make a money loan to a client but rather puts his credit at the disposition of the client. The client depends for the realization of money against that credit upon the discount of an acceptance. To require as a condition of purchase by a Federal reserve bank that the acceptor of a bill should keep a portion of his assets invested and immobilized in the acceptances of other banks and bankers might very well have the effect of reducing the amount of acceptance credit some banks would be willing to grant, and of causing other banks to withhold acceptance credit entirely from their clients. The law already limits the amount of such credit which may be granted by member banks and we believe further curtailment of that credit would be unfortunate in its effect upon all of the business and agricultural interests of the country.

We further believe that serious, needless, and unjust discriminations would arise if Federal reserve banks attempted to execute the policy suggested and that the strength and breadth of the discount market would be seriously impaired. One of the most important factors in the achievement of the preferred position which bankers acceptances hold to-day and one determining to a large extent the lower rates they command as compared with other forms of commercial obligation, is the confidence of holders that in case of need they may be sold to a Federal reserve bank. A great many bills accepted and issued in this country are drawn abroad. It is quite clear that foreign banks would be unwilling to pay prime rates for dollar bankers' bills if any doubt should be created in their minds as to the market status of bills drawn on prime American banks bought by them. Also, it would be quite impracticable for Federal reserve banks, making daily purchases of bills offered to them, to know the then current position of each accepting bank with respect to the amount of the acceptances of other banks held by such bank in its portfolio.

Philadelphia.—Due to the artificial bill market we have at the present time, it is essential that the accepting banks carry at all times a certain porportion of their assets in acceptances of other banks, and properly so, but the amount should depend upon their condition at the time of purchase and should not be based upon a percentage of their own acceptance liabilities. A procedure of this sort is not conducive to a broader or healthier market.

Richmond.—We do not believe reserve banks should follow this policy; we do not believe it to be practicable.

St Louis.—No.

San Francisco.—No. It would be more constructive if Federal reserve banks would educate accepting banks to the desirability of extending at all times (even when borrowing at the Federal reserve bank) reasonable lines of credit to dealers at a cost not greater than that bid for 90-day bills.

It should not be (although it is) difficult for accepting banks to understand that their accepting privilege is of no value unless a market can be found for their bills. The dealers are rendering this service, and the banks creating bills should, for selfish reasons if for no other, support them instead of leaving such support (at times) entirely to the Federal reserve banks.

12. Would the dependence of the acceptance market on the reserve bnaks be lessened if the reserve banks should hold their buying rates above the market rate on acceptances? What would be the effect of this change of policy on the acceptance market? To what extent, in your opinion, has the market rate on acceptances been an artificial one in the sense that it has been primarily determined by the buying rates of the reserve banks?

Atlanta.—(*a*) It would.

(*b*) The effect of such a change of policy would be to discourage the purchase of bills by member banks in the open market for the reason that they could not depend on a quick sale to the Reserve Banks except at a loss. Another effect would be a higher open-market yield on acceptances which would encourage member banks to invest in bills and to hold them to maturity.

(*c*) The Federal Reserve Banks have been a great stabilizing influence in the acceptance market. They have taken sudden increases in the supply of bills off the market, and they have been prepared to buy bills from the member banks who have desired to liquidate their holdings. To this extent the market rate on acceptances has been artificial, and this change of policy would result in more erratic fluctuations in open market rates.

Boston.—We doubt that the dependence of the acceptance market on the reserve banks would be lessened if the reserve banks should hold their buying rates above the market rate on acceptances. When bill rates are sufficiently high to attract investors, or during periods such as the present time when money is in abundance, there is little need for Federal reserve bank support, but when these conditions do not exist and bills are in abundance with investment demand lacking, higher rates of the Federal reserve banks would have an adverse affect upon the bill market. Dealers would find themselves with high portfolios, faced with the necessity of selling their bills at losses. Eventually, this would force rates up to that point where it would be more profitable for shippers to finance their bills through other than dollar acceptances, with the result that European centers would regain the acceptance business that it has lost to this country during the past few years. Inasmuch as bill dealers' acceptance rates have so frequently led changes in discount rates and in many cases have led changes in buying rates, it appears that the open market rate on acceptances is not so artificial as might be supposed from the fact that Federal reserve banks furnish the principal market.

Chicago.—We believe under normal money market conditions that the buying rates of the Federal reserve banks should be equal to or slightly above the market rate on acceptances and that the reserve rates as far as practicable should follow rather than lead the open market rates and that this practice would result in a broader distribution of bills and an improved acceptance market. Of course, there are times when money rates get too high, when the Federal reserve banks, in order to protect the bill market, are obliged to maintain low enough rates to stabilize the open-market rates at a reasonable level and therefore at such times to be large buyers of bills. In the past, for the purpose of developing the bill market, the Federal reserve bill rates have at times been more or less artificial and has resulted in the reserve banks carrying an unusually large percentage in their portfolios of the total bills outstanding. We believe that the time is past for any assistance of this kind to be given the market and that in the future Federal reserve banks should maintain their rates at a point where they will be only moderate buyers of bills except in cases of emergency.

Cleveland.—The buying rates of Federal reserve banks are usually above the market rates for bills of the same class. With few exceptions, reserve banks purchase only 3-name paper, i. e., bills of a drawer or an acceptor which ostensibly have circulated in the market and come to us bearing a banking indorsement. These bills enjoy a preferential rate of one-eighth per cent in the market by reason of the banking indorsement, as against the usual offerings of bill dealers bearing only two names—drawer and acceptor.

The foreign demand for American bills and the employment of foreign balances in this country have been of such proportions as to be a predominating influence in market rates for bills; accordingly, with such a demand the market rate can not be considered as artificial or as determined by the buying rates of reserve banks. Undoubtedly, the market when establishing its rates considers the factors which may determine the buying rates of the Federal reserve banks at a future time. The dealers want to be in position to supply their porfolios and making their rates; they must consider such factors as the probable present and future supply and demand and the probable course of the money market.

Dallas.—(*a*) It is the policy now of the reserve banks to establish their minimum buying rates fractionally above the selling rates in the open market for bills of similar maturities. This policy, no doubt, prevents the sale of acceptances to the reserve banks except for the purpose of adjusting the selling bank's position.

(*b*) The effect of this policy on the acceptance market is to limit the purchase of acceptances to investment purposes only and to broaden the market and discourage any tendency for the reserve banks to be the market themselves.

(*c*) Only at times have we regarded the market rate on acceptances as an artificial one, primarily determined by the buying rates of the reserve banks. At such times this has come about by an overanxiety on the part of certain reserve banks that sufficient bills would not be offered to them. However, when this has occurred the offering of bills to the dealers has so largely increased as to bring about overpurchases, necessitating a change upward of Federal reserve bank buying rates.

Kansas City.—The buying rates of the Federal reserve banks are, at times, above the open-market rate on acceptances, as is the case at the present time. When our rates are not above the open-market rates, they are at least no lower than such rates, and we understand it to be the policy of the open-market committee to refrain from purchases in the open market when the supply of bills can be absorbed by commercial institutions. This being the case, we do not understand that the market rate on acceptances has been an artificial one nor that it has been primarily determined by the buying rates of the Federal reserve banks, but, on the contrary, that the Federal reserve rate follows the market.

Minneapolis.—This question can only be answered by Federal reserve banks in centers where the acceptance market is somewhat developed.

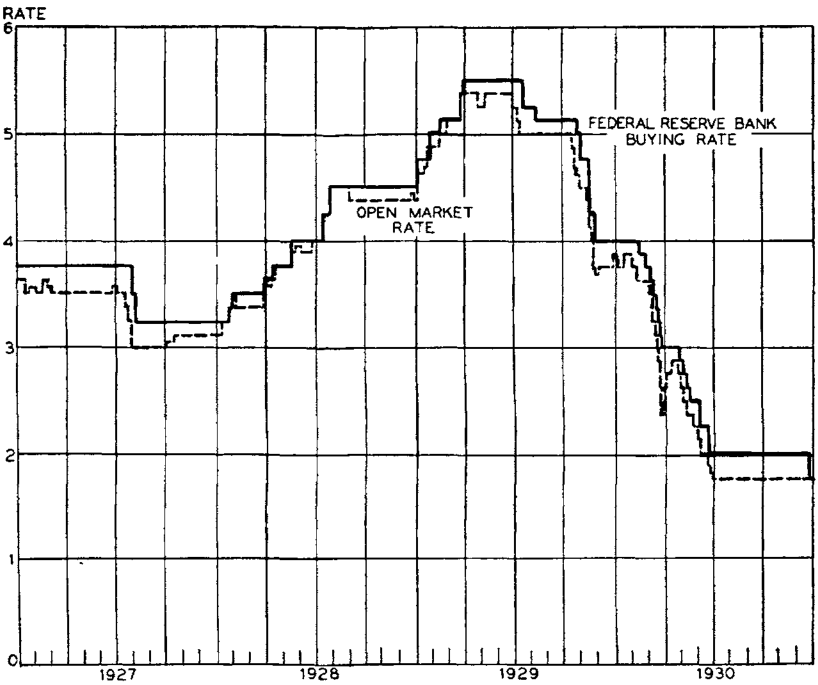
New York.—The effective buying rates of this bank are generally and normally above the market rates. Lest there should be confusion in this regard it should be understood that the market rates quoted in the newspapers and elsewhere are the rates at which dealers will buy and offer for resale ordinary amounts of prime bills as they come fresh into the market. At that time they ordinarily are 2-name bills, that is, they bear the name of the drawer and the acceptor. The reserve bank buying rate applies to those bills after they have been circulated in the market and have acquired a third name, i. e., a banking indorsement. The value of that indorsement is recognized in the market usually at one-eighth per cent per annum, sometimes more, so when the market offers to buy bills at 2 per cent discount and resell them at 1⅞ per cent, that is a price for 2-name paper; 3-name paper would be 1⅞ per cent bid, 1¾ per cent asked. The reserve bank rate is normally at or above the bid rate for 2-name paper and almost always above the rate asked in the market for 3-name paper. This has been the policy since the inception of the American discount market.

The market rate on acceptances is not an artificial one in the sense that it is primarily determined by the buying rates of the reserve banks. The rate at which it is expected reserve banks might be willing to buy bills at a future time doubtless is an element which the market considers in establishing its rates in times of fairly tight money or when a rise in money rates generally is expected, but the discount dealers' buying rates depend more importantly upon supply and demand, present and expected, and their view of the future course of rates; also, in times of easy money, upon the necessity of maintaining their portfolios at a reasonable volume so that they may supply their investing clients.

Accompanying is a diagram showing, for the years 1927 to 1930, inclusive, the relation of our minimum buying rates for indorsed 90-day bills to the rates at which such bills were offered by dealers in the open market, from which it will also be seen that rate changes in the open market ordinarily precede changes in our rates.

Philadelphia.—In theory, probably correct, but not practicable in the present artificial market. I do not believe it is possible for the Federal reserve banks to hold their buying rate above the market for acceptances for any length of time, owing to the undue dependence upon the Federal reserve system for its support. The market is too artificial at this time to attempt a change of this kind. The Federal reserve buying rate has practically determined the market rate for bills, and will continue to do so until we are able to develop a broader market.

Richmond.—(*a*) We think the dependence of the acceptance market on the reserve banks would be lessened if the reserve banks' buying rates were held consistently above the market rate on acceptances.



Open market rate and Federal reserve bank buying rate on indorsed 90-day acceptances, 1927–1930

(*b*) It would make the market rate more self-sustaining, but what effect it would have on the volume of acceptances we are unable to say.

(*c*) In our opinion, the market rate has been at times an artificial one because of the buying rate of Federal reserve banks, but to what extent we are not prepared to estimate.

St. Louis.—Their buying rates are not above the market. They have not led, but instead have followed.

San Francisco.—(*a*) Yes.

(*b*) A penalty rate would stimulate dealers in seeking a wider market and would give accepting banks some incentive to support dealers who are merchandising their (accepting banks') products.

(*c*) More than has been necessary during recent years.

13. Would you favor a change in the Federal reserve act limiting the accepting of time bills of exchange on the part of member bank simply to those growing out of bona fide shipments in foreign trade and to those made for the purpose of creating dollar exchange?

Atlanta.—It is our opinion that it would be very unwise to eliminate the right to create acceptances for certain classes of domestic transactions. The use of the acceptance has been a most economical and satisfactory method of financing the domestic storage and shipment of goods preparatory to their export sale in foreign markets.

Boston.—It would not seem desirable to change the Federal reserve act limiting the accepting of time bills of exchange to those growing out of bona fide shipments in foreign trade and to those made for the purpose of creating dollar exchange. We believe that the bankers' acceptance has a very definite use (see queston No. 6) and that it is highly desirable to promote the use of all classes of bankers' acceptances, rather than limit it to foreign trade or for the purpose of creating dollar exchange.

Chicago.—No. This would eliminate acceptances created for the domestic storage and shipment of goods. While there may be some question as to the necessity of making acceptances for domestic shipments of goods, as these transasctions could be easily handled by counter credits, the volume of such bills, however, is relatively small, amounting to a little over 2 per cent of the total bills outstanding as of November 30, 1929.

With regard to domestic acceptances, based on domestic warehouse credits, we believe it essential that they should be continued, as they represent principally the storage of agricultural products raised in this country and through the use of acceptance credits the cost of carrying these products is substantially reduced and the benefit of this reduced cost of carrying is therefore reflected in a better price to the producer. Furthermore, a substantial amount of these products are exported under bankers' acceptance credits and the financing of the storage of the goods in this country should be on just as favorable a basis as the financing of their export.

Cleveland.—No.

Dallas.—We do not think such change would be of any special moment.

Kansas City.—No. We can see no reason for any such limitation.

Minneapolis.—No.

New York.—Whatever might have been wise at the outset, we would not now favor a change in the Federal reserve act to eliminate domestic warehouse credits or domestic shipment credits. We believe that these credits have been developed in recent years to serve a most useful purpose in this country and that, particularly through the warehouse credit, the orderly marketing of our staple agricultural products is now being greatly assisted. It seems obvious that anything which tends to reduce the carrying charges on agricultural products is advantageous to all classes of our people, including the growers and handlers of agricultural products. Through the warehouse acceptance credits and the discount market the temporarily idle money of the entire world is available for carrying our staple agricultural products in warehouse pending their distribution into the channels of consumption, and the availability of these moneys makes for an ample supply at the lowest possible rates. Again, to make the increased production of agricultural products dependent upon commodity secured bank loans, local and otherwise, would be, we believe, to place a serious and needless additional burden upon agricultural interests as well as upon the consumers. In spite of the relatively short experience of banks and bankers in the use of this kind of acceptance credits, we feel that, on the whole, they are wisely, conservatively, and helpfully created.

Philadelphia.—No. The domestic acceptance represents a distinct growth in the self-liquidating paper of the country. It acts as an equalizer of money rates. It renders a great economic service in this connection. It relieves financial pressure in sections where seasonal demands might otherwise be heavy. In other words, it provides a flexible source of credit and stabilizes interest rates.

Richmond.—We doubt the advisability of such a change. We believe that provision permitting acceptances against domestic shipment and storage undoubtedly increases the volume of funds available to the interior for agricultural purposes.

St. Louis.—No.

San Francisco.—Would favor eliminating all forms of storage credits except those arising out of the storage in United States of our major domestically raised staples, such as cotton, grain, wool, tobacco, etc. Creating acceptances against unsold merchandise of every kind which can qualify under the definition of a readily marketable staple fulfills no national demand and serves to open the way to abuses. (See questionnaire No. 10, question No. 7), when banks find difficulty in keeping their borrowings at the Federal reserve bank within proper bounds.

14. Append a digest of the laws of those States included within your district respecting the acceptance powers of State banks, the limitations on the amount of acceptances which State banks may discount, and the provisions of any State law permitting acceptance banks of the type permitted by the provisions of the Edge Act. (See appendix.)

15. Append by countries, as of the last reporting date in each month since January, 1922, data on the volume of bills held purchased for foreign account.

Atlanta.—The Federal Reserve Bank of New York will submit system totals for bills held purchased, for foreign account, in which the Federal Reserve Bank of Atlanta participated, according to the percentages as shown below:

Percentage participation for the years 1922 through 1930, Federal Reserve Bank of Atlanta

	Per cent		Per cent
1922	3.6	1927	4.0
1923	4.1	1928	4.2
1924	4.4	1929	3.9
1925	4.1	1930	3.6
1926	4.0		

Boston.—Detailed accounts representing the volume of bills purchased for "Foreign accounts" are maintained by the Federal Reserve Bank of New York. The Federal Reserve Bank of Boston participates in the aggregate amount of these transactions only in accordance with its participating ratio as indicated below:

Percentage of participating ratio of Federal Reserve Bank of Boston, bills purchased "Foreign accounts"

	Per cent		Per cent
1922	7.3	1927	7.5
1923 [1]	7.5	1928	7.5
1925	7.4	1929	7.4
1926	7.6	1930	7.4

Chicago.—All purchases of bills for foreign account are made by the Federal Reserve Bank of New York and are pro rated to all other Federal reserve banks. This bank has always taken its pro rata share of such purchases. The New York bank therefore can furnish the information required.

Cleveland.—This information is available at the Federal Reserve Bank of New York. We only participate in the guarantee of the bills. Following are the percentages of participation in purchases of foreign bills since 1926:

	Per cent		Per cent
1926	10.7	1929	10.2
1927	10.6	1930	10.0
1928	10.4	1931	10.1

Dallas.—We are advised by the Federal Reserve Bank of New York that inasmuch as all bills of this class which have been purchased for foreign account are held by the Federal Reserve Bank of New York, the details requested are being furnished by that bank, and we are therefore merely furnishing a statement of our percentages of participation.

Percentage of participation of the Federal Reserve Bank of Dallas in foreign accounts

	Per cent		Per cent
1922	2.6	1927	3.5
1923	3.6	1928	3.5
1924	3.8	1929	3.3
1925	3.5	1930	3
1926	3.5		

Kansas City.—These statistics should be furnished by open-market committee for all Federal reserve banks.

Minneapolis.—Since this bank merely enjoys a participation in the earnings and accepts a participation in the contingent liability arising from bills purchased for foreign account by the New York Federal Reserve Bank, this table can only be submitted by the New York reserve bank for the system as a whole.

New York.—(Data not supplied.)

[1] Up to June 15, 1923, only. Did not participate during 1924. Beginning Apr. 16, 1925.

Philadelphia.—The purchase of bills for foreign accounts is handled by the Federal Reserve Bank of New York, and it is our understanding that they will cover this question in their report.

Richmond.—This bank has only a voluntary participation in such bills, purchased for system account by the Federal Reserve Bank of New York, which bank will, doubtless, furnish this information.

Our percentage of participation has been as follows:

	Per cent		Per cent
1922	4.9	1927	5.2
1923	5.2	1928	5.1
1924	5.7	1929	4.6
1925	5.8	1930	4.2
1926	5.3		

St. Louis.—The Federal Reserve Bank of New York, we understand, is reporting total for the system. Our participation was:

	Per cent		Per cent
1922	4.7	1927	4.3
1923	4.4	1928	4.3
1924	4.9	1929	4
1925	4.6	1930	3.6
1926	11.3		

San Francisco.—This information will be furnished by New York. Therefore, we shall not duplicate unless it is desired.

16. Is the buying rate on bills bought for foreign account lower than that on bills bought for own account? Are bills purchased for foreign account acquired solely from dealers? If the bulk of bills purchased for foreign account is acquired from dealers, state the reason for this practice.

Atlanta.—This information is to be supplied for all districts by the Federal Reserve Bank of New York report on Questionnaire No. 10.

Boston.—As all the details pertaining to this question are maintained by the Federal Reserve Bank of New York for the "system," we are unable to supply the information requested.

Chicago.—See answer to No. 15.

Cleveland.—This information is not obtainable here. It may be obtained from the Federal Reserve Bank of New York.

Dallas.—All purchases are made by the Federal Reserve Bank of New York.

Kansas City.—Refer to Federal Reserve Bank of New York, which acts as buying agent and which maintains detailed records in connection with these transactions.

Minneapolis.—This question can only be answered by the Federal Reserve Bank of New York.

New York.—The rates which we have to pay for bills bought for foreign account are ordinarily somewhat below the rates paid on bills of similar maturities bought for our own account. That is because, when acting for foreign banks, we are seeking to buy bills, and have to pay the price demanded in the market to acquire them, whereas we do not seek bills bought for our own account; they are offered to us by the holders desirous of selling them to us at our rates. Bills purchased for foreign account are bought almost entirely from dealers. The principal reasons for that fact are that the available supply is with dealers and that many banks do not care to have their indorsement outstanding except to Federal reserve banks and that national banks are precluded by law from incurring indorser's liability to the extent that would be necessary if they sold to us in substantial amounts for account of foreign banks. Their indorser's liability on notes or bills discounted with or sold to Federal reserve banks is an exception from the limitations of section 5202, Revised Statutes, but their liability as indorsers on bills sold to foreign banks or to any one other than a Federal reserve bank falls within the limitations of that section. Also, in the interests of maintaining a broad and stable discount market, it is believed that investment demand should be supplied through dealers who principally make the market.

Philadelphia.—Same answer as 15.

Richmond.—See answer to 15.

St. Louis.—All bills bought for foreign account in which we participate in any way are handled by the Federal Reserve Bank of New York.

San Francisco.—This question has been left for the Federal Reserve Bank of New York to answer because no bills for foreign account have been purchased in the twelfth district, and, as far as it is known, bills are acquired in New York exclusively.

17. What is the rate of commission that the reserve banks receive for indorsing the bills purchased for foreign account? Are all such bills indorsed? Is the indorsement placed on each bill or is the indorsement in the nature of a blanket agreement with the foreign clients for which the purchases are made?

Atlanta.—This information is to be supplied for all districts by the Federal Reserve Bank of New York report on questionnaire No. 10.

Boston.—As all the details pertaining to this question are maintained by the Federal Reserve Bank of New York for the "System," we are unable to supply the information requested.

Chicago.—See answer to No. 15.

Cleveland.—One-eighth per cent for guaranteeing the bills.

Dallas.—All arrangements of this character are made by the Federal Reserve Bank of New York. We do not indorse the bills, but merely participate in the liability of guaranty to repurchase before maturity according to our percentage of allotment of bills purchased.

Kansas City.—Rate of commission determined by separate agreement in each instance. Bills are not indorsed but are guaranteed by Federal reserve banks under a blanket agreement. Details can be obtained from Federal Reserve Bank of New York, which handles these transactions for the system, or from the Federal Reserve Board.

Minneapolis.—This question can only be answered by the Federal Reserve Bank of New York.

New York.—The commission charged by the reserve banks on bills bought for foreign account is one-eighth of 1 per cent per annum. The bills are not indorsed by any reserve bank but the reserve banks assume liability for their payment at maturity.

Philadelphia.—Commission charged, one-eighth of 1 per cent. These bills are not indorsed by the Federal reserve banks but there is a blanket agreement in which Federal reserve banks agree to buy these bills at any time.

Richmond.—See answer to 15.

St. Louis.—Bills are not indorsed by Federal reserve bank. For purchases of bankers' acceptances with guarantee of payment at maturity and agreement to buy back at time of maturity, the commission is one-eighth of 1 per cent per annum on the face amount. For the purchase of bankers' acceptances without guarantee of payment or agreement to buy back, the charge is one-sixteenth of 1 per cent per annum on the face amount.

San Francisco.—Commission one-eighth of 1 per cent. Bills are not manually indorsed. Indorsement is in the form of a written guarantee.

18. Append statistics on the volume of bills in your portfolio that have been purchased locally from dealers, that have been purchased locally from accepting banks, that have been purchased locally from other sources, and that have been acquired through the open-market investment committee, for the last reporting date of each month from January, 1922.

Atlanta.—

Volume of bills in our portfolio that have been purchased locally from dealers, locally from accepting banks, locally from other sources, and that have been acquired through the open-market investment committee for the last reporting date of each month from January, 1922

Month	Locally from accepting banks	Locally from other sources	Open-market investment committee	Special purchases
1922				
Jan	$140,475	$1,870,382	---	---
Feb	74,040	1,142,880	---	---
Mar	25,980	2,070,010	---	---
Apr	---	838,020	---	---
May	---	466,583	---	---
June	---	792,476	---	---
July	---	497,188	---	---
Aug	---	811,116	---	---
Sept	173,130	4,750,123	---	---
Oct	500,651	11,818,147	---	$1,734,952
Nov	563,250	8,285,711	---	50,000
Dec	200,045	7,644,574	---	1,946,313
1923				
Jan	290,300	2,646,515	$917,563	660,856
Feb.[1]	---	2,873,496	3,300,455	341,314
Mar	---	3,281,773	18,025,714	999,491
Apr	---	2,053,714	12,260,372	127,331
May	---	1,622,942	3,502,897	---
June	---	1,601,835	---	221,626
July	---	1,858,288	5,035,565	523,677
Aug	---	2,468,872	---	242,375
Sept	---	4,555,650	---	560,960
Oct	246,531	5,792,675	---	1,484,088
Nov	462,435	6,885,143	---	1,051,683
Dec	---	6,651,284	---	1,325,019
1924				
Jan	---	8,279,731	---	737,956
Feb	---	5,657,093	1,207,666	575,264
Mar	---	4,589,855	1,623,806	644,024
Apr	---	3,485,444	---	655,115
May	---	3,294,642	59,252	---
June	---	1,651,095	---	---
July	---	1,156,429	25,000	---
Aug	---	780,168	84,045	239,990
Sept	---	2,080,307	520,166	---
Oct	---	5,025,965	364,072	40,224
Nov	---	6,546,791	379,012	849,539
Dec	---	7,377,570	396,187	14,665
1925				
Jan	277,987	3,440,766	---	---
Feb	753,040	1,469,960	5,246,459	---
Mar	221,000	900,370	8,140,137	---
Apr	222,000	734,062	3,222,345	---
May	66,000	625,090	5,401,659	---
June	16,000	411,773	3,577,081	9,033,519
July	---	274,914	6,519,756	---
Aug	246,313	616,323	7,261,130	---
Sept	732,221	1,100,106	8,380,921	3,149,340
Oct	971,355	2,913,468	36,732,870	---
Nov	642,379	3,827,418	35,598,087	---
Dec	754,847	3,597,265	40,804,594	---
1926				
Jan	254,502	3,991,329	5,396,856	---
Feb	402,561	3,325,393	3,113,856	---
Mar	464,902	2,379,236	2,242,811	---
Apr	124 260	1,927,866	5,606,583	16,032,542
May	24,226	1,108,675	7,223,747	5,005,698
June	---	644,178	6,667,472	10,775,976
July	---	668,310	6,463,740	7,745,173
1920				
Aug	$107,089	$1,578,929	$8,205,760	$9,002,679
Sept	179,045	3,291,245	6,959,975	10,445,629
Oct	429,948	3,851,228	7,115,232	6,343,081
Nov	442,820	4,695,044	5,991,820	3,210,043
Dec	502,014	4,059,310	6,654,498	---
1927				
Jan	541,821	3,148,146	5,510,948	---
Feb	347,345	2,530,415	6,451,515	---
Mar	392,827	3,776,856	3,671,199	---
Apr	291,753	4,107,133	4,753,203	---
May	388,652	2,687,695	4,648,529	---
June	292,593	2,886,214	5,001,255	---
July	276,797	1,687,440	3,210,354	1,400,043
Aug	214,056	1,219,989	3,979,714	---
Sept	558,000	1,368,525	444,573	---
Oct	253,570	1,357,054	---	---
Nov	106,363	5,987,442	---	---
Dec	60,532	6,140,212	---	---
1928				
Jan	126,890	1,911,204	8,421,881	---
Feb	70,678	1,572,831	4,276,653	---
Mar	25,173	1,233,729	9,193,131	2,717,767
Apr	362,502	1,074,423	10,276,541	---
May	374,046	1,317,605	5,235,794	---
June	345,650	1,106,665	4,350,819	---
July	222,812	438,008	7,122,659	---
Aug	175,040	605,354	4,356,769	---
Sept	380,969	603,391	9,498,274	---
Oct	563,940	1,318,664	14,076,692	---
Nov	195,030	1,470,689	10,488,208	---
Dec	256,120	2,153,814	13,426,279	---
1929				
Jan	150,040	2,954,392	6,563,573	---
Feb	110,688	2,962,791	3,845,882	---
Mar	191,772	3,904,585	3,535,352	---
Apr	146,538	4,134,610	2,587,714	---
May	114,054	4,966,958	2,897,898	---
June	336,902	4,033,492	1,873,972	---
July	35,347	4,037,881	634,929	---
Aug	255,057	5,326,242	1,648,457	---
Sept	944,150	7,437,897	7,213,575	---
Oct	2,082,664	8,001,211	10,628,688	---
Nov	969,164	6,223,871	1,001,552	---
Dec	1,177,297	7,719,607	6,672,265	415,598
1930				
Jan	628,176	4,226,128	8,452,160	1,264,033
Feb	168,419	2,756,683	15,537,152	---
Mar	384,480	1,428,256	6,164,152	2,518,190
Apr	46,056	876,888	13,052,554	7,932,219
May	8,000	706,064	7,302,414	---
June	7,000	399,087	4,130,957	---
July	---	465,681	8,120,860	---
Aug	18,300	523,253	6,551,886	---
Sept	---	1,184,638	7,049,885	476,178
Oct	---	1,228,527	7,445,258	862,232
Nov	---	856,842	4,530,874	---
Dec	4,042,983	1,769,543	12,699,002	154,939

[1] $17,829 purchased locally from dealers.

Boston.—

Statistics on the volume of bills in our portfolio that have been purchased locally from dealers, that have been purchased locally from accepting banks, and that have been acquired through the open-market investment committee, for the last reporting date of each month from January, 1922

[000 omitted]

Date	Volume of acceptances purchased by months						Holdings on last report date	
	Purchased from dealers			From accepting banks	Acquired from open-market investment committee	Total purchased for month	Date	Amount
	Outright (local)	Agreement (local)	Outright (not local)					
1922								
January	$329	$12,214	$612	$1,372	....	$14,527	Jan. 25	$9,473
February	1,548	11,524	3,290	3,473	....	19,835	Feb. 21	12,611
March	649	10,837	....	1,402	....	12,878	Mar. 29	11,543
April	1,543	13,505	....	580	....	15,628	Apr. 26	9,882
May	1,428	15,472	1,865	3,933	....	22,698	May 31	10,783
June	2,269	13,197	3,293	11,264	....	30,023	June 28	24,206
July	76	13,914	....	352	....	14,342	July 26	19,138
August	486	17,795	....	5,321	....	23,602	Aug. 30	11,193
September	2,826	8,104	3,535	8,762	....	23,227	Sept. 27	15,857
October	3,139	14,154	....	9,804	....	27,097	Oct. 25	26,299
November	2,220	21,214	....	6,214	....	29,468	Nov. 29	28,831
December	1,958	19,639	....	6,589	....	28,186	Dec. 27	25,706
1923								
January	945	18,639	....	8,911	....	28,495	Jan. 31	14,851
February	3,780	16,408	500	5,374	....	26,062	Feb. 28	12,546
March	5,383	19,339	781	7,733	....	33,236	Mar. 28	17,482
April	5,587	12,438	399	7,025	....	25,449	Apr. 25	20,979
May	2,076	14,136	....	1,557	....	17,769	May 29	21,025
June	3,764	19,222	719	2,441	....	26,146	June 27	18,564
July	678	16,157	61	5,770	....	22,666	July 25	16,512
August	1,414	11,225	....	1,916	....	14,555	Aug. 29	10,126
September	1,323	10,818	....	2,631	....	14,772	Sept. 25	8,165
October	1,886	17,709	....	4,710	....	24,305	Oct. 30	14,454
November	3,839	21,874	1,924	6,234	$10,090	43,982	Nov. 27	30,131
December	1,165	23,212	....	6,219	4,140	34,736	Dec. 24	33,078
1924								
January	2,034	18,891	....	5,663	4,203	30,791	Jan. 29	24,952
February	2,202	14,266	....	5,849	2,471	24,788	Feb. 26	24,462
March	1,370	14,823	....	2,614	3,282	22,090	Mar. 25	19,519
April	1,562	15,841	....	1,127	2,647	21,177	Apr. 29	11,479
May	2,068	6,024	....	800	....	8,892	May 27	5,612
June	354	2,050	....	125	672	3,201	June 24	1,991
July	3,339	5,956	....	....	621	9,916	July 29	2,602
August	1,499	2,410	....	1,425	406	5,740	Aug. 26	4,539
September	3,267	6,162	....	1,141	1,696	12,266	Sept. 30	9,059
October	5,405	12,293	....	8,834	689	27,221	Oct. 28	20,405
November	16,039	19,034	....	12,599	1,508	49,180	Nov. 25	39,046
December	17,457	13,970	....	12,382	427	44,236	Dec. 30	59,423
1925								
January	2,613	5,985	....	5,454	....	14,052	Jan. 28	45,406
February	10,363	9,503	....	12,490	....	32,356	Feb. 25	41,961
March	10,275	14,218	....	6,452	....	30,945	Mar. 25	41,092
April	2,849	15,909	....	4,188	....	22,946	Apr. 29	32,993
May	7,940	13,491	....	12,314	....	33,745	May 27	37,422
June	7,697	15,104	....	5,512	....	28,313	June 24	32,605
July	10,653	10,823	....	1,481	....	22,957	July 29	31,513
August	6,319	8,398	....	5,162	9,254	29,133	Aug. 26	27,600
September	9,227	5,867	....	12,641	7,464	35,199	Sept. 30	49,246
October	15,169	13,712	....	18,144	....	47,025	Oct. 28	64,770
November	23,062	5,455	....	21,492	....	50,009	Nov. 25	85,992
December	17,001	17,096	....	15,452	....	49,639	Dec. 30	81,381
1926								
January	6,365	20,731	....	10,961	1,865	39,922	Jan. 27	82,789
February	6,777	17,241	....	9,086	....	33,104	Feb. 24	47,316
March	5,987	19,136	....	9,290	....	34,413	Mar. 31	43,664
April	7,990	27,905	....	8,351	....	44,246	Apr. 28	18,879
May	12,734	24,458	....	8,154	....	45,346	May 26	22,220
June	12,202	21,559	....	22,294	....	56,055	June 30	29,731
July	15,385	17,906	....	19,855	....	53,146	July 28	18,577

Statistics on the volume of bills in our portfolio that have been purchased locally from dealers, that have been purchased locally from accepting banks, and that have been acquired through the open-market investment committee, for the last reporting date of each month from January, 1922—Continued

Date	Volume of acceptances purchased by months						Holdings on last report date	
	Purchased from dealers			From accepting banks	Acquired from open-market investment committee	Total purchased for month	Date	Amount
	Outright (local)	Agreement (local)	Outright (not local)					
1926								
August	$14,067	$10,851		$17,893		$42,811	Aug. 25	$17,444
September	12,721	6,877		17,534		37,132	Sept. 29	26,308
October	11,116	10,305		31,796		53,217	Oct. 27	34,296
November	8,022	12,740		17,219	$10	37,991	Nov. 24	32,741
December	8,301	30,457		23,132		61,890	Dec. 29	47,306
1927								
January	3,381	29,214		11,297	100	43,992	Jan. 26	41,477
February	7,739	33,881		16,870		58,490	Feb. 23	46,038
March	6,789	34,452		6,925		48,166	Mar. 30	27,573
April	6,550	23,086		7,298	350	37,284	Apr. 27	25,114
May	6,955	30,341		7,049	700	45,045	May 25	25,837
June	9,242	27,979		10,577		47,798	June 29	16,920
July	5,849	15,734		4,421		26,004	July 27	13,785
August	3,844	29,618		1,139	2,335	36,936	Aug. 31	18,446
September	8,315	27,653		11,123		47,091	Sept. 28	24,319
October	11,507	29,555		17,883		58,945	Oct. 26	32,588
November	10,465	28,640		16,585		55,690	Nov. 30	39,021
December	6,386	26,336		9,131	4,000	45,853	Dec. 28	48,738
1928								
January	14,740	34,645	$4,573	15,735		69,693	Jan. 25	42,773
February	9,867	18,845		8,050		36,762	Feb. 29	39,505
March	16,955	33,086		9,729		59,770	Mar. 28	49,243
April	18,830	32,344		45,938		97,112	Apr. 25	50,926
May	16,771	31,574		2,307		50,652	May 29	41,355
June	17,367	27,244		6,224		50,835	June 27	37,288
July	25,119	29,283		4,547		58,949	July 25	19,240
August	19,400	21,369		4,666		45,435	Aug. 29	19,009
September	10,672	20,346		8,598		39,616	Sept. 26	21,422
October	12,821	51,736		16,620		81,177	Oct. 31	43,895
November	7,895	47,830		29,379		85,104	Nov. 28	49,188
December	22,189	27,826		23,150		73,165	Dec. 26	49,284
1929								
January	12,420	41,827		18,770		73,017	Jan. 30	63,180
February	4,321	29,157		617		34,095	Feb. 27	43,707
March	8,753	17,379		4,872		31,004	Mar. 27	26,095
April	7,357	21,831		5,063		34,251	Apr. 24	22,692
May	3,979	30,344		4,831		39,154	May 29	26,281
June	1,235	12,932		900		15,067	June 26	8,465
July	806	19,726		2,946		23,478	July 31	10,254
August	8,690	28,481		3,111		40,282	Aug. 28	20,477
September	3,862	28,048		35		31,945	Sept. 25	20,894
October	3,691	32,904		240		36,835	Oct. 30	13,986
November	383	6,289		30		6,702	Nov. 27	4,773
December	2,176	49,047		2,161		53,384	Dec. 24	14,830
1930								
January	6,127	34,892		1,847		42,866	Jan. 29	16,443
February	2,782	23,941		188		26,911	Feb. 26	14,258
March	1,029	25,226		4,235		30,490	Mar. 26	9,839
April	7,910	32,721		6,182		46,813	Apr. 30	15,075
May	3,412	22,457		1,198	2,500	29,567	May 28	16,858
June	4,140	16,484			1,808	22,432	June 25	16,274
July	4,095	14,090		1,227	9,096	28,508	July 30	17,865
August	1,314	8,378			8,220	17,912	Aug. 27	16,921
September	1,670	8,378		1,764	8,253	20,065	Sept. 24	22,465
October	1,675	8,081		6,130	7,445	23,331	Oct. 29	14,343
November	202	3,325		416	5,515	9,458	Nov. 26	14,553
December	1,449	10,552		2,078	15,306	29,385	Dec. 31	25,315

Chicago.—

Volume of bills held

[000 omitted]

Date	Purchases from member banks	From dealers	Open market investment committee	Resale agreement
1922				
Jan. 25	$1,638	$673	$9,126	$2,567
Feb. 23	2,401	2,369	7,565	1,731
Mar. 29	3,016	390	4,163	738
Apr. 26	6,530	3,145	1,610	546
May 31	13,643	1,786	2,834	3,283
June 28	13,344	6,736	3,004	365
July 26	5,638	9,426	2,643	2,289
Aug. 30	8,601	12,695	3,983	1,494
Sept. 27	6,776	5,265	8,408	1,169
Oct. 25	3,853	12,271	4,696	32
Nov. 29	3,193	5,140	6,667	2,250
Dec. 27	5,091	4,114	4,748	1,345
1923				
Jan. 31	3,860	3,676	6,019	325
Feb. 28	5,478	2,834	13,286	2,198
Mar. 28	2,493	3,025	8,859	1,156
Apr. 25	3,080	4,986	8,465	220
May 29	243	--------	7,982	1,301
June 27	1,590	13,847	15,256	1,583
July 25	2,128	6,769	14,885	3,130
Aug. 29	778	2,980	7,450	3,006
Sept. 26	581	2,771	16,418	1,152
Oct. 31	807	1,294	17,843	3,333
Nov. 28	3,459	0	11,631	2,129
Dec 26	1,515	1,098	11,699	1,973
1924				
Jan. 30	2,903	2,953	15,700	914
Feb. 27	785	2,067	12,148	796
Mar. 26	916	1,119	12,411	730
Apr. 30	1,567	--------	8,933	970
May 28	30	200	2,568	863
June 25	--------	10	5,419	--------
July 30	500	--------	1,508	--------
Aug. 27	1,601	2,283	--------	--------
Sept. 24	300	1,732	5,560	--------
Oct. 29	7,135	3,281	10,261	70
Nov. 26	5,866	1,220	9,199	1,199
Dec. 31	5,503	893	17,506	--------
1925				
Jan. 28	2,717	122	7,265	417
Feb. 25	1,542	9,960	10,079	1,200
Mar. 25	14,308	2,408	7,746	648
Apr. 29	3,665	715	5,776	2,295
May 27	2,708	83	15,842	2,088
June 24	5,989	555	9,341	883
July 29	1,971	543	12,343	706
Aug. 26	1,056	106	14,313	639
Sept. 30	4,017	856	20,081	391
Oct. 28	2,150	769	12,594	112
Nov. 25	847	3,050	9,861	1,133
Dec. 30	3,479	3,932	6,759	1,350
1926				
Jan. 27	2,717	1,423	10,332	995
Feb. 24	1,766	893	13,513	2,525
Mar. 31	4,203	1,258	11,569	1,113
Apr. 28	1,247	1,065	14,473	2,111
May 26	712	2,549	15,851	4,427
June 30	2,332	4,705	16,575	2,757
1926				
July 28	$663	$3,884	$13,727	$2,059
Aug. 25	3,399	3,501	12,438	1,717
Sept. 29	1,562	2,836	17,426	1,782
Oct. 27	1,156	2,777	18,214	4,172
Nov. 24	2,026	2,194	16,713	2,913
Dec. 29	5,826	3,567	17,066	4,596
1927				
Jan. 26	1,807	3,520	14,398	2,669
Feb. 23	4,436	1,538	13,365	4,380
Mar. 30	7,905	2,018	11,269	4,210
Apr. 27	3,858	1,388	13,572	4,344
May 25	2,863	2,714	13,343	3,524
June 29	8,408	2,780	11,219	2,400
July 27	4,244	2,051	6,657	1,867
Aug. 31	2,597	1,983	7,993	3,615
Sept. 28	6,167	1,593	6,544	4,627
Oct. 26	11,362	3,442	8,002	4,810
Nov. 30	16,046	2,996	23,940	2,826
Dec. 28	17,335	3,383	22,402	2,047
1928				
Jan. 27	10,275	3,406	25,752	2,721
Feb. 29	7,562	4,225	6,556	2,904
Mar. 28	5,019	3,769	12,832	3,525
Apr. 25	7,121	8,291	11,433	2,221
May 29	6,171	3,470	17,764	3,105
June 27	780	1,436	2,651	1,595
July 25	931	468	6,034	1,019
Aug. 29	174	1,324	9,313	2,078
Sept. 26	10	2,413	12,874	2,153
Oct. 31	454	3,029	16,796	3,457
Nov. 28	244	2,845	11,810	2,693
Dec. 26	1,093	5,678	7,364	3,918
1929				
Jan. 30	1,577	5,452	16,716	6,283
Feb. 27	1,014	2,885	10,404	2,927
Mar. 27	380	1,482	--------	1,419
Apr. 24	239	109	--------	751
May 29	2,333	1,437	9,170	3,292
June 26	853	820	2,239	2,392
July 31	452	845	1,589	4,956
Aug. 28	1,150	2,694	4,240	4,257
Sept. 25	128	1,868	14,913	4,000
Oct. 30	1,154	3,039	28,863	367
Nov. 27	311	1,334	574	1,706
Dec. 24	6,468	1,283	10,763	5,232
1930				
Jan. 29	3,169	3,049	23,279	1,876
Feb. 26	1,009	941	28,200	2,510
Mar. 26	2,660	1,780	8,942	4,112
Apr. 30	5,324	2,063	19,843	2,104
May 28	288	2,942	11,944	3,689
June 25	3,869	2,609	7,403	3,152
July 30	47	3,081	17,222	858
Aug. 27	1,569	574	12,931	1,731
Sept. 24	602	417	14,943	628
Oct. 29	849	1,175	18,532	1,848
Nov. 26	--------	1,141	9,903	751
Dec. 31	16,856	2,133	29,658	2,488

Cleveland.—The data on the schedule do not answer the specific question asked. Our records are not set up so that the information requested could readily be obtained. The following schedule is a statement of holdings on given dates, together with additions thereto from the various sources during the various months:

Total bills held on last report date

Date	Held	Allotted by open market investment committee	Purchased from fourth district members	Acquired otherwise from fourth district	Acquired from other Federals	Total purchased and acquired
1922						
January	$4,262,738.30	$2,000,467.37	$10,000.00	$1,297,120.64		$3,307,588.01
February	2,807,999.44	2,763,801.12		1,030,805.83		3,794,606.95
March	3,140,795.07	2,767,320.51	25,000.00	1,085,434.42		3,877,754.93
April	2,010,618.89	1,042,319.29	35,000.00	614,576.52		1,691,895.81
May	9,610,106.99	5,723,997.21	300,000.00	276,813.26	$3,786,200.10	10,087,010.57
June	16,716,083.88	4,648,014.72	88,210,38	336,388.69	5,012,646.04	10,085,259.83
July	26,328,324.52	6,379,403.53		306,517.70	9,998,446.52	16,684,367.75
August	28,958,954.91	7,865,401.60	254,977.32	135,812.20	8,773,398.85	17,029,589.97
September	37,524,685.83	10,618,457.73	116,193.15	158,052.51	9,197,840.20	20,090,543.59
October	33,158,334.21	9,702,176.11	410,358.32	371,734.20	6,239,403.69	16,723,672.32
November	53,150,892.87	24,612,200.38	279,419.80	225,429.64	7,047,335.48	32,164,385.30
December	50,907,018.19	9,651,805.65	298,919.04	119,297.26	3,406,845.15	13,476,867.10
1923						
January	41,500,576.61	9,811,181.68	550,638.83	264,309.24		10,626,129.75
February	30,599,146.48	17,744,361.38	4,348.015.90	627,895.91		22,720,273.19
March	50,421,527.14	31,089,127.98	1,954,563.63	198,169.53		33,241,861.14
April	47,110.570.92	12,537,652.16	1,927,426.02	157,770.24		14,622,848.42
May	37,552,995.45	7,126,857.87	2,181,309.00	193,276.98		9,501,443.85
June	27,591,286.05	6,960,357.97	336,899.70	26,916.30	1,779,491.18	9,103,665.15
July	26,643,328.23	10,663,613.32	859,952.83	[1] 171,900.00	5,016,560.89	16,712,027.04
August	42,704,120.26	24,856,377.64	719,461.34	193,700.00		25,769,538.98
September	32,610,002.77	4,883,431.59	651,235.36	101,000.00		5,635,666.95
October	28,715,860.49	16,154,413.84	719,864.70			16,874,278.54
November	29,944,423.36	11,832,033.80	792,510.36			12,624,544.16
December	39,809,223.51	25,516,755.77	620,606.52			26,137,362.29
1924						
January	41,414,869.40	13,765,906.68	600,000.19			14,365,906.87
February	33,036,214.29	9,248,579.65	1,349,273.06			10,597,852.71
March	20,613,685.61	7,938,394.85	314,657.32	[2] 50,000.00		8,303,052.17
April	13,671,535.50	4,173,705.26	1,393,102.09			5,566,807.35
May	7,556,094.16	1,867,211.91	375,263.70			2,242,475.61
June	4,414,975.18	3,231,943.68				3,231,943.68
July	1,685,908.03	837,303.95	551,713.29			1,389,017.24
August	933,215.73	879,794.66	272,925.94			1,152,720.60
September	8,301,162.41	4,966,095.79	3,090,702.37			8,056,798.16
October	18,247,342.42	15,030,756.91	1,908,511.63			16,939,268.54
November	25,886,867.19	17,072,172.79	2,207,987.39			19,280,160.18
December	41,217,174.99	20,888,271.46	4,055,598.59			24,943,870.05
1925						
January	37,962,952.99	12,379,602.72	1,722,612.49			14,102,215.21
February	34,104,702.04	10,755,954.84	4,176,218.37	[2] 150,000.00		15,082,173.21
March	30,912,895.54	11,465,535.40	4,367,380.39			15,832,915.79
April	24,589,627.08	4,909,603.64	2,343,961.96			7,253,565.60
May	24,871,934.54	13,102,230.52	2,080,099.12			15,182,329.64
June	20,526,302.87	7,233,755.43	3,952,602.67			11,186,358.10
July	17,148,026.33	4,936,188.10	2,800,064.38	[2] 90,000.00		7,826,252.48
August	18,359,934.13	6,124,098.34	5,869,859.32	[2] 67,481.31		12,061,438.97
September	18,681,835.07	7,137,357.62	2,739,766.48			9,877,124.10
October	13,628,861.07	2,181,831.82	2,549,236.97			4,731,068.79
November	9,645,272.55		1,704,938.62			1,704,938.62
December	4,998,646.43		744,242.87			744,242.87
1926						
January	12,170,720.88	8,343,199.62	2,596,662.37		1,163,270.88	12,103,132.87
February	18,024,721.18	8,552,394.44	1,883,071.40		758,232.51	11,193,698.35
March	21,023,314.57	7,084,852.86	4,052,568.60			11,137,421.46
April	18,702,391.71	11,339,628.07	1,639,908.75			12,979,536.82
May	21,009,088.61	13,239,176.93	3,364,279.72			16,603,456.65
June	22,598,645.86	9,158,581.41	4,456,131.62	[2] 100,000.00		13,714,713.03
July	21,346,407.05	7,718,738.90	2,649,297.22		3,613,792.92	13,981,829.04
August	26,483,743.92	11,368,342.56	3,318,732.63		2,000,881.68	16,687,956.87
September	26,609,953.57	9,338,815.19	2,181,110.55		2,651,174.89	14,171,100.63
October	28,148,390.19	11,281,790.39	1,664,143.53		3,100,780.61	16,046,714.53
November	30,902,889.90	10,531,931.43	2,330,190.64		4,200,233.34	17,062,355.41
December	34,487,714.57	11,922,709.10	3,218,768.18	[2] 236,000.00	2,890,105.32	18,267,582.60

[1] $125,000 of this amount bought from outside dealers.
[2] This amount bought from outside dealer.

Total bills held on last report date—Continued

Date	Held	Allotted by open market investment committee	Purchased from fourth district members	Acquired otherwise from fourth district	Acquired from other Federals	Total purchased and acquired
1927						
January	$27,902,670.22	$11,545,225.67	$2,911,420.67		$1,400,047.15	$15,856,693.49
February	29,950,899.90	11,125,931.12	7,940,613.15			19,066,544.27
March	20,663,052.35	7,286,665.43	4,952,443.71			12,239,109.14
April	20,195,761.51	11,510,719.15	4,230,873.21			15,741,592.36
May	17,850,610.56	8,942,203.93	4,429,286.39		1,000,000.00	14,371,490.32
June	19,862,383.99	9,300,094.99	4,193,083.41		500,000.00	13,993,178.40
July	16,535,827.62	5,679,266.77	1,809,059.50		1,100,000.00	8,588,326.27
August	11,435,654.51	5,603,690.87	2,708,762.81			8,312,453.68
September	17,003,619.32	8,633,922.21	3,187,628.27			11,821,550.48
October	19,529,999.99	9,626,019.55	3,823,064.90		900,000.00	14,349,084.45
November	17,097,758.70	8,880,058.13	2,688,424.80		1,100,000.00	12,668,482.93
December	19,794,244.66	9,437,502.33	6,552,031.87			15,989,534.20
1928						
January	26,947,091.03	19,287,274.11	5,410,097.10		1,500,025.84	26,197,397.05
February	28,059,022.57	7,341,056.28	4,847,645.88			12,188,702.16
March	30,905,095.25	12,747,119.68	5,036,178.67		2,000,000.00	19,783,298.35
April	33,114,636.08	14,644,017.87	1,426,103.88		10,000,158.44	26,070,280.19
May	27,621,505.38	12,082,710.43	2,777,076.58		500,061.57	15,359,848.58
June	23,459,397.64	5,297,311.93	2,954,721.56		2,300,067.90	10,552,101.39
July	18,796,615.56	6,018,258.45	3,037,809.68		2,000,057.89	11,056,126.02
August	19,724,082.77	6,322,649.54	2,611,704.04		3,500,306.02	12,434,659.60
September	24,057,920.72	14,966,864.23	2,127,428.18		3,000,628.37	20,094,920.78
October	41,531,324.60	21,362,537.86	4,307,274.97			25,669,812.83
November	54,804,959.24	17,797,460.37	2,726,531.08		3,053,981.99	23,577,973.44
December	51,698,669.62	19,896,584.05	256,169.00			20,152,753.05
1929						
January	39,995,313.67	11,897,182.35	2,300,772.10			14,197,954.45
February	32,418,166.65	7,936,008.15	2,032,847.55			9,968,855.70
March	23,377,759.65	10,075,276.19	4,214,524.29	[2] $251,477.38		14,541,277.86
April	15,726,110.56	6,861,445.11	2,293,588.82			9,155,033.93
May	9,920,702.20	6,272,026.76	761,508.20			7,033,534.96
June	6,888,844.94	3,021,602.86	1,843,330.04			4,864,932.90
July	3,690,610.71	1,565,960.70				1,565,960.70
August	5,239,786.46	3,601,252.35	1,141,149.69			4,742,402.04
September	16,149,899.54	15,560,792.46	1,274,524.59			16,835,317.05
October	40,460,782.49	23,376,804.89	1,773,500.24			25,150,305.13
November	34,070,354.69	2,237,035.11	232,603.16			2,469,638.27
December	24,654,372.97	12,954,201.18				12,954,201.18
1930						
January	22,025,707.84	16,657,008.66				16,657,008.66
February	33,646,067.31	21,867,597.42				21,867,597.42
March	19,050,851.71	6,933,744.43				6,933,744.43
April	19,611,258.25	14,974,087.16				14,974,087.16
May	11,131,867.34	5,712,949.09				5,712,949.09
June	8,669,534.03	3,991,714.08				3,991,714.08
July	13,250,623.13	12,941,690.47				12,941,690.47
August	15,543,881.37	12,115,302.95				12,115,302.95
September	22,506,847.94	11,195,281.98				11,195,281.98
October	20,556,565.48	12,545,201.29				12,545,201.29
November	17,687,292.45	7,583,631.70				7,583,631.70
December	25,931,375.71	21,883,658.13				21,883,658.13

[2] This amount bought from outside dealer.

Dallas.—We have never extended the balances of bills held in our portfolio in the manner which the question suggests. We can probably readily give the total amount of acceptances purchased in any given period and separately the amount purchased through the sytem or from member banks and dealers in this district. If this information is vital for your purposes, we could undertake, within say 30 days, to compile the information by reconstructing our records in order to obtain it, and will gladly do so if you desire. We are, however, not delaying the transmission of our other answers in order to do so.

34718—31—PT 6——13

Kansas City.—

Volume of bills in the portfolio of the Federal Reserve Bank of Kansas City on the last reporting date of each month from January, 1922, to December, 1930

Date	Acceptances purchased locally from accepting banks	Acceptances purchased locally from other sources	Acceptances purchased through open-market investment committee
1922			
Jan. 31		$61,485.83	
Feb. 28		46,500.00	
Mar. 31		29,000.00	
Apr. 30		39,000.00	
May 31		5,000.00	
June 30		5,000.00	
July 31			
Aug. 31		75,000.00	
Sept. 30		277,000.00	
Oct. 31		392,500.00	
Nov. 30		402,000.00	
Dec. 31		402,000.00	
1923			
Jan. 31		85,000.00	
Feb. 28		75,000.00	
Mar. 31		75,000.00	$520,000.00
Apr. 30			
May 31		128,997.85	
June 30		25,725.85	
July 31			
Aug. 31		10,198.63	2,002,144.50
Sept. 30		385,698.63	1,701,644.50
Oct. 31		450,000.00	1,077,133.37
Nov. 30		375,000.00	335,000.00
Dec. 31		545,000.00	
1924			
Jan. 31		75,000.00	
Feb. 29		520,000.00	9,432,601.34
Mar. 31		410,000.00	8,019,613.26
Apr. 30			4,886,674.24
May 31			1,647,969.01
June 30			1,647,188.87
July 31		175,000.00	953,249.70
Aug. 31		175,000.00	316,957.98
Sept. 30		150,000.00	3,784,131.96
Oct. 31		150,000.00	8,958,606.22
Nov. 30		10,000.00	13,323,437.69
Dec. 31		10,000.00	15,661,180.87
1925			
Jan. 31			13,078,158.04
Feb. 28			13,304,172.83
Mar. 31			13,685,304.35
Apr. 30			11,711,010.99
May 31			15,423,037.34
June 30	$50,000.00		13,621,643.67
July 31			15,302,288.05
Aug. 31			17,837,120.73
Sept. 30			26,135,459.47
Oct. 31			32,562,657.68
Nov. 30			19,059,595.95
Dec. 31			17,006,321.32
1926			
Jan. 31			14,221,369.64
Feb. 28			15,459,249.51
Mar. 31			12,073,579.95
Apr. 30			10,572,244.95
May 31			12,025,522.73
June 30			11,360,729.83
1926			
July 31			$12,553,405.65
Aug. 31			13,894,270.90
Sept. 30			15,155,257.67
Oct. 31			17,883,830.92
Nov. 30			17,220,165.47
Dec. 31			18,294,960.03
1927			
Jan. 31			14,897,583.16
Feb. 28	$17,923.75		13,145,023.42
Mar. 31	4,153.12		10,859,876.08
Apr. 30			11,612,236.98
May 31			8,776,803.79
June 30			9,275,794.20
July 31			7,542,159.31
Aug. 31			5,396,425.02
Sept. 30			9,700,079.26
Oct. 31			11,342,508.63
Nov. 30			8,916,432.61
Dec. 31			7,881,758.50
1928			
Jan. 31			13,327,244.16
Feb. 29			12,097,397.71
Mar. 31			11,934,924.74
Apr. 30			16,200,798.30
May 31			13,473,698.65
June 30			10,897,242.83
July 31			8,572,692.46
Aug. 31			10,577,945.85
Sept. 30			17,902,036.09
Oct. 31	26,000.00		24,872,923.33
Nov. 30	53,610.69		9,470,231.83
Dec. 31	53,510.69		5,880.00
1929			
Jan. 31	27,510.69		8,425,218.99
Feb. 28			9,976,456.34
Mar. 31			10,347,664.16
Apr. 30			6,292,718.86
May 31			5,487,226.00
June 30			2,203,987.97
July 31			815,430.11
Aug. 31	700,000.00		1,747,993.45
Sept. 30	800,000.00	$50,000.00	9,100,692.87
Oct. 31	1,020,000.00	70,000.00	18,371,108.29
Nov. 30	1,110,000.00	70,000.00	16,383,787.91
Dec. 31	540,000.00		7,621,130.72
1930			
Jan. 31	110,000.00		472,799.59
Feb. 28	30,000.00		8,415,611.38
Mar. 31			9,535,376.82
Apr. 30			11,671,442.96
May 31			6,662,505.63
June 30			3,885,352.81
July 31			5,484,033.58
Aug. 31			10,560,156.54
Sept. 30			9,553,729.23
Oct. 31			6,424,144.84
Nov. 30			6,746,831.11
Dec. 31			11,891,173.63

Minneapolis.—Data not forwarded.

New York.—The principal source of bills bought by this bank is banks and bankers, not necessarily banks which are in the business of making acceptances. Our records do not show a segragation of the bill holdings of this bank as to the source of purchase. Beginning in 1926 we have kept a record of our bill purchases for account of ourselves and other Federal reserve banks, showing the relative amounts bought from banks and from dealers. Part of such bills are allotted to other Federal reserve banks. We have no record of such division of bills which we retain ourselves. The following schedule, therefore, shows, for the years 1926 to 1930 inclusive, our purchases of bills which are distributed among the other Federal reserve banks of the system from banks and from dealers, and that portion of the total held by this bank and the portion of the total allotted to other Federal reserve banks. No bills are acquired from or through the open-market investment committee.

Statement showing, monthly from January, 1926, to December, 1930, purchases of bankers' acceptances for the Federal reserve system segregated as to the amounts acquired from banks and from dealers, also the participation of the Federal Reserve Bank of New York and of other Federal reserve banks in the total purchased

[In thousands of dollars]

Date	From banks	From dealers	Total	Held by Federal Reserve Bank of New York	Allotted to other Federal reserve banks
1926					
January	64, 400	19, 300	83, 700	24, 500	59, 200
February	56, 100	16, 700	72, 800	18, 500	54, 300
March	44, 000	16, 800	60, 800	6, 800	54, 000
April	50, 700	34, 400	85, 100	18, 800	66, 300
May	38, 900	68, 800	107, 700	25, 000	82, 700
June	65, 500	33, 300	98, 800	13, 600	85, 200
July	44, 300	25, 800	70, 100	21, 700	48, 400
August	59, 500	43, 700	103, 200	29, 900	73, 300
September	51, 100	26, 700	77, 800	21, 900	55, 900
October	64, 200	34, 600	98, 800	32, 400	66, 400
November	72, 200	25, 200	97, 400	28, 200	69, 200
December	63, 200	52, 800	116, 000	42, 900	74, 100
1927					
January	58, 000	42, 100	100, 100	33, 100	67, 000
February	56, 000	32, 400	88, 400	30, 900	57, 500
March	70, 800	3, 700	74, 500	23, 200	51, 300
April	56, 100	42, 000	98, 100	31, 200	66, 900
May	74, 800	24, 000	98, 800	32, 200	66, 600
June	67, 100	19, 200	86, 300	29, 700	56, 600
July	47, 600	5, 300	52, 900	19, 500	33, 400
August	44, 100	23, 100	67, 200	26, 500	40, 700
September	72, 400	13, 500	85, 900	34, 400	51, 500
October	101, 100	32, 000	133, 100	58, 400	74, 700
November	98, 400	7, 100	105, 500	35, 200	70, 300
December	108, 200	3, 400	111, 600	28, 700	82, 900
1928					
January	128, 500	37, 900	166, 400	61, 300	105, 100
February	67, 700	2, 000	69, 700	28, 800	40, 900
March	100, 000	1, 900	101, 900	36, 200	65, 700
April	97, 100	17, 900	115, 000	44, 100	70, 900
May	75, 000	12, 800	87, 800	29, 400	58, 400
June	30, 200	5, 900	36, 100	17, 200	18, 900
July	47, 100	4, 000	51, 100	23, 100	28, 000
August	57, 900	17, 100	75, 000	34, 100	40, 900
September	45, 900	72, 400	118, 300	44, 600	73, 700
October	114, 000	51, 000	165, 000	60, 600	104, 400
November	109, 400	9, 800	119, 200	47, 400	71, 800
December	79, 200	38, 700	117, 900	40, 300	77, 600
1929					
January	78, 400	11, 900	90, 300	34, 200	56, 100
February	68, 000	5, 100	73, 100	28, 900	44, 200
March	41, 600	25, 200	66, 800	28, 300	38, 500
April	45, 800	5, 200	51, 000	30, 600	20, 400
May	32, 300	21, 800	54, 100	22, 600	31, 500
June	25, 000	1, 500	26, 500	14, 900	11, 600
July	16, 000	1, 800	17, 800	10, 300	7, 500
August	35, 000	3, 200	38, 200	19, 500	18, 700
September	62, 900	85, 500	148, 400	43, 000	105, 400
October	84, 500	68, 200	152, 700	58, 400	94, 300
November	10, 000	1, 200	11, 200	10, 300	900
December	70, 200	44, 600	114, 800	34, 200	80, 600
1930					
January	96, 200	40, 000	136, 200	51, 800	84, 400
February	102, 300	60, 800	163, 100	34, 800	128, 300
March	60, 000	10, 900	70, 900	23, 800	47, 100
April	64, 500	67, 200	131, 700	32, 200	99, 400
May	69, 300	21, 600	90, 900	25, 500	65, 400
June	60, 600	6, 600	67, 200	26, 900	40, 300
July	89, 500	24, 100	113, 600	33, 700	79, 900
August	98, 800	13, 300	112, 100	34, 000	78, 100
September	120, 500	10, 400	130, 900	44, 000	86, 900
October	89, 400	15, 300	104, 700	32, 300	72, 400
November	70, 400	3, 300	73, 700	21, 600	52, 100
December	239, 400	12, 300	251, 700	71, 200	180, 500

Our purchases from dealers for account of this bank and other Federal reserve banks were, in percentages of total purchases for system account: In 1927, 13 per cent; 1928, 11 per cent; 1929, 9 per cent; 1930, 6 per cent.

Philadelphia—

Acceptances held at last reporting date of each month as follows

	Purchased from banks and dealers	Purchased through open-market committee
1922		
January	$14,060,899.79	
February	16,749,224.74	
March	20,848,528.92	
April	20,343,539.54	
May	15,735,968.13	
June	19,003,441.85	
July	25,412,685.01	
August	29,840,230.98	
September	22,187,539.42	
October	19,649,586.82	
November	19,325,056.43	
December	23,380,058.08	
1923		
January	26,768,049.13	
February	28,082,869.03	
March	29,025,675.82	
April	24,124,023.58	
May	19,664,660.07	
June	19,539,899.40	
July	18,835,535.00	
August	19,667,628.63	
September	17,592,454.29	
October	16,962,136.94	
November	23,924,207.29	
December	33,200,989.00	
1924		
January	29,942,156.59	
February	19,177,340.13	
March	14,964,006.11	
April	7,078,693.48	
May	4,169,285.79	
June	2,148,054.91	
July	1,287,489.49	
August	1,760,353.57	
September	1,487,760.81	
October	8,569,261.55	
November	20,830,531.10	
December	18,276,472.25	
1925		
January	17,338,096.36	
February	22,822,097.84	
March	24,415,419.78	
April	23,727,822.46	
May	21,659,898.37	
June	15,352,934.64	
July	11,192,506.27	
August	17,883,178.17	
September	19,787,136.38	
October	18,094,673.08	
November	13,930,680.03	
December	16,923,054.08	
1926		
January	15,820,211.73	
February	19,670,308.00	
March	10,851,047.17	
April	13,127,796.03	
May	11,060,920.11	
June	14,640,368.71	
July	$17,028,967.67	
August	19,379,985.91	
September	24,019,413.36	
October	27,534,166.38	
November	25,804,672.96	
December	26,838,777.53	
1927		
January	24,411,434.12	
February	18,341,508.14	
March	13,622,278.01	
April	12,911,455.55	
May	12,401,685.29	
June	12,773,070.88	
July	10,824,791.22	
August	1,935,191.28	
September	9,469,418.23	$2,004,144.55
October	19,313,188.73	
November	32,024,029.42	
December	39,599,372.21	4,899,145.06
1928		
January	27,487,590.23	2,161,497.05
February	37,013,085.67	246,716.93
March	23,256,678.38	
April	32,057,309.38	2,500,705.98
May	30,437,814.88	2,500,705.98
June	21,307,793.59	1,079,566.77
July	14,862,263.87	
August	12,384,086.84	
September	15,526,068.66	
October	20,645,941.48	
November	19,484,759.50	
December	16,137,084.34	
1929		
January	21,258,519.47	1,845,543.00
February	18,447,541.61	4,342,271.30
March	14,514,893.48	3,229,890.48
April	11,462,063.52	262,353.22
May	9,692,442.01	
June	8,866,361.07	
July	2,399,577.32	
August	7,436,694.19	
September	12,913,933.23	
October	13,769,636.40	
November	9,503,863.01	
December	8,441,426.65	
1930		
January	8,998,601.65	
February	11,593,853.38	
March	8,246,028.29	
April	7,886,038.09	
May	3,827,542.46	
June	2,301,977.31	
July	593,851.39	
August		
September		
October		
November		
December	5,776.08	

Richmond.—

Bills held on last day of each month, 1922 to 1930, inclusive

Date	Purchased from dealers and banks	Allotted by open-market investigating committee
1922		
January	$2,505,099	
February	2,288,919	
March	2,002,710	
April	1,859,060	
May	1,146,960	
June	710,300	
July	4,465,525	
August	268,750	
September	783,600	
October	1,985,818	
November	2,182,818	
December	1,734,289	
1923		
January	731,000	
February	165,000	
March	975,893	
April	2,078,734	
May	2,047,068	
June	2,177,582	
July	1,910,933	
August	953,900	
September	448,000	
October	1,765,506	
November	2,459,108	
December	2,078,338	
1924		
January	2,313,050	
February	2,388,588	
March	2,539,363	
April	2,058,379	
May	1,447,405	
June	710,400	
July		
August		
September		
October		
November		
December	1,486,012	
1925		
January	1,433,300	
February	2,014,051	$5,527,321
March	3,449,100	9,231,301
April	2,738,100	7,914,461
May	2,328,018	8,336,264
June	2,094,199	7,558,368
July	1,704,329	4,846,572
August	1,794,040	3,060,474
September	2,644,754	1,959,782
October	4,008,487	1,061,459
November	3,734,288	147,783
December	2,652,000	43,825
1926		
January	2,356,200	4,727,013
February	2,267,600	7,533,917
March	1,206,900	9,236,527
April	1,543,559	6,707,815
May	1,683,009	7,962,759
June	931,200	9,724,648
July	$514,000	$9,777,012
August	667,509	11,636,302
September	696,000	11,836,962
October	1,590,057	12,499,374
November	2,038.102	10,328,378
December	2,958,846	9,837,488
1927		
January	2,079,160	8,670,029
February	1,947,843	8,028,080
March	1,198,389	7,261,973
April	1,882,236	7,968,018
May	1,561,715	6,325,550
June	476,500	7,840,615
July	779,754	8,747,999
August	866,693	11,006,056
September	1,531,250	24,951,666
October	3,791,292	41,925,816
November	3,714,562	46,298,105
December	4,731,882	44,092,061
1928		
January	3,796,919	23,211,656
February	3,137,342	12,956,938
March	1,974,657	11,511,322
April	1,282,097	14,580,943
May	2,351,533	10,686,384
June	2,193,019	7,054,299
July	1,202,312	5,446,648
August	1,710,599	4,398,611
September	1,845,279	12,245,863
October	2,225,579	18,759,434
November	3,521,087	23,528,539
December	4,087,610	20,229,144
1929		
January	4,470,497	14,737,068
February	3,648,826	10,295,684
March	4,474,665	6,900,736
April	2,565,084	4,238,597
May	1,840,514	2,818,381
June	1,202,975	1,947,988
July	868,434	1,073,479
August	813,663	1,865,195
September	1,635,664	7,505,972
October	2,243,028	17,026,060
November	1,958,111	15,714,684
December	1,986,995	11,301,353
1930		
January	2,102,085	8,255,074
February	1,459,600	12,635,645
March	1,576,000	8,067,104
April	1,554,049	7,380,545
May	1,478,775	6,662,687
June	1,108,375	4,180,760
July	904,275	5,363,169
August	486,000	9,597,521
September	249,000	9,588,953
October	523,000	7,481,763
November	686,500	7,321,252
December	727,000	8,698,109

St. Louis.—

Statistics on the volume of bills purchased and held in our portfolio on the last reporting date of each month

Date	From local dealers	From local other sources	From open-market investment committee
1922			
January	$15, 737. 03	$46, 326. 32	
February	751, 147. 35	383, 303. 38	
March	799, 433. 15	362, 019. 14	
April	349, 246. 92	480, 507. 30	
May	505, 697. 00	3, 868, 910. 26	$609, 145. 39
June	470, 697. 00	10, 458, 766. 92	609, 145. 39
July	520, 925. 47	13, 684, 112. 05	1, 154, 017. 13
August	252, 933. 00	13, 952, 104. 52	1, 870, 453. 71
September		9, 921, 136. 77	1, 616, 639. 80
October	200, 000. 00	4, 910, 087. 73	4, 988, 969. 14
November	800, 523. 38	3, 512, 531. 08	7, 235, 707. 71
December		1, 418, 919. 05	11, 608, 727. 57
1923			
January		1. 122, 501. 88	13, 426, 681. 62
February		1, 585, 574. 02	8, 453, 143. 60
March		1, 998, 163. 59	10, 872, 069. 23
April		1, 007, 431. 19	10, 755, 024. 40
May		772, 586. 13	8, 920, 281. 42
June		539, 799. 20	6, 067, 893. 74
July		33, 706. 64	2, 611, 009. 46
August			389, 404. 50
September			39, 404. 50
October		29, 000. 00	
November	100, 000. 00	22, 000. 00	
December		43, 246. 98	
1924			
January	100, 000. 00	639, 628. 68	133, 691. 56
February		207, 000. 00	4, 148, 669. 38
March		608, 715. 47	5, 432, 036. 20
April			4, 240. 751. 67
May			2, 396, 820. 65
June			562, 867. 54
July			29, 834. 16
August			567, 149. 31
September			3, 894, 689. 85
October			9, 589, 497. 68
November			14, 253, 589. 86
December			21, 390, 593. 51
1925			
January			21, 138, 347. 40
February			17, 313, 421. 61
March		108, 988. 58	12, 824, 155. 94
April			10, 042, 577. 69
May			11, 980, 988. 48
June			10, 737, 198. 71
July			10, 475, 121. 04
August		31, 714. 97	11, 532, 297. 46
September			959, 099. 23
October		30, 241. 07	19, 582, 561. 04
November			22, 267, 642. 81
December		30, 000. 00	22, 151, 254. 99
1926			
January		1, 508, 356. 68	18, 344, 826. 81
February			16, 215, 378. 26
March			9, 183, 386. 26
April		15, 000. 00	7, 967, 554. 73
May			9, 625, 357. 68
June			7, 721, 586. 82
1926			
July			$4, 720, 968. 00
August			8, 264, 329. 65
September			660, 889. 36
October			6, 445, 072. 58
November			10, 496, 630. 39
December			7, 991, 665. 14
1927			
January			10, 452, 372. 33
February			8, 978, 070. 40
March			19, 746, 576. 29
April			18, 210, 150. 42
May			11, 648, 467. 31
June			10, 722, 904. 32
July			7, 311, 976. 36
August			4, 065, 167. 22
September			4, 190, 284. 83
October			4, 946, 169. 56
November			4, 428, 257. 65
December			5, 035, 382. 72
1928			
January			13, 216, 249. 77
February			12, 401, 676. 64
March			6, 007, 167. 89
April			3, 371, 855. 72
May			626, 820. 98
June			343, 274. 79
July			125, 348. 69
August			
September			
October		$5, 000. 00	11, 901, 723. 63
November			9, 618, 001. 81
December			11, 290, 950. 57
1929			
January			8, 457, 084. 91
February			9, 581, 785. 33
March			7, 458, 302. 62
April			1, 890, 638. 64
May			1, 066, 547. 70
June			260, 983. 86
July			24, 245. 83
August		88, 530. 00	
September			
October			
November			
December		25, 201. 93	9, 734, 543. 20
1930			
January			13, 028, 220. 78
February			20, 887, 921. 49
March			8, 953, 846. 56
April			9, 825, 788. 36
May			7, 434, 490. 58
June			4, 567, 913. 63
July			5, 764, 270. 05
August			8, 918, 271. 62
September			9, 093, 717. 02
October			5, 718, 098. 95
November			5, 861, 130. 92
December			9, 492, 903. 21

San Francisco.—A separate control record of bills acquired from various sources has not been maintained.

Possibly the following information showing total purchases each month and the source of such purchases may serve your purpose.

Accepting banks offer their bills to dealers and not to the Federal reserve bank.

Classification of bills purchased

[000 omitted]

Date	Acquired in twelfth district		Acquired outside twelfth district		
	From dealers under repurchase agreement	From dealers outright	From banks	From other Federal reserve banks	From open-market committee
1922					
January	$1,651		$821		$1,250
February	2,805		746		5,527
March	3,288		824		4,764
April	3,119		792		1,728
May	3,591		353		6,821
June	6,470		986	$2,502	10,640
July	9,678		405		5,456
August	8,295	$50	962		20,520
September	7,188	2,734	3,061		21,354
October	7,966	2,624	596		16,253
November	5,774	978	545		13,325
December	9,441	1,732	250		18,906
1923					
January	9,560	805	587		8,574
February	8,058	419	224		13,925
March	7,947	1,620	924		26,738
April	7,417	2,771	2,011		7,217
May	4,211	535	1,521		5,365
June	5,694	1,720	1,515	3,203	2,612
July	5,774	477	1,867		4,266
August	6,848	1,556	612		3,325
September	5,679	918	542		3,747
October	7,383	779	1,234		4,230
November	7,376	1,408	776		9,071
December	8,636	1,487	707		24,496
1924					
January	8,951	624	276		7,825
February	8,247	439	1,351		8,338
March	5,975	387	614		6,328
April	5,553	555	861		3,589
May	1,683	147	276		1,878
June	591	167	374		3,837
July		318	435		1,006
August		246	1,280		1,035
September		231	504		8,603
October	250	3,072	1,229		18,207
November		2,822	926		24,880
December	4,435	1,692	1,783		35,116
1925					
January	5,499	2,052	1,420		20,324
February	9,207	4,755	857		9,223
March	8,815	1,691	2,299		4,945
April	12,134	2,881	1,856		3,015
May	7,937	2,353	1,008		9,717
June	12,297	3,033	1,253		7,131
July	10,032	2,191	1,737		7,520
August	7,867	2,854	3,406		7,979
September	9,902	2,262	1,990		7,519
October	10,121	2,129	1,682		13,372
November	7,511	2,602	2,974		8,592
December	9,924	3,066	7,002		11,057
1926					
January	9,721	1,305	1,910	1,009	7,389
February	8,220	1,188	2,283		6,709
March	11,621	2,779	2,334		4,664
April	17,716	904	1,179		9,368
May	11,781	1,631	2,063		9,013
June	17,469	3,376	2,534		8,488
July	13,199	2,407	1,582		7,800
August	11,698	4,445	2,743		7,953
September	14,566	5,448	3,140	580	4,496
October	13,080	4,313	2,001	1,100	6,252
November	17,075	2,507	2,564		8,376
December	21,049	6,709	2,419	1,013	5,949

Classification of bills purchased—Continued

Date	Acquired in twelfth district		Acquired outside twelfth district		
	From dealers under repurchase agreement	From dealers outright	From banks	From other Federal reserve banks	From open-market committee
1927					
January	$17,671	$4,636	$1,874		$5,001
February	15,853	4,185	2,347		6,158
March	23,418	3,101	1,578		5,677
April	19,621	4,904	1,905		5,571
May	16,127	4,101	995		4,760
June	15,272	3,433	927		6,919
July	16,037	6,458	960		1,144
August	18,636	3,788	671		
September	20,472	6,266	4,105		
October	18,644	6,433	1,469		
November	22,218	4,615	3,009		
December	20,207	5,657	5,133		
1928					
January	1,631	11,516	4,034		4,484
February	1,163	7,812	1,276	$8,400	3,103
March	15,133	4,445	6,383		5,852
April	6,105	5,870	4,794		7,081
May	5,201	3,166	2,036		6,635
June	7,962	6,145	1,883	800	1,315
July	6,603	7,058	3,550		
August	12,140	5,407	3,980	1,000	
September	18,627	18,467	3,592		1,534
October	15,079	13,420	6,766		
November	11,778	12,088	7,497	3,314	4,684
December	19,178	13,674	11,216		500
1929					
January	11,866	12,110	6,441	1,000	1,035
February	9,287	3,774	6,373		3,509
March	13,029	3,936	7,238		692
April	10,782	2,161	701		
May	10,729	2,445	2,943		231
June	10,933	1,754	2,677		2,472
July	11,527	1,163	1,303		1,234
August	14,307	4,320	4,092		3,019
September	14,754	2,102	5,689		11,772
October	16,555	2,606	4,960		11,400
November	17,797	4,024	640		217
December	18,364	4,344	4,232		10,856
1930					
January	22,196	5,974	8,133		10,176
February	17,919	3,240	4,514		11,304
March	16,922	4,343	2,921		7,468
April	19,404	7,736	3,095		12,882
May	32,582	4,958	1,281		8,689
June	23,074	5,535	331		3,139
July	3,548	3,465	1,069		8,769
August	12,273	2,714	137		9,411
September	16,716	4,518	1,693		7,502
October	29,611	6,412	4,000		7,719
November	21,814	4,083	2,605		5,779
December	30,012	4,805	358		17,242

19. What policy does your institution follow in buying bills directly from the accepting bank? Are such bills discounted?

Atlanta.—We discount bills offered by our member banks at our regular discount rate on 90 days commercial paper when such bills are adequately secured at time of acceptance by readily marketable staples stored in independent warehouses.

Boston.—This bank does not buy direct from an accepting bank its own acceptances. This policy has been in effect since June 1, 1918. Such bills are not discounted. We do buy (when offered) from accepting banks bills of other acceptors when such bills have been in the open market for a period of 12 to 14 days.

Chicago.—It has never been our practice to buy bills directly from the accepting bank. We are, however, willing to take such bills for rediscount at our regular discount rate for commercial paper but such bills are not offered to us for rediscount.

Cleveland.—We do not purchase acceptances direct from the accepting bank, nor do we discount such bills for the accepting bank.

Dallas.—We do not purchase from accepting banks their own bills, or discount them.

Kansas City.—Bills bought direct from accepting bank are usually treated as rediscounts and handled at the current discount rate.

Minneapolis.—This bank does not buy bills directly from the accepting bank without indorsement by another bank. Such indorsed bills are purchased outright.

New York.—We never buy bills from the acceptors, directly or indirectly, nor do we discount for a member bank a bill accepted by that member bank.

Philadelphia.—We do not buy bills directly from, nor rediscount directly for accepting banks.

Richmond.—This bank does not buy bills directly from the accepting bank, and it is not the practice of accepting banks to offer them to us for discount.

St. Louis.—We do not buy or discount bills direct from or for the accepting bank.

San Francisco.—(*a*) Bills are not purchased directly from acceptors.

(*b*) A bank's own acceptance is not taken for discount. As a primary obligation of the offering bank, the acceptance would not (it is believed) come within the provisions of section 13 of the Federal reserve act permitting a Federal reserve bank to make advances to its member banks on their own promissory notes for a period not exceeding 15 days when secured by notes and bills, etc., eligible for discount and purchase, or United States Government obligations.

20. Append a classification of bills held for own account on the last reporting date in each month since January, 1922, by the type of currency in which the bills are stated. What were the reasons for the increase in the amount of bills stated in foreign currencies in 1927, 1929, and 1930?

Atlanta.—See following schedule for our holdings of bills which were stated in United States currency. The Federal Reserve Bank of New York will submit system aggregate amounts of bills held which were stated in foreign currencies, in which holdings the Federal Reserve Bank of Atlanta participated in accordance with the percentages as shown on the schedule supporting our answers to question No. 15.

Classification of bills held for own account on last report date in each month since January, 1922, by the type of currency in which bills are stated (all bills stated are in United States currency)

Month	1922	1923	1924	1925	1926
January	$2, 010, 857. 44	$3, 086, 816. 34	$8, 748, 858. 32	$3, 922, 317. 92	$4, 037, 322. 45
February	1, 216, 920. 42	3, 214, 247. 46	6, 453, 492. 54	2, 387, 545. 77	3, 418, 773. 21
March	2, 106, 020. 26	3, 635, 274. 75	5, 025, 756. 15	1, 336, 370. 51	2, 389, 236. 85
April	918, 020. 62	2, 598, 714. 67	3, 986, 912. 87	956, 062. 70	2, 040, 297. 10
May	516, 583. 20	2, 079, 113. 24	3, 688, 197. 23	776, 090. 82	1, 108, 675. 33
June	869, 565. 03	1, 909, 186. 29	1, 964, 664. 45	427, 774. 40	644, 178. 61
July	746, 187. 88	2, 096, 798. 74	1, 477, 542. 42	274, 915. 50	668, 310. 77
August	1, 063, 116. 49	2, 825, 929. 76	1, 041, 862. 64	743, 524. 70	1, 578, 930. 26
September	5, 073, 413. 19	4, 959, 794. 24	2, 536, 666. 01	1, 120, 431. 35	3, 448, 290. 99
October	12, 376, 792. 74	6, 304, 431. 55	5, 532, 709. 33	2, 913, 469. 49	4, 214, 280. 24
November	8, 976, 961. 66	7, 688, 600. 44	6, 890, 952. 21	3, 949, 475. 26	4, 982, 091. 30
December	8, 291, 620. 09	7, 160, 128. 53	7, 826, 168. 78	3, 682, 536. 58	4, 383, 894. 74

Month	1927	1928	1929	1930
January	$3, 468, 114. 89	$2, 038, 095. 08	$3, 104, 433. 10	$5, 870, 084. 33
February	2, 825, 495. 87	1, 643, 509. 98	3, 073, 480. 44	2, 892, 414. 67
March	4, 112, 867. 65	1, 258, 903. 49	4, 090, 039. 92	1, 558, 258. 62
April	4, 326, 640. 70	1, 436, 925. 93	4, 207, 661. 31	922, 945. 51
May	2, 944, 686. 68	1, 691, 651. 16	4, 989, 666. 06	714, 064. 93
June	3, 083, 108. 69	1, 452, 315. 82	4, 265, 678. 84	406, 087. 28
July	1, 964, 238. 27	543, 798. 03	4, 037, 882. 09	465, 682. 66
August	1, 434, 046. 72	780, 395. 20	5, 581, 310. 24	614, 004. 36
September	1, 926, 525. 76	984, 361. 03	8, 134, 877. 36	1, 321, 539. 30
October	1, 588, 114. 62	1, 882, 604. 77	8, 920, 753. 14	1, 228, 527. 65
November	2, 346, 912. 09	1, 665, 720. 36	6, 536, 476. 15	968, 312. 15
December	2, 239, 232. 46	2, 400, 255. 28	8, 042, 434. 02	1, 801, 544. 32

Boston.—Classification of sterling bills held for own account on the last reporting date in each month since January 1922, by the type of currency in which the bills are stated:

December, 1924	$474,000
January, 1925	474,000
February, 1925	71,000

NOTE.—Figures shown in the above table represent the amount of sterling bills purchased by this bank locally. If question 20 refers to "System" purchases, it is suggested that reference be made to report submitted by the Federal Reserve Bank of New York.

Chicago.—All transactions in bills purchased in foreign currencies are conducted by the Federal Reserve Bank of New York, the other Federal reserve banks participating, we taking our pro rata share. The information required can be obtained from the Federal Reserve Bank of New York.

Classification of bills held by the Minneapolis Federal Reserve Bank for own account on the last reporting date in each month since January, 1922, by the type of currency in which the bills are stated

	Bills purchased, payable in dollars	Bills purchased, payable in foreign currency		Bills purchased, payable in dollars	Bills purchased, payable in foreign currency
1923			1927		
January	$131,662.50		January	$10,527,894.31	
February	4,958,652.93		February	9,468,413.63	
March	2,582,769.86		March	6,618,717.03	
April	652,267.91		April	12,370,891.46	
May			May	7,552,912.91	
June			June	6,983,018.43	$330,141.59
July			July	5,388,731.99	351,485.06
August			August	4,105,162.47	357,426.07
September			September	8,285,911.38	195,486.50
October	50,601.53		October	18,104,963.75	7,591.65
November	50,601.53		November	20,582,708.96	7,591.65
December	623,501.13		December	18,310,951.40	7,661.67
1924			1928		
January	2,928,776.35		January	14,314,621.00	6,896.02
February	5,116,333.96		February	10,736,224.10	6,896.02
March	7,744,240.33		March	13,820,968.04	6,908.60
April	3,730,897.17		April	18,500,201.89	6,924.44
May	1,701,709.51		May	20,642,857.70	6,924.44
June	1,044,065.40		June	13,032,359.74	6,963.48
July	317,625.68		July	10,194,220.19	6,963.48
August	292,671.24		August	9,044,039.05	6,963.48
September	1,888,453.63		September	12,584,271.96	6,994.97
October	1,540,427.71		October	19,011,260.70	7,061.31
November	560,112.40		November	21,109,802.97	7,056.87
December	8,377.82		December	21,791,873.67	27,469.54
1925			1929		
January			January	16,858,832.39	25,428.58
February	4,997,321.87		February	12,520,613.19	25,481.70
March	8,490,455.92		March	7,917,144.77	25,722.36
April	17,316,638.36		April	4,141,428.29	25,894.93
May	10,664,272.01		May	2,803,426.90	25,912.47
June	17,078,363.60		June	2,259,512.65	26,076.31
July	19,685,634.87		July	1,612,226.34	51,383.50
August	20,468,428.12		August	1,688,697.38	308,393.13
September	25,018,726.85		September	6,111,826.68	423,739.75
October	13,270,618.26		October	3,655,301.55	426,584.30
November	6,399,227.73		November	2,769,310.71	25,661.53
December	18,741,259.17		December	6,610,659.65	25,761.22
1926			1930		
January	7,182,501.98		January	8,178,067.33	23,705.45
February	7,124,421.66		February	11,770,149.66	23,815.99
March	8,082,395.37		March	11,949,391.23	23,878.16
April	19,017,688.47		April	8,590,677.55	23,913.01
May	12,810,629.68		May	6,959,978.32	24,236.79
June	8,681,549.56		June	6,253,816.71	24,469.80
July	9,115,913.36		July	6,136,485.77	24,469.80
August	11,505,596.98		August	7,495,447.35	24,506.28
September	12,778,205.79		September	7,156,840.75	24,639.99
October	13,646,066.60		October	4,183,098.01	496,432.35
November	13,093,420.82		November	4,049,535.32	698,314.65
December	12,614,674.84		December	7,583,714.68	827,597.90

Cleveland.—We are unable to give the detailed information requested. We understand, however, that this information may be had through the Federal Reserve Bank of New York.

Dallas.—See answer to question 18. We are advised that the Federal Reserve Bank of New York will give a complete answer to this inquiry.

Kansa City.—None. All held in New York.

Minneapolis.—Following is a classification of bills held for our account on the last reporting date in each month since January, 1922, divided into bills drawn in United States dollars and bills in foreign currency. The latter are not divided by currency, since the bills are held in New York and we have never tabulated them in any other form than in the United States equivalent of all foreign currencies involved as one total. The reasons for the increase in the bills drawn in foreign currency in 1927, 1929, and 1930 can best be given by the New York Federal Reserve Bank.

New York.—The reasons for the increases in 1927, 1929, and 1930 in the amounts of foreign currency bills held by ourselves and the other Federal reserve banks were generally as follows: We purchased foreign exchange at a time when it was weak and we were threatened with the importation of gold. We sought to support exchange by our purchases and thereby not only prevent the withdrawal of further amounts of gold from Europe but also, by improving the position of the foreign exchanges, to enhance or stabilize Europe's power to buy our exports. In fact our efforts to support exchange were undertaken in the autumn during our heaviest export season when the foreign exchanges are normally under pressure, and these operations were liquidated when the seasonal strain had passed, our goods had been moved, and the position of the foreign exchanges had improved.

(The Federal Reserve Bank of New York requested that data be held confidential.)

Philadelphia.—Acceptances held at last reporting date of each month

	United States currency	Sterling bills		United States currency	Sterling bills
1922			1925		
January	$14,060,899.79		January	$17,338,096.36	
February	16,749,224.74		February	22,822,097.84	
March	20,848,528.92		March	24,415,419.78	
April	20,343,539.54		April	23,727,822.46	
May	15,735,968.13		May	21,659,898.37	
June	19,003,441.85		June	15,352,934.64	
July	25,412,685.01		July	11,192,506.27	
August	29,840,230.98		August	17,883,178.17	
September	22,187,539.42		September	19,787,136.38	
October	19,649,586.82		October	18,094,673.08	
November	19,325,056.43		November	13,930,680.03	
December	23,380,058.08		December	16,923,054.08	
1923			1926		
January	26,768,049.13		January	15,820,211.73	
February	28,082,869.03		February	19,670,308.00	
March	29,025,675.82		March	10,851,047.17	
April	24,124,023.58		April	13,127,796.03	
May	19,664,660.07		May	11,060,920.11	
June	19,539,899.40		June	14,640,368.71	
July	18,835,535.00		July	17,028,967.67	
August	19,667,628.63		August	19,379,985.91	
September	17,592,454.29		September	24,019,413.36	
October	16,962,136.94		October	27,534,166.38	
November	23,924,207.29		November	25,804,672.96	
December	33,260,989.00		December	26,838,777.53	
1924			1927		
January	29,942,156.59		January	24,411,434.12	
February	19,177,340.13		February	18,341,508.14	
March	14,964,006.11		March	13,622,278.01	
April	7,078,693.48		April	12,911,455.55	
May	4,169,285.79		May	12,401,685.29	
June	2,148,054.91		June	12,773,070.88	$1,024,858.09
July	1,287,489.49		July	10,824,791.22	1,124,752.21
August	1,760,353.57		August	1,935,191.28	1,143,763.41
September	1,487,760.81		September	11,473,562.78	625,556.80
October	8,569,261.55		October	19,313,188.73	24,293.27
November	20,830,531.10		November	32,024,029.42	24,293.27
December	18,276,472.25		December	44,498,517.27	24,517.36

Philadelphia.—Acceptances held at last reporting date of each month—Contd.

	United States currency	Sterling bills
1928		
January	$29,649,087.28	$24,263.78
February	37,259,802.60	24,263.78
March	23,256,678.38	24,308.04
April	34,558,015.36	24,363.78
May	32,938,520.86	24,363.78
June	22,387,360.36	24,501.12
July	14,862,263.87	24,501.12
August	12,384,086.84	24,501.12
September	15,526,068.66	24,611.94
October	20,645,941.48	24,845.36
November	19,484,759.50	24,829.71
December	16,137,084.24	96,652.08
1929		
January	23,104,062.47	97,645.75
February	22,789,812.91	97,849.72
March	17,744,783.96	98,773.88
April	11,724,416.74	99,436.52
May	9,692,442.01	99,503.89
June	8,866,361.07	100,133.03
July	$2,399,577.32	$197,312.63
August	7,436,694.19	1,184,229.67
September	12,913,393.23	1,627,160.58
October	13,769,636.40	1,638,083.71
November	9,503,863.01	98,540.26
December	8,441,426.65	98,923.11
1930		
January	8,998,601.65	99,975.15
February	11,593,853.38	100,441.36
March	8,246,028.29	100,703.55
April	7,886,038.09	100,850.51
May	3,827,542.46	102,216.04
June	2,301,977.31	103,198.73
July	593,851.39	103,198.73
August		103,352.56
September		103,916.48
October		2,093,649.44
November		2,945,066.17
December	5,776.08	3,490,304.18

Richmond.—This bank has only a voluntary pro rata participation in foreign bills purchased by the Federal Reserve Bank of New York for system account and is unable to give the currency of such bills. For percentage of participation see answer to 15.

St. Louis.—(1) Schedule follows.

(2) None held until June–September, 1927, when Federal Reserve Bank of New York sold gold earmarked in London and invested proceeds in sterling bills, in which we participated. Holdings afterwards small until October, 1930, when sterling exchange was purchased by Federal Reserve Bank of New York and invested in sterling bills, in which we participated.

Classification of bills held for own account on the last reporting date in each month since June, 1927 [1]

	Payable in—		
	Sterling	Francs	Pengos
1927			
June	$480,034.02		
July	503,811.71		
August	512,344.53		
September	280,197.32		
October	10,881.36		
November	10,881.36		
December	10,981.73		
1928			
January	10,982.55		
February	11,002.58		
March	11,027.82		
April	11,027.82		
May	11,018.80		
June	11,089.98		
July	11,089.98		
August	11,140.14		
September	11,245.80		
October	11,238.71		
November	11,652.24		
December	11,677.48	$32,070.31	
1929			
January	10,865.75	29,904.97	
February	11,069.97	30,085.81	
March	$11,164.09	$30,267.79	
April	11,164.01	30,295.94	
May	11,281.59	30,311.11	
June	11,269.19	30,452.90	
July	11,483.29	30,483.58	$40,491.50
August	56,270.19	3,928.57	2,594.13
September	40,458.65	1,937.74	
October	40,462.63	1,933.86	
November	9,870.55	31,208.29	
December	9,870.55	31,347.41	
1930			
January	8,976.23	28,300.97	
February	8,976.23	28,398.28	
March	8,973.14	28,455.92	
April	9,390.33	28,545.42	
May	9,390.33	28,692.00	
June	9,525.06	28,775.50	
July	9,526.42	28,831.23	
August	9,516.41	29,050.53	
September	9,605.34	29,083.25	
October	747,840.57	29,130.38	
November	1,107,910.60	29,212.13	
December	1,266,100.10	29,270.52	

[1] None so held previous to this date.

San Francisco.—Increase of foreign bills:

1927: Sterling purchased to employ portion of temporary London balances which arose from the purchase of gold to arrest shipments to the United States.

1929: Sterling bills bought to relieve some of the pressure on sterling exchange and to help stay the flow of gold from London to the United States. Pengos were purchased in cooperation with central banks of England, France, Belgium, and the Netherlands, to strengthen position of National Bank of Hungary in dealing with Hungary's foreign exchanges.

1930: Sterling purchased to strengthen European exchanges which were weakened to a degree, it was believed, that would check foreign purchases of American goods.

Classification follows:

Date	Holdings of bills		Date	Holdings of bills	
	United States currency	Foreign currencies		United States currency	Foreign currencies
Jan. 25, 1922	$7,598,000		July 28, 1926	$20,317,000	
Feb. 21, 1922	4,891,000		Aug. 25, 1926	26,552,000	
Mar. 29, 1922	6,483,000		Sept. 29, 1926	26,598,000	
Apr. 26, 1922	5,873,000		Oct. 27, 1926	26,869,000	
May 31, 1922	9,422,000		Nov. 24, 1926	28,809,000	
June 28, 1922	16,953,000		Dec. 29, 1926	31,008,000	
July 26, 1922	17,497,000		Jan. 26, 1927	26,505,000	
Aug. 30, 1922	21,991,000		Feb. 23, 1927	22,968,000	
Sept. 27, 1922	40,928,000		Mar. 30, 1927	22,879,000	
Oct. 25, 1922	44,163,000		Apr. 27, 1927	23,374,000	
Nov. 29, 1922	40,304,000		May 25, 1927	14,980,000	
Dec. 27, 1922	38,302,000		June 29, 1927	16,428,000	[1] 747,000
Jan. 31, 1923	28,998,000		July 27, 1927	16,122,000	[1] 829,000
Feb. 28, 1923	28,375,000		Aug. 31, 1927	11,924,000	[1] 834,000
Mar. 28, 1923	36,821,000		Sept. 28, 1927	12,179,000	[1] 813,000
Apr. 25, 1923	37,010,000		Oct. 26, 1927	5,893,000	[1] 18,000
May 29, 1923	28,341,000		Nov. 30, 1927	7,603,000	[1] 18,000
June 27, 1923	20,651,000		Dec. 28, 1927	10,467,000	[1] 18,000
July 25, 1923	15,865,000		Jan. 25, 1928	14,731,000	[1] 18,000
Aug. 29, 1923	12,321,000		Feb. 29, 1928	25,491,000	[1] 18,000
Sept. 26, 1923	11,505,000		Mar. 28, 1928	26,218,000	[1] 18,000
Oct. 31, 1923	12,450,000		Apr. 25, 1928	26,191,000	[1] 18,000
Nov. 28, 1923	18,032,000		May 29, 1928	21,713,000	[1] 18,000
Dec. 26, 1923	35,343,000		June 27, 1928	20,055,000	[1] 18,000
Jan. 30, 1924	27,948,000		July 25, 1928	20,122,000	[1] 18,000
Feb. 27, 1924	23,931,000		Aug. 29, 1928	23,197,000	[1] 18,000
Mar. 26, 1924	16,391,000		Sept. 26, 1928	38,629,000	[1] 18,000
Apr. 30, 1924	12,579,000		Oct. 31, 1928	40,257,000	[1] 19,000
May 28, 1924	5,448,000		Nov. 28, 1928	50,189,000	[1] 19,000
June 25, 1924	4,373,000		Dec. 26, 1928	58,013,000	[2] 72,000
July 30, 1924	1,848,000		Jan. 30, 1929	52,472,000	73,000
Aug. 27, 1924	1,898,000		Feb. 27, 1929	46,780,000	73,000
Sept. 24, 1924	9,291,000		Mar. 27, 1929	25,980,000	74,000
Oct. 29, 1924	21,934,000		Apr. 24, 1929	16,438,000	75,000
Nov. 26, 1924	35,680,000		May 29, 1929	14,037,000	75,000
Dec. 31, 1924	54,068,000		June 26, 1929	13,375,000	75,000
Jan. 28, 1925	49,372,000		July 31, 1929	10,524,000	[3] 148,000
Feb. 25, 1925	42,006,000		Aug. 28, 1929	14,925,000	[4] 640,000
Mar. 25, 1925	30,104,000		Sept. 25, 1929	25,802,000	[4] 1,220,000
Apr. 29, 1925	21,411,000		Oct. 30, 1929	36,774,000	[4] 1,229,000
May 27, 1925	20,792,000		Nov. 27, 1929	29,402,000	74,000
June 24, 1925	21,841,000		Dec. 31, 1929	34,539,000	74,000
July 29, 1925	19,382,000		Jan. 29, 1930	33,647,000	71,000
Aug. 26, 1925	19,750,000		Feb. 26, 1930	41,411,000	71,000
Sept. 30, 1925	24,016,000		Mar. 26, 1930	25,974,000	72,000
Oct. 28, 1925	25,191,000		Apr. 30, 1930	29,755,000	72,000
Nov. 25, 1925	30,360,000		May 28, 1930	29,796,000	73,000
Dec. 30, 1925	31,440,000		June 25, 1930	16,402,000	73,000
Jan. 27, 1926	24,226,000		July 30, 1930	13,855,000	73,000
Feb. 24, 1926	22,886,000		Aug. 27, 1930	17,220,000	74,000
Mar. 31, 1926	21,567,000		Sept. 24, 1930	24,144,000	74,000
Apr. 28, 1926	22,880,000		Oct. 29, 1930	19,735,000	[4] 1,152,000
May 26, 1926	20,683,000		Nov. 26, 1930	26,515,000	[4] 2,095,000
June 30, 1926	23,979,000		Dec. 31, 1930	28,540,000	[4] 2,483,000

[1] All sterling. [2] Increase francs. [3] Increase pengos. [4] Increase sterling.

21. Does your institution ever acquire bills from other reserve banks to serve as a cover for Federal reserve notes? State on attached schedule the amounts and occasions of such purchases.

Atlanta.—Our institution does not acquire bills from other Federal reserve banks to serve as a cover for Federal reserve notes.

Boston.—This institution does not acquire bills from other reserve banks to serve as a cover for Federal reserve notes.

Chicago.—We have never acquired bills from other Federal reserve banks for the purpose of using them as a cover for Federal reserve note issue, but we have purchased bills from other Federal reserve banks for other purposes.

Cleveland.—We have not found such practice necessary at any time.

Dallas.—We have never done so but appreciate that occasions might arise when it would be desirable to do so.

Kansas City.—We have never acquired bills from other reserve banks for the purpose of serving as cover for Federal reserve notes.

Minneapolis.—This bank has never followed this practice.

New York.—This bank has never acquired bills from other Federal reserve banks for the purpose of providing cover for its Federal reserve notes.

Philadelphia.—No.

Richmond.—No such purchases have ever been made by this bank.

St. Louis.—No.

San Francisco.—No.

22. Present on attached schedule the buying rates on acceptances of different maturities which have been in force at your institution, with the date of each change, since January, 1922.

Atlanta—

Schedule of buying rates on acceptances of different maturities which have been in force at the Federal reserve bank of Atlanta, with date of each change since January, 1922.

	Per cent
Aug. 31, 1925:	
30 days	3⅛
45 days	3¼
46–90 days	3⅜
4 months	3½
5–6 months	3¾
Sept. 22, 1925:	
45 days	3¼
46–90 days	3⅜
4 months	3½
5–6 months	3¾
Jan. 8, 1926:	
45 days	3½
90 days	3⅝
4 months	3¾
5–6 months	4
Apr. 27, 1926:	
15 days	3⅛
60 days	3¼
90 days	3½
4 months	3½
5–6 months	4
May 20, 1926:	
30 days	3⅛
90 days	3¼
4 months	3½
5–6 months	4
May 21, 1926:	
30 days	3⅛
90 days	3¼
4 months	3⅜
5–6 months	3¾
Aug. 16, 1926:	
45 days	3⅜
90 days	3½
4 months	3⅝
5–6 months	4
Aug. 23, 1926:	
15 days	3⅜
45 days	3½
120 days	3¾
5–6 months	4
Sept. 1, 1926:	
15 days	3½
45 days	3½
120 days	3¾
5–6 months	4
Aug. 5, 1927:	
15 days	3
45 days	3⅛
90 days	3¼
4 months	3⅜
5–6 months	3¾
Jan. 27, 1928:	
45 days	3⅛
90 days	3⅜
120 days	3½
5–6 months	3¾
Feb. 3, 1928:	
45 days	3¼
120 days	3½
5–6 months	3¾
Mar. 30, 1928:	
30 days	3½
90 days	3⅝
120 days	3¾
5–6 months	4
Apr. 13, 1928:	
30 days	3⅝
120 days	3¾
5–6 months	4
May 22, 1928:	
120 days	4
5–6 months	4¼

	Per cent
July 14, 1928:	
120 days	4¼
5–6 months	4½
Aug. 1, 1928:	
90 days	4½
4 months	4⅝
6 months	5
Jan. 7, 1929:	
30 days	4½
90 days	4¾
4 months	4⅞
5–6 months	5
Dec. 10, 1929:	
120 days	4
5–6 months	4½

	Per cent
Feb. 1, 1930:	
45 days	3⅞
120 days	4
5–6 months	4½
Apr. 12, 1930:	
120 days	3
5–6 months	3¼
Aug. 25, 1930:	
75 days	1⅞
90 days	2
120 days	2⅛
5–6 months	2⅜
Dec. 26, 1930:	
120 days	1¾
5–6 months	2

Boston.—

Buying rates on acceptances of different maturities which have been in force at this institution, with the date of each change, since January, 1922

Date of change	Maturities (days)											
	15	20	30	45	60	75	90	110	120	130	150	180
1922												
Jan. 3	4⅛	4⅛	4⅛	4¼	4¼	4¼	4¼	4½	4½	4½	4½	4½
Jan. 5	4⅛			4⅛	4⅛							
Jan 9						4⅛	4⅛					
Feb. 6	4	4	4	4	4	4	4	4⅛	4⅛	4⅛	4⅛	4⅛
Mar. 23	3¾	3¾	3¾	3¾	3¾	3¾	3¾	4	4	4	4	4
Apr. 10	3⅜	3⅜	3⅜	3⅜								
Apr. 11	3½	3½	3½	3½								
Apr. 21	3¼	3¼	3¼	3¼	3¼	3⅜	3⅜					
May 9						3¼	3¼					
May 24	3⅛	3⅛	3⅛	3⅛	3⅛							
June 2						3⅛	3⅛					
June 30	3¼	3¼	3¼	3¼	3¼	3¼	3¼					
July 10	3⅛	3⅛	3⅛	3⅛	3⅛	3¼	3¼					
Aug. 2	3	3	3	3		3⅛	3⅛					
Aug. 16			3		3	3	3					
Sept. 20	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛					
Sept. 29						3¼	3¼	3½	3½	3½	3½	3½
Oct. 2				3¼	3¼	3⅜	3⅜	3¾	3¾	3¾	3¾	3¾
Oct. 6	3¼	3¼	3¼	3⅜	3⅜	3½	3½					
Oct. 18	3⅜	3⅜	3⅜	3½	3½	3⅝	3⅝					
Oct. 19	3½	3½	3½	3⅝	3⅝	3¾	3¾	4	4	4	4	4
Oct. 25	3⅝	3⅝	3⅝	3¾	3¾	3⅞	3⅞					
Oct. 26	3¾	3¾	3¾	3⅞	3⅞	4	4	4⅛	4⅛	4⅛	4⅛	4⅛
Dec. 20	3⅞	3⅞	3⅞	4	4	4	4					
1923												
Apr. 16	4	4	4									
Apr. 23	4⅛	4⅛	4⅛	4⅛	4⅛	4⅛	4⅛	4¼	4¼	4¼	4¼	4¼
May 31	4	4	4									
Oct. 2	4	4	4					4⅛	4⅛	4⅛	4⅛	4⅛
1924												
Jan. 14				4	4	4	4					
Jan. 16				4⅛	4⅛	4⅛	4⅛	4¼	4¼	4¼	4¼	4¼
Apr. 24				4	4	4	4	4⅛	4⅛	4⅛	4⅛	4⅛
Apr. 25	3⅞	3⅞	3⅞									
May 1	3⅝	3⅝	3⅝	3¾	3¾	3¾	3¾	3⅞	3⅞	3⅞	3⅞	3⅞
May 19	3½	3½	3½	3½	3½	3½	3½	3½	3½	3½	3½	3½
May 22	3⅛	3⅛	3⅛	3¼	3¼	3¼	3¼	3⅜	3⅜	3⅜	3⅜	3⅜
June 9	3	3	3	3⅛	3⅛	3⅛	3⅛	3⅛	3¼	3¼	3¼	3¼
June 18	2½	2½	2½	2⅝	2⅝	2⅝	2⅝	2⅝	2⅝	2⅝	2⅝	2⅝
June 30	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼
July 23								2⅜	2⅜	2⅜	2½	2½
July 28								2⅜	2⅜	2⅜	2½	2½
Aug. 25	2	2	2⅛	2⅛	2¼	2¼	2¼	2¼	2¼		2⅜	2⅜
Sept. 3			2	2⅛	2⅛					2¼	2⅜	2⅜
Nov. 17	2⅛	2¼	2¼	2¼	2⅜	2⅜	2½	2½	2⅝	2¾	2¾	2¾
Nov. 28	2¼	2¼	2¼	2⅜		2½		2⅝		2⅞	2⅞	3
Dec. 3	2⅜	2⅜	2⅜	2½	2½	2⅝	2⅝	2⅝	2¾	3	3	3⅛
Dec. 5	2½	2½	2½	2¾	2¾	2¾	2¾	2¾	2⅞			3
Dec. 9	2¾	2¾	2¾					2⅞				
Dec. 22				2⅞	2⅞	3	3	3	3¼	3½	3½	3½

Buying rates on acceptances of different maturities which have been in force at this institution, with the date of each change, since January, 1922—Continued

Date of change	Maturities (days)											
	15	20	30	45	60	75	90	110	120	130	150	180
1925												
Feb. 6	3	3	3	3	3	3	3	3¼	3¼	3½	3½	3½
Mar. 2				3⅛	3⅛	3⅛	3⅛	3¼	3¼			
June 15						3¼	3¼	3¼				
Aug. 31	3⅛	3⅛	3⅛	3¼	3¼	3⅜	3⅜	3⅜	3½	3¾	3¾	3¾
Sept. 23	3¼	3¼	3¼	3¼	3⅜			3½				
1926												
Jan. 8	3½	3½	3½	3½	3⅝	3⅝	3⅝	3¾	3¾	4	4	4
Apr. 27	3⅛	3¼	3¼	3¼	3¼	3½	3½	3½	3½			
May 20		3⅛	3⅛	3¼	3¼	3¼	3¼					
May 21								3⅜	3⅜	3¾	3¾	3¾
Aug. 16	3⅜	3⅜	3⅜	3⅜	3½	3½	3½	3⅝	3⅝	4	4	4
Aug. 23	3⅜	3½	3½	3½	3¾	3¾	3¾	3¾	3¾			
Sept. 1	3½				3¾							
1927												
July 22				3½								
July 29	3¼	3¼	3¼	3¼	3½	3½	3½	3½	3½	3¾	3¾	3¾
Aug. 5	3	3⅛	3⅛	3⅛	3¼	3¼	3¼	3⅜	3⅜			
Aug. 22		3	3	3								
1928												
Jan. 27	3⅛	3⅛	3⅛	3⅛	3⅜	3⅜	3⅜	3½	3½			
Feb. 3	3¼	3¼	3¼	3¼	3½	3½	3½					
Mar. 30	3½	3½	3½	3⅝	3⅝	3⅝	3⅝	3¾	3¾	4	4	4
Apr. 13	3⅝	3⅝	3⅝	3¾	3¾	3¾	3¾					
May 18	4	4	4	4	4	4	4	4	4	4¼	4¼	4¼
July 13	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½	4½	4½
July 26	4½	4½	4½	4½	4½	4½	4½	4⅝	4⅝	5	5	5
1929												
Jan. 4				4¾	4¾	4¾	4¾	4⅞	4⅞			
Jan. 21	4¾	4⅞	4⅞	4⅞	5	5	5	5	5	5	5	5
Feb. 15	5	5	5	5	5⅛	5⅛	5⅛	5¼	5¼	5¼	5¼	5¼
Mar. 21	5¼	5¼	5¼	5¼	5⅜	5⅜	5⅜	5½	5½	5⅝	5⅝	5⅝
Mar. 26	5⅜	5⅜	5⅜	5⅜	5½	5½	5½	5½		5¾	5¾	5¾
July 12	5¼	5¼	5¼	5¼	5¼	5¼	5¼	5¼	5¼	5½	5½	5½
Aug. 9	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛			
Oct. 25	5	5	5	5	5	5	5					
Nov. 1	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	5	5	5
Nov. 15	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½	4½	4½
Nov. 22	4	4	4	4	4	4	4	4	4			
1930												
Jan. 31	3⅞	3⅞	3⅞	3⅞								
Feb. 11	3¾	3¾	3¾	3¾	3⅞	3⅞	3⅞	3⅞	3⅞	4¼	4¼	4¼
Feb. 24					3¾	3¾	3¾					
Mar. 5	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	4	4	4
Mar. 6	3½	3½	3½	3½	3½	3½	3½	3½	3½	3¾	3¾	3¾
Mar. 11	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅝	3⅝	3⅝
Mar. 14		3¼	3¼	3¼	3¼	3¼	3¼	3¼	3¼			
Mar. 17	3⅛	3⅛	3⅛	3⅛								
Mar. 19	3	3	3	3	3⅛	3⅛	3⅛	3⅛	3⅛	3⅜	3⅜	3⅜
Mar. 20					3	3	3	3	3	3¼	3¼	3¼
May 2	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	3	3	3
May 8	2½	2½	2½	2½	2½	2⅝	2⅝	2⅝	2⅝			
May 20						2½	2½					
June 3	2⅜	2⅜	2⅜	2⅜				2½	2½			
June 5	2¼	2½	2¼	2¼	2¼	2½	2¼	2⅜	2⅜	2¾	2¾	2¾
June 16	2⅛	2⅛	2⅛	2⅛				2¼	2¼			
June 20	2	2	2	2	2	2	2	2⅛	2⅛	2⅜	2⅜	2⅜
June 30	1⅞	1⅞	1⅞	1⅞								
July 21					1⅞	1⅞						
Dec. 24	1¾	1¾	1¾	1¾	1¾	1¾	1¾	1¾	1¾	2	2	2

Chicago.—

Federal Reserve Bank of Chicago buying rates on bankers' acceptances, January 1, 1922, to January 20, 1931

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 90 days	91 to 120 days	121 to 180 days
In effect Jan. 1, 1922	4⅛	4⅛	4¼	4⅛	4¼	4¼	4¼
1922							
Feb. 6	4	4	4⅛	4⅛	4⅛		
Feb. 16			4	4		4⅛	4⅛
Mar. 6					4	4	
Mar. 13	3⅞	3⅞					
Mar. 21	3⅝	3⅝	3¾	3¾	3¾	3¾	4
Mar. 27	3½	3½	3½	3½	3½	3⅝	
Apr. 10	3⅜	3⅜	3⅜	3⅜	3⅜	3½	3½
Apr. 14	3¼	3¼					
May 5			3¼	3½	3¼	3⅜	
May 18	3⅛	3⅛	3⅛	3⅛			
June 2			3 3/16	3 3/16		3¼	3⅜
June 19			3⅛	3⅛	3⅛		3¼
June 26						3⅛	
July 5	3	3					
July 15			3	3			
July 25					3		
Sept. 21					3⅛	3¼	3⅜
Sept. 25			3⅛	3⅛			
Sept. 27	3⅛	3⅛					
Oct. 2			3¼	3¼	3⅜	3½	3½
Oct. 6	3¼	3¼					
Oct. 13			3⅜	3⅜	3½		3⅝
Oct. 18	3⅝	3⅝	3⅝	3⅝	3⅝	3⅞	3⅞
Oct. 19	3¾	3¾	3¾	3¾	3¾		
Oct. 24					3⅞	4	4
Oct. 27	3⅞	3⅞		4	4	4⅛	4¼
1923							
Apr. 17	4	4			4⅛		4⅜
May 23			4⅛	4⅛			
July 7						4¼	
1924							
Apr. 24	3⅞	3⅞	4	4	4	4⅛	4¼
May 1	3¾	3¾	3¾	3¾	3¾	3¾	3¾
May 16	3½	3½	3⅝	3⅝	3⅝	3⅝	3⅝
May 22	3⅛	3⅛	3¼	3¼	3¼	3¼	3¼
June 2	3	3	3⅛	3⅛	3⅛	3⅛	3⅛
June 77	2½	2½	2½	2½	2½	2⅝	2¾
June 26	2¼	2¼	2¼	2¼	2¼	2¼	2¼
Aug. 8	2	2	2⅛	2⅛			
Nov. 17	2⅛	2⅛	2¼	2¼	2⅜	2⅝	2¾
Nov. 28	2¼	2¼	2⅜	2⅜			3
Dec. 3	2⅜	2⅜	2½	2½	2⅝	2¾	
Dec. 5	2½	2½	2¾	2¾	2¾	2⅞	
Dec. 8	2¾	2¾					
Dec. 22			2⅞	2⅞	3	3¼	3½
1925							
Feb. 6	3	3	3	3			
Feb. 27			3⅛	3⅛	3⅛		
June 12					3¼		
Aug 31	3⅛	3⅛	3¼	3⅜	3⅜	3½	3¾
Sept. 22	3¼	3¼					
1926							
Jan. 8	3½	3½	3½	3⅝	3⅝	3¾	4
Apr. 27	3⅛	3¼	3¼	3¼	3½	3½	
May 20		3⅛					
May 21						3⅜	3¾
Aug. 16	3⅜	3⅜	3⅜	3½	3½	3⅝	4
Aug. 16		3½	3½	3¾	3¾	3¾	
Sept. 1	3½						
1927							
July 29	3¼	3¼	3¼	3¼	3½	3½	3¾
Aug. 5	3	3⅛	3⅛	3¼	3¼	3⅜	
Aug. 22		3	3				

Federal Reserve Bank of Chicago buying rates on bankers' acceptances, January 1, 1922, to January 20, 1931—Continued

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 90 days	91 to 120 days	121 to 180 days
1928							
Jan. 27	3⅛	3⅛	3⅛	3⅜	3⅜	3½	------
Feb. 3	4¼	3¼	3¼	3½	3½	------	------
Mar. 30	3½	3½	3⅝	3⅝	3⅝	3¾	4
Apr. 13	3⅝	3⅝	3¾	3¾	3¾	------	------
May 18	4	4	4	4	4	4	4¼
July 13	4¼	4¼	4¼	4¼	4¼	4¼	4½
July 26	4½	4½	4½	4½	4½	4⅝	5
1929							
Jan. 4	------	------	4¾	4¾	4¾	4⅞	------
Jan. 21	4¾	4⅞	4⅞	5	5	5	------
Feb. 15	5	5	5	5⅛	5⅛	5¼	5¼
Mar. 21	5¼	5¼	5¼	5⅜	5⅜	5½	5⅝
Mar. 25	5⅜	5⅜	5⅜	5½	5½	------	5¾
July 12	5¼	5¼	5¼	5¼	5¼	5¼	5½
Aug. 9	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	------
Oct. 25	5	5	5	5	5	------	------
Nov. 1	4¾	4¾	4¾	4¾	4¾	4¾	5
Nov. 15	4¼	4¼	4¼	4¼	4¼	4¼	4½
Nov. 22	4	4	4	4	4	4	------
Dec. 31 (in effect)	4	4	4	4	4	4	4½
1930							
Jan. 31	3⅞	3⅞	3⅞	------	------	------	------
Feb. 11	3¾	3¾	3¾	3⅞	3⅞	3⅞	4¼
Feb. 24	------	------	------	3¾	3¾	------	------
Mar. 5	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	4
Mar. 6	3½	3½	3½	3½	3½	3½	3¾
Mar. 11	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅝
Mar. 14	------	3¼	3¼	3¼	3¼	3¼	------
Mar. 17	3⅛	3⅛	3⅛	------	------	------	------
Mar. 19	3	3	3	3⅛	3⅛	3⅛	3⅜
Mar. 20	------	------	------	3	3	3	3¼
May 2	2¾	2¾	2¾	2¾	2¾	2¾	3
May 8	2½	2½	2½	2½	2⅝	2⅝	------
May 20	------	------	------	------	2½	------	------
June 3	2⅜	2⅜	2⅜	------	------	2½	------
June 5	2¼	2¼	2¼	2¼	2¼	2⅜	2¾
June 16	2⅛	2⅛	2⅛	------	------	------	------
June 20	2	2	2	2	2	2⅛	2⅜
July 1	1⅞	1⅞	1⅞	------	------	------	------
July 21	------	------	------	1⅞	[1] 1⅞ and 2	------	------
Dec. 24	1¾	1¾	1¾	1¾	1¾	1¾	2
1931							
Jan. 16	1⅝	------	------	------	------	------	------
In effect Jan. 20	1⅝	1¾	1¾	1¾	1¾	1¾	2

[1] 61 to 75 days, 1⅞ per cent; 76 to 90 days, 2 per cent.

Cleveland.—

Buying rates for bankers acceptances effective at Federal Reserve Bank of Cleveland, from January, 1922, to December, 1930, inclusive

The buying rates for various maturities are not available for the years 1922, 1923, and 1924. However, the following schedule indicates the minimum buying rates for bankers acceptances which were in effect during those years. For the most part, our rates as scheduled above have followed the New York rates. However, while many changes have occurred in the New York rates since March 20, 1930, no changes have been made in our rates, except that our minimum rate was reduced to 2½ per cent.

	Per cent		Per cent
Jan. 1 to Mar. 12, 1922	4	Jan. 1 to May 11, 1924	4
Mar. 13 to Apr. 20, 1922	3½	May 12 to May 28, 1924	3½
Apr. 21 to Dec. 31, 1922	3	May 29 to June 19, 1924	2¾
Jan. 1 to Apr. 23, 1923	3	June 20 to Dec. 31, 1924	2
Apr. 24 to Dec. 31, 1923	4		

The buying rates in effect for bills of the various maturities from January 1, 1925, to December 31, 1930, are as follows:

	Per cent
Jan. 1 to Feb. 27, 1925:	
1 to 30 days	2¾
31 to 60 days	2⅞
61 to 90 days	3
91 to 120 days	3½
121 to 180 days	3½
Sales contracts	3
Feb. 28 to June 11, 1925:	
1 to 30 days	3
31 to 60 days	3⅛
61 to 90 days	3⅛
91 to 120 days	3¼
121 to 180 days	3½
June 12 to Aug. 30, 1925:	
1 to 30 days	3
31 to 60 days	3⅛
61 to 90 days	3¼
91 to 120 days	3¼
121 to 180 days	3½
Aug. 31 to Sept. 21, 1925:	
1 to 30 days	3⅛
31 to 45 days	3¼
46 to 90 days	3⅜
91 to 120 days	3½
121 to 180 days	3¾
Sales contracts	3¼
Sept. 22, 1925, to Jan. 7, 1926:	
1 to 45 days	3¼
46 to 90 days	3⅜
91 to 120 days	3½
121 to 180 days	3¾
Jan. 8 to Apr. 26, 1926:	
1 to 45 days	3½
46 to 90 days	3⅝
91 to 120 days	3¾
121 to 180 days	4
Trade bills	4
Sales contracts	3½
Sales contracts, United States securities	4
April 27 to May 20, 1926:	
1 to 15 days	3⅛
16 to 60 days	3¼
61 to 90 days	3½
91 to 120 days	3½
121 to 180 days	4
Trade bills	3½
Sales contracts	3½
May 21 to Aug. 15, 1926:	
1 to 30 days	3⅛
31 to 90 days	3¼
91 to 120 days	3⅜
121 to 180 days	3¾
Sales contracts	3½
Aug. 16–23, 1926:	
1 to 45 days	3⅜*3*
46 to 90 days	3½
91 to 120 days	3⅝
121 to 180 days	4
Trade acceptances	4
Sales contracts on bills	3½
Sales contracts on governments	4
Aug. 24–31, 1926:	
1 to 15 days	3⅜
16 to 45 days	3½
46 to 120 days	3¾
121 to 180 days	4
Trade acceptances	4
Sales contracts on bills	3¾
Sales contracts on governments	4
Sept. 1, 1926, to Aug. 4, 1927:	
1 to 15 days	3½
16 to 45 days	3½
46 to 120 days	3¾
121 to 180 days	4
Trade acceptances	4
Sales contracts on bills,[1] July 22, 1929, (3⅝ per cent)	3¾
Sales contracts on governments	4
Aug. 5–21, 1927:	
1 to 15 days	3
16 to 45 days	3⅛
46 to 90 days	3¼
91 to 120 days	3⅜
121 to 180 days	3¾
Repurchase rate—	
New York	3¼
Cleveland	3½
Trade bills	3½
Aug. 22, 1927, to Jan. 26, 1928:	
1 to 15 days	3
16 to 45 days	3
46 to 90 days	3¼
91 to 120 days	3⅜
121 to 180 days	3¾
Repurchase rate—	
New York	3¼
Cleveland	3½
Trade bills	3½
Jan. 27, to Feb. 2, 1928:	
1 to 15 days	3⅛
16 to 45 days	3⅛
46 to 90 days	3⅜
91 to 120 days	3½
121 to 180 days	3¾
Repurchase rate—	
New York	3¼
Cleveland	3½
Trade bills	3½
Feb. 3, to Mar. 29, 1928:	
1 to 45 days	3¼
46 to 120 days	3½
121 to 180 days	3¾
Repurchase rate	3½
Trade bills	3½
Mar. 30, to Apr. 12, 1928:	
1 to 30 days	3½
31 to 90 days	3⅝
91 to 120 days	3¾
121 to 180 days	4
Repurchase rate	3½
Trade bills	4

[1] Wire from New York of July 21, 1929.

	Per cent
Apr. 13, to May 17, 1928:	
1 to 30 days	3⅝
31 to 120 days	3¾
121 to 180 days	4
Repurchase rate	3¾
Trade bills	4
May 18 to July 12, 1928:	
1 to 120 days	4
121 days and over	4¼
Repurchase rate	4
Trade bills	4½
July 13–25, 1928:	
1 to 120 days	4¼
121 to 180 days	4½
Repurchase rate	4½
Trade bills	4½
July 26, 1928, to Jan. 3, 1929:	
1 to 90 days	4½
91 to 120 days	4⅝
121 to 180 days	5
Repurchase rate	4½
Jan. 4–20, 1929:	
1 to 30 days	4½
31 to 90 days	4¾
91 to 120 days	4⅞
121 to 180 days	5
Sales contracts	4¾
Trade bills	5
Jan. 21 to Feb. 14, 1929:	
1 to 15 days	4¾
16 to 45 days	4⅞
46 to 180 days	5
Trade bills	5
Sales contracts	5
Feb. 15 to Mar. 20, 1929:	
1 to 15 days	5
16 to 45 days	5
46 to 90 days	5⅛
91 to 180 days	5¼
Trade bills	5¼
Sales contracts	5
Mar. 21–24, 1929:	
1 to 45 days	5¼
46 to 90 days	5⅜
91 to 120 days	5½
121 to 180 days	5⅝
Trade bills	5½
Mar. 25 to July 11, 1929:	
1 to 45 days	5⅜
46 to 120 days	5½
121 to 180 days	5¾
Trade bills	5¾
Sales contracts	5½
July 12 to Aug. 8, 1929:	
1 to 120 days	5¼
121 to 180 days	5½
Trade bills	5½
Sales contracts	5¼
Aug. 9 to Oct. 23, 1929:	
1 to 120 days	5⅛
121 to 180 days	5½

	Per cent
Aug. 9 to Oct. 23, 1929—Con.	
Trade bills	6
Sales contracts	5⅛
Oct. 24–31, 1929:	
1 to 90 days	5
91 to 120 days	5⅛
121 to 180 days	5½
Trade bills	6
Sales contracts	5⅛
Nov. 1, 1929, to Feb. 7, 1930:	
1 to 120 days	4¾
121 to 180 days	5
Trade bills	5
Sales contracts	4¾
Feb. 8–10, 1930:	
1 to 45 days	3⅞
46 to 120 days	4
121 to 180 days	4½
Trade bills	4½
Sales contracts	4
Feb. 11–23, 1930:	
1 to 45 days	3¾
46 to 120 days	3⅞
121 to 180 days	4¼
Sales contracts	3⅞
Feb. 24 to Mar. 4, 1930:	
1 to 90 days	3¾
91 to 120 days	3⅞
121 to 180 days	4¼
Sales contracts	3⅞
Mar. 5–6, 1930:	
1 to 120 days	3⅝
121 to 180 days	4
Sales contracts	3¾
Mar. 6–10, 1930:	
1 to 120 days	3½
121 to 180 days	3¾
Sales contracts	3½
Mar. 11–13, 1930:	
1 to 15 days	3¼
16 to 120 days	3⅜
121 to 180 days	3⅝
Sales contracts	3¼
Mar. 14–16, 1930:	
1 to 120 days	3¼
121 to 180 days	3⅝
Sales contracts	3¼
Mar. 17–18, 1930:	
1 to 45 days	3⅛
46 to 120 days	3¼
121 to 180 days	3⅝
Sales contracts	3¼
Mar. 19–20, 1930:	
1 to 45 days	3
46 to 120 days	3⅛
121 to 180 days	3⅜
Sales contracts	3
Mar. 20 to Dec. 31, 1930:	
1 to 120 days	3
121 to 180 days	3¼
Sales contracts	3

Dallas.—

Minimum buying rates for bankers' acceptances Federal Reserve Bank of Dallas

Date	15 days	30 days	45 days	60 days	90 days	120 days	5 months	6 months
Jan. 1, 1922	6	6	6	6	6	6	6	6
Jan. 18, 1922	4	4	4	4	4	4	4	4
June 13, 1922	3	3	3	3	3	3	3	3
Feb. 5, 1925	3	3	3	3	3	3¼	3½	3½
June 12, 1925	3	3	3⅛	3⅛	3¼	3¼	3½	3½
Aug. 31, 1925	3⅛	3⅛	3¼	3⅜	3⅜	3½	3¾	3¾
Sept. 21, 1925	3¼	3¼	3¼	3⅜	3⅜	3½	3¾	3¾
Jan. 7, 1926	3½	3½	3½	3⅝	3⅝	3¾	4	4
Apr. 26, 1926	3⅛	3¼	3¼	3¼	3½	3½	4	4
May 20, 1926	3⅛	3⅛	3¼	3¼	3¼	3½	4	4
May 21, 1926	3⅛	3⅛	3¼	3¼	3¼	3⅜	3¾	3¾
Aug. 16, 1926	3⅜	3⅜	3⅜	3½	3½	3⅝	4	4
Aug. 23, 1926	3⅜	3½	3½	3¾	3¾	3¾	4	4
Sept. 1, 1923	3½	3½	3½	3¾	3¾	3¾	4	4
July 22, 1927	3½	3½	3½	3¾	3¾	3¾	4	4
Aug. 5, 1927	3	3⅛	3⅛	3¼	3¼	3⅜	3¾	3¾
Aug. 22, 1927	3	3	3	3¼	3¼	3⅜	3¾	3¾
Jan. 26, 1928	3⅛	3⅛	3⅛	3⅜	3⅜	3½	3¾	3¾
Feb. 3, 1928	3¼	3¼	3¼	3½	3½	3½	3¾	3¾
Mar. 30, 1928	3½	3½	3⅝	3⅝	3⅝	3¾	4	4
Apr. 13, 1928	3⅝	3⅝	3¾	3¾	3¾	3¾	4	4
May 18, 1928	4	4	4	4	4	4	4¼	4¼
July 13, 1928	4¼	4¼	4¼	4¼	4¼	4¼	4½	4½
July 26, 1928	4½	4½	4½	4½	4½	4⅝	5	5
Oct. 16, 1928	4⅜	4⅜	4⅜	4⅜	4⅜	4⅝	4⅞	4⅞
Jan. 8, 1929	4⅜	4⅜	4½	4½	4½	4¾	4⅞	4⅞
Jan. 23, 1929	4½	4½	4⅝	4⅝	4⅞	5	5	5
Jan. 26, 1929	4½	4½	4⅝	4¾	4⅞	5	5⅛	5⅛
Feb. 20, 1929	4½	4½	4¾	4¾	5	5¼	5¼	5¼
Mar. 4, 1929	4⅞	4⅞	5	5	5⅛	5¼	5¼	5¼
Mar. 22, 1929	5	5	5⅛	5⅛	5⅜	5½	5⅝	5⅝
Mar. 26, 1929	5	5	5⅛	5¼	5½	5¾	5¾	5¾
July 9, 1929	4⅞	4⅞	4⅞	5	5	5¼	5¼	5¼
Nov. 1, 1929	4¾	4¾	4¾	4¾	4¾	4¾	5	5
Nov. 15, 1929	4¼	4¼	4¼	4¼	4¼	4¼	4½	4½
Nov. 22, 1929	4	4	4	4	4	4	4½	4½
Jan. 31, 1930	3⅞	3⅞	3⅞	4	4	4	4½	4½
Feb. 13, 1930	3¾	3¾	3¾	3⅞	3⅞	3⅞	4¼	4¼
Mar. 5, 1930	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	4	4
Mar. 7, 1930	3½	3½	3½	3½	3½	3½	3¾	3¾
Mar. 12, 1930	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅝	3⅝
Mar. 14, 1930	3¼	3¼	3¼	3¼	3¼	3¼	3⅝	3⅝
Mar. 17, 1930	3⅛	3⅛	3⅛	3¼	3¼	3¼	3⅝	3⅝
Mar. 20, 1930	3	3	3	3⅛	3⅛	3⅛	3⅜	3⅜
Mar. 21, 1930	3	3	3	3	3	3	3¼	3¼
May 3, 1930	2¾	2¾	2¾	2¾	2¾	2¾	3	3
May 9, 1930	2½	2½	2½	2⅓	2⅝	2⅝	3	3
May 20, 1930	2½	2½	2½	2½	2⅝	2⅝	3	3
June 4, 1930	2⅜	2⅜	2⅜	2½	2½	2½	3	3
June 6, 1930	2¼	2¼	2¼	2¼	2¼	2⅜	2¾	2¾
June 16, 1930	2⅛	2⅛	2⅛	2¼	2¼	2¼	2¾	2¾
June 20, 1930	2	2	2	2	2	2⅛	2⅜	2⅜
July 1, 1930	1⅞	1⅞	1⅞	2	2	2⅛	2⅜	2⅜
July 22, 1930	1⅞	1⅞	1⅞	1⅞	2	2⅛	2⅜	2⅜
Dec. 24, 1930	1¾	1¾	1¾	1¾	1¾	1¾	2	2
Jan. 16, 1931	1⅝	1¾	1¾	1¾	1¾	1¾	2	2

Kansas City.—Our buying rate on acceptances has followed very closely that of the Federal Reserve Bank of New York. Their schedule will serve as ours.

Minneapolis.—

Buying rates on acceptances of different maturities which have been in force at the Minneapolis Federal Reserve Bank since January, 1922

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 90 days	91 to 120 days	121 to 180 days
Jan. 1, 1922	4 1/8	4 1/8	4 1/4	4 1/8	4 1/4	4 1/4	4 1/4
Feb. 6, 1922	4	4	4 1/8	4 1/8	4 1/8		
Feb. 16, 1922			4	4		4 1/8	4 1/8
Mar. 6, 1922					4	4	
Mar. 13, 1922	3 7/8	3 7/8					
Mar. 21, 1922	3 5/8	3 5/8	3 3/4	3 3/4	3 3/4	3 3/4	4
Mar. 27, 1922	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 5/8	
Apr. 10, 1922	3 3/8	3 3/8	3 3/8	3 3/8	3 3/8	3 1/2	3 1/2
Apr. 14, 1922	3 1/4	3 1/4					
May 5, 1922			3 1/4	3 1/4	3 1/4	3 3/8	
May 18, 1922	3 1/8	3 1/8	3 1/8	3 1/8			
June 2, 1922			3 3/16	3 3/16		3 1/4	3 3/8
June 19, 1922			3 1/8	3 1/8	3 1/8		3 1/4
June 26, 1922						3 1/8	
July 5, 1922	3	3					
July 15, 1922			3	3			
July 25, 1922					3		
Sept. 21, 1922					3 1/8	3 1/4	3 3/8
Sept. 25, 1922			3 1/8	3 1/8			
Sept. 27, 1922	3 1/8	3 1/8					
Oct. 2, 1922			3 1/4	3 1/4	3 3/8	3 1/2	3 1/2
Oct. 6, 1922	3 1/4	3 1/4					
Oct. 13, 1922			3 3/8	3 3/8	3 1/2		3 5/8
Oct. 18, 1922	3 5/8	3 5/8	3 5/8	3 5/8	3 5/8	3 7/8	3 7/8
Oct. 19, 1922	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4		
Oct. 24, 1922					3 7/8	4	1
Oct. 27, 1922	3 7/8	3 7/8		4	4	4 1/8	4 1/4
Apr. 17, 1923	4	4			4 1/8		4 3/8
May 23, 1923			4 1/8	4 1/8			
July 7, 1923						4 1/4	
Apr. 24, 1924	3 7/8	3 7/8	4	4	4	4 1/8	4 1/4
May 1, 1924	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4
May 16, 1924	3 1/2	3 1/2	3 5/8	3 5/8	3 5/8	3 5/8	3 5/8
May 22, 1924	3 1/8	3 1/8	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4
June 2, 1924	3	3	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8
June 17, 1924	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 5/8	2 3/4
June 26, 1924	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
Aug. 8, 1924	2	2	2 1/8	2 1/8			
Nov. 17, 1924	2 1/8	2 1/8	2 1/4	2 1/4	2 3/8	2 5/8	2 3/4
Nov. 28, 1924	2 1/4	2 1/4	2 3/8	2 3/8			3
Dec. 3, 1924	2 3/8	2 3/8	2 1/2	2 1/2	2 5/8	2 3/4	
Dec. 5, 1924	2 1/2	2 1/2	2 3/4	2 3/4	2 3/4	2 7/8	
Dec. 8, 1924	2 3/4	2 3/4					
Dec. 22, 1924			2 7/8	2 7/8	3	3 1/4	3 1/2
Feb. 6, 1925	3	3	3	3			
Feb. 27, 1925			3 1/8	3 1/8	3 1/8		
June 12, 1925					3 1/4		
Aug. 31, 1925	3 1/8	3 1/8	3 1/4	3 3/8	3 3/8	3 1/2	3 3/4
Sept. 22, 1925	3 1/4	3 1/4					
Jan. 8, 1926	3 1/2	3 1/2	3 1/2	3 5/8	3 5/8	3 3/4	4
Apr. 27 1926	3 1/8	3 1/4	3 1/4	3 1/4	3 1/2	3 1/2	
May 20, 1926		3 1/8					
May 21, 1926						3 3/8	3 3/4

Buying rates on acceptances of different maturities which have been in force at the Minneapolis Federal Reserve bank since January, 1922—Continued

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 75 days	76 to 90 days	91 to 120 days	121 to 180 days
Aug. 16, 1926	3⅜	3⅜	3⅜	3½	3½	3½	3⅝	4
Aug. 23, 1926	3⅜	3½	3½	3½	3½	3½	3¾	4
Sept. 1, 1926	3½	3½	3½	3½	3½	3½	3¾	4
Aug. 5, 1927	3	3⅛	3⅛	3¼	3¼	3¼	3⅜	3¾
Aug. 22, 1927	3	3	3	3¼	3¼	3¼	3⅜	3¾
Jan. 27, 1928	3⅛	3⅛	3⅛	3⅜	3⅜	3⅜	3½	3¾
Feb. 3, 1928	3¼	3¼	3¼	3½	3½	3½	3½	3¾
Mar. 30, 1928	3½	3½	3⅝	3⅝	3⅝	3⅝	3¾	4
Apr. 13, 1928	3⅝	3⅝	3¾	3¾	3¾	3¾	3¾	4
May 18, 1928	4	4	4	4	4	4	4	4¼
July 14, 1928	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½
July 26, 1928	4½	4½	4½	4½	4½	4½	4⅝	5
Jan. 4, 1929	4½	4½	4¾	4¾	4¾	4¾	4⅞	5
Jan. 21, 1929	4¾	4⅞	4⅞	5	5	5	5	5
Feb. 15, 1929	5	5	5	5⅛	5⅛	5⅛	5¼	5¼
Mar. 21, 1929	5¼	5¼	5¼	5⅜	5⅜	5⅜	5½	5⅝
Mar. 26, 1929	5⅜	5⅜	5⅜	5½	5½	5½	5½	5¾
July 12, 1929	5¼	5¼	5¼	5¼	5¼	5¼	5¼	5½
Aug. 10, 1929	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5½
Nov. 15, 1929	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½
Nov. 22, 1929	4	4	4	4	4	4	4	4½
Feb. 1, 1930	3⅞	3⅞	3⅞	4	4	4	4	4½
Feb. 11, 1930	3¾	3¾	3¾	3⅞	3⅞	3⅞	3⅞	4¼
Feb. 24, 1930	3¾	3¾	3¾	3¾	3¾	3¾	3⅞	4¼
Mar. 5, 1930	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	4
Mar. 7, 1930	3½	3½	3½	3½	3½	3½	3½	3¾
Mar. 13, 1930	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅝
Mar. 14, 1930	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3⅝
Mar. 17, 1930	3⅛	3⅛	3⅛	3¼	3¼	3¼	3¼	3⅝
Mar. 19, 1930	3	3	3	3⅛	3⅛	3⅛	3⅛	3⅜
Apr. 2, 1930	3	3	3	3	3	3	3	3¼
May 3, 1930	2¾	2¾	2¾	2¾	2¾	2¾	2¾	3
May 9, 1930	2½	2½	2½	2½	2⅝	2⅝	2⅝	3
May 20, 1930	2½	2½	2½	2½	2½	2½	2⅝	3
June 3, 1930	2⅜	2⅜	2⅜	2½	2½	2½	2½	3
June 5, 1930	2¼	2¼	2¼	2¼	2¼	2¼	2⅜	2¾
June 16, 1930	2⅛	2⅛	2⅛	2¼	2¼	2¼	2¼	2¾
June 20, 1930	2	2	2	2	2	2	2⅛	2⅜
July 1, 1930	1⅞	1⅞	1⅞	2	2	2	2⅛	2⅜
July 21, 1930	1⅞	1⅞	1⅞	1⅞	1⅞	2	2⅛	2⅜
Dec, 24. 1930	1¾	1¾	1¾	1¾	1¾	1¾	1¾	2

New York.—

Buying rates on acceptances of different maturities in force at Federal Reserve Bank of New York since January, 1922

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 75 days	76 to 90 days	91 to 120 days	121 to 180 days
Dec. 27, 1921	4⅛	4⅛	4¼	4¼	4¼	4¼	4¼	4¼
Feb. 6, 1922	4	4	4⅛	4⅛	4⅛	4⅛	4¼	4¼
Feb. 16, 1922	4	4	4	4⅛	4⅛	4⅛	4⅛	4⅛
Feb. 28, 1922	4	4	4	4	4⅛	4⅛	4⅛	4⅛
Mar. 6, 1922					4	4	4	4⅛
Mar. 13, 1922	3⅞	3⅞						
Mar. 21, 1922	3⅝	3⅝	3¾	3¾	3¾	3¾	3¾	4
Mar. 22, 1922								
Mar. 27, 1922	3½	3½	3½	3½	3½	3½	3⅝	
Apr. 10, 1922	3⅜	3⅜	3⅜	3⅜	3⅜	3½	3½	3½
Apr. 14, 1922	3¼	3¼						
May 5, 1922			3¼	3¼	3¼	3¼	3⅜	
May 18, 1922	[1] 3⅛		[2] 3¼					
June 2, 1922	3⅛	3⅛	3 3/16	3 3/16			3¼	3⅜
June 19, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛		3¼
June 26, 1922							3⅛	
July 5, 1922	3	3						
July 14, 1922	3	3	3					
July 17, 1922				3				
July 25, 1922					3			
Aug. 9, 1922						3		
Sept. 21, 1922					3⅛	3⅛	3¼	3⅜

[1] 2 to 40 days. [2] 41 to 45 days.

Buying rates on acceptances of different maturities in force at Federal Reserve Bank of New York since January, 1922—Continued

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 75 days	76 to 90 days	91 to 120 days	121 to 180 days
Sept. 25, 1922			3⅛	3⅛				
Sept. 27, 1922	3⅛	3⅛				3 3/16		
Oct. 2, 1922			3¼	3¼	3⅜	3⅜	3½	3½
Oct. 6, 1922	3¼	3¼						
Oct. 13, 1922	3¼	3⅜	3⅜	3½	3½	3½		3⅝
Oct. 17, 1922								
Oct. 18, 1922	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅞	3⅞
Oct. 19, 1922	3¾	3¾	3¾	3¾	3¾	3¾		
Oct. 23, 1922								
Oct. 24, 1922	3¾			3⅞	3⅞	3⅞	4	4
Oct. 27, 1922	3⅞	3⅞	3⅞	4	4	4	4⅛	4¼
Apr 17, 1923	4	4	4	4	4	4⅛	4⅛–4¼	4⅜
May 17, 1923					4⅛			
May 21, 1923				4⅛				
May 23, 1923			4⅛					
July 7, 1923							4¼	
Apr. 24, 1924	3⅞	3⅞	4	4				
May 1, 1924	3¾	3¾	3¾	3¾	3¾	3¾	3¾	3¾
May 16, 1924	3½	3½	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝
May 22, 1924	3⅛	3⅛	3¼	3¼	3¼	3¼	3¼	3¼
May 26, 1924								
June 2, 1924	3	3	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
June 12, 1924								
June 17, 1924	2½	2½	2½	2½	2½	2½	2⅝	2¾
June 26, 1924	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼
Aug. 8, 1924	2	2	2⅛	2¼	2¼			
Aug. 20, 1924				2⅛				
Sept. 3, 1924								
Oct. 16, 1924								
Nov. 17, 1924	2⅛	2¼	2¼	2⅜	2⅜	[3] 2½	[4] 2⅝	2¾
Nov. 28, 1924	2¼		2⅜		2½	2½	2⅝	3
Dec. 3, 1924	2⅜	2⅜	2½	2½	2⅝	2⅝	2¾	
Dec. 5, 1924	2½	2½	2¾	2¾	2¾	2¾	2⅞	
Dec. 8, 1924	2¾	2¾						
Dec. 22, 1924			2⅞	2⅞	3	3	3¼	3½
Feb. 6, 1925	3	3	3	3				
Feb. 27, 1925			3⅛	3⅛	3⅛	3⅛		
June 12, 1925					3¼	3¼		
Aug. 28, 1925	3⅛	3⅛	3¼	3⅜	3⅜	3⅜	3½	3¾
Sept. 16, 1925								
Sept. 22, 1925	3¼	3¼						
Jan. 8, 1926	3½	3½	3½	3⅝	3⅝	3⅝	3¾	4
Apr. 27, 1926	3⅛	3¼	3¼	3¼	3½	3½	3½	
May 20, 1926	3⅛	3⅛			3¼	3¼		
May 21, 1926							3⅜	3¾
Aug. 16, 1926	3⅜	3⅜	3⅜	3½	3½	3½	3⅝	4
Aug. 23, 1926		3½	3½	3¾	3¾	3¾	3¾	
Sept. 1, 1926	3½							
July 22, 1927								
July 29, 1927	3¼	3¼	3¼	3½	3½	3½	3½	3¾
Aug. 5, 1927	3	3⅛	3⅛	3¼	3¼	3¼	3⅜	
Aug. 22, 1927		3	3					
Jan. 27, 1928	3⅛	3⅛	3⅛	3⅜	3⅜	3⅜	3½	
Feb. 3, 1928	3¼	3¼	3¼	3½	3½	3½		
Mar. 30, 1928	3½	3½	3⅝	3⅝	3⅝	3⅝	3¾	4
Apr. 13, 1928	3⅝	3⅝	3¾	3¾	3¾	3¾		
May 18, 1928	4	4	4		4	4	4	4¼
July 13, 1928	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½
July 26, 1928	4½	4½	4½	4½	4½	4½	4⅝	5
Jan. 4, 1929	4½	4½	4¾	4¾	4¾	4¾	4⅞	5
Jan. 21, 1929	4¾	4⅞	4⅞	5	5	5	5	
Feb. 15, 1929	5	5	5	5⅛	5⅛	5⅛	5¼	5¼
Mar. 21, 1929	5¼	5¼	5¼	5⅜	5⅜	5⅜	5½	5⅝
Mar. 25, 1929	5⅜	5⅜	5⅜	5½	5½	5½	5¾	5¾
July 12, 1929	5¼	5¼	5¼	5¼	5¼	5¼	5¼	5½
Aug. 9, 1929	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	
Oct. 25, 1929	5	5	5	5	5	5	5⅛	
Nov. 1, 1929	4¾	4¾	4¾	4¾	4¾	4¾	4¾	5
Nov. 15, 1929	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½
Nov. 22, 1929	4	4	4	4	4	4	4	
Jan. 31, 1930	3⅞	3⅞	3⅞					
Feb. 7, 1930								
Feb. 11, 1930	3¾	3¾	3¾	3⅞	3⅞	3⅞	3⅞	4¼
Feb. 24, 1930				3¾	3¾	3¾		
Mar. 5, 1930	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	4
Mar. 6, 1930	3½	3½	3½	3½	3½	3½	3½	3¾
Mar. 11, 1930	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅝
Mar. 14, 1930		3¼	3¼	3¼	3¼	3¼	3¼	
Mar. 17, 1930	3⅛	3⅛	3⅛					

[3] 76 to 110 days.

[4] 111 tc 120 days.

Buying rates on acceptances of different maturities in force at Federal Reserve Bank of New York since January, 1922—Continued

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 75 days	76 to 90 days	91 to 120 days	121 to 180 days
Mar. 19, 1930	3	3	3	3⅛	3⅛	3⅛	3⅛	3⅜
Mar. 20, 1930				3	3	3	3	3¼
May 1, 1930	2⅞	2⅞	2⅞	2⅞	2⅞	2⅞	2⅞	
May 2, 1930	2¾	2¾	2¾	2¾	2¾	2¾	2¾	3
May 8, 1930	2½	2½	2½	2½	2⅝	2⅝	2⅝	3
May 19, 1930					2½	2½		
June 3, 1930	2⅜	2⅜	2⅜	2½			2½	
June 5, 1930	2¼	2¼	2¼	2¼	2¼	2¼	2⅜	2¾
June 16, 1930	2⅛	2⅛	2⅛				2¼	
June 20, 1930	2	2	2	2	2	2	2⅛	2⅜
June 30, 1930	1⅞	1⅞	1⅞					
July 21, 1930				1⅞	1⅞			
Dec. 24, 1930	1¾	1¾	1¾	1¾	1¾	1¾	1¾	2
Jan. 16, 1931	1⅝							

Philadelphia.—

Buying rates on acceptances

In effect	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 90 days	91 to 120 days	121 to 180 days
Jan. 1, 1922	4⅛	4⅛	4¼	4⅛	4¼	4¼	4¼
Feb. 6, 1922	4	4	4⅛	4⅛	4⅛	4¼	4¼
Feb. 16, 1922	4	4	4	4	4⅛	4⅛	4⅛
Mar. 6, 1922	4	4	4	4	4	4	4⅛
Mar. 13, 1922	3⅞	3⅞	4	4	4	4	4⅛
Mar. 21, 1922	3⅝	3⅝	3¾	3¾	3¾	3¾	4
Mar. 27, 1922	3½	3½	3½	3½	3½	3⅝	4
Apr. 10, 1922	3⅜	3⅜	3⅜	3⅜	3⅜	3½	3½
Apr. 14, 1922	3¼	3¼	3⅜	3⅜	3⅜	3½	3½
May 5, 1922	3¼	3¼	3¼	3¼	3¼	3⅜	3½
May 18, 1922	3⅛	3⅛	3⅛	3⅛	3¼	3⅜	3½
June 2, 1922	3⅛	3⅛	3 3/16	3 3/16	3¼	3¼	3⅜
June 19, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3¼	3¼
June 26, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3¼
July 5, 1922	3	3	3⅛	3⅛	3⅛	3⅛	3¼
July 15, 1922	3	3	3	3	3⅛	3⅛	3¼
July 25, 1922	3	3	3	3	3	3⅛	3¼
Sept. 21, 1922	3	3	3	3	3⅛	3¼	3⅜
Sept. 25, 1922	3	3	3⅛	3⅛	3⅛	3¼	3⅜
Sept. 27, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3¼	3⅜
Oct. 2, 1922	3⅛	3⅛	3¼	3¼	3⅜	3½	3½
Oct. 6, 1922	3¼	3¼	3¼	3¼	3⅜	3½	3½
Oct. 13, 1922	3¼	3¼	3⅜	3⅜	3½	3½	3⅝
Oct. 18, 1922	3⅝	3⅝	3⅝	3⅝	3⅝	3⅞	3⅞
Oct. 19, 1922	3¾	3¾	3¾	3¾	3¾	3⅞	3⅞
Oct. 24, 1922	3¾	3¾	3¾	3¾	3⅞	4	4
Oct. 27, 1922	3⅞	3⅞	3¾	4	4	4⅛	4½
Apr. 17, 1923	4	4	3¾	4	4⅛	4⅛	4⅜
May 23, 1923	4	4	4⅛	4⅛	4⅛	4⅛	4⅜
July 7, 1923	4	4	4⅛	4⅛	4⅛	4¼	4⅜
Apr. 24, 1924	3⅞	3⅞	4	4	4	4⅛	4¼
May 1, 1924	3¾	3¾	3¾	3¾	3¾	3¾	3¾
May 16, 1924	3½	3½	3⅝	3⅝	3⅝	3⅝	3⅝
May 22, 1924	3⅛	3⅛	3¼	3¼	3¼	3¼	3¼
June 2, 1924	3	3	3⅛	3⅛	3⅛	3⅛	3⅛
June 17, 1924	2½	2½	2½	2½	2½	2⅝	2¾
June 26, 1924	2¼	2¼	2¼	2¼	2¼	2¼	2¼
Aug. 8, 1924	2	2	2⅛	2⅛	2¼	2¼	2¼
Nov. 17, 1924	2⅛	2⅛	2¼	2¼	2⅜	2⅝	2¾
Nov. 28, 1924	2¼	2¼	2⅜	2⅜	2⅜	2⅝	3
Dec. 3, 1924	2⅜	2⅜	2½	2½	2⅝	2¾	3
Dec. 5, 1924	2½	2½	2¾	2¾	2¾	2⅞	3
Dec. 8, 1924	2¾	2¾	2¾	2¾	2¾	2⅞	3
Dec. 22, 1924	2¾	2¾	2⅞	2⅞	3	3¼	3½
Feb. 6, 1925	3	3	3	3	3	3¼	3½
Feb. 27, 1925	3	3	3⅛	3⅛	3⅛	3¼	3½
June 12, 1925	3	3	3⅛	3⅛	3¼	3¼	3½
Aug. 31, 1925	3⅛	3⅛	3¼	3⅜	3⅜	3½	3¾
Sept. 22, 1925	3¼	3¼	3¼	3⅜	3⅜	3½	3¾
Jan. 8, 1926	3½	3½	3½	3⅝	3⅝	3¾	4
Apr. 27, 1926	3⅛	3¼	3¼	3¼	3½	3½	4

Buying rates on acceptances—Continued

In effect	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 90 days	91 to 120 days	121 to 180 days
May 20, 1926	3⅛	3⅛	3¼	3¼	3½	3½	4
May 21, 1926	3⅛	3⅛	3¼	3¼	3½	3⅜	3¾
Aug. 16, 1926	3⅜	3⅜	3⅜	3½	3½	3⅝	4
Aug. 23, 1926	3⅜	3½	3½	3¾	3¾	3¾	4
Sept. 1, 1926	3½	3½	3½	3¾	3¾	3¾	4
July 29, 1927	3¼	3¼	3¼	3½	3½	3½	3¾
Aug. 5, 1927	3	3⅛	3⅛	3¼	3¼	3⅜	3¾
Aug. 22, 1927	3	3	3	3¼	3¼	3⅜	3¾
Jan. 27, 1928	3⅛	3⅛	3⅛	3⅜	3⅜	3½	3¾
Feb. 3, 1928	3¼	3¼	3¼	3½	3½	3½	3¾
Mar. 30, 1928	3½	3½	3⅝	3⅝	3⅝	3¾	4
Apr. 13, 1928	3⅝	3⅝	3¾	3¾	3¾	3¾	4
May 18, 1928	4	4	4	4	4	4	4¼
July 13, 1928	4¼	4¼	4¼	4¼	4¼	4¼	4½
July 26, 1928	4½	4½	4½	4½	4½	4⅝	5
Jan. 4, 1929	4½	4½	4¾	4¾	4¾	4¾	5
Jan. 21, 1929	4¾	4⅞	4⅞	5	5	5	5
Feb. 15, 1929	5	5	5	5⅛	5⅛	5¼	5¼
Mar. 21, 1929	5¼	5¼	5¼	5⅜	5⅜	5½	5⅝
Mar. 25, 1929	5⅜	5⅜	5⅜	5½	5½	5½	5¾
July 12, 1929	5¼	5¼	5¼	5¼	5¼	5¼	5½
Aug. 9, 1929	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5½
Oct. 24, 1929	5	5	5	5	5	5⅛	5½
Nov. 1, 1929	4¾	4¾	4¾	4¾	4¾	4¾	5
Nov. 15, 1929	4¼	4¼	4¼	4¼	4¼	4¼	4⅜
Nov. 21, 1929	4	4	4	4	4	4	4
Jan. 31, 1930	3⅞	3⅞	3⅞	4	4	4	4
Feb. 11, 1930	3¾	3¾	3¾	3⅞	3⅞	3⅞	3⅞
Feb. 24, 1930	3¾	3¾	3¾	3¾	3¾	3⅞	3⅞
Mar. 5, 1930	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝
Mar. 6, 1930	3½	3½	3½	3½	3½	3½	3½
Mar. 11, 1930	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜
Mar. 14, 1930	3¼	3¼	3¼	3¼	3¼	3¼	3¼
Mar. 17, 1930	3⅛	3⅛	3⅛	3¼	3¼	3¼	3¼
Mar. 19, 1930	3	3	3	3⅛	3⅛	3⅛	3⅛
Mar. 20, 1930	3	3	3	3	3	3	3

Richmond.—

Local buying rates on acceptances of different maturities since January 1, 1922

NOTE.—From 1922 to 1926 we had an authorized minimum buying rate of 3 per cent. Our practice, however, was to follow the buying rates at which bills were acquired by the New York bank for system account, adding one-eighth of 1 per cent to each rate for such bills as were bought by us locally. We have preserved no record of the changes and dates of change prior to May, 1926. Since that date our minimum buying rates have been as follows:

1926

May 13, 1 to 15 days, 3¼ per cent; 16 to 60 days, 3⅜ per cent.; 61 to 90 days, 3⅝ per cent.

August 16, 1 to 45 days, 3½ per cent; 46 to 90 days, 3⅝ per cent.

August 23, 1 to 15 days, 3½ per cent; 16 to 45 days, 3⅝ per cent; 46 to 90 days, 3¾ per cent.

September 1, 1 to 15 days, 3⅝ per cent; 16 to 45 days, 3⅝ per cent; 46 to 90 days, 3¾ per cent.

December 10, 1 to 45 days, 3⅝ per cent; 46 to 120 days, 3⅞ per cent.

1927

July 22, 1 to 45 days, 3⅝ per cent; 46 to 120 days, 3⅞ per cent.

August 5, 1 to 15 days, 3⅛ per cent; 16 to 45 days, 3¼ per cent; 46 to 90 days, 3⅜ per cent.

1928

January 26, 1 to 45 days, 3¼ per cent; 46 to 90 days, 3½ per cent; 91 to 120 days, 3⅝ per cent.

February 3, 1 to 45 days, 3⅜ per cent; 46 to 120 days, 3⅝ per cent; 121 to 180 days, 3⅞ per cent.

March 30, 1 to 30 days, 3⅝ per cent; 31 to 90 days, 3¾ per cent; 91 to 120 days, 3⅞ per cent; 121 to 180 days, 4 per cent.
April 13, 1 to 30 days, 3¾ per cent; 31 to 120 days, 3⅞ per cent; 121 to 180 days, 4 per cent.
May 7, 1 to 30 days, 3⅞ per cent; 31 to 120 days, 4 per cent; 121 to 180 days, 4¼ per cent.
May 18, 1 to 120 days, 4⅛ per cent; 121 to 180 days, 4⅜ per cent.
July 13, 1 to 120 days, 4⅜ per cent; 121 to 180 days, 4⅝ per cent.
July 26, 1 to 90 days, 4⅝ per cent; 91 to 120 days, 4¾ per cent; 121 to 180 days, 5 per cent.

1929

January 4, 1 to 30 days, 4⅝ per cent; 31 to 90 days, 4⅞ per cent; 91 to 120 days, 5 per cent; 121 to 180 days, 5 per cent.
January 21, 1 to 15 days, 4⅞ per cent; 16 to 45 days, 5 per cent; 46 to 180 days, 5 per cent.
February 16, 1 to 45 days, 5⅛ per cent; 46 to 90 days, 5¼ per cent; 91 to 180 days, 5⅜ per cent.
March 21, 1 to 45 days, 5⅜ per cent; 46 to 90 days, 5½ per cent; 91 to 120 days, 5⅝ per cent; 121 to 180 days, 5¾ per cent.
March 26, 1 to 45 days, 5½ per cent; 46 to 120 days, 5⅝ per cent; 121 to 180 days, 5⅞ per cent.
July 12, 1 to 120 days, 5⅜ per cent; 121 to 180 days, 5⅝ per cent.
August 9, 1 to 120 days, 5¼ per cent; 121 to 180 days, 5⅝ per cent.
October 25, 1 to 90 days, 5⅛ per cent; 91 to 120 days, 5¼ per cent; 121 to 180 days, 5⅝ per cent.
November 1, 1 to 90 days, 4⅞ per cent; 91 to 120 days, 4⅞ per cent; 121 to 180 days, 5⅛ per cent.
November 15, 1 to 120 days, 4⅜ per cent; 121 to 180 days, 4⅝ per cent.
November 22, 1 to 120 days, 4⅛ per cent; 121 to 180 days, 4⅝ per cent.

1930

January 31, 1 to 45 days, 4 per cent; 46 to 120 days, 4⅛ per cent; 121 to 180 days, 4⅝ per cent.
February 12, 1 to 45 days, 3⅞ per cent; 46 to 120 days, 4 per cent; 121 to 180 days, 4⅜ per cent.
February 24, 1 to 90 days, 3⅞ per cent; 91 to 120 days, 4 per cent; 121 days, 4⅜ per cent.
March 5, 1 to 120 days, 3¾ per cent; 121 days, 4⅛ per cent.
March 6, 1 to 120 days, 3⅝ per cent; 121 days, 3⅞ per cent.
March 12, 1 to 15 days, 3⅜ per cent; 16 to 120 days, 3½ per cent; 121 days, 3¾ per cent.
March 14, 1 to 120 days, 3⅜ per cent; 121 days, 3¾ per cent.
March 18, 1 to 45 days, 3¼ per cent; 46 to 120 days, 3⅜ per cent; 121 days, 3¾ per cent.
March 20, 1 to 45 days, 3⅛ per cent; 46 to 120 days, 3¼ per cent; 121 days, 3½ per cent.
March 21, 1 to 120 days, 3⅛ per cent; 121 days, 3⅜ per cent.
May 3, 1 to 120 days, 2⅞ per cent; 121 days, 3⅛ per cent.
May 9, 1 to 60 days, 2⅝ per cent; 61 to 120 days, 2¾ per cent; 121 days, 3⅛ per cent.
May 20, 1 to 90 days, 2⅝ per cent; 91 to 120 days, 2¾ per cent; 121 days, 3⅛ per cent.
June 4, 1 to 45 days, 2½ per cent; 46 to 120 days, 2⅝ per cent; 121 days, 3⅛ per cent.
June 6, 1 to 90 days, 2⅜ per cent; 91 to 120 days, 2½ per cent; 121 days, 2⅞ per cent.
June 16, 1 to 45 days, 2¼ per cent; 46 to 120 days, 2⅜ per cent; 121 days, 2⅞ per cent.
June 20, 1 to 90 days, 2⅛ per cent; 91 to 120 days, 2¼ per cent; 121 days, 2½ per cent.
July 1, 1 to 45 days, 2 per cent; 46 to 90 days, 2⅛ per cent; 91 to 120 days, 2¼ per cent; 121 days, 2½ per cent.
July 21, 1 to 75 days, 2 per cent; 76 to 90 days, 2⅛ per cent; 91 to 120 days, 2¼ per cent; 121 days, 2½ per cent.
December 24, 1 to 120 days, 1⅞ per cent; 121 days, 2⅛ per cent.

St. Louis.—

Buying rates on acceptances of different maturities which have been in force at Federal Reserve Bank of St. Louis

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 75 days	76 to 90 days	91 to 120 days	121 to 180 days
Dec. 27, 1921	4⅛	4⅛	4¼	4¼	4¼	4¼	4¼	4¼
Feb. 6, 1922	4	4	4⅛	4⅛	4⅛	4⅛	4¼	4¼
Feb. 16, 1922	4	4	4	4⅛	4⅛	4⅛	4⅛	4⅛
Feb. 28, 1922	4	4	4	4	4⅛	4⅛	4⅛	4⅛
Mar. 6, 1922	4	4	4	4	4	4	4	4⅛
Mar. 13, 1922	3⅞	3⅞	4	4	4	4	4	4⅛
Mar. 21, 1922	3⅝	3⅝	3¾	3¾	3¾	3¾	3¾	4
Mar. 27, 1922	3½	3½	3½	3½	3½	3½	3⅝	4
Apr. 10, 1922	3⅜	3⅜	3⅜	3⅜	3⅜	3½	3½	3½
Apr. 14, 1922	3¼	3¼	3⅜	3⅜	3⅜	3½	3½	3½
May 5, 1922	3¼	3¼	3¼	3¼	3¼	3¼	3⅜	3½
May 18, 1922	[1]	[1]	[2]	3¼	3¼	3¼	3⅜	3½
June 2, 1922	3⅛	3⅛	3 3/16	3 3/16	3¼	3¼	3¼	3⅜
June 19, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3¼	3¼
June 26, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3¼
July 5, 1922	3	3	3⅛	3⅛	3⅛	3⅛	3⅛	3¼
July 14, 1922	3	3	3	3⅛	3⅛	3⅛	3⅛	3¼
July 17, 1922	3	3	3	3	3⅛	3⅛	3⅛	3¼
July 25, 1922	3	3	3	3	3	3⅛	3⅛	3¼
Aug. 9, 1922	3	3	3	3	3	3	3⅛	3¼
Sept. 21, 1922	3	3	3	3	3⅛	3⅛	3¼	3⅜
Sept. 25, 1922	3	3	3⅛	3⅛	3⅛	3⅛	3¼	3⅜
Sept. 27, 1922	3⅛	3⅛	3⅛	3⅛	3⅛	3 3/16	3¼	3⅜
Oct. 2, 1922	3⅛	3⅛	3¼	3¼	3⅜	3⅜	3½	3½
Oct. 6, 1922	3¼	3¼	3¼	3¼	3⅜	3⅜	3½	3½
Oct. 13, 1922	3¼	3⅜	3⅜	3½	3½	3½	3½	3⅝
Oct. 18, 1922	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅞	3⅞
Oct. 19, 1922	3¾	3¾	3¾	3¾	3¾	3¾	3⅞	3⅞
Oct. 24, 1922	3¾	3¾	3¾	3⅞	3⅞	3⅞	4	4
Oct. 27, 1922	3⅞	3⅞	3⅞	4	4	4	4⅛	4¼
Apr. 17, 1923	4	4	4	4	4	4⅛	4⅛–4¼	4⅜
May 17, 1923	4	4	4	4	4⅛	4⅛	4⅛–4¼	4⅜
May 21, 1923	4	4	4	4⅛	4⅛	4⅛	4⅛–4¼	4⅜
May 23, 1923	4	4	4⅛	4⅛	4⅛	4⅛	4⅛–4¼	4⅜
July 7, 1923	4	4	4⅛	4⅛	4⅛	4⅛	4¼	------
Apr. 24, 1924	3⅞	3⅞	4	4	4⅛	4⅛	4¼	4⅜
May 1, 1923	3¾	3¾	3¾	3¾	3¾	3¾	3¾	3¾
May 16, 1924	3½	3½	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝
May 22, 1924	3⅛	3⅛	3¼	3¼	3¼	3¼	3¼	3¼
June 2, 1924	3	3	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
June 17, 1924	2½	2½	2½	2½	2½	2½	2⅝	2¾
June 26, 1924	2¼	2¼	2¼	2¼	2¼	2¼	2½	2¼
Aug. 8, 1924	2	2	2⅛	2¼	2¼	2¼	2¼	2¼
Aug. 20, 1924	2	2	2⅛	2⅛	2¼	2¼	2¼	2¼
Nov. 17, 1924	2⅛	2¼	2¼	2⅜	2⅜	[3]	[4]	2¾
Nov. 28 1924	2¼	2¼	2⅜	2⅜	2½	2½	2⅝	3
Dec. 3, 1924	2⅜	2⅜	2½	2½	2⅝	2⅝	2¾	3
Dec. 4, 1924	2½	2½	2¾	2¾	2¾	2¾	2⅞	3
Dec. 8, 1924	2¾	2¾	2¾	2¾	2¾	2¾	2⅞	3
Dec. 22, 1924	2¾	2¾	2⅞	2⅞	3	3¾	3¼	3½
Feb. 6, 1925	3	3	3	3	3	3	3¼	3½
Feb. 27, 1925	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3¼	3½
June 12, 1925	3	3	3⅛	3⅛	3¼	3¼	3¼	3½
Aug. 31, 1925	3⅛	3⅛	3¼	3⅜	3⅜	3⅜	3½	3¾
Sept. 21, 1925	3¼	3¼	3¼	3⅜	3⅜	3½	3½	3¾
Jan. 8, 1926	3½	3½	3½	3⅝	3⅝	3⅝	3¾	4
Apr. 27, 1926	3⅛	3¼	3¼	3¼	3½	3½	3½	4
May 21, 1926	3⅛	3⅛	3¼	3¼	3¼	3¼	3⅜	3¾
Aug. 16, 1926	3⅜	3⅜	3⅜	3½	3½	3½	3⅝	4
Aug. 23, 1926	3⅜	3½	3½	3¾	3¾	3¾	3¾	4
Oct. 4, 1926	3½	3½	3½	3¾	3¾	3¾	3¾	4
Aug. 5, 1927	3	3⅛	3⅛	3¼	3¼	3¼	3⅜	3¾
Aug. 22, 1927	3	3	3	3¼	3¼	3¼	3⅜	3¾
Jan. 27, 1928	3⅛	3⅛	3⅛	3⅜	3⅜	3⅜	3½	3¾
Feb. 3, 1928	3¼	3¼	3¼	3½	3½	3½	3½	3¾
Mar. 30, 1928	3½	3½	3⅝	3⅝	3⅝	3⅝	3¾	4
Apr. 13, 1928	3⅝	3⅝	3¾	3¾	3¾	3¾	3¾	4
May 18, 1928	4	4	4	4	4	4	4	4¼
July 13, 1928	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½
July 26, 1928	4½	4½	4½	4½	4½	4½	4⅝	5
Jan. 4, 1929	4½	4½	4¾	4¾	4¾	4¾	4⅞	5
Jan. 21, 1929	4¾	4⅞	4⅞	5	5	5	5	5
Feb. 15, 1929	5	5	5	5⅛	5⅛	5⅛	5¼	5¼
Mar. 21, 1929	5¼	5¼	5¼	5⅜	5⅜	5⅜	5½	5⅝
Mar. 25, 1929	5⅜	5⅜	5⅜	5½	5½	5½	5½	5¾

[1] 1 to 40 days 3⅛.

[2] 41 to 45 days 3¼.

Buying rates on acceptances of different maturities which have been in force at Federal Reserve Bank of St. Louis—Continued

Date effective	1 to 15 days	16 to 30 days	31 to 45 days	46 to 60 days	61 to 75 days	76 to 90 days	91 to 120 days	121 to 180 days
July 12, 1929	5¼	5¼	5¼	5¼	5¼	5¼	5¼	5½
Aug. 9, 1929	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5⅛	5½
Oct. 24, 1929	5	5	5	5	5	5	5⅛	5½
Nov. 1, 1929	4¾	4¾	4¾	4¾	4¾	4¾	4¾	5
Nov. 15, 1929	4¼	4¼	4¼	4¼	4¼	4¼	4¼	4½
Nov. 22, 1929	4	4	4	4	4	4	4	4½
Jan. 31, 1930	3⅞	3⅞	3⅞	4	4	4	4	4½
Feb. 11, 1930	3¾	3¾	3¾	3⅞	3⅞	3⅞	3⅞	4¼
Feb. 24, 1930	3¾	3¾	3¾	3¾	3¾	3¾	3⅞	4¼
Mar. 5, 1930	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	3⅝	4
Mar. 6, 1930	3½	3½	3½	3½	3½	3½	3½	3¾
Mar. 11, 1930	3¼	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅝
Mar. 14, 1930	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3⅝
Mar. 17, 1930	3⅛	3⅛	3⅛	3¼	3¼	3¼	3¼	3⅝
Mar. 19, 1930	3	3	3	3⅛	3⅛	3⅛	3⅛	3⅜
Mar. 20, 1930	3	3	3	3	3	3	3	3¼
May 2, 1930	2¾	2¾	2¾	2¾	2¾	2¾	2¾	3
May 8, 1930	2½	2½	2½	2½	2⅝	2⅝	2⅝	3
May 19, 1930	2½	2½	2½	2½	2½	2½	2⅝	3
June 3, 1930	2⅜	2⅜	2⅜	2½	2½	2½	2½	3
June 5, 1930	2¼	2¼	2¼	2¼	2¼	2¼	2⅜	2¾
June 16, 1930	2⅛	2⅛	2⅛	2¼	2¼	2¼	2¼	2¾
June 20, 1930	2	2	2	2	2	2	2⅛	2⅜
June 30, 1930	1⅞	1⅞	1⅞	2	2	2	2⅛	2⅜
July 21, 1930	1⅞	1⅞	1⅞	1⅞	1⅞	2	2⅛	2⅜
Dec. 24, 1930	1¾	1¾	1¾	1¾	1¾	1¾	1¾	2
Jan. 16, 1931	1⅝	1¾	1¾	1¾	1¾	1¾	1¾	2

San Francisco.—Open-market acceptance rates in the San Francisco district are (of necessity) the same as those ruling in New York. To have higher buying rates in San Francisco would throw all bills into the New York market. Lower buying rates would promptly divert bills from New York to San Francisco in such volume as to make defective action imperative.

The following is recited as an illustration of the necessity for close coordination between San Francisco and New York in the question of discount and open-market rates:

During the latter half of 1928 San Francisco had a discount rate of 4½ per cent against New York's 5 per cent. Dealers were bidding 4¾ per cent for 90-day bills, and New York was buying at from 4½ to 4¾ per cent. Accepting banks in San Francisco either preferred to borrow at the Federal reserve bank at 4½ per cent than to sell their bills in the open market at 4¾ per cent or to borrow from the market at a higher rate than to be indebted to the Federal reserve bank.

As a corrective measure, and to give its own member banks the benefit of the lower discount rate policy, San Francisco accepted offerings of bills accepted by member banks of the twelfth district at 4¼ per cent. This experiment proved to be unsatisfactory, because everywhere it resulted in bringing out of investors' portfolios acceptances of twelfth district bills, and for a time it made the Federal Reserve Bank of San Francisco the exclusive market for its own district bills.

23. Does your institution ever discrimate in the buying rate established on bills on the basis of the self-liquidating or nonself-liquidating nature of the transaction from which the bill arose?

Atlanta.—No.

Boston.—This institution does not discrimate in the buying rate established on bills on the basis of the self-liquidating or nonself-liquidating nature of the transaction from which the bill arose.

Chicago.—No.

Cleveland.—Our rates are fixed on the established credit standing of the acceptors and indorsers of the bills and satisfactory evidence that the bills offered are eligible in all respects. It is our understanding that all acceptances drawn in conformity with the Federal reserve act and the regulations and rulings of the Federal Reserve Board would be self-liquidating.

Dallas.—No. We endeavor to buy no bills except of apparent self-liquidating character.

Kansas City.—Practically all our bills have been purchased through open-market committee in New York. All bills purchased locally, other than those handled as rediscounts for accepting bank, have been considered self-liquidating.

Minneapolis.—No.

New York.—This bank does not discrimate in the buying rate for bills on the basis of the transaction underlying the bill. There would seem to be no logical basis for taking bills of the same acceptor with equivalent indorsements at different rates, because they arose in different classes of transactions, all of which the law specifically provides may be financed by acceptances. The market would never discriminate in that way. It deals in bills as credit instruments. We believe it would be harmful to the position of dollar exchange bills in world markets as well as at home if such discrimation were attempted. For example, if a bank in Rio de Janeiro were offered three 90-day bills on the same New York bank, one drawn against an export of coffee from Brazil to France, one drawn against the storage of coffee in Brazil awaiting shipment to France, and the third drawn for the purpose of creating dollar exchange, which are the three classes of transactions for which bills would most probably be drawn in Brazil, the Rio de Janeiro bank would never understand why the same rate should not apply to each of those bills, and when the bills reached this market banks and other investors would be unwilling to buy any one of them if any doubt existed as to its rediscount value in this market. Such a practice, in our opinion, would make for untold confusion in the discount market.

Philadelphia.—No. All bankers acceptance credits should be self-liquidating—the great majority within the period for which the bills are drawn. In some cases renewals are permissible where the transaction involving the transportation and distribution consumes a longer period than 90 days; but whether at the maturity of the first acceptance, or the renewal, the liquidation of the underlying transaction should pay off the loan.

Richmond.—No.

St. Louis.—Have had no occasion to discriminate, as we believe all bills bought by us to be self-liquidating.

San Francisco.—No. Bills are bought on the basis of the financial standing of the accepting bank and its reputation in conducting acceptance transactions.

24. What has been the effect of changes in acceptance buying rates of the Federal reserve banks on the total volume of bills outstanding?

Atlanta.—Do not know.

Boston.—Only indirectly have the buying rates of Federal reserve banks affected the total volume of bills outstanding. As it is the primary purpose of the Federal reserve banks to assist in establishing and maintaining an active and independent bill market, it usually follows (conditions warranting) that Federal reserve bank rates follow the open market rates, established by accepting houses. It is seldom that Federal reserve banks take the initiative by establishing new rates, and, therefore, any changes in the volume of outstanding acceptances brought about as the result of changes in rates would have been initiated by the acceptance houses themselves.

A review of the bill rates of the past few years show considerable fluctuation, both increases and decreases, while the volume of bills during this period has shown a steady increase. At the end of September, 1928, the open-market bid rate for 90-day bills was 4⅝ per cent while the volume of outstanding bills amounted to $1,004,000,000. This rate was advanced to 5⅝ per cent at the end of March, 1929, while the volume of outstanding bills increased to $1,205,000,000. Our buying rates during this period under review were 4½ and 5½ per cent, respectively.

Through 1928 Federal reserve banks had been heavy buyers of bills, but later in the year much of this support was withdrawn. On December 12, 1928, the "system" was holding $494,000,000 bills. These holdings declined to $157,000,000 on April 10, a reduction of $337,000,000, but the total volume of outstanding acceptances showed a reduction of only $80,000,000, leaving $257,000,000 bills to be absorbed by the outside market.

Indirectly, buying rates of Federal reserve banks no doubt affect the volume of bills outstanding. It is most reassuring to the foreign shipper for him to know that his acceptance, when it reaches this country, will find a ready market at suitable rates. If Federal reserve bank support were lacking and acceptances difficult to market, the volume would, no doubt, be curtailed.

Chicago.—The total volume of bills outstanding is affected to some extent by the rates. If the rates are low, as compared to commercial paper rates, this would increase the volume of bills to some extent, more particularly domestic acceptances. On the other hand, when acceptance rates are high the volume of domestic bills is correspondingly reduced. We are unable to determine to what extent if any the buying rates of the Federal reserve banks have affected the volume of bills outstanding.

Cleveland.—The volume of bills in the market is subject to fluctuations in business or trade and to supply and demand as they affect the money market. The market really determines the rate, and the market rate, of course, is affected by any appreciable differences in rates here and abroad, especially between New York and London. High rates here will send some business to London, and vice versa.

Dallas.—We think that this question could be answered best by appending statistical data showing the comparison between the range of rates and the volume of bills outstanding and that the Federal Reserve Bank of New York is in better position to give this information than we are.

Kansas City.—Refer to division of research and statistics, Federal Reserve Board.

Minneapolis.—Such a small volume of acceptances is purchased directly by this bank that the effect of changes in our acceptance buying rate is not discernible.

New York.—We believe that there has been slight, if any, effect on the total volume of bills outstanding occasioned by the buying rates of reserve banks. As explained in a previous question, the market primarily determines the rates at which bills circulate. If rates in this country are too high, some of the business will go to London. When rates in this country are below London, some business will flow from sterling to dollars.

As to dollar financing shifting from the form of acceptance credits to bank loans, only a relatively small portion of the business financed by acceptance credits is susceptible of such shift, but that portion which could be shifted would change and occasionally has changed on a slight difference in the aggregate cost of the accommodation. The most noticeable instance of this occurred during and in the years immediately following the World War when the American packing houses were using large amounts of credit in both departments and the cost of financing through acceptances approximated and at times exceeded the rates at which they could borrow from their banks. Ordinarily, shifts of this sort due to rate changes have been relatively small.

Philadelphia.—Any change in the buying rate of the Federal reserve banks would have no effect on the total volume of bills outstanding unless the change affected the relationship to rates on other instruments of a competitive character.

Richmond.—In our opinion the buying rate of Federal reserve banks constitutes only one of a number of factors determining the total volume of bills outstanding at any one time, and the effect of changes in the rates could be only approximately determined, if at all.

St. Louis.—Not enough acceptance business in the eighth district to justify a conclusion.

San Francisco.—It is too early to determine what effect the system's buying rates have had on the volume of bills created because other important factors have been working to increase the volume of American acceptances.

Suffice it to say, however, that prohibitive rates would soon destroy the desire to create bills, and a constantly low range of rates offer an inducement to use this form of credit.

25. What are the factors responsible for the decline in the acceptance commissions charged by American accepting institutions over the past six years?

Atlanta.—Do not know.

Boston.—Competition has been the chief factor responsible for the decline in the acceptance commissions charged by American accepting institutions over the past six years. This cutting of commissions, however, has been limited almost entirely to foreign credits. When the volume of this class of acceptances first began to increase, dealers who had been charging a minimum of 1 per cent per annum found that they were unable to hold their business and were forced by keen competition to lower their commission to three-fourths of 1 per cent per annum and in some instances to an even lower rate. With commission rates at three-fourths of 1 per cent per annum American acceptance houses were more in line with the London rate, which was one-half of 1 per cent per annum plus stamp taxes, making the total commission approximately three-fourths of 1 per cent.

The decline, if any, of commissions charged by local acceptors for domestic credits during the past six years has been very slight. Most accepting banks work under an agreement wherein they charge a minimum rate of 1 per cent per annum for domestic credits. This commission ranges from a minimum of 1 per cent to in some cases as high as 2 per cent, according to risks and work involved, although 1⅛ per cent per annum is a fair average.

It is understood that there is a recent movement under way, whereby accepting banks will agree to charge not less than 1 per cent per annum for both foreign and domestic acceptance credits.

Chicago.—Competition between accepting banks for business and to some extent by the reduction of acceptance commissions charged by London banks in competition for international acceptance business.

Cleveland.—Competition for this business between the accepting banks.

Dallas.—Competition between accepting banks in the American market and competition between the American banks and foreign banks.

Kansas City.—We are not informed on this subject because of lack of interest of commercial banks in this district.

Minneapolis.—This question can best be answered by commercial banks in the centers originating a large volume of acceptances.

New York.—We believe that acceptance commissions charged by American banks and bankers have not generally declined during the past six years. On choice American business the usual rate six years ago was one-fourth of 1 per cent for 90 days, and it still is. On business done for account of foreign banks there has been some reduction. In the years just after the war charges ran from three-eighths to one-half of 1 per cent for 90 days, but for some years now the rate has been more generally three-sixteenths to one-fourth of 1 per cent. This reduction was brought about by competition, principally competition of London joint-stock banks, which at present are doing a similar business for one-eighth of 1 per cent. There is an indication now of American banks, in view of the low discount rates obtaining in this country, reestablishing one-fourth of 1 per cent for 90 days for business done for account of foreign banks.

Philadelphia.—The keen competition for business of this character, and the volume of business handled, has been the ruling factor in the reduction responsible for the decline in the acceptance commissions charged by American acceptance institutions for the past few years.

Richmond.—We should say that the decline is caused partly by competition between banks and partly because of the desire to accommodate the public.

St. Louis.—It is our understanding that foreign competition was responsible.

San Francisco.—(*a*) Takers of credits showing an improving trend of financial responsibility; (*b*) strong competition among American banks; (*c*) stabilization of European currencies causing competition of foreign banking houses seeking to recapture lost business.

26. Present a list of the recognized dealers in acceptances; i. e., of those dealers whose indorsement is recognized by your institution. State the net worth that a recognized dealer must possess. What other standards has your institution imposed to which a recognized dealer must attain? What factors are considered in determining the dealers' lines of credit?

Atlanta.—There are no recognized dealers in bankers' acceptances local to this district.

Boston.—The names of the recognized dealers in bankers' acceptances in this district are as follows: First National Old Colony Corporation, Shawmut Corporation of Boston, National City Co. of Boston, Salomon Bros. & Hutzler.

While there is no stated amount of net worth required, the net worth should be substantial in amount and adequate for the volume of business transacted. Determining the dealers' line of credit or net worth is the first consideration, but other factors are considered, such as his general standing in the community, his knowledge and experience and the class of customers for whom he deals.

Chicago.—Discount Corporation of New York, First National Old Colony Corporation of Boston, National City Co. of New York, Salomon Bros. & Hutzler, Shawmut Corporation of Boston.

The National City Co. and Salomon Bros. & Hutzler are recognized as dealers in bankers' acceptances in this district but they do not indorse bills. They are privileged, however, to sell us acceptances with an agreement to repurchase within 15 days the total amount not to exceed $2,000,000 in each case. The Discount Corporation operates as a dealer in this market and their indorsement is acceptable to us, but they carry their entire portfolio in New York.

This bank does not have a minimum requirement for the capital structure of the recognized dealers in granting accommodations under sales contracts, but the minimum capital of such dealers at this time is somewhat in excess of $2,000,000.

In recognizing dealers in acceptances it is understood, of course, that they will circulate at frequent intervals a list of their offerings and be willing to bid for round amounts of bills at any time. We restrict the amounts bought under sales contract with any one dealer to a maximum of $2,000,000, which amount we believe to be sufficient to take care of the requirements of this market. We have never found it necessary to fix any maximum amount that we would buy with the indorsement of any of the dealers.

Cleveland.—Dealers in bills whose indorsements we recognize when purchasing bills from member banks in our district are those of established firms in high credit standing, who furnish us regularly with their financial statements in satisfactory form and whose management is well regarded. Discount Corporation of New York, First National Old Colony Corporation of Boston, Shawmut Corporation.

Dallas.—(1) Fort Worth National Co., Fort Worth, Tex.; Union National Co., Houston, Tex.

(2) Minimum paid-in capital of $100,000.

(3) The principal factors which we consider in determining the recognition of a dealer are as follows: Ability of management, knowledge of the bill business, character of transactions, and rapidity of distribution.

(4) Net worth as represented by capital structure, length of maturity of bills indorsed by dealer, and outstanding and volume and maturity of bills held by us under repurchase agreement.

Kansas City.—There are no acceptance dealers with headquarters in this district.

Minneapolis.—There are no recognized dealers in acceptances in this district, except agencies or offices of eastern dealers, and no portfolios of bills are carried here by these representatives.

New York.—(The Federal Reserve Bank of New York requested that its reply to this question be omitted.)

Philadelphia.—The Discount Corporation, the Shawmut Corporation, First National Corporation. We have no rule of thumb regarding the net worth a recognized dealer must possess. Of course it must be a substantial amount and must have a proper relationship to its outstanding liabilities. The statement must indicate proper liquidity and diversification of assets. The personnel and its connection are also taken into consideration. We have never extended a dealer a line of credit; our holdings are usually well diversified as to risk. The indorsement of the dealer gives additional responsibility, but is a secondary consideration. Unless we are satisfied as to the responsibility of the accepting bank we do not purchase the bill.

Richmond.—This bank buys from dealers only bills which are accepted or indorsed by member banks of this district, and in practice has bought such bills only from Shawmut Corporation of Boston and the First National Corporation of Boston.

St. Louis.—We have not been called upon to grant credit to dealers since 1923; consequently, have had no occasion in recent years to determine the standards a recognized dealer should possess.

San Francisco.—(*a*) National City Co. of California.

	Net worth
Owned by National City Co. of New York which guarantees California corporation's obligations	$110, 000, 000
American Securities Co	1, 350, 000

(*b*) Worth of dealer must be commensurate with liabilities for the character of its business.

(*c*) Required that the dealer be a bona fide buyer and distributor of bills.

(*d*) Dealer's line of credit is determined upon financial responsibility and extent credit needed to carry an appropriate portfolio.

27. On an attached schedule, present since January, 1924, weekly statistics of the volume of acceptances held in the portfolios of dealers operating in your district.

Atlanta.—All dealers operating in this district are branch offices of outside firms.

Boston.—

Weekly statistics of the volume of acceptances since January, 1924, held in the portfolios of dealers operating in district No. 1

[000 omitted]

Date	Amount	Date	Amount	Date	Amount
1924		1925		1926	
Jan. 2	$5,142	June 3	$3,637	Nov. 3	$3,985
Jan. 9	5,055	June 10	3,109	Nov. 10	3,687
Jan. 16	5,990	June 17	3,155	Nov. 17	2,982
Jan. 23	4,172	June 24	1,784	Nov. 24	3,929
Jan. 30	5,288	July 1	3,911	Dec. 1	5,439
Feb. 6	5,897	July 8	3,254	Dec. 8	5,987
Feb. 13	4,359	July 15	3,910	Dec. 15	5,195
Feb. 20	4,452	July 22	3,734	Dec. 22	9,751
Feb. 27	5,077	July 29	2,766	Dec. 29	13,872
Mar. 5	4,594	Aug. 5	2,960		
Mar. 12	4,390	Aug. 12	4,034	1927	
Mar. 19	1,274	Aug. 19	3,917	Jan. 5	7,527
Mar. 26	5,063	Aug. 26	3,218	Jan. 12	7,654
Apr. 2	5,879	Sept. 2	1,714	Jan. 19	12,837
Apr. 9	6,999	Sept. 9	1,493	Jan. 26	14,912
Apr. 16	6,001	Sept. 16	2,770	Feb. 2	14,076
Apr. 23	4,685	Sept. 23	2,206	Feb. 9	12,248
Apr. 30	4,086	Sept. 30	3,193	Feb. 16	16,863
May 7	3,646	Oct. 7	3,002	Feb. 23	12,746
May 14	3,174	Oct. 14	2,616	Mar. 2	12,425
May 21	3,410	Oct. 21	4,081	Mar. 9	12,636
May 28	4,264	Oct. 28	4,942	Mar. 16	10,585
June 4	4,346	Nov. 4	4,170	Mar. 23	10,994
June 11	3,346	Nov. 11	2,178	Mar. 30	8,451
June 18	1,910	Nov. 18	2,077	Apr. 6	9,074
June 25	2,837	Nov. 25	1,938	Apr. 13	8,038
July 3	3,827	Dec. 2	3,041	Apr. 20	8,801
July 9	4,894	Dec. 9	2,095	Apr. 27	7,633
July 16	2,597	Dec. 16	2,385	May 4	8,209
July 23	2,139	Dec. 23	4,570	May 11	10,515
July 30	2,275	Dec. 30	10,721	May 18	9,997
Aug. 6	5,878			May 25	11,758
Aug. 13	5,846	1926		June 1	13,131
Aug. 20	7,091	Jan. 6	4,585	June 8	10,483
Aug. 27	4,863	Jan. 13	5,855	June 15	11,045
Sept. 3	6,532	Jan. 20	6,404	June 22	8,219
Sept. 10	5,510	Jan. 27	6,726	June 29	6,387
Sept. 17	1,995	Feb. 3	7,251	July 6	4,384
Sept. 24	3,902	Feb. 10	6,794	July 13	5,435
Oct. 1	3,102	Feb. 17	7,457	July 20	5,072
Oct. 8	5,074	Feb. 24	4,169	July 27	6,020
Oct. 15	5,892	Mar. 3	5,035	Aug. 3	6,917
Oct. 22	3,209	Mar. 10	5,328	Aug. 10	6,737
Oct. 29	6,908	Mar. 17	4,729	Aug. 17	8,346
Nov. 5	5,338	Mar. 24	3,656	Aug. 24	8,720
Nov. 12	5,861	Mar. 31	5,344	Aug. 31	10,619
Nov. 19	3,785	Apr. 7	6,047	Sept. 7	12,963
Nov. 26	3,880	Apr. 14	11,550	Sept. 14	10,751
Dec. 3	2,204	Apr. 21	7,812	Sept. 21	10,117
Dec. 10	1,955	Apr. 28	5,579	Sept. 28	10,607
Dec. 17	2,827	May 5	7,437	Oct. 5	11,275
Dec. 24	2,625	May 12	10,017	Oct. 12	10,022
Dec. 31	8,101	May 19	10,452	Oct. 19	10,981
		May 26	8,358	Oct. 26	8,558
1925		June 2	6,865	Nov. 2	12,586
Jan. 7	4,444	June 9	6,594	Nov. 9	9,880
Jan. 14	2,730	June 16	3,891	Nov. 16	6,110
Jan. 21	3,054	June 23	5,474	Nov. 23	3,890
Jan. 28	3,789	June 30	6,982	Nov. 30	6,716
Feb. 4	5,126	July 7	5,750	Dec. 7	7,618
Feb. 11	3,168	July 14	5,092	Dec. 14	8,309
Feb. 18	2,733	July 21	5,541	Dec. 21	4,875
Feb. 25	2,628	July 28	6,405	Dec. 28	7,168
Mar. 4	2,491	Aug. 4	3,845		
Mar. 11	2,486	Aug. 11	4,655	1928	
Mar. 18	3,063	Aug. 18	1,761	Jan. 4	8,395
Mar. 25	2,398	Aug. 25	1,647	Jan. 11	6,168
Apr. 1	2,643	Sept. 1	1,532	Jan. 18	5,891
Apr. 8	3,457	Sept. 8	1,935	Jan. 25	5,568
Apr. 15	2,954	Sept. 15	2,195	Feb. 1	4,927
Apr. 22	5,305	Sept. 22	2,122	Feb. 8	4,117
Apr. 29	5,244	Sept. 29	2,188	Feb. 15	5,015
May 6	5,256	Oct. 6	3,645	Feb. 21	3,668
May 13	4,150	Oct. 13	3,703	Feb. 29	5,846
May 20	4,792	Oct. 20	4,374	Mar. 7	7,973
May 27	4,735	Oct. 27	2,510	Mar. 14	7,458

Weekly statistics of the volume of acceptances since January, 1924, held in the portfolios of dealers operating in district No. 1—Continued

[000 omitted]

Date	Amount	Date	Amount	Date	Amount
1928		1929		1930	
Mar. 21	$8,466	Feb. 20	$6,315	Jan. 22	$8,990
Mar. 28	9,152	Feb. 27	5,716	Jan. 29	6,930
Apr. 4	6,721	Mar. 6	5,199	Feb. 5	5,368
Apr. 11	5,799	Mar. 13	3,830	Feb. 12	8,101
Apr. 18	8,021	Mar. 20	4,855	Feb. 19	6,726
Apr. 25	7,085	Mar. 27	2,490	Feb. 26	6,874
May 2	7,079	Apr. 3	3,417	Mar. 5	4,650
May 9	5,373	Apr. 10	3,865	Mar. 12	7,492
May 16	6,387	Apr. 17	2,778	Mar. 19	5,696
May 23	9,349	Apr. 24	3,738	Mar. 26	8,258
May 29	6,179	May 1	11,435	Apr. 2	9,549
June 6	5,180	May 8	11,178	Apr. 9	9,623
June 13	7,201	May 16	9,283	Apr. 16	7,575
June 20	7,995	May 22	8,153	Apr. 23	7,679
June 27	11,000	May 30	10,673	Apr. 30	5,240
July 3	8,752	June 5	8,044	May 7	5,657
July 11	5,899	June 12	4,074	May 14	5,748
July 18	6,911	June 19	3,216	May 21	5,199
July 25	6,694	June 27	5,079	May 28	4,772
Aug. 1	4,660	July 5	5,604	June 4	3,476
Aug. 8	3,552	July 10	6,384	June 11	3,783
Aug. 15	6,104	July 18	6,580	June 18	1,591
Aug. 22	7,133	July 25	6,928	June 25	3,611
Aug. 29	8,459	July 31	9,794	July 2	2,140
Sept. 5	7,083	Aug. 7	11,183	July 9	4,797
Sept. 12	5,315	Aug. 14	9,813	July 16	6,753
Sept. 19	8,480	Aug. 22	9,749	July 23	3,333
Sept. 26	7,492	Aug. 28	8,815	July 30	2,054
Oct. 3	11,268	Sept. 4	7,730	Aug. 6	1,010
Oct. 10	12,786	Sept. 12	7,640	Aug. 14	1,673
Oct. 17	13,310	Sept. 18	8,122	Aug. 20	1,971
Oct. 24	12,981	Sept. 25	7,598	Aug. 27	1,030
Oct. 31	14,332	Oct. 2	8,576	Sept. 3	1,833
Nov. 7	17,773	Oct. 9	9,369	Sept. 10	2,389
Nov. 14	14,174	Oct. 16	8,380	Sept. 17	1,688
Nov. 21	14,100	Oct. 23	5,711	Sept. 25	2,246
Nov. 28	12,868	Oct. 30	3,407	Oct. 1	1,263
Dec. 5	10,791	Nov. 6	4,105	Oct. 8	1,897
Dec. 12	8,100	Nov. 13	3,327	Oct. 15	2,684
Dec. 19	6,104	Nov. 20	4,697	Oct. 22	3,065
Dec. 26	8,170	Nov. 27	5,081	Oct. 29	1,079
		Dec. 4	6,365	Nov. 5	327
1929		Dec. 11	9,215	Nov. 12	416
Jan. 2	6,772	Dec. 18	11,126	Nov. 19	660
Jan. 9	8,280	Dec. 24	13,470	Nov. 26	1,265
Jan. 16	11,835	Dec. 31	13,188	Dec. 3	1,549
Jan. 23	7,639			Dec. 10	1,077
Jan. 30	10,158	1930		Dec. 17	1,927
Feb. 6	8,302	Jan. 8	11,242	Dec. 24	1,787
Feb. 13	9,587	Jan. 15	10,572	Dec. 31	2,742

Chicago.—

Dealers' holdings of bankers' acceptances in seventh Federal reserve district, by months from January, 1924, to December, 1926, and by weeks from December 22, 1926, to January 14, 1931, together with an estimate of the amount of acceptances held which were acquired directly from accepting institutions, and from others

[In thousands of dollars]

NOTE.—Bill dealers in seventh district state that less than one-eighth of 1 per cent of their bills are purchased directly from drawers, inasmuch as accepting banks handle practically all of the transactions, either for their own account, or for account of the drawer. Holdings of bills from "others" include for the most part acceptances received from eastern offices of the same dealers.

Dates	Total	Acceptors	Others
1924			
Jan. 9	2,921	1,823	1,098
Feb. 13	4,921	4,306	615
Mar. 12	4,995	4,440	555
Apr. 9	5,271	2,635	2,636
May 14	2,502	1,752	750
June 11	1,506	1,004	502
July 9	3,690	3,354	336
Aug. 13	2,153	1,821	332
Sept. 10	7,360	3,800	3,560
Oct. 15	5,937	3,564	2,373
Nov. 12	2,424	1,557	867
Dec. 10	2,087	1,349	738
1925			
Jan. 21	2,207	1,207	1,000
Feb. 18	1,843	1,000	843
Mar. 18	4,551	2,275	2,276
Apr. 15	2,542	1,271	1,271
May 20	3,539	2,831	708
June 17	1,092	546	546
July 15	2,029	1,295	734
Aug. 20	1,466	1,064	402
Sept. 16	931	500	431
Oct. 21	1,321	444	877
Nov. 18	2,061	1,374	687
Dec. 16	2,675	1,338	1,337
1926			
Jan. 20	1,941	970	971
Feb. 17	3,750	2,500	1,250
Mar. 17	2,618	1,746	872
Apr. 14	5,468	3,780	1,688
May 19	5,001	3,751	1,250
June 16	3,822	2,700	1,122
July 14	5,335	2,800	2,535
Aug. 18	2,534	1,583	951
Sept. 15	3,420	2,100	1,320
Oct. 20	5,198	2,776	2,422
Nov. 17	4,314	2,744	1,570
Dec. 15	5,132	2,700	2,432
Dec. 22	4,037	1,550	2,487
Dec. 29	4,801	2,220	2,581
1927			
Jan. 5	5,842	2,921	2,921
Jan. 12	5,871	4,408	1,463
Jan. 19	5,096	1,274	3,822
Jan. 20	4,300	1,433	2,867
Feb. 2	5,753	2,877	2,876
Feb. 9	6,140	3,070	3,070
Feb. 16	6,188	3,094	3,094
Feb. 23	6,067	2,426	3,641
Mar. 2	5,955	2,553	3,402
Mar. 9	4,951	2,476	2,475
Mar. 16	3,119	1,559	1,560
Mar. 23	3,284	1,312	1,972
Mar. 30	3,350	1,340	2,010
Apr. 6	3,202	1,067	2,135
Apr. 13	3,485	1,044	2,441
Apr. 20	2,708	1,084	1,624
Apr. 27	3,820	1,910	1,910
May 4	3,461	1,730	1,731
May 11	3,343	2,142	1,201
May 18	4,253	2,550	1,703
May 25	4,203	2,102	2,101
June 1	5,090	2,036	3,054
June 8	3,948	1,568	2,380
June 15	4,855	1,539	3,316
June 22	3,106	776	2,330
June 29	3,690	922	2,768
July 6	3,209	802	2,407
July 13	3,256	1,302	1,954
July 20	3,099	1,952	1,147
July 27	2,645	1,674	971
Aug. 3	2,677	2,013	664
Aug. 10	4,051	3,038	1,013
Aug. 17	5,126	3,844	1,282
Aug. 24	5,945	3,807	2,138
Aug. 31	6,097	3,048	3,049
Sept. 7	6,180	2,580	3,600
Sept. 14	5,802	2,400	3,402
Sept. 21	5,740	546	5,194
Sept. 28	6,355	2,635	3,720
Oct. 5	4,837	1,934	2,903
Oct. 11	7,458	2,574	4,884
Oct. 19	5,566	2,783	2,783
Oct. 26	6,634	1,326	5,308
Nov. 2	3,438	1,376	2,062
Nov. 9	5,421	1,807	3,614
Nov. 16	5,024	2,512	2,512
Nov. 23	4,291	2,861	1,430
Nov. 30	4,383	3,066	1,317
Dec. 7	4,622	2,311	2,311
Dec. 14	4,228	1,057	3,171
Dec. 21	2,683	1,074	1,609
Dec. 28	2,453	1,635	818
1928			
Jan. 4	4,584	2,750	1,834
Jan. 11	4,754	3,169	1,585
Jan. 18	3,403	2,552	851
Jan. 25	3,175	1,588	1,587
Feb. 1	2,296	765	1,531
Feb. 8	1,204	301	903
Feb. 15	2,551	1,547	1,004
Feb. 21	2,546	1,183	1,363
Feb. 29	4,014	2,007	2,007
Mar. 7	4,291	2,452	1,839
Mar. 14	4,445	2,667	1,778
Mar. 21	4,845	2,422	2,423
Mar. 28	5,468	3,124	2,344
Apr. 4	1,468	870	598
Apr. 11	2,393	950	1,443
Apr. 18	2,264	1,132	1,132
Apr. 25	3,033	607	2,426
May 2	3,164	1,266	1,898
May 9	2,671	1,781	890
May 16	2,926	1,463	1,463
May 23	3,667	1,377	2,290
May 29	3,998	1,440	2,558
June 6	3,951	3,102	849
June 13	3,896	2,976	920
June 20	4,169	3,127	1,042
June 27	2,691	2,491	200
July 3	2,766	2,375	391
July 11	2,921	2,241	680
July 18	1,783	1,300	483
July 25	1,884	1,413	471
Aug. 1	935	935	--------
Aug. 8	2,412	1,206	1,206
Aug. 15	2,910	1,746	1,164
Aug. 22	2,567	1,283	1,284
Aug. 29	2,279	1,519	760
Sept. 5	3,845	2,663	1,182
Sept. 12	3,907	1,302	2,605
Sept. 19	3,755	1,504	2,251
Sept. 26	2,381	1,587	794
Oct. 3	3,949	2,962	987

Dealers' holdings of bankers' acceptances in seventh Federal reserve district, by months from January, 1924, to December, 1926, etc.—Continued

[In thousands of dollars]

Dates	Total	Acceptors	Others
1928			
Oct. 10	3,236	2,427	809
Oct. 17	4,617	3,463	1,154
Oct. 24	2,283	1,522	761
Oct. 31	3,822	2,294	1,528
Nov. 7	4,270	2,562	1,708
Nov. 14	4,843	3,395	1,448
Nov. 21	3,576	2,145	1,431
Nov. 28	2,781	927	1,854
Dec. 5	4,123	1,374	2,749
Dec. 12	3,945	1,462	2,483
Dec. 19	4,275	3,420	855
Dec. 26	3,944	3,120	824
1929			
Jan. 2	3,006	2,505	501
Jan. 9	4,039	673	3,366
Jan. 16	4,552	1,518	3,034
Jan. 23	4,890	2,720	2,170
Jan. 30	6,546	3,273	3,273
Feb. 6	5,513	2,756	2,757
Feb. 13	5,198	3,250	1,948
Feb. 20	3,453	2,100	1,353
Feb. 27	2,813	2,500	313
Mar. 6	3,276	2,303	973
Mar. 13	4,421	2,520	1,901
Mar. 20	6,306	5,706	600
Mar. 27	1,029	260	769
Apr. 3	2,129	1,064	1,065
Apr. 10	2,374	1,187	1,187
Apr. 17	2,671	1,410	1,261
Apr. 24	691	230	461
May 1	3,726	2,200	1,526
May 8	3,947	2,424	1,523
May 15	4,530	1,750	2,780
May 22	4,002	1,950	2,052
May 29	3,195	2,600	595
June 5	2,353	1,569	784
June 12	2,646	1,690	956
June 19	2,726	1,363	1,363
June 26	2,540	1,380	1,160
July 3	2,899	905	1,994
July 10	3,454	1,368	2,086
July 17	3,496	1,500	1,996
July 24	4,271	2,903	2,368
July 31	6,990	6,000	990
Aug. 7	6,909	5,916	993
Aug. 14	4,453	3,560	893
Aug. 21	5,645	4,788	857
Aug. 28	5,686	4,692	994
Sept. 4	5,984	5,074	910
Sept. 11	6,244	5,620	624
Sept. 18	4,440	3,510	930
Sept. 25	3,745	2,975	770
Oct. 2	4,538	3,631	907
Oct. 9	4,378	3,831	547
Oct. 16	5,201	4,025	1,176
Oct. 23	3,197	2,897	300
Oct. 30	1,812	432	1,380
Nov. 6	3,922	1,632	2,290
Nov. 13	4,078	3,262	816
Nov. 20	5,128	4,487	641
Nov. 27	3,486	2,789	697
Dec. 4	5,833	5,250	583
Dec. 11	5,191	4,326	865
Dec. 18	5,525	4,604	921
Dec. 24	7,263	6,355	908
Dec. 31	7,062	6,118	944
1930			
Jan. 8	8,555	5,343	3,112
Jan. 15	6,920	4,792	2,128
Jan. 22	5,479	3,288	2,191
Jan. 29	4,437	3,187	1,250
Feb. 5	4,154	2,310	1,844
Feb. 11	3,895	3,300	595
Feb. 19	2,892	1,928	964
Feb. 26	2,536	1,268	1,268
Mar. 5	5,476	2,738	2,738
Mar. 12	2,574	711	1,863
Mar. 19	4,797	2,398	2,399
Mar. 26	4,091	1,435	2,656
Apr. 2	9,830	4,915	4,915
Apr. 9	4,797	3,945	852
Apr. 16	6,314	3,157	3,157
Apr. 23	3,512	2,338	1,174
Apr. 30	1,920	1,300	620
May 7	3,126	1,042	2,084
May 14	3,209	1,840	1,369
May 21	3,015	1,206	1,809
May 28	4,470	1,917	2,553
June 4	3,395	1,697	1,698
June 11	4,223	3,167	1,056
June 18	3,828	1,914	1,914
June 25	3,425	2,854	571
July 2	3,214	2,143	1,071
July 9	3,025	2,420	605
July 16	1,530	1,330	200
July 23	1,881	705	1,176
July 30	1,937	963	964
Aug. 6	322	300	22
Aug. 13	1,605	802	803
Aug. 20	2,547	1,910	637
Aug. 27	854	800	54
Sept. 3	769	710	59
Sept. 10	1,134	1,100	34
Sept. 17	437	400	37
Sept. 24	333	320	13
Oct. 8	1,158	926	232
Oct. 15	2,697	1,348	1,349
Oct. 22	2,658	1,690	968
Oct. 29	1,963	981	982
Nov. 5	1,730	288	1,442
Nov. 12	1,452	262	1,190
Nov. 19	1,522	1,016	506
Nov. 26	834	417	417
Dec. 3	909	606	303
Dec. 10	3,216	1,608	1,608
Dec. 17	2,483	828	1,655
Dec. 24	1,768	884	884
Dec. 31	2,589	1,294	1,295
1931			
Jan. 7	1,904	1,666	238
Jan. 14	784	87	697

Cleveland.—We have had no dealers in this district in the period covered.

Dallas.—We have no means of obtaining this information without making inquiry of dealers, which we shall be glad to do if you desire.

Kansas City.—There are no acceptance dealers with headquarters in this district.

Minneapolis.—See answer to question 26.

New York.—

Volume of acceptances reported as held in portfolios of dealers in New York district, January 2, 1924, to January 14, 1931

[In thousands of dollars]

Date	Amount	Date	Amount	Date	Amount
1924		1925		1926	
Jan. 2	62,358	June 3	43,722	Nov. 3	60,925
Jan. 9	73,746	June 10	49,949	Nov. 10	57,809
Jan. 16	62,366	June 17	28,304	Nov. 17	61,465
Jan. 23	56,267	June 24	35,056	Nov. 24	58,113
Jan. 30	61,820	July 1	42,662	Dec. 1	90,177
Feb. 6	81,403	July 8	31,875	Dec. 8	100,219
Feb. 13	83,507	July 15	32,770	Dec. 15	89,047
Feb. 20	79,962	July 22	36,660	Dec. 22	75,742
Feb. 27	73,596	July 29	35,183	Dec. 29	74,244
Mar. 5	75,028	Aug. 5	34,982		
Mar. 12	65,754	Aug. 12	36,834	1927	
Mar. 19	52,038	Aug. 19	30,466	Jan. 5	90,073
Mar. 26	53,452	Aug. 26	29,557	Jan. 12	78,335
Apr. 2	71,197	Sept. 2	23,592	Jan. 19	76,322
Apr. 9	61,742	Sept. 9	25,652	Jan. 26	70,203
Apr. 16	67,823	Sept. 16	26,026	Feb. 2	87,933
Apr. 23	64,190	Sept. 23	36,851	Feb. 10	86,904
Apr. 30	44,034	Sept. 30	38,059	Feb. 16	90,350
May 7	61,069	Oct. 7	43,843	Feb. 23	74,238
May 14	53,589	Oct. 14	51,830	Mar. 2	74,146
May 21	55,200	Oct. 21	50,989	Mar. 9	79,680
May 28	72,144	Oct. 28	56,144	Mar. 16	52,890
June 4	70,318	Nov. 4	54,746	Mar. 23	50,487
June 11	56,330	Nov. 11	51,082	Mar. 30	55,997
June 18	66,942	Nov. 18	48,286	Apr. 6	62,013
June 25	38,831	Nov. 25	56,607	Apr. 13	60,405
July 2	55,239	Dec. 2	56,118	Apr. 21	75,252
July 9	74,986	Dec. 9	53,705	Apr. 27	80,260
July 16	54,200	Dec. 16	65,641	May 4	77,812
July 23	38,941	Dec. 23	69,100	May 11	63,923
July 30	33,748	Dec. 30	67,527	May 18	78,856
Aug. 6	43,193			May 25	82,178
Aug. 13	49,595	1926		June 1	92,204
Aug. 20	62,941	Jan. 6	61,632	June 8	94,647
Aug. 27	52,841	Jan. 13	49,252	June 15	67,291
Sept. 3	41,456	Jan. 20	56,046	June 22	60,727
Sept. 10	37,115	Jan. 27	55,821	June 29	67,938
Sept. 17	29,444	Feb. 3	59,513	July 6	51,820
Sept. 24	40,948	Feb. 10	69,225	July 13	42,069
Oct. 1	66,101	Feb. 17	79,343	July 20	37,639
Oct. 8	81,949	Feb. 24	73,853	July 27	58,683
Oct. 15	74,687	Mar. 3	72,906	Aug. 3	82,466
Oct. 22	61,113	Mar. 10	73,721	Aug. 10	88,724
Oct. 29	61,986	Mar. 17	62,338	Aug. 17	96,523
Nov. 5	60,321	Mar. 24	68,839	Aug. 24	95,909
Nov. 12	80,288	Mar. 31	82,161	Aug. 31	95,704
Nov. 19	63,512	Apr. 7	86,754	Sept. 7	90,431
Nov. 26	67,531	Apr. 14	93,030	Sept. 14	91,413
Dec. 3	56,348	Apr. 21	81,601	Sept. 21	80,888
Dec. 10	63,843	Apr. 28	66,073	Sept. 28	92,086
Dec. 17	50,389	May 5	98,485	Oct. 5	101,087
Dec. 24	46,945	May 12	121,414	Oct. 11	96,754
Dec. 31	5,2086	May 19	106,142	Oct. 19	98,875
		May 26	85,092	Oct. 26	102,506
1925		June 2	71,966	Nov. 2	105,492
Jan. 7	52,753	June 9	69,469	Nov. 9	85,738
Jan. 14	45,446	June 16	64,419	Nov. 16	86,224
Jan. 21	37,290	June 23	60,542	Nov. 23	73,320
Jan. 28	46,654	June 30	56,336	Nov. 30	99,811
Feb. 4	49,515	July 8	52,198	Dec. 7	101,422
Feb. 11	45,928	July 14	50,326	Dec. 14	76,375
Feb. 18	43,201	July 21	49,944	Dec. 21	72,269
Feb. 25	49,265	July 28	48,930	Dec. 28	84,564
Mar. 4	36,116	Aug. 4	48,684		
Mar. 11	40,289	Aug. 11	39,131	1928	
Mar. 18	35,282	Aug. 18	35,166	Jan. 4	95,984
Mar. 25	40,037	Aug. 25	33,910	Jan. 11	72,235
Apr. 1	49,899	Sept. 1	34,410	Jan. 18	59,587
Apr. 8	62,402	Sept. 8	36,888	Jan. 25	69,206
Apr. 15	60,300	Sept. 15	38,062	Feb. 8	51,854
Apr. 22	48,418	Sept. 22	38,240	Feb. 15	51,464
Apr. 29	42,932	Sept. 29	49,011	Feb. 21	56,676
May 6	74,940	Oct. 6	53,232	Feb. 29	61,020
May 13	67,624	Oct. 13	55,930	Mar. 7	59,422
May 20	50,842	Oct. 20	60,600	Mar. 14	63,591
May 27	55,775	Oct. 27	54,332	Mar. 21	69,041

Volume of acceptances reported as held in portfolios of dealers in New York district, January 2, 1924, to January 14, 1931—Continued

[In thousands of dollars]

Date	Amount	Date	Amount	Date	Amount
1928		1929		1930	
Mar. 28	73,437	Mar. 6	56,282	Feb. 12	107,965
Apr. 4	80,029	Mar. 13	64,723	Feb. 19	113,202
Apr. 11	85,139	Mar. 20	60,364	Feb. 26	114,038
Apr. 18	66,681	Mar. 27	41,555	Mar. 5	102,747
Apr. 25	53,013	Apr. 4	35,703	Mar. 12	104,297
May 2	54,380	Apr. 10	22,893	Mar. 19	70,278
May 9	45,244	Apr. 17	24,733	Mar. 26	145,083
May 16	50,610	Apr. 24	35,531	Apr. 2	151,258
May 23	48,948	May 1	53,174	Apr. 9	141,335
May 29	48,656	May 8	55,700	Apr. 16	145,751
June 6	35,828	May 15	49,033	Apr. 23	110,555
June 13	38,020	May 22	47,438	Apr. 30	97,717
June 20	45,710	May 29	56,741	May 7	114,107
June 27	50,033	June 5	51,301	May 14	83,179
July 3	46,846	June 12	64,357	May 21	95,701
July 11	38,987	June 19	32,478	May 28	102,958
July 18	44,372	June 26	21,278	June 4	84,085
July 25	47,436	July 3	18,229	June 11	106,270
Aug. 1	40,679	July 10	20,428	June 18	72,073
Aug. 8	30,306	July 17	40,894	June 25	38,864
Aug. 15	37,932	July 24	59,667	July 2	52,364
Aug. 22	38,250	July 31	66,701	July 9	93,025
Aug. 29	42,293	Aug. 7	59,204	July 16	104,146
Sept. 5	50,148	Aug. 14	75,491	July 23	67,351
Sept. 12	61,273	Aug. 21	83,649	July 30	22,565
Sept. 19	49,112	Aug. 28	89,269	Aug. 6	38,037
Sept. 26	63,228	Sept. 4	95,832	Aug. 13	32,903
Sept. 30	65,148	Sept. 11	93,793	Aug. 20	35,021
Oct. 3	68,609	Sept. 18	85,984	Aug. 27	36,281
Oct. 10	73,717	Sept. 25	91,573	Sept. 3	38,771
Oct. 17	76,258	Oct. 2	96,166	Sept. 10	44,389
Oct. 25	73,364	Oct. 10	98,450	Sept. 17	39,883
Oct. 31	80,480	Oct. 16	87,647	Sept. 24	38,323
Nov. 7	66,783	Oct. 23	34,086	Oct. 1	37,314
Nov. 14	69,833	Oct. 30	48,317	Oct. 8	59,262
Nov. 21	65,687	Nov. 6	44,738	Oct. 15	82,873
Nov. 28	59,205	Nov. 13	53,823	Oct. 22	114,534
Dec. 5	78,492	Nov. 20	34,618	Oct. 29	55,256
Dec. 12	83,110	Nov. 27	69,072	Nov. 5	38,053
Dec. 19	67,217	Dec. 4	113,567	Nov. 12	25,944
Dec. 26	78,889	Dec. 11	135,988	Nov. 19	27,377
		Dec. 18	121,087	Nov. 26	33,093
1929		Dec. 24	174,539	Dec. 3	39,485
Jan. 9	71,299	Dec. 31	177,172	Dec. 10	39,273
Jan. 16	76,484			Dec. 17	61,566
Jan. 23	77,190	1930		Dec. 24	69,883
Jan. 30	82,930	Jan. 8	218,758	Dec. 31	53,098
Feb. 7	77,177	Jan. 15	185,092		
Feb. 13	68,565	Jan. 22	157,996	1931	
Feb. 20	54,766	Jan. 29	118,313	Jan. 7	63,596
Feb. 27	44,294	Feb. 5	110,413	Jan. 14	39,198

Philadelphia.—No record.

Richmond.—There are no dealers located in this district.

St. Louis.—We are not familiar with portfolios of dealers having offices in this district. In attempting to fill orders of member banks to purchase bills, we have not in recent years found any bills being held in St. Louis.

San Francisco.—(Data omitted at request of Federal Reserve Bank of San Francisco.)

28. In connection with the data presented in answer to the above question, estimate the amount of acceptances in the dealers' portfolios that they have acquired directly from the accepting insitutions, from drawers of bills, and from other sources.

Atlanta.—None.

Boston.—

Weekly statistics of the volume of acceptances held in the portfolios of dealers operating in this district showing the estimated amount acquired directly from accepting institutions, from indorsers, and from other sources since January, 1924

[000 omitted]

Date	Estimated amount purchased from—			
	Acceptors	Indorsers	Other sources	Total
1924				
Jan. 2	$2,880	$257	$2,005	$5,142
Jan. 9	3,286	202	1,567	5,055
Jan. 16	4,792		1,198	5,990
Jan. 23	2,169		2,003	4,172
Jan. 30	3,437		1,851	5,288
Feb. 6	4,305		1,592	5,897
Feb. 13	2,877		1,482	4,359
Feb. 20	2,582	312	1,558	4,452
Feb. 27	3,198	254	1,625	5,077
Mar. 5	3,216		1,378	4,594
Mar. 12	3,161		1,229	4,390
Mar. 19	930		344	1,274
Mar. 26	2,380		2,683	5,063
Apr. 2	3,469		2,410	5,879
Apr. 9	6,159		840	6,999
Apr. 16	3,841		2,160	6,001
Apr. 23	2,343		2,342	4,685
Apr. 30	2,452		1,634	4,086
May 7	2,297	219	1,130	3,646
May 14	2,285		889	3,174
May 21	2,762		648	3,410
May 28	3,198		1,066	4,264
June 4	2,564		1,782	4,346
June 11	2,811		535	3,346
June 18	1,815		95	1,910
June 25	1,475		1,362	2,837
July 3	3,521		306	3,827
July 9	1,958		2,936	4,894
July 16	1,688		909	2,597
July 23	1,390		749	2,139
July 30	1,183		1,092	2,275
Aug. 6	2,469	235	3,174	5,878
Aug. 13	4,501		1,345	5,846
Aug. 20	5,460	567	1,064	7,091
Aug. 27	2,334		2,529	4,863
Sept. 3	5,944		588	6,532
Sept. 10	4,298		1,212	5,510
Sept. 17	1,736		259	1,995
Sept. 24	3,122		780	3,902
Oct. 1	2,358		744	3,102
Oct. 8	4,262		812	5,074
Oct. 15	4,773		1,119	5,892
Oct. 22	1,605	96	1,508	3,209
Oct. 29	4,352		2,556	6,908
Nov. 5	3,683		1,655	5,338
Nov. 12	4,337	762	762	5,861
Nov. 19	2,990	38	757	3,785
Nov. 26	2,212	194	1,474	3,880
Dec. 3	1,763	44	397	2,204
Dec. 10	1,505	235	215	1,955
Dec. 17	2,488	226	113	2,827
Dec. 24	2,520	79	26	2,625
Dec. 31	6,967	243	891	8,101
1925				
Jan. 7	4,355		89	4,444
Jan. 14	2,430		300	2,730
Jan. 21	2,901		153	3,054
Jan. 28	3,259	227	303	3,789
Feb. 4	3,947		1,179	5,126
Feb. 11	2,788	190	190	3,168
Feb. 18	1,804	246	683	2,733
Feb. 25	1,629	79	920	2,628
Mar. 4	1,669		822	2,491
Mar. 11	1,790	298	398	2,486
Mar. 18	2,083	276	704	3,063
Mar. 25	1,822	312	264	2,398
Apr. 1	2,115	79	449	2,643
Apr. 8	2,973		484	3,457
Apr. 15	2,452	59	443	2,954
Apr. 22	4,668		637	5,305
Apr. 29	4,353		891	5,244
May 6	3,259	105	1,892	5,256
May 13	$3,154	$125	$871	$4,150
May 20	2,731		2,061	4,792
May 27	3,315	142	1,278	4,735
June 3	2,692	436	509	3,637
June 10	2,270	186	653	3,109
June 17	2,650	63	442	3,155
June 24	1,124	446	214	1,784
July 1	3,481	352	78	3,911
July 8	2,050	618	586	3,254
July 15	2,698		1,212	3,910
July 22	2,315	224	1,195	3,734
July 29	1,688	138	940	2,766
Aug. 5	1,924		1,036	2,960
Aug. 12	1,977	363	1,694	4,034
Aug. 19	2,507	352	1,058	3,917
Aug. 26	2,864		354	3,218
Sept. 2	1,594	51	69	1,714
Sept. 9	1,135	119	239	1,493
Sept. 16	1,385	111	1,274	2,770
Sept. 23	838	552	816	2,206
Sept. 30	1,692	32	1,469	3,193
Oct. 7	1,711	60	1,231	3,002
Oct. 14	2,146	78	392	2,616
Oct. 21	1,836	82	2,163	4,081
Oct. 28	3,756	148	1,038	4,942
Nov. 4	3,586	334	250	4,170
Nov. 11	849	218	1,111	2,178
Nov. 18	1,288		789	2,077
Nov. 25	1,221		717	1,938
Dec. 2	2,402	213	426	3,041
Dec. 9	1,383	188	524	2,095
Dec. 16	1,550		835	2,385
Dec. 23	2,148	137	2,285	4,570
Dec. 30	6,433	214	4,074	10,721
1926				
Jan. 6	3,118		1,467	4,585
Jan. 13	4,157	703	995	5,855
Jan. 20	4,355	832	1,217	6,404
Jan. 27	5,784	336	606	6,726
Feb. 3	5,946	290	1,015	7,251
Feb. 10	5,571	408	815	6,794
Feb. 17	6,562		875	7,457
Feb. 24	2,418		1,751	4,169
Mar. 3	2,417		2,618	5,035
Mar. 10	3,144		2,184	5,328
Mar. 17	4,303		426	4,729
Mar. 24	3,144	110	402	3,656
Mar. 31	4,168	321	855	5,344
Apr. 7	4,838		1,209	6,047
Apr. 14	3,234		8,316	11,550
Apr. 21	4,531	547	2,734	7,812
Apr. 28	3,905		1,674	5,579
May 5	5,875	967	595	7,437
May 12	6,711		3,306	10,017
May 19	7,525		2,927	10,452
May 26	3,176		5,182	8,358
June 2	1,099	343	5,423	6,865
June 9	5,011		1,583	6,594
June 16	2,957	272	662	3,891
June 23	3,503		1,971	5,474
July 7	3,623		2,127	5,750
July 14	2,240	153	2,699	5,092
July 21	1,274		4,267	5,541
July 28	2,242		4,163	6,405
Aug. 4	1,692	1,038	1,115	3,845
Aug. 11	977	1,909	1,769	4,655
Aug. 18	599	17	1,145	1,761
Aug. 25	774		873	1,647
Sept. 1	858	31	643	1,532
Sept. 8	1,200	251	484	1,935
Sept. 15	395	44	1,756	2,195
Sept. 22	424	43	1,655	2,122

Weekly statistics of the volume of acceptances held in the portfolios of dealers operating in this district, etc.—Continued

[000 omitted]

Date	Estimated amount purchased from—			
	Acceptors	Indorsers	Other sources	Total
1926				
Sept. 29	$656	$44	$1,488	$2,188
Oct. 6	1,166	37	2,442	3,645
Oct. 13	1,148	74	2,481	3,703
Oct. 20	1,706	87	2,581	4,374
Oct. 27	552	201	1,757	2,510
Nov. 3	1,913	40	2,032	3,985
Nov. 10	1,032	37	2,618	3,687
Nov. 17	1,312	30	1,640	2,982
Nov. 24	1,493	118	2,318	3,929
Dec. 1	4,514		925	5,439
Dec. 8	5,867		120	5,987
Dec. 15	4,052	364	779	5,195
Dec. 22	7,216	487	2,048	9,751
Dec. 29	7,213		4,994	13,872
1927				
Jan. 5	6,022	602	903	7,527
Jan. 12	6,812		842	7,654
Jan. 19	12,580		257	12,837
Jan. 26	14,614		298	14,912
Feb. 2	13,513		563	14,076
Feb. 9	7,716	2,450	2,082	12,248
Feb. 16	10,624	1,349	4,890	16,863
Feb. 23	12,236		510	12,746
Mar. 2	9,940		2,485	12,425
Mar. 9	9,351		3,285	12,636
Mar. 16	7,092		3,493	10,585
Mar. 23	6,486		4,508	10,994
Mar. 30	6,761	84	1,606	8,451
Apr. 6	6,261		2,813	9,074
Apr. 13	5,948		2,090	8,038
Apr. 20	4,401	528	3,872	8,801
Apr. 27	4,580		3,053	7,633
May 4	8,127		82	8,209
May 11	8,412		2,103	10,515
May 18	6,798		3,199	9,997
May 25	5,879		5,879	11,758
June 1	9,848		3,283	13,131
June 8	9,540		943	10,483
June 15	6,737		4,308	11,045
June 22	4,027	740	3,452	8,219
June 29	5,557		830	6,387
July 6	3,726		658	4,384
July 13	3,424		2,011	5,435
July 20	4,616		456	5,072
July 27	5,719		301	6,020
Aug. 3	5,949		968	6,917
Aug. 10	5,726		1,011	6,737
Aug. 17	7,929		417	8,346
Aug. 24	6,627		2,093	8,720
Aug. 31	9,026		1,593	10,619
Sept. 7	11,019		1,944	12,963
Sept. 14	10,428		323	10,751
Sept. 21	8,397		1,720	10,117
Sept. 28	9,546	530	531	10,607
Oct. 5	10,824		451	11,275
Oct. 12	9,120	501	401	10,022
Oct. 19	8,455	330	2,196	10,981
Oct. 26	7,788		770	8,558
Nov. 2	8,936	503	3,147	12,586
Nov. 9	6,224	889	2,767	9,880
Nov. 16	5,010	183	917	6,110
Nov. 23	2,801	972	117	3,890
Nov. 30	6,179		537	6,716
Dec. 7	6,247		1,371	7,618
Dec. 14	6,149		2,160	8,309
Dec. 21	3,266		1,609	4,875
Dec. 28	6,809		359	7,168
1928				
Jan. 4	8,311		84	8,395
Jan. 11	4,873		1,295	6.168
Jan. 18	5,655	177	59	5,891
Jan. 25	5,401		167	5,568
Feb. 1	$4,434		$493	$4,927
Feb. 8	3,993		124	4,117
Feb. 15	4,814		201	5,015
Feb. 21	3,595		73	3,668
Feb. 29	4,969		877	5,846
Mar 7	6,458	$239	1,276	7,973
Mar. 14	5,146		2,312	7,458
Mar. 21	7,619	169	678	8,466
Mar. 28	7,870	92	1,190	9,152
Apr. 4	5,310	67	1,344	6,721
Apr. 11	3,595		2,204	5,799
Apr. 18	6,016	561	1,444	8,021
Apr. 25	5,951	850	284	7,085
May 2	5,168		1,911	7,079
May 9	5,104		269	5,373
May 16	6,068		319	6,387
May 23	8,508	467	374	9,349
May 29	4,943	62	1,174	6,179
June 6	3,574	155	1,451	5,180
June 13	3,240		3,961	7,201
June 20	7,675		320	7,995
June 27	8,800		2,200	11,000
July 3	7,177	87	1,488	8,752
July 11	4,601		1,298	5,899
July 18	6,013	69	829	6,911
July 25	6,158	67	469	6,694
Aug. 1	4,380		280	4,660
Aug. 8	3,410		142	3,552
Aug. 15	5,372	61	671	6,104
Aug. 22	6,705	143	285	7,133
Aug. 29	5,160		3,299	8,459
Sept. 5	6,729	283	71	7,083
Sept. 12	5,315			5,315
Sept. 19	7,971	170	339	8,480
Sept. 26	5,694	674	1,124	7,492
Oct. 3	5,859		5,409	11,268
Oct. 10	8,950	2,429	1,407	12,786
Oct. 17	7,986		5,324	13,310
Oct. 24	6,231	1,168	5,582	12,981
Oct. 31	9,746	287	4,299	14,332
Nov. 7	13,507		4,626	17,773
Nov. 14	8,504	709	4,961	14,174
Nov. 21	9,447	2,820	1,833	14,100
Nov. 28	8,107	1,158	3,603	12,868
Dec. 5	9,388	432	971	10,791
Dec. 12	4,779	1,458	1,863	8,100
Dec. 19	3,540	1,465	1,099	6,104
Dec. 26	6,699	1,144	327	8,170
1929				
Jan. 2	2,573	2,777	1,422	6,772
Jan. 9	4,802	580	2,898	8,280
Jan. 16	6,864	237	4,734	11,833
Jan. 23	5,424	1,298	917	7,639
Jan. 30	6,704		3,454	10,158
Feb. 6	6,060	1,328	914	8,302
Feb. 13	9,204	96	287	9,587
Feb. 20	5,999	190	126	6,315
Feb. 27	3,944	572	1,200	5,716
Mar. 6	4,471	312	416	5,199
Mar. 13	3,332	268	230	3,830
Mar. 20	4,661	97	97	4,855
Mar. 27	2,191	199	100	2,490
Apr. 3	2,904	69	444	3,417
Apr. 10	3,324	77	464	3,865
Apr. 17	1,945		833	2,778
Apr. 24	3,065	187	486	3,738
May 1	5,603	114	5,718	11,435
May 8	10,507		671	11,178
May 16	6,590		2,692	9,282
May 22	7,256	408	489	8,153
May 30	7,685		2,988	10,673
June 5	6,274		1,770	8,044

Weekly statistics of the volume of acceptances held in the portfolios of dealers operating in this district, etc.—Continued

[000 omitted]

Date	Estimated amount purchased from—			
	Acceptors	Indorsers	Other sources	Total
1929				
June 12	$3,422	$41	$ 611	$4,074
June 19	2,058		1,158	3,216
June 27	3,758		1,321	5,079
July 5	5,212		392	5,604
July 10	6,129		255	6,384
July 18	4,803		1,777	6,580
July 25	6,374		554	6,928
July 31	9,794			9,794
Aug. 7	11,183			11,183
Aug. 14	4,759	2,468	1,586	8,813
Aug. 22	7,799	1,365	585	9,749
Aug. 28	7,493	529	793	8,815
Sept. 4	5,025	77	2,628	7,730
Sept. 12	6,265	76	1,299	7,640
Sept. 18	7,716		406	8,122
Sept. 25	3,039		4,559	7,598
Oct. 2	7,890	86	600	8,576
Oct. 9	4,684	375	4,310	9,369
Oct. 16	4,358	83	3,939	8,380
Oct. 23	2,284	1,028	2,399	5,711
Oct. 30	2,385		1,022	3,407
Nov. 6	3,284		821	4,105
Nov. 13	1,564		1,763	3,327
Nov. 20	2,161		2,536	4,697
Nov. 27	3,607	559	915	5,081
Dec. 4	3,755		2,610	6,365
Dec. 11	8,201		1,014	9,215
Dec. 18	8,233		2,893	11,126
Dec. 24	11,045	2,021	404	13,470
Dec. 31	10,155	659	2,374	13,188
1930				
Jan. 8	5,621	112	5,509	11,242
Jan. 15	6,026	1,480	3,066	10,572
Jan. 22	5,034	450	3,506	8,990
Jan. 29	4,227		2,703	6,930
Feb. 5	3,704		1,664	5,368
Feb. 12	6,481		1,620	8,101
Feb. 19	4,170	67	2,489	6,726
Feb. 26	5,087	550	1,237	6,874
Mar. 5	3,395		1,255	4,650
Mar. 12	7,342		150	7,492

Date	Estimated amount purchased from—			
	Acceptors	Indorsers	Other sources	Total
1930				
Mar. 19	$3,759		$1,937	$5,696
Mar. 26	5,533		2,725	8,258
Apr. 2	5,729		3,820	9,549
Apr. 9	9,142		481	9,623
Apr. 16	6,136		1,439	7,575
Apr. 23	6,758	$921		7,679
Apr. 30	4,402	210	628	5,240
May 7	4,582	566	509	5,657
May 14	4,886		862	5,748
May 21	4,887	260	52	5,199
May 28	3,006		1,766	4,772
June 4	3,267		209	3,476
June 11	3,216	454	113	3,783
June 18	1,527		64	1,591
June 25	3,105	217	289	3,611
July 2	1,990		150	2,140
July 9	4,077		720	4,797
July 16	5,605	68	1,080	6,753
July 23	2,933	400		3,333
July 30	1,787	267		2,054
Aug. 6	980		30	1,010
Aug. 14	1,673			1,673
Aug. 20	1,951		20	1,971
Aug. 27	1,030			1,030
Sept. 3	1,778	55		1,833
Sept. 10	2,126	263		2,389
Sept. 17	1,654		34	1,688
Sept. 25	1,954		292	2,246
Oct. 1	1,200		63	1,263
Oct. 8	1,821		76	1,897
Oct. 15	2,389		295	2,684
Oct. 22	2,881		184	3,065
Oct. 29	1,068		11	1,079
Nov. 5	320		7	327
Nov. 12	416			416
Nov. 19	640		20	660
Nov. 26	1,240		25	1,265
Dec. 3	1,425		124	1,549
Dec. 10	969	75	33	1,017
Dec. 17	1,811		116	1,927
Dec. 24	1,573	143	71	1,787
Dec. 31	2,495		247	2,742

Chicago.—See reply to question No. 27.

Cleveland.—We have had no dealers in this district in the period covered.

Dallas.—See answer to question 27.

Kansas City.—No information available on this subject.

Minneapolis.—See answer to question 26.

New York.—Dealers do not classify their purchases under those heads. Their classification is, purchases from acceptors, from indorsers, and from others. Following is a schedule prepared from weekly reports made by New York dealers to this bank, showing aggregate amount of bills held at the end of each week in each of the years from 1924 to 1930, inclusive. classified accordingly, *Bankers' acceptances held in dealers' portfolios weekly, January 2, 1924, to January 14, 1931, estimated as to source from which acquired*

[In thousands of dollars]

Date	From accepting institutions	From indorsers	From others	Total
1924				
Jan. 2	31,000	18,600	12,700	62,30
Jan. 9	40,700	8,100	24,900	73,700
Jan. 16	39,500	10,600	12,300	62,400
Jan. 23	22,500	13,600	20,200	56,300
Jan. 30	27,800	11,400	22,600	61,800
Feb. 6	38,400	22,300	20,700	81,400
Feb. 13	39,500	15,200	28,800	83,500
Feb. 20	43,200	18,300	18,400	79,900
Feb. 27	33,700	24,400	15,500	73,600
Mar. 5	41,200	22,500	11,300	75,000
Mar. 12	25,600	15,800	24,300	65,700
Mar. 19	23,400	10,400	18,200	52,000
Mar. 26	26,200	6,700	20,600	53,500
Apr. 2	28,400	21,500	21,300	71,200
Apr. 9	26,100	15,300	20,300	61,700
Apr. 16	33,900	16,800	17,100	67,800
Apr. 23	24,300	14,100	25,700	64,100
Apr. 30	17,400	7,900	18,700	44,000
May 7	25,900	10,400	24,700	61,000
May 14	19,600	10,800	23,200	53,600
May 21	18,700	8,800	27,700	55,200
May 28	31,300	15,700	25,100	72,100
June 4	15,600	18,900	35,800	70,300
June 11	16,800	14,100	25,400	56,300
June 18	14,600	5,300	47,000	66,900
June 25	15,600	6,500	16,800	38,900
July 2	18,200	13,800	23,200	55,200
July 9	23,900	17,400	33,600	74,900
July 16	24,200	10,400	19,600	54,200
July 23	14,800	3,100	21,000	38,900
July 30	14,300	5,900	13,500	33,700
Aug. 6	11,200	7,200	24,800	43,200
Aug. 13	15,700	10,200	23,700	29,600
Aug. 20	33,400	8,100	21,400	62,900
Aug. 27	27,400	18,000	7,400	52,800
Sept. 3	13,700	7,600	20,100	41,400
Sept. 10	18,500	6,400	12,200	37,100
Sept. 17	15,400	6,700	7,300	29,400
Sept. 24	16,200	7,400	17,300	40,900
Oct. 1	26,500	10,600	29,000	66,100
Oct. 8	46,600	12,200	23,100	81,900
Oct. 15	45,000	6,600	23,100	74,700
Oct. 22	24,200	11,700	25,200	61,100
Oct. 29	26,900	9,900	25,200	62,000
Nov. 5	25,100	12,000	23,200	60,300
Nov. 12	31,700	16,200	32,400	80,300
Nov. 19	31,400	9,600	22,500	63,500
Nov. 26	24,600	13,500	29,400	67,500
Dec. 3	28,300	13,800	14,200	56,300
Dec. 10	26,400	12,900	24,500	63,800
Dec. 17	20,600	12,300	17,500	50,400
Dec. 24	24,600	11,900	10,400	46,900
Dec. 31	30,200	15,600	19,400	65,200
1925				
Jan. 7	22,700	5,900	24,100	52,700
Jan. 14	18,400	11,700	15,300	45,400
Jan. 21	17,700	6,800	12,800	37,300
Jan. 28	21,900	7,200	17,600	46,700
Feb. 4	27,400	9,000	13,100	49,500
Feb. 11	23,100	8,100	14,700	45,900
Feb. 18	23,300	8,200	11,700	43,200
Feb. 25	20,100	5,700	23,500	49,300
Mar. 4	13,200	10,400	12,500	36,100
Mar. 11	19,000	8,100	13,200	40,300
Mar. 18	14,500	10,300	10,500	35,300
Mar. 25	19,300	6,500	14,200	40,000
Apr. 1	22,600	13,200	14,100	49,900
Apr. 8	23,900	12,000	26,300	62,400
Apr. 15	29,000	8,200	23,100	60,300
Apr. 22	19,600	12,100	16,700	48,400
Apr. 29	16,200	11,600	15,100	42,900
May 6	22,800	6,500	45,600	74,900
May 13	30,900	13,800	22,900	67,600

Date	From accepting institutions	From indorsers	From others	Total
1925				
May 20	28,200	8,300	14,300	50,800
May 27	22,400	7,200	16,200	55,800
June 3	21,500	14,800	7,400	43,700
June 10	20,300	9,100	20,500	49,900
June 17	12,800	6,500	9,000	28,300
June 24	13,200	5,500	16,400	35,100
July 1	16,200	14,800	11,700	42,700
July 8	12,200	11,700	8,000	31,900
July 15	16,100	7,200	9,500	32,800
July 22	15,600	7,700	7,400	30,700
July 29	14,500	10,600	10,100	35,200
Aug. 5	14,800	8,900	11,300	35,000
Aug. 12	15,400	8,100	13,300	36,800
Aug. 19	11,000	8,000	11,500	30,500
July 26	16,700	5,700	7,600	30,000
Sept. 2	7,200	7,000	9,400	23,600
Sept. 9	11,000	4,500	10,200	25,700
Sept. 16	11,300	7,500	7,200	26,000
Sept! 23	18,600	9,700	8,600	36,900
Sept. 30	14,600	10,800	12,600	38,000
Oct. 7	19,500	9,700	14,600	43,800
Oct. 14	22,800	8,600	20,400	51,800
Oct. 21	21,200	13,800	16,000	51,000
Oct. 28	18,800	17,200	20,100	56,100
Nov. 4	25,600	12,200	16,900	54,700
Nov. 11	20,300	17,400	13,400	51,100
Nov. 18	23,100	13,000	12,200	48,300
Nov. 25	23,800	18,700	14,100	56,600
Dec. 2	25,700	9,500	20,900	56,100
Dec. 9	20,500	16,500	16,700	53,700
Dec. 16	26,900	21,900	16,800	65,600
Dec. 23	34,800	15,700	18,600	19,100
Dec. 30	27,500	19,700	20,300	67,500
1926				
Jan. 6	21,100	15,300	25,200	61,600
Jan. 13	19,800	15,200	14,200	49,200
Jan. 20	26,000	13,000	17,000	56,000
Jan. 27	29,100	14,900	11,800	55,800
Feb. 3	26,100	14,200	19,200	59,500
Feb. 10	31,900	20,200	17,100	69,200
Feb. 17	36,600	24,900	17,800	79,300
Feb. 24	35,800	21,600	16,500	73,900
Mar. 3	29,300	24,200	19,400	72,900
Mar. 10	28,100	29,400	16,200	73,700
Mar. 17	30,300	15,100	16,900	62,300
Mar. 24	28,500	19,600	20,700	68,800
Mar. 31	41,100	27,600	13,400	82,100
Apr. 7	43,200	31,400	12,200	86,800
Apr. 14	52,500	20,100	20,400	93,000
Apr. 21	35,600	15,300	30,700	81,600
Apr. 28	22,800	17,900	25,300	66,000
May 5	21,300	16,400	60,800	98,500
May 12	49,600	24,300	47,500	121,400
May 19	53,800	24,700	27,600	106,100
May 26	52,600	15,300	17,100	85,000
June 2	36,800	21,900	13,300	72,000
June 9	35,100	18,200	16,100	69,500
June 16	27,400	9,900	27,100	64,400
June 23	24,800	8,100	27,600	60,500
June 30	21,100	20,500	14,700	56,300
July 8	27,200	12,500	12,400	52,100
July 14	29,500	13,300	7,500	50,300
July 21	25,300	15,500	9,100	49,900
July 28	22,400	13,100	13,400	48,900
Aug. 4	24,700	12,400	11,600	48,700
Aug. 11	16,800	9,100	13,200	39,100
Aug. 18	20,800	8,900	5,400	35,100
Aug. 25	16,500	9,500	7,900	33,900
Sept. 1	17,100	7,200	10,100	34,400
Sept. 8	20,900	8,700	7,300	36,900
Sept. 15	20,600	10,300	7,100	38,000
Sept. 22	18,500	12,400	7,300	38,200
Sept. 29	22,400	15,200	11,400	49,000

Bankers' acceptances held in dealers' portfolios weekly, January 2, 1924, to January 14, 1931, estimated as to source from which acquired—Continued

[In thousands of dollars]

Date	From accepting institutions	From indorsers	From others	Total
1926				
Oct. 6	27,600	13,900	11,700	53,200
Oct. 13	30,100	13,700	12,100	55,900
Oct. 20	33,800	13,900	12,900	60,600
Oct. 27	22,100	21,800	10,400	54,300
Nov. 3	36,800	10,200	13,900	60,900
Nov. 10	27,700	16,900	13,200	57,800
Nov. 17	34,600	14,100	12,800	61,500
Nov. 24	32,800	14,600	10,700	58,100
Dec. 1	44,600	29,800	15,700	90,100
Dec. 8	55,900	26,100	18,200	100,200
Dec. 15	44,700	12,200	32,100	89,000
Dec. 22	42,300	21,200	12,200	75,500
Dec. 29	41,800	15,300	17,100	74,200
1927				
Jan. 5	42,500	18,400	29,200	90,100
Jan. 12	44,600	22,900	10,800	78,300
Jan. 19	39,500	17,200	19,600	76,300
Jan. 26	46,900	12,800	10,500	70,200
Feb. 2	36,900	13,400	37,700	88,000
Feb. 9	38,600	28,800	19,500	86,900
Feb. 16	49,600	22,500	18,300	90,400
Feb. 23	37,500	27,800	8,900	74,200
Mar. 2	36,400	23,600	14,100	74,100
Mar. 9	39,300	24,800	15,600	79,700
Mar. 16	25,100	14,200	13,600	52,900
Mar. 23	22,800	12,400	15,300	50,500
Mar. 30	26,500	11,800	18,700	56,000
Apr. 6	29,600	11,300	22,100	62,000
Apr. 13	28,800	11,500	20,100	60,400
Apr. 20	34,600	13,900	26,800	75,300
Apr. 27	37,100	17,300	25,900	80,300
May 4	36,200	16,100	23,500	77,800
May 11	33,100	15,200	15,600	63,900
May 18	39,100	22,100	17,700	78,900
May 25	40,900	24,100	17,200	82,200
June 1	49,100	26,200	16,900	92,200
June 8	48,900	25,300	20,500	94,700
June 15	37,200	18,100	18,900	64,200
June 22	35,100	18,600	17,000	60,700
June 29	40,100	20,200	17,600	67,900
July 6	26,200	14,800	10,800	51,800
July 13	21,100	9,200	11,800	42,100
July 20	19,800	10,200	7,700	37,700
July 27	26,200	12,800	19,700	58,700
Aug. 3	42,900	19,500	20,100	82,500
Aug. 10	43,500	21,400	23,800	88,700
Aug. 17	46,300	26,200	24,000	96,500
Aug. 24	45,100	27,600	23,200	95,900
Aug. 31	44,900	27,400	23,400	95,700
Sept. 7	42,600	26,300	21,500	90,400
Sept. 14	43,100	25,800	22,500	91,400
Sept. 21	36,100	23,200	21,600	80,900
Sept. 28	44,700	24,900	22,500	92,100
Oct. 5	53,200	26,500	21,400	101,100
Oct. 12	50,400	24,700	21,700	96,800
Oct. 19	54,500	24,100	20,300	98,900
Oct. 26	56,200	25,600	20,700	102,500
Nov. 2	58,100	26,200	21,200	105,500
Nov. 9	49,100	20,600	16,000	85,700
Nov. 16	45,200	21,800	19,200	86,200
Nov. 23	41,300	16,400	15,600	73,300
Nov. 30	53,400	22,900	23,500	99,800
Dec. 7	52,800	25,500	23,100	101,400
Dec. 14	40,600	20,100	15,600	76,300
Dec. 21	40,300	18,200	13,700	72,200
Dec. 28	46,100	18,400	20,100	84,608
1928				
Jan. 4	53,400	24,500	18,100	96,000
Jan. 11	33,700	23,300	15,200	72,200
Jan. 18	30,900	18,200	10,500	59,600
Jan. 25	45,100	12,300	11,800	69,200
Feb. 1	38,200	20,000	14,200	72,400

Date	From accepting institutions	From indorsers	From others	Total
1928				
Feb. 8	28,800	13,500	9,600	51,900
Feb. 15	31,100	15,200	5,200	51,500
Feb. 21	26,800	19,900	10,000	56,700
Feb. 29	35,600	14,200	11,200	61,000
Mar. 7	28,100	19,000	12,300	59,400
Mar. 14	36,000	14,600	13,000	63,600
Mar. 21	37,000	16,800	15,200	59,000
Mar. 28	46,500	15,600	11,300	73,400
Apr. 4	43,400	18,200	18,400	80,000
Apr. 11	50,600	22,600	11,900	85,100
Apr. 18	31,700	20,600	14,400	66,700
Apr. 25	28,500	13,300	11,200	53,000
May 2	31,200	12,000	11,200	54,400
May 9	28,000	9,000	8,200	45,200
May 16	26,000	16,500	8,100	50,600
May 23	25,200	12,500	11,200	48,900
May 29	27,700	10,500	10,500	48,700
June 6	18,200	11,300	6,300	35,800
June 13	16,000	11,500	10,500	38,000
June 20	27,700	12,600	5,400	45,700
June 27	25,500	13,300	11,200	50,000
July 3	26,200	9,400	11,200	46,800
July 11	18,000	12,000	9,000	39,000
July 18	24,300	11,700	8,400	44,400
July 25	28,200	13,000	6,200	47,400
Aug. 1	21,000	10,400	9,300	40,700
Aug. 8	16,300	7,300	6,700	30,300
Aug. 15	14,600	11,600	11,700	37,900
Aug. 22	19,700	8,200	10,400	38,300
Aug. 29	20,600	9,700	12,200	42,300
Sept. 5	26,700	12,400	11,000	50,100
Sept. 12	34,200	12,100	15,000	61,300
Sept. 19	26,600	14,800	7,700	49,100
Sept. 26	36,400	12,300	13,500	63,200
Oct. 3	43,200	14,100	11,300	68,600
Oct. 10	38,600	19,300	15,800	73,700
Oct. 17	42,000	20,200	14,100	76,300
Oct. 25	38,500	18,600	16,300	73,400
Oct. 31	41,800	20,800	17,900	80,500
Nov. 7	39,500	13,700	13,600	66,800
Nov. 14	38,200	18,500	13,100	69,800
Nov. 21	32,300	17,400	16,000	65,700
Nov. 28	30,200	12,400	16,400	59,000
Dec. 5	40,700	17,500	20,300	78,500
Dec. 12	41,400	20,200	21,500	83,100
Dec. 19	36,500	17,400	13,300	67,200
Dec. 26	38,200	24,200	16,500	78,900
1929				
Jan. 2	37,900	24,300	16,200	78.500
Jan. 9	35,100	22,000	14,200	71,300
Jan. 16	37,300	20,100	19,100	76,500
Jan. 23	37,900	20,200	19,100	77,200
Jan. 30	42,600	18,500	21,800	82,900
Feb. 7	41,800	19,300	16,100	77,200
Feb. 13	35,200	17,800	15,600	68,600
Feb. 20	27,300	11,200	16,300	54,800
Feb. 27	25,900	10,100	8,300	44,300
Mar. 6	31,700	14,900	9,700	56,300
Mar. 13	36,500	15,400	12,800	64,700
Mar. 20	35,100	14,100	11,200	60,400
Mar. 27	24,400	9,900	7,300	41,600
Apr. 3	21,100	8,200	6,400	35,700
Apr. 10	12,800	5,500	4,600	22,900
Apr. 17	11,700	6,800	6,200	24,700
Apr. 24	20,900	7,700	6,900	35,500
May 1	24,200	10,100	18,900	53,200
May 8	27,300	9,800	18,600	55,700
May 15	24,100	12,200	13,700	49,000
May 22	23,900	11,600	11,900	47,400
May 29	27,300	16,100	13,300	56,700
June 5	25,800	13,100	12,400	51,300
June 12	29,600	17,300	17,500	64,400
June 19	14,100	8,900	9,500	32,500

Bankers' acceptances held in dealers' portfolios weekly, January 2, 1924, to January 14, 1931, estimated as to source from which acquired—Continued

[In thousands of dollars]

Date	From accepting institutions	From indorsers	From others	Total	Date	From accepting institutions	From indorsers	From others	Total
1929					1930				
June 26	10, 700	4, 600	6, 000	21, 300	Apr. 9	75, 200	31, 600	34, 500	141, 300
July 3	9, 800	4, 400	4, 000	18, 200	Apr. 16	75, 400	26, 100	44, 300	145, 800
July 10	11, 200	5, 700	3, 500	20, 400	Apr. 23	58, 000	19, 400	32, 900	110, 600
July 17	20, 500	9, 600	10, 800	40, 900	Apr. 30	56, 700	17, 300	23, 700	97, 700
July 24	31, 100	8, 700	19, 900	59, 700	May 7	64, 900	20, 900	29, 300	114, 100
July 31	35, 400	12, 100	19, 200	66, 700	May 14	49, 500	15, 600	18, 100	83, 200
Aug. 7	33, 800	14, 300	11, 100	59, 200	May 21	60, 500	17, 000	18, 200	95, 700
Aug. 14	38, 300	13, 900	23, 300	75, 500	May 28	55, 000	16, 900	31, 100	103, 000
Aug. 21	46, 200	15, 800	21, 600	83, 600	June 4	39, 900	15, 200	29, 000	84, 100
Aug. 28	48, 600	16, 400	24, 300	89, 300	June 11	59, 900	22, 600	23, 800	106, 300
Sept. 4	50. 700	15, 200	29, 900	95, 800	June 18	41, 700	14, 600	15, 800	72, 100
Sept. 11	53, 200	16, 400	24, 200	93, 800	June 25	23, 000	7, 700	7, 600	38, 900
Sept. 18	50, 100	16, 100	19, 800	86, 000	July 2	31, 400	11, 700	9, 300	52, 400
Sept. 25	51, 600	17, 900	22, 100	91, 600	July 9	53, 800	19, 400	19, 800	93, 000
Oct. 2	53, 800	19, 900	22, 500	96, 200	July 16	58, 400	21, 200	24, 500	104, 100
Oct. 10	55, 300	20, 800	22, 400	98, 500	July 23	34, 300	15, 900	17, 200	67, 400
Oct. 16	52, 400	16, 600	18, 600	87, 600	July 30	11, 600	4, 100	6, 900	22, 600
Oct. 23	21, 900	6, 900	5, 300	34, 100	Aug. 6	19, 400	9, 000	9, 600	38, 000
Oct. 30	31, 200	9, 700	7, 400	48, 300	Aug. 13	17, 100	8, 000	7, 800	32. 900
Nov. 6	28, 800	7, 100	8, 800	44, 700	Aug. 20	18, 500	6, 200	10, 300	35, 000
Nov. 13	33, 200	9, 100	11, 500	53, 800	Aug. 27	19, 300	6, 400	10, 600	36, 300
Nov. 20	19, 100	7, 200	8, 300	34, 600	Sept. 3	20, 000	7, 500	11, 300	38, 800
Nov. 27	39, 900	12, 100	17, 100	69, 100	Sept. 10	24, 000	8, 500	11, 900	44, 400
Dec. 4	68, 200	18, 200	27, 200	113, 600	Sept. 17	23. 400	8, 100	8, 400	39, 900
Dec. 11	79, 900	24, 300	31, 800	136, 000	Sept. 24	23, 100	7, 400	7, 800	38, 300
Dec. 18	71, 300	20. 100	29, 700	121, 100	Oct. 1	22, 600	7, 200	7, 500	37, 300
Dec. 24	94, 100	30, 800	49, 600	174, 500	Oct. 8	31, 900	12, 200	15, 200	59, 300
Dec. 31	92, 300	32, 600	52, 300	177, 200	Oct. 15	46, 300	13, 600	23, 000	82, 900
					Oct. 22	59, 700	20, 400	34, 400	114, 500
1930					Oct. 29	31, 600	9, 700	13, 000	55, 300
Jan. 8	124, 900	30, 200	63, 700	218, 800	Nov. 5	20, 500	7, 500	10, 100	38, 100
Jan. 15	107, 100	25, 300	52, 600	185, 000	Nov. 12	15, 300	4, 300	6, 300	25, 900
Jan. 22	94, 200	15, 800	49, 000	158, 000	Nov. 19	13, 800	6, 500	7, 100	27, 400
Jan. 29	78, 500	11. 600	28, 200	118, 300	Nov. 26	16, 000	8, 000	9, 100	33, 100
Feb. 5	75, 600	10, 200	24, 200	110, 400	Dec. 3	19, 000	9, 500	11, 000	39, 500
Feb. 12	54, 000	15, 000	39, 000	108, 000	Dec. 10	21, 200	8, 700	9, 400	39, 300
Feb. 19	55, 700	33, 000	24, 500	113, 200	Dec. 17	32, 300	12, 200	17, 100	61, 600
Feb. 26	64, 400	21, 200	28, 400	114, 000	Dec. 24	39, 800	10, 100	20, 000	69, 900
Mar. 5	72, 600	15, 200	24, 900	102, 700	Dec. 31	31, 400	8, 800	12, 900	53, 100
Mar. 12	64, 300	23, 200	16, 700	104, 300					
Mar. 19	32, 300	16, 900	21, 100	70, 300	1931				
Mar. 26	74, 000	31, 700	39, 300	145, 000	Jan. 7	40, 900	7, 200	15, 500	63, 600
Apr. 2	82, 400	33, 000	35, 900	151, 300	Jan. 14	24, 300	5, 600	9, 300	39, 200

Philadelphia.—There is practically no bill market in this district. There are several representatives of New York and Boston houses located in this city, but their bill operations are a very small part of their business, and the few bills they buy are carried at the main office. It is therefore impossible to supply you with this information with any degree of accuracy.

Richmond.—See answer to 27.

St. Louis.—None in the eighth district.

San Francisco.—(Data omitted.)

29. State on attached schedule the amount of acceptances held under resale agreement by your institution on the last reporting date in each month since January, 1922.

Atlanta.—None.

Boston.—

Amount of acceptances held under resale agreement by this institution on the last reporting date in each month since January, 1922

[000 omitted]

Date	Amount	Date	Amount	Date	Amount
1922		1925		1928	
Jan. 25	----	Jan. 28	$1,940	Jan. 25	$4,158
Feb. 22	----	Feb. 25	1,231	Feb. 29	5,843
Mar. 29	----	Mar. 25	1,506	Mar. 28	8,476
Apr. 26	----	Apr. 29	4,244	Apr. 25	7,514
May 31	----	May 27	3,337	May 30	5,368
June 28	----	June 24	1,202	June 27	10,664
July 26	----	July 29	1,670	July 25	6,204
Aug. 30	----	Aug. 26	1,262	Aug. 29	5,686
Sept. 27	----	Sept. 30	1,910	Sept. 26	6,132
Oct. 25	----	Oct. 28	3,902	Oct. 31	16,297
Nov. 29	----	Nov. 25	310	Nov. 28	11,630
Dec. 27	----	Dec. 30	5,917	Dec. 26	8,328
1923		1926		1929	
Jan. 31	----	Jan. 27	5,699	Jan. 30	13,023
Feb. 28	----	Feb. 24	2,817	Feb. 27	4,527
Mar. 28	----	Mar. 31	4,218	Mar. 27	1,680
Apr. 25	----	Apr. 28	1,687	Apr. 24	2,792
May 29	----	May 26	6,191	May 29	8,560
June 27	----	June 30	5,756	June 26	1,938
July 25	----	July 28	3,944	July 31	6,530
Aug. 29	----	Aug. 25	797	Aug. 28	7,896
Sept. 25	----	Sept. 29	724	Sept. 25	6,950
Oct. 30	$4,976	Oct. 27	403	Oct. 30	1,923
Nov. 27	5,030	Nov. 24	2,564	Nov. 27	278
Dec. 24	2,883	Dec. 29	12,041	Dec. 24	11,743
1924		1927		1930	
Jan. 29	3,534	Jan. 26	11,398	Jan. 29	6,536
Feb. 26	3,914	Feb. 23	8,244	Feb. 26	5,965
Mar. 25	2,505	Mar. 30	6,150	Mar. 26	4,819
Apr. 29	2,051	Apr. 27	6,177	Apr. 30	5,166
May 27	910	May 25	9,417	May 28	4,247
June 24	415	June 29	3,220	June 25	3,456
July 29	2,788	July 27	4,625	July 30	1,939
Aug. 26	----	Aug. 31	7,934	Aug. 27	862
Sept. 30	1,003	Sept. 28	7,429	Sept. 24	1,929
Oct. 28	4,176	Oct. 26	5,373	Oct. 29	678
Nov. 25	2,521	Nov. 30	4,118	Nov. 26	992
Dec. 30	2,741	Dec. 28	7,082	Dec. 31	1,052

Chicago.—See answer to No. 18.

Cleveland.—Statement following covers transactions in 1922 and 1923; no transactions since September 26, 1923.

Bankers' acceptances held under resale agreement on last reporting day of each month

January, 1922	$411,331.33	November, 1922	$39,063.29
February, 1922	513,873.11	December, 1922	42,036.58
March, 1922	324,435.88	January, 1923	91,236.71
April, 1922	61,899.87	February, 1923	295,302.74
May, 1922	95,274.54	March, 1923	70,907.12
June, 1922	147,080.28	April, 1923	116,843.99
July, 1922	48,914.66	May, 1923	11,758.56
August, 1922	56,074.60	July, 1923	40,900.00
September, 1922	97,836.78	August, 1923	103,900.00
October, 1922	226,790.45		

No similar transactions since 1923.

Dallas.—See following schedule, which dates back to 1926, when we first began operations in resale agreement transactions.

Amount of bankers acceptances held under resale agreement by the Federal Reserve Bank of Dallas at last reporting date in each month since January, 1922

Date	Amount	Date	Amount	Date	Amount
None prior to Dec. 29, 1926.		Jan. 25, 1928	$500,000	Apr. 24, 1929	$83,134
		Feb. 29, 1928	None.	May 29, 1929	188,826
Dec. 29, 1926	$130,858	Mar. 28, 1928	72,544	June 26, 1929	118,247
Jan. 26, 1927	73,969	Apr. 25, 1928	600,000	July 31, 1929	360,914
Feb. 23, 1927	None.	May 30, 1928	200,000	Aug. 28, 1929	211,545
Mar. 30, 1927	713,901	June 27, 1928	None.	Sept. 25, 1929	370,665
Apr. 27, 1927	611,669	July 25, 1928	None.	Oct. 30, 1929	526,290
May 25, 1927	622,737	Aug. 29, 1928	None.	Nov. 27, 1929	352,952
June 29, 1927	265,000	Sept. 26, 1928	100,000	Dec. 25, 1929	421,433
July 27, 1927	118,113	Oct. 31, 1928	540,000	Jan. 29, 1930	388,140
Aug. 31, 1927	1,370,000	Nov. 28, 1928	None.	Feb. 26, 1930	252,421
Sept. 28, 1927	1,091,373	Dec. 26, 1928	916,998	Mar. 26, 1930	103,039
Oct. 26, 1927	1,155,006	Jan. 30, 1929	419,441	Apr. 30, 1930	231,281
Nov. 30, 1927	145,000	Feb. 27, 1929	421,897	None since Apr. 30, 1930.	
Dec. 28, 1927	476,644	Mar. 27, 1929	8,801		

Kansas City.—None.

Minneapolis.—We have never held acceptances under resale agreement since January, 1922.

New York.—

Amount of acceptances held under resale agreements by the Federal Reserve Bank of New York on the last reporting date in each month since January, 1922

[In thousands of dollars]

Date	Amount	Date	Amount	Date	Amount
1922		1925		1928	
Jan. 25	11,000	Jan. 28	9,202	Jan. 25	16,491
Feb. 21	22,000	Feb. 25	23,721	Feb. 29	33,080
Mar. 29	18,000	Mar. 25	8,916	Mar. 28	40,687
Apr. 26	1,000	Apr. 29	13,969	Apr. 25	24,081
May 31	19,000	May 27	26,880	May 29	9,441
June 28	22,000	June 24	15,511	June 27	9,311
July 26	12,000	July 29	11,813	July 25	297
Aug. 30	9,000	Aug. 26	8,593	Aug. 29	15,613
Sept. 27	6,000	Sept. 30	21,100	Sept. 26	42,755
Oct. 25	13,000	Oct. 28	25,385	Oct. 31	60,192
Nov. 29	12,000	Nov. 25	29,268	Nov. 28	35,490
Dec. 27	17,000	Dec. 30	30,829	Dec. 26	50,884
1923		1926		1929	
Jan. 31	7,000	Jan. 27	6,165	Jan. 30	29,957
Feb. 28	4,000	Feb. 24	39,202	Feb. 27	13,610
Mar. 28	9,000	Mar. 31	29,269	Mar. 27	10,925
Apr. 25	4,000	Apr. 28	8,667	Apr. 24	14,403
May 29	19,941	May 26	38,912	May 29	----------
June 27	18,788	June 30	20,205	June 26	3,208
July 25	11,436	July 28	5,854	July 31	13,444
Aug. 30	21,160	Aug. 25	4,956	Aug. 28	45,501
Sept. 26	15,713	Sept. 29	22,393	Sept. 25	68,609
Oct. 31	27,150	Oct. 27	6,909	Oct. 30	21,793
Nov. 28	31,451	Nov. 24	25,042	Nov. 26	----------
Dec. 26	37,411	Dec. 29	47,988	Dec. 31	115,975
1924		1927		1930	
Jan. 30	23,024	Jan. 26	12,895	Jan. 29	62,192
Feb. 27	39,393	Feb. 24	17,530	Feb. 26	51,249
Mar. 26	25,896	Mar. 30	34,548	Mar. 26	101,574
Apr. 30	14,135	Apr. 27	29,330	Apr. 30	37,900
May 28	33,235	May 25	49,188	May 28	29,357
June 25	----------	June 30	23,779	June 25	----------
July 30	----------	July 27	----------	July 30	----------
Aug. 27	----------	Aug. 31	48,191	Aug. 27	1,544
Sept. 24	----------	Sept. 28	51,922	Sept. 24	----------
Oct. 29	----------	Oct. 26	42,029	Oct. 29	1,266
Nov. 26	2,642	Nov. 30	54,131	Nov. 26	----------
Dec. 31	27,665	Dec. 28	55,043	Dec. 31	29,093

Philadelphia.—

Acceptances held under resale agreement, close of business, monthly

January, 1922	$184, 839. 67
February, 1922	246, 776. 69
March, 1922	
April, 1922	125, 000. 00
May, 1922	273, 977. 25
June, 1922	523, 977. 25
July, 1922	499, 783. 06
August, 1922	475, 101. 14
September, 1922	206, 384. 36
October, 1922	322, 956. 60
November, 1922	317, 956. 60
December, 1922	530, 565. 82
January, 1923	926, 231. 40
February, 1923	486, 464. 12
March, 1923	597, 130. 46
April, 1923	492, 715. 50
May, 1923	279, 230. 19
June, 1923	176, 230. 19
July, 1923	26, 230. 19
August, 1923	7, 000. 00
September, 1923, to December, 1930, inclusive	None.

Richmond.—No such acceptances have been held.

St. Louis.—

Acceptances held under resale agreement on last reporting date in month for the following years

January, 1922	$15, 737. 03	July, 1922	$440, 002. 89
February, 1922	480, 941. 27	November, 1922	600, 523. 38
May, 1922	605, 697. 00	January, 1924	739, 628. 68

San Francisco.—

[000 omitted]

Date	Amount	Date	Amount	Date	Amount
1922		1925		1928	
January		January	$1, 416	January	
February		February	3, 045	February	
March		March	3, 885	March	$4, 691
April		April	3, 559	April	
May		May	2, 209	May	2, 402
June		June	4, 610	June	2, 788
July	$1, 105	July	4, 768	July	625
August		August	3, 260	August	4, 156
September	1, 347	September	3, 055	September	6, 474
October	1, 016	October	1, 866	October	3, 411
November	2, 855	November	1, 823	November	1, 300
December	2, 423	December	3, 881	December	3, 061
1923		1926		1929	
January	1, 972	January	3, 236	January	4, 597
February	2, 138	February	3, 854	February	4, 331
March	1, 641	March	4, 147	March	2, 458
April	984	April	6, 278	April	3, 966
May	1, 424	May	5, 474	May	2, 462
June	1, 315	June	6, 038	June	3, 977
July	1, 409	July	3, 307	July	4, 288
August	464	August	2, 635	August	3, 383
September	1, 581	September	3, 161	September	4, 535
October	2, 897	October	5, 269	October	3, 747
November	2, 392	November	6, 869	November	4, 730
December	1, 947	December	6, 670	December	7, 849
1924		1927		1930	
January	2, 553	January	5, 430	January	1, 803
February	2, 095	February	4, 067	February	6, 809
March	1, 907	March	7, 032	March	2, 003
April	1, 909	April	7, 431	April	2, 529
May	503	May	1, 512	May	8, 201
June	83	June	3, 291	June	969
July		July	5, 484	July	
August		August	5, 829	August	
September		September	6, 933	September	3, 025
October		October	4, 495	October	
November		November	5, 056	November	3, 032
December		December	5, 591	December	4, 869

30. Present statistics of the rate prevailing in respect to the resale agreements against acceptances with changes in the rate and the date of each change since the inception of such agreements.

Atlanta.—None.

Boston.—

Statistics of rates prevailing in respect to the resale agreements against acceptances with changes in the rates and the date of each change, since the inception of such agreements

Date	Rate	Daily average amount of acceptances held for dealers on resale agreements
1919		
Jan. 16 [1]	4¼	(2)
Period ending—		
Feb. 15	4¼ -4¼	(2)
Mar. 15	4¼ -4 3/16	(2)
Apr. 15	4¼ -4 3/16	(2)
May 15	4⅛ -4 3/16	(2)
June 15	4⅛ -4¼	(2)
July 15	4⅛ -4¼	(2)
Aug. 15	4⅛ -4¼	(2)
Sept. 15	4⅛ -4 5/16	(2)
Oct. 15	4 3/16-4 5/16	(2)
Nov. 15	4¼ -4 5/16	(2)
Dec. 15	4½ -4¾	(2)
1920		
Jan. 15	4¾ -5⅜	(2)
Feb. 15	4⅞ -5⅝	(2)
Mar. 15	5½ -6¼	(2)
Apr. 15	5⅝ -6¼	(2)
May 15	5¾ -6¼	(2)
June 15	6 -6½	(2)
July 15	6⅛ -6⅜	(2)
Aug. 15	6 -6⅜	(2)
Sept. 15	6 -6⅜	(2)
Oct. 15	6¼ -6⅜	(2)
Nov. 15	6⅛ -6⅜	(2)
Dec. 15	6 -6½	(2)
1921		
Jan. 15	5¾ -6½	(2)
Feb. 15	5¾ -6¼	(2)
Definite rate established		
Feb. 11	5¾	(2)
May 16	5⅝	(2)
July 12	5½	(2)
July 22	5¼	(2)
July 28	5	(2)
Oct. 7 [3]	4¾	(2)
Oct. 17	4⅝	(2)
Nov. 7	4½	(2)
Nov. 21	4⅜	(2)
Nov. 28	4¼	(2)
Dec. 27	4⅜	(2)
1922		
Jan. 3	4¼	(2)
Jan. 9	4⅛	(2)
Mar. 20 [4]	3¾	(2)
Mar. 27	3⅝	(2)
Apr. 4	3⅜	(2)
Apr. 10	3½	(2)
Apr. 17	3⅜	(2)
Apr. 24	3¼	(2)
May 8	3⅛	(2)
June 5	3¼	(2)
June 12	3⅛	(2)
June 19	3	(2)
Sept. 18	3⅛	(2)
Sept. 20	3¼	(2)
Oct. 3	3½	(2)
Oct. 16	3¾	(2)
Oct. 23	4	(2)
Nov. 14	4⅛	(2)
Nov. 20	4	(2)
1923		
Apr. 23	4¼	(2)
May 7	4⅛	(2)
October		$649
November		1,092
December		1,118
1924		
January		904
Jan. 16	4	
February		945
March		786
April		1,239
May		497
May 1	3½	
May 19	3⅛	
May 22	3	
June		696
June 9	2¾	
June 18	2⅜	
June 30	2⅛	
July		943
July 1	2	
August		766
Aug. 25	2¼	
September		1,020
Sept. 22	2⅛	
October		1,391
Oct. 10	2¼	
November		1,771
Nov. 17	2⅜	
Nov. 28	2⅝	
December		539
Dec. 3	2¾	
Dec. 5	2⅞	
Dec. 22	3	

[1] Beginning Jan. 16, 1919, this bank purchased acceptances on resale agreements at the current open-market rates in effect at the time of purchase. This policy continued uutil Feb. 11, 1921, when definite rates were established. Unindorsed bills were purchase one-eighth and one-fourth of 1 per cent above the current rate according to grades and maturities. Many rates were therefore involved, and for this reason we present the range of rates for prime bills of all maturities for periods ending the 15th day of each month from Jan. 16, 1919, to Feb. 15, 1921.

[2] Averages not available.

[3] Beginning Oct. 7, 1921, to Mar. 27, 1922, our buying rate was the same as dealers' buying rate.

[4] Beginning Mar. 27, 1922, to Jan. 8, 1926, our buying rate was one-eighth of 1 per cent less than dealers' buying rate. Rates beginning Feb. 11, 1921, are for 90-day prime bills.

Statistics of rates prevailing in respect to the resale agreements against acceptances with changes in the rates and the date of each change, since the inception of such agreements—Continued

Date	Rate	Daily average amount of acceptances held for dealers on resale agreements
1925		
January		$758
February		516
Feb. 10	3⅛	
March		577
Mar. 2	3¼	
April		854
Apr. 15	3⅛	
May		1,072
May 25	3¼	
June		833
July		1,070
August		929
Aug. 31	3½	
September		518
October		717
November		859
December		736
1926		
January		1,643
February		1,351
March		1,107
April		2,425
May		1,363
June		1,423
July		1,429
August		563
Aug. 23	3¾	
September		291
October		677
November		820
December		1,940
1927		
January		3,011
February		2,795
March		2,873
April		1,864
May		2,670
June		2,468
July		1,293
July 22	3⅝	
July 29	3⅜	
August		2,275
Aug. 5	3¼	
September		2,606
October		2,445
November		1,796
December		2,207
1928		
January		2,289
February		1,392
Feb. 3	3½	
March		2,308
April		2,395
Apr. 13	3¾	
May		1,846
May 18	4	
1928		
June		$2,286
July		2,111
July 13	4½	
August		1,854
September		2,247
October		5,809
November		4,477
December		2,187
1929		
January		2,444
Jan. 4	4¾	
Jan. 21	5	
February		2,412
March		1,287
Mar. 21	5¼	
Mar. 26	5½	
April		1,226
May		2,082
June		1,371
July		2,727
July 12	5¼	
August		2,186
Aug. 9	5⅛	
September		2,321
October		2,116
November		1,098
Nov. 1	4¾	
Nov. 15	4¼	
Nov. 22	4	
December		3,109
1930		
January		2,556
February		2,068
Feb. 11	3⅞	
March		1,960
Mar. 5	3¾	
Mar. 6	3½	
Mar. 11	3¼	
Mar. 19	3	
April		2,705
May		1,622
May 2	2¾	
May 8	2⅝	
May 20	2½	
June		2,225
June 5	2⅜	
June 16	2¼	
June 20	2⅛	
June 30	2	
July		2,428
August		1,318
September		1,584
October		1,863
November		482
December		854
Dec. 24	1¾	

Chicago.—This bank has never applied a fixed rate for resale agreements against acceptances. Our practice has always been and still is to take bills from dealers on repurchase agreements at the dealers' buying rates for such bills which are one-eighth of 1 per cent to one-fourth of 1 per cent higher than the dealers' selling rates, but not less than our buying rates for such bills. The resale agreement rates therefore fluctuate automatically in accordance with the dealers' buying rates for bills as to all maturities, and we are protected in loaning to dealers so that bills are not taken under such agreements at less than our buying rates.

Cleveland.—We have had no transaction since 1923, but prior to that time whenever bankers' acceptances were purchased under resale agreements the rate we charged was the same rate at which the dealer had acquired the acceptances, so there was no profit to the dealer in selling the bills to us under resale agreement.

Dallas.—

Rate prevailing at the Federal Reserve Bank of Dallas on resale agreements against bankers' acceptances, showing date of each change since January, 1922

Date	Sales contract	Date	Sales contract	Date	Sales contract
Jan. 1, 1922	6	July 13, 1928	4½	Mar. 7, 1930	3½
Jan. 18, 1922	4	Jan. 8, 1929	4¾	Mar. 12, 1930	3¼
June 13, 1922	3	Jan. 23, 1929	5	Mar. 20, 1930	3
Aug. 31, 1925	3¼	Mar. 22, 1929	5¼	May 3, 1930	2¾
Jan. 7, 1926	3½	Mar. 26, 1929	5½	May 9, 1930	2⅝
Aug. 23, 1926	3¾	July 9, 1929	5¼	May 20, 1930	2½
July 22, 1927	3⅝	Nov. 1, 1929	4¾	June 6, 1930	2⅜
Aug. 5, 1927	3¼	Nov. 15, 1929	4¼	June 16, 1930	2¼
Feb. 3, 1928	3½	Nov. 22, 1929	4	June 20, 1930	2⅛
Apr. 13, 1928	3¾	Feb. 13, 1930	3⅞	July 1, 1930	2
May 18, 1928	4	Mar. 5, 1930	3¾	Dec. 24, 1930	1¾

Kansas City.—None.

Minneapolis.—See answer to question 29.

New York.—

Resale agreement rates against acceptances

Date effective	Rate	Date effective	Rate	Date effective	Rate
1918		1924		1929	
Aug. 16	4¼	May 26	3⅛	Jan. 4	4¾
		June 17	2½	Jan. 21	5
1919		Sept. 3	2	Mar. 21	5¼
Nov. 28	4½	Nov. 17	2¼	Mar. 25	5½
Dec. 29	4¾	Nov. 28	2½	July 11	5¼
		Dec. 5	2¾	Aug. 9	5⅛
		Dec. 22	3	Oct. 25	5
1920				Nov. 1	4¾
Jan. 23	5¼	1925		Nov. 15	4¼
June 28	5¾	Aug. 28	3¼	Nov. 22	4
1921		1926		1930	
Aug. 2	5¼	Jan. 8	3½	Feb. 11	3⅞
Sept. 26	5	Aug. 23	3¾	Mar. 5	3¾
Oct. 4	4¾			Mar. 6	3½
Nov. 3	4½	1927		Mar. 11	3¼
		July 21	3⅝	Mar. 19	3
		July 29	3⅜	May 2	2¾
1922		Aug. 5	3¼	May 8	2⅝
Mar. 6	4			May 19	2½
Mar. 22	3½	1928		June 5	2⅜
July 5	3¼	Feb. 3	3½	June 16	2¼
Oct. 17	3½	Apr. 13	3¾	June 20	2⅛
Oct. 23	3¾	May 18	4	June 30	2
Oct. 27	4	July 13	4½	Dec. 24	1¾

Philadelphia.—During 1922 and the early part of 1923 we extended a limited amount of accommodation to one dealer, under this arrangement.

Rates charged on resale agreements against acceptances

1921

October, 4¾ per cent.
November, 4⅜, 4½, and 4¾ per cent.
December, 4⅛, 4¼, 4⅜, and 4½ per cent.

1922

January, 4, 4⅛, 4⅜, and 4½ per cent.
February, 4⅛ per cent.
March, 4⅛ per cent.
April, 3½ per cent.
May, 3¼ and 3⅜ per cent.
June, 3¼ per cent.
August, 3⅛ per cent.
September, 3⅜ per cent.
October, 3⅝ and 4⅛ per cent.
November, 4⅛ per cent.
December, 4, 4⅛, 4¼, and 4 3/16 per cent.

1923

January, 4 and 4⅛ per cent.
February, 4 and 4⅛ per cent.
March, 4.
April, 4, 4⅛, and 4⅜ per cent.
May, 4¼ and 4⅜ per cent.
June, 4¼ per cent.

From July, 1923, to December, 1930, no agreements.

Richmond.—We have no resale agreements.

St. Louis.—Have had no resale agreements in effect since January, 1924. The few in effect prior to that time were on a basis of a rate equivalent to that at which the dealer bought the bills.

San Francisco.—In the beginning (1921), the carrying rate for bills was fixed at the actual rate which each bill was purchased by the dealer in the market.

When bills were being withdrawn each day for sale to investors, that procedure was found somewhat clumsy, so an average rate was fixed with the object of leaving no profit to the dealer in his carrying operations.

Later, conditions again changed, making it desirable at times to fix a rate which would provide sufficient penalty to cause the dealer to seek cheaper funds elsewhere. (See questionnaire No. 10, question 31.)

While banks are borrowing, they will not advance funds to dealers to carry a portfolio. The Federal resrve bank, under such circumstances, has felt it a necessary service to accepting banks and investors to provide limited accommodation, so that dealers would not cease to buy and distribute bills.

The following will show the variations between open market bid rates and dealers' carrying rates during recent years:

Date of change	Carrying rate	Bid 90 d/3	Date of change	Carrying rate	Bid 90 d/3
Jan. 8, 1926	3⅝	3⅞	Nov. 5, 1929	4¾	4¾
Apr. 26, 1926	3½	3¼	Nov. 19, 1929	4¼	4
Aug. 24, 1926	3¾	3⅞	Nov. 25, 1929	4	3¾
Aug. 9, 1927	3¼	3¼	Feb. 24, 1930	3⅞	3⅞
Feb. 3, 1928	3½	3¾	Mar. 5, 1930	3¾	3¾
Apr. 12, 1928	3¾	4	Mar. 6, 1930	3½	3½
May 28, 1928	4	4⅛	Mar. 11, 1930	3¼	3½
July 13, 1928	4¼	4½	Apr. 4, 1930	3	3
Aug. 1, 1928	4½	4¾	May 7, 1930	2¾	2¾
Jan. 4, 1929	4¾	5	May 8, 1930	2⅝	2⅝
Jan. 21, 1929	5	5⅛	May 20, 1930	2½	2⅝
Mar. 21, 1929	5¼	5¼	June 5, 1930	2⅜	2⅜
Mar. 26, 1929	5½	5¾	June 17, 1930	2¼	2¼
July 16, 1929	5¼	5¼	June 24, 1930	2⅛	2⅛
Oct. 29, 1929	5	4⅞	July 1, 1930	2	2

31. To prevent the seepage of Federal reserve credit into the speculative or investment market, does your institution inquire into the use of the funds extended to dealers under resale agreements?

Atlanta.—No such agreements are entered into by this bank.

Boston.—This institution does not inquire into the use of the funds extended to dealers under resale agreements.

Chicago.—We do not inquire for the reason that credits extended to dealers under resale agreements are for the purpose of paying for the bills which they purchase and we do not see therefore how such funds could get into the speculative or investment market.

Cleveland.—No dealers, consequently no transactions.

Dallas.—It has been unnecessary to do this because the funds obtained from us are used to carry the dealers' portfolio pending prompt distribution.

Kansas City.—We have had no resale agreements with dealers; consequently, this question does not apply to us.

Minneapolis.—See answer to question 29.

New York.—This question relates to similar questions with respect to Government securities, question No. 7 in questionnaire No. 7 and question No. 11 in questionnaire No. 9, in the answers to which the problem is more fully considered and to which reference is hereby made.

As to the first use of the proceeds of funds placed in dealers hands under resale agreements for bills, no inquiry is necessary. Dealers take accommodation from us solely for the purpose of carrying their portfolios of bills at times when outside funds against such bills as collateral are not available, either in sufficient amount or at rates economically possible for them to pay. When they sell the bills they must repurchase them from us to enable them to nake delivery and when outside money becomes available they shift their bills from us into loans from banks and bankers.

Philadelphia.—We have never extended accommodation to dealers under resale agreements, with the exception stated elsewhere. The bills bought in the district are carried mainly in New York and Boston.

Richmond.—We have no resale agreements.

St. Louis.—Not having had any resale agreements since January, 1924, we have had no occasion to make inquiry.

San Francisco.—Inasmuch as the dealers keep the Federal reserve bank informed as to the amount of their portfolios, the reserve bank is informed as to the amount of credit dealers require and there is little opportunity to misuse credit.

While banks are rediscounting they will not accommodate dealers. Immediately the banks are in funds they offer dealers credit, which, if accepted, relieves the Federal reserve bank of the dealer's obligations.

Federal reserve rate is so fixed as to create an incentive to borrow elsewhere as soon as surplus funds appear in the market.

It has been felt that portfolios should have a direct relationship to the dealers' demands from investors, and that the Federal reserve bank should not accommodate dealers which were carrying bills with any other object in view. The carrying rate would be used as the corrective measure, if any correction were required.

32. Append statistics showing the average life of resale agreements since January, 1922.

Atlanta.—No such agreements are entered into by this bank.

Boston.—

Average life of resale agreements since January, 1922

[Bankers' acceptances]

Month	1923	1924	1925	1926	1927	1928	1929	1930
	Days	*Days*	*Days*	*Days*	*Days*	*Days*	*Days*	*Days*
January	11.2	7.0	7.8	9.3	10.8	10.0	10.6	8.1
February	12.1	7.9	7.6	9.9	9.8	10.4	9.4	9.0
March	11.6	8.0	10.1	10.4	10.5	10.4	10.1	9.7
April	12.4	9.4	11.3	10.9	10.2	9.2	10.1	10.6
May	11.9	6.4	9.1	10.7	10.7	10.4	9.8	9.0
June	10.0	3.3	10.2	9.8	10.1	12.3	9.5	9.5
July	10.1	7.0	8.8	10.1	10.7	10.6	10.3	10.5
August	11.5	2.3	9.5	10.7	11.0	11.6	10.7	11.0
September	11.3	4.7	9.4	10.6	10.9	11.4	10.1	11.1
October	11.3	7.4	9.1	10.2	10.6	10.5	8.7	11.0
November	11.1	5.3	5.5	8.8	9.4	10.7	7.0	10.9
December	9.6	7.6	8.8	8.9	11.6	10.2	8.9	10.0
Yearly average	11.2	7.1	9.2	10.0	9.5	10.5	9.8	9.7

Chicago.—We have no way of determining accurately the average life of sales contracts for the reason that dealers sell us their bills with agreement to buy them back within 15 days, and during the 15-day period they withdraw the bills that they are able to sell, reducing the contract almost daily.

We would estimate the average life of our sales contracts covering bankers' acceptances at 10 days.

Cleveland.—We have but one transaction under repurchase agreement since 1923. The amounts of those transactions prior to 1923, as shown by the schedule attached to question No. 29, were insignificant and the average life of the agreement approximately 15 days.

Dallas.—We estimate that the average life of the resale agreements which we have handled is not over 10 days.

Kansas City.—Same answer as to question 31.

Minneapolis.—See answer to question 29.

New York.—The average life of a particular agreement is not a test of the accommodation extended to any particular dealer, as there are frequently several agreements for a given dealer running concurrently, from which withdrawals are made as necessary for the dealer to make delivery on bills sold to investors. A more accurate picture of the extent of our accommodation to the market under resale agreements is the average amount of our holdings of bills under resale agreements and the number of days in each month when there were no such holdings. The data requested and the other information referred to given below.

Statistics pertaining to acceptances held under resale agreements by Federal Reserve Bank of New York monthly from January 1, 1922, to December 31, 1930

Date	Average life in days of resale agreements	Average balance of acceptances held under resale agreements (in thousands)	Number of days during month on which no bills were held under resale agreements	Date	Average life in days of resale agreements	Average balance of acceptances held under resale agreements (in thousands)	Number of days during month on which no bills were held under resale agreements
1922				1925			
January	11	$17,868	6	January	7	$13,227	9
February	8	11,411	....	February	10	13,864	....
March	8	9,348	6	March	8	12,332	6
April	10	8,663	....	April	10	22,100	....
May	10	9,568	....	May	13	30,784	....
June	11	12,822	7	June	13	19,157	....
July	10	16,284	....	July	13	17,810	....
August	11	7,387	....	August	11	9,342	....
September	10	11,397	....	September	11	10,923	....
October	14	12,565	....	October	14	23,726	....
November	12	13,443	....	November	14	24,480	....
December	12	14,194	....	December	13	29,755	....
1923				1926			
January	9	10,158	....	January	11	13,526	....
February	10	8,700	....	February	14	30,129	....
March	9	9,461	....	March	13	29,542	....
April	9	7,730	....	April	10	19,837	3
May	12	13,694	....	May	13	49,481	....
June	13	19,230	....	June	12	25,790	....
July	13	15,935	....	July	12	17,587	....
August	13	14,997	....	August	9	5,235	....
September	11	15,417	....	September	11	10,170	....
October	14	18,877	....	October	10	13,674	....
November	14	35,423	....	November	14	31,820	....
December	13	35,177	....	December	13	56,571	....
1924				1927			
January	14	[illegible]9,477	....	January	14	35,316	....
February	13	46,118	....	February	12	31,068	....
March	13	31,900	7	March	11	29,532	....
April	9	24,633	....	April	13	33,313	....
May	6	15,292	19	May	14	33,152	....
June	....	14,525	26	June	9	32,470	10
July	7	20,640	21	July	8	4,996	8
August	....	....	31	August	14	42,545	....
September	11	3,674	7	September	14	51,663	....
October	10	27,558	....	October	13	51,000	....
November	8	15,297	....	November	13	33,907	....
December	8	19,604	3	December	14	53,990	....

Statistics pertaining to acceptances held under resale agreements by Federal Reserve Bank of New York monthly from January 1, 1922, to December 31, 1930—Con.

Date	Average life in days of resale agreements	Average balance of acceptances held under resale agreements (in thousands)	Number of days during month on which no bills were held under resale agreements	Date	Average life in days of resale agreements	Average balance of acceptances held under resale agreements (in thousands)	Number of days during month on which no bills were held under resale agreements
1928				1929			
January	11	$36,133	1	July	8	$13,693	4
February	13	26,493	----------	August	10	41,535	----------
March	13	30,055	----------	September	12	59,780	----------
April	12	38,147	----------	October	6	22,467	1
May	10	14,994	----------	November	7	8,763	14
June	7	4,542	6	December	13	62,777	----------
July	10	6,840	----------				
August	9	9,161	----------	1930			
September	13	34,440	----------	January	12	95,613	----------
October	14	52,977	----------	February	10	54,714	----------
November	13	47,053	----------	March	11	47,767	1
December	13	39,916	----------	April	12	78,777	----------
				May	10	25,426	----------
1929				June	7	23,354	2
January	13	32,581	----------	July	9	12,681	4
February	11	19,414	----------	August	7	6,340	11
March	7	17,307	3	September	5	8,253	11
April	9	8,233	----------	October	9	10,016	----------
May	10	18,900	4	November	7	1,796	6
June	5	5,917	6	December	9	17,781	----------

Philadelphia.—

Average life of resale agreements on acceptances

	Number	Amount		Number	Amount
1922			1922		
January	14	$939,527.22	November	2	$95,000.00
February	5	277,376.69	December	4	352,493.48
March	6	483,353.19			
April	3	170,947.73	1923		
May	4	148,977.25	January	16	573,737.92
June	1	250,000.00	February	5	103,215.50
July	----------	----------	March	3	140,000.00
August	6	387,864.03	April	4	220,000.00
September	1	75,000.00	May	2	19,230.19
October	4	213,072.24	June	1	7,000.00

From July, 1923, to December, 1930: Nothing.
About 50 per cent of these agreements run from 1 to 15 days and the remainder up to 90 days.

Richmond.—We have no resale agreements.
St. Louis.—

Statistics showing life of repurchase agreements

Date	Days															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
1922	5	----	4	3	3	2	1	----	1	1	1	----	----	1	1	23
1923	1	1	3	3	1	----	----	1	----	----	----	1	----	----	----	11
1924	----	1	----	----	2	1	----	----	----	----	----	----	----	----	----	4

Average 4.97 days.

San Francisco.—The maximum length of an agreement is 15 days.

When the investment market is active, bills are withdrawn very rapidly. Frequently, agreements are broken down in part to make deliveries to investors within 1, 2, or 3 days. At times the life of agreements averages 4 or 5 days and at other times 10 or 12 days.

33. What, in the experience of your institution, has been the relationship between changes in the amount of acceptances held under resale agreement and the amount held in the dealers' portfolios? The relationship of the resale agreement rate in force at your institution and market rates of interest on acceptances as regards the volume of bills held under resale agreement?

Atlanta.—Our institution has had no experience with such resale agreements.

Boston.—It usually follows that during periods when the dealers' portfolios are the highest it has been the result of a slackening in the demand for bills. It is during these periods that the dealer will usually sell more of his bills to Federal reserve banks on repurchase agreements, relieving him of the necessity of dumping his bills on the open market oftentimes at losses.

During the year 1928, more particularly during the latter half of the year and the first quarter of 1929, rates advanced from 3⅜ per cent to 5⅝ per cent. The supply of new bills coming into the market, especially during the fall of 1928, continued large, reflecting the usual seasonal increase, while the investment demand was insufficient to absorb this increased supply, consequently, dealers' portfolios in this district reached a high of nearly $18,000,000 with the result that dealers found it necessary to sell many of their bills to us on their resale agreement. Their holdings with us during this period were the highest since the inception of the agreement. During the periods when a good investment demand for bills exists, dealers' portfolios decline to a minimum and their offerings to us on resale agreements will be negligible. This latter condition was particularly true at the end of 1930, when the aggregate amount of all acceptances offered by dealers on their resale agreements averaged a little more than $500,000 a day. (See figures, questionnaire No. 10, answer No. 30.) Our usual buying rates for acceptances on resale agreements vary from one-eighth per cent less to one-eighth per cent more than the dealers' buying rate for 90-day prime bills. Exceptions to this are made from time to time, dependent upon the support that Federal reserve banks feel it is necessary to extend to dealers relative to existing conditions. For example, at the present time there is a scarcity of bills due to an excellent investment demand and as there is little need for Federal reserve support, our rate to dealers on resale agreements is one-fourth per cent higher than the open-market rate for 90-day prime bills. Should this present condition be reversed, and we felt that dealers needed support, our rates would undoubtedly be changed to meet this condition.

Chicago.—The amount of acceptances held under resale agreement is usually greater when money rates in the open market are high and does not necessarily have relationship to the amount held in the dealers' portfolios. When the dealers are able to obtain money cheaper in the open market they borrow against bills in the open market instead of carrying resale agreements with us. Inasmuch as the dealer has no profit in carrying bills with us under resale agreements, because he pays us the same rate at which he bought the bills, it is to his advantage to sell them as quickly as possible or to borrow money in the open market against them whenever the open market rate is less than the rate he pays us.

Cleveland.—No dealers, consequently can not answer.

Dallas.—(1) As the demand for bills declines the amount held under repurchase agreement increases and the bill dealer's portfolio decreases. Under conditions of active demand for bills the relationship moves in the opposite direction.

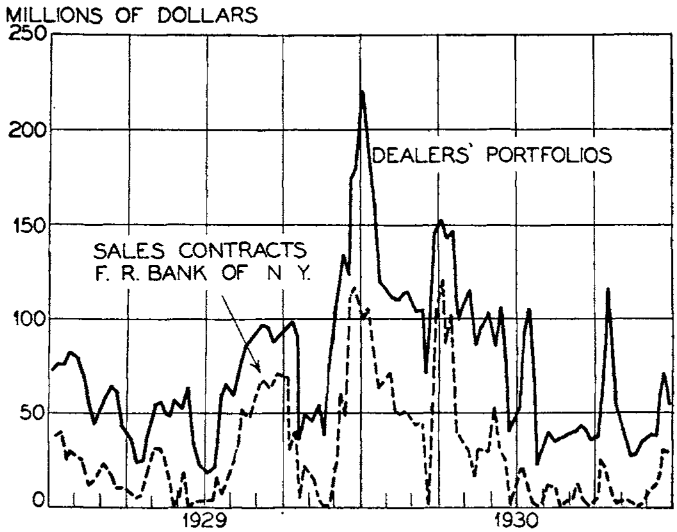
(2) Inasmuch as member banks in this district do not lend on call against bills, the repurchase rate in effect at this institution is the only rate applicable to the volume of bills held by dealers in this district pending distribution.

Kansas City.—Same as answer to question 31.

Minneapolis.—See answer to question 29.

New York.—As the vast bulk of acceptances carried in portfolios by dealers is carried in one way or another on borrowed money, it follows that their need for money accommodation increases as their portfolios increase, and the decline is accordingly relative. The relationship of our repurchase agreement rate and the market call rate for loans against acceptances affects the volume of bills carried by us for dealers under repurchase agreement for the reason explained in the answers to this and previous questions. When outside money is not available in amounts sufficient to meet dealers' requirements, or is available only at rates which it is economically impossible for the dealers to pay, dealers come to us for accommodation. When it is in sufficient supply at rates below, equal to, or even somewhat above our rates, they use the market. Ordinarily the position of a dealer in this country is that it costs him money in his interest account to carry his portfolio. Therefore, he is required to be more active on the trading side than are London discount houses who buy more for the carry at a profit in the interest account.

The accompanying diagram shows, for the years 1929 and 1930, a comparison of the total of dealers' portfolios with the amounts of sales contracts held by this bank.



Comparison of amount of bills in dealers' portfolios with amount of bills held by the Federal Reserve Bank of New York under sales contracts, weekly, 1929–30

Philadelphia.—None.

Richmond.—We have no resale agreement.

St. Louis.—None.

San Francisco.—There does not appear to be any relationship between the size of a dealers' portfolio and the amount being carried under repurchase agreement by the Federal reserve bank. Dealers carry what they believe to be their marketing requirements to the extent they can obtain financing at an average profit from the commercial banks and the Federal reserve bank.

Dealers' portfolios express a forecast of future rates and future demand for bills by investors. The amount of credit (and the possible cost) which can be expected from commercial banks and the Federal reserve bank are also important factors in determining the size of portfolios.

If dealers could depend always on carrying rates which involved a profit, it would result in their accumulating large portfolios.

Lower open market rates would be a consequence of more active buying by dealers to carry large and profitable portfolios. The effect would be the same as more active buying in the open market by the Federal reserve banks.

Inasmuch as San Francisco maintains a carrying rate which is designed to have dealers borrow elsewhere if funds are available, its carrying rate has not been a cheapening factor in the money market.

An understanding exists with dealers that they will not maintain portfolios beyond their marketing requirements while they expect the Federal reserve bank to afford relief in a stringency.

APPENDIX

DIGEST OF STATE LAWS RESPECTING THE ACCEPTANCE POWER OF STATE BANKS AND TRUST COMPANIES AND RESPECTING ACCEPTANCE CORPORATIONS

(Prepared by the different Federal reserve banks)

Federal Reserve Bank of Atlanta

Memorandum as to the laws of the States included within the Sixth Federal Reserve District touching the acceptance powers of State banks and the limitations on the amount of acceptances which State banks may discount

ALABAMA

1. Banks may accept drafts or bills of exchanges drawn upon them, having not more than six months sight to run exclusive of days of grace and growing out of transactions involving the importation or exportation of goods or out of transactions involving the domestic shipment of goods if shipping documents, conveying or securing title, are attached at the time of acceptance or if, at the time of acceptance, such bills were secured by warehouse receipts or similar documents, conveying or securing title, covering readily marketable staples. Banks must keep careful records of all such acceptances, showing the same as liabilities on general books. (Michie's Annotated Code of Alabama, 1928, sec. 6377.)

2. No bank shall accept for any one person, etc., to an amount equal at any time in the aggregate to more than 10 per cent of its paid up and unimpaired capital stock and surplus, unless the bank is secured either by attached documents or some other actual security growing out of the same transactions as the acceptance, and no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half of its paid up and unimpaired capital stock and surplus. Banks which are members of the Federal reserve system may accept such bills to an amount not exceeding in the aggregate at any time 100 per cent of its paid up and unimpaired capital stock and surplus, but the aggregate of acceptances growing out of domestic transactions shall in no event exceed 50 per cent of such capital and surplus. (Michie's Annotated Code of Alabama, 1928, sec. 6378.)

FLORIDA

1. Statutes provide that no banking company shall at any time be indebted or in any way liable to an amount exceeding its capital stock at such time actually paid in, etc., except on account of certain demands, including "the discount and rediscount of any bills payable, bills receivable, domestic and foreign bills of exchange, trade acceptances and bankers' acceptances;" with the proviso that such indebtedness shall be incurred under such restrictions, limitations and regulations as may be imposed by the comptroller. (Compiled General Laws of Florida, 1927, vol. 3, sec. 6073.)

Under the above provisions, banks are given the power to discount acceptances but the statutes do not confer the right to make or issue acceptances.

GEORGIA

1. In the enumeration of the general powers of banks appears a statement of the power "to issue and sell acceptances." (Michie's Annotated Georgia Code, 1926, sec. 2366 (135).)

2. No bank shall be at any time indebted to an amount exceeding double the amount of its capital stock actually paid in and remaining undiminished by loss or otherwise, plus the amount of unimpaired surplus and undivided profits except on account of certain items, including "acceptances as herein authorized." (Michie's Annotated Georgia Code, 1926, sec. 2366 (171).)

No bank shall be allowed to lend to any person, etc., more than 20 per cent of its capital and unimpaired surplus, etc., but "liabilities arising to the makers and indorsers of bank drafts, bills of exchange received by the bank on deposit, cashed or purchased by it shall not be considered as borrowed money or loans." (Michie's Annotated Georgia Code, 1930 Supplement, sec. 2366 (159).)

LOUISIANA

No provision authorizing banks to accept drafts nor limiting its powers with respect to the making or discount of acceptances.

MISSISSIPPI

1. A bank may accept drafts or bills or exchange drawn upon it having not more than six months sight to run, exclusive of grace, and growing out of transactions involving the shipment of goods: *Provided,* Shipping documents, conveying or securing title, are attached at the time of acceptance or which are secured by warehouse receipts or other documents conveying or securing title, covering readily marketable staples, not subject to rapid deterioration. (Mississippi Code, 1930, Annotated, sec. 3831.)

2. No bank shall accept for any one person, etc., to an amount equal at any time in the aggregate to more than 10 per cent of its paid up and unimpaired capital stock and surplus unless the bank is secured by such attached documents, and no bank shall accept to an amount equal at any time in the aggregate to more than one-half of its paid up and unimpaired capital and surplus. (Mississippi Code, 1930, Annotated, sec. 3831.)

TENNESSEE

1. All banks and trust companies are authorized to accept time bills of exchange drawn upon them and to issue letters of credit authorizing holders thereof to draw drafts upon them or their correspondents at sight or on time not exceeding one year. (Baldwin's Cumulative Code, Supplement 1920, sec. 3235a–8.)

2. It is not lawful for any bank in Tennessee, directly or indirectly, to increase its total liabilities beyond the amount of its total solvent assets.

Federal Reserve Bank of Boston

Digest of State laws respecting acceptance powers of State banks. Limitations on amount of acceptances which State banks may discount. Provisions of State law permitting acceptance banks of the type permitted by provisions of the Edge act

CONNECTICUT

Under section 3901 of the General Statutes, any State bank or trust company may accept for payment at a future date, not exceeding six months, drafts drawn by its patrons but no bank shall accept such drafts in the aggregate to an amount exceeding 50 per cent of its capital and unimpaired surplus.

Under section 3901, no bank shall accept for payment from one person, firm or corporation, an amount exceeding 10 per cent of its capital stock and unimpaired surplus, surplus in this instance including surplus, profits and losses and all other items of excess earnings except interest paid in advance. The liability of customers under this section may be in addition to all liabilities provided for loans to one person under another section of the General Statutes.

Under section 3901, a record of acceptances must be kept in such form as approved by the bank commissioner and under section 3903 any acceptances issued under the provisions of section 3901 shall be either of a draft or bill of exchange drawn in good faith against actually existing values with bills of lading or warehouse receipts attached, or with stocks or bonds of known value and worth at least 20 per cent in excess of the draft, or of commercial or business paper owned by the person or firm negotiating the same and indorsed by such person or persons without limitation and subject to the restrictions defined in section 3901.

While the State has passed a law (ch. 135, Public Acts of 1925) under which the provisions of the General Statutes relating to reserves and cash balances of State banks and trust companies shall not apply to any bank or trust company which is a stockholder in any Federal reserve bank, it has not adopted any law conferring upon banks which are members of the Federal reserve system the powers which member banks may exercise under the Federal reserve act.

The amount of acceptances which the commercial departments of State banks and trust companies may discount is not specifically limited by law but the commissioner is of the opinion that if such acceptances were discounted for a customer the amount thereof would be included with other borrowings and that the limitations prescribed by sections 3900 and 3905 covering loans to one person and to directors respectively, would apply. Under section 3908 and section 3995 of the General Statutes, not exceeding 10 per cent of deposits in the savings departments of State banks and trust companies and of deposits in mutual savings banks (including the surplus of the latter) may be invested in bills of exchange drawn by the seller on the purchaser of goods and accepted by such purchaser, provided such bill of exchange is indorsed by any national bank, member of a Federal reserve bank, State bank or trust company in this State or in Boston, Mass., Providence, R. I., New York, N. Y., or Philadelphia, Pa., and in the acceptance authorized by section 13 of the Federal reserve act or any amendment thereto, of any national bank, or member of a Federal reserve bank, in this State, in Boston, Mass., Providence, R. I., New York, N. Y., or Philadelphia, Pa., or of any State bank or trust company in this State which may be authorized to issue such acceptances, nor shall the amount invested in such acceptances and bills of exchange of any one bank by any savings bank, when added to the sum of any funds deposited by the savings bank in such bank, exceed 30 per cent of the capital stock, surplus, and undivided profits of such depositary bank.

The State does not have any law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

MAINE

Under section 61 of chapter 57 of the Revised Statutes, any trust company organized under the laws of the State has the power, subject to such restrictions as may be imposed by the bank commissioner, to accept for payment at a future date drafts and bills of exchange drawn upon it and to issue letters of credit authorizing holders thereof to draw drafts upon it, or its correspondents, at sight or on time: *Provided,* That such acceptances or drafts be based upon actual values, but no trust company shall accept such bills or drafts to an aggregate amount exceeding at any one time one-half of its paid-up capital and surplus, except with the approval of the bank commissioner, and in no case to an aggregate amount in excess of its capital and surplus.

Under section 80 of chapter 57 of the Revised Statutes, any trust company may become a stockholder in a Federal reserve bank within the Federal reserve district where said trust company is situated and may have and exercise any and all of the corporate powers and privileges which may be exercised by member banks under the provisions of the Federal reserve act or any acts in amendment thereof or in addition thereto.

The amount of acceptances which may be discounted by the commercial and the savings departments of trust companies is not limited by law but acceptances discounted by the savings department must be segregated. Under paragraph 18 of section 27 of chapter 57 of the Revised Statutes, funds of savings banks and institutions for savings may be invested in bankers acceptances and bills of exchange of the kind and maturities made eligible by law for rediscount with Federal reserve banks: *Provided,* The same are accepted by a trust and banking company incorporated under the laws of this State, or a member of the Federal reserve system located in any of the New England States or the State of New York; and in bills of exchange drawn by the seller on the purchaser of goods sold and accepted by such purchaser of the kind and maturities, made eligible by alw for rediscount with Federal reserve banks: *Provided,* The same are indorsed by a trust and banking company incorporated under the laws of this State, or a member of the Federal reserve system located in any of the New England States or the State of New York. Not more than 10 per cent of the assets of any such bank shall be invested in such acceptances. The aggregate amount of the liability of any trust and banking company or of any national bank to any savings bank or institution for savings, whether as principal or indorser, for acceptances held by such savings bank or institution for savings, shall not exceed 20 per cent of the paid up capital and surplus of such trust and banking company or national bank, and not more than 5 per cent of the assets of any savings bank or institution for savings shall be invested in the acceptances of a trust and banking company or of a national bank of which a trustee of such savings bank or institution for savings is a director.

The State does not have any law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

MASSACHUSETTS

Under section 36 of chapter 172 of the General Laws, any trust company may, subject to such restrictions as may be imposed by the bank commissioner, accept for payment at a future date drafts and bills of exchange drawn upon it and issue letters of credit authorizing holders thereof to draw drafts upon it, or its correspondents, at sight or on time: *Provided*, That such acceptances or drafts be based upon actual values, but no such trust company shall accept such bills or drafts to an aggregate amount exceeding at any one time one-half of its paid-up capital and surplus, except with the approval of the commissioner, and in no case, to an aggregate amount in excess of its capital and surplus.

Under section 37 of chapter 172 of the General Laws, a trust company may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the import or export of goods, having not more than six months' sight to run, but no trust company shall accept such bills to an amount equal at any time in the aggregate to more than one-half of its paid-up capital stock and surplus.

Under section 40 of chapter 172 of the General Laws, the total liabilities of a person or firm for money borrowed from and drafts drawn on any trust company having a capital stock of $500,000 or more shall at no time exceed one-fifth of the surplus account and of the paid-up capital. Such total liabilities to any trust company having a capital stock of less than $500,000 shall at no time exceed one-fifth of the paid-up capital or one-tenth of the surplus account and of the paid-up capital.

Under section 48 of chapter 172 of the General Laws, a trust company which becomes a stockholder in a Federal reserve bank within the Federal reserve district where such trust company is situated and while such trust company continues as a member bank under the Federal reserve act or any acts in amendment thereof, may have and exercise any and all of the corporate powers and privileges which may be exercised by member banks under said Federal reserve act or any acts in amendment thereof or in addition thereto.

The amount of acceptances which the commercial departments of trust companies may discount is not limited by law. Under section 61 of chapter 172 and the eighth clause of section 54 of chapter 168 of the General Laws, deposits in the savings departments of trust companies and deposits in mutual savings banks (including income derived therefrom) may be invested in bankers' acceptances and bills of exchange of the kinds and maturities made eligible by law for rediscount with Federal reserve banks: *Provided*, That the same are accepted by a bank, banking association or trust company incorporated under the laws of the United States or of this Commonwealth, and having its principal place of business within the Commonwealth. Not more than 10 per cent of such deposits shall be invested in bankers' acceptances or bills of exchange, nor shall any such bank invest in the acceptances and bills of exchange eligible by law for rediscount with Federal reserve banks of any one accepting bank or trust company to an amount in excess of 5 per cent of such deposits. The aggregate amount of bankers acceptances and bills of exchange of any bank, banking association or trust company held by any such bank shall not exceed 25 per cent of the paid-up capital and surplus of such bank, banking association, or trust company.

The State does not have any law permitting acceptance banks of the type permitted by the provisions of the Edge Act, although corporations may be organized under the general business laws with broad powers in foreign transactions.

NEW HAMPSHIRE

The laws of the State do not confer any specific acceptance powers upon trust companies organized under the laws of the State. Section 31 of chapter 265 of the Public Laws of the State authorizes trust conpanies, among other things, "to do a general banking business."

Under section 7 of chapter 264 of the Public Laws of the State, a trust company which becomes a stockholder in a Federal reserve bank may have and exercise any and all of the corporate powers and privileges incident thereto which may be exercised by member banks under the provisions of the Federal reserve act or any acts in amendment thereof or in addition thereto.

Section 31 of chapter 265 of the Public Laws, authorizes trust companies "to negotiate, purchase, and sell stocks, bonds, and other evidence of debt," but it does not contain any provisions with reference to discount of acceptances by the commercial departments of trust companies or establishing any limitation which is applicable to the discount of bankers acceptances. Under section 9 of chapter 264 of the Public Laws, every trust company receiving savings deposits or transacting the business of a savings bank must conduct the business as a separate department which shall be amenable to the laws governing savings banks. Legal investments of savings banks (and of savings deposits in trust companies) are governed by chapter 262 of the Public Laws of the State. Under paragraph 7 of section 3 of that chapter, the funds of savings banks and of savings departments in banking and trust companies may be invested in notes with two or more signers, or one or more indorsers, or acceptances of member banks of the Federal reserve system of the kinds and maturities made eligible for rediscount or purchase by Federal reserve banks, or notes of makers with net assets of not less than $250,000 and with total indebtedness of not more than 50 per cent of their quick assets. Not exceeding 30 per cent of deposits shall be invested under paragraph 7: *Provided*, That, except in notes with two or more signers, or one or more indorsers, or in said acceptances, no savings bank shall invest under this paragraph unless its guaranty fund is full and unimpaired and the total value of its assets exceeds the amount of its deppósits by at least 10 per cent.

The State does not have any law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

RHODE ISLAND

Under section 2 of chapter 271 of the General Laws of the State, every bank and every trust company has the power to accept under its letters of credit, or other authorization, drafts or bills of exchange arising out of actual commercial transactions or issued or drawn for agricultural, industrial, or commercial purposes, at sight or on time not exceeding one year.

Under section 3 of chapter 278 of the General Laws, the total liabilities of any person, corporation, association, or firm, to any bank or trust company on account of or in connection with the acceptance by such bank or trust company of drafts or bills of exchange as aforesaid, shall at no time exceed 40 per cent of the paid-in and unimpaired capital and surplus of such bank or trust company. The foregoing limitations are separate from the limitation of total liabilities to any bank or trust company of any person, corporation, association, or firm for money borrowed.

Under section 9 of chapter 271 of the General Laws of the State, a bank or trust company may subscribe to the capital stock and become a member of a Federal reserve bank within the Federal reserve district where such bank or trust company is situated under the provisions of the Federal reserve act and any amendments thereof or additions thereto, and every such member bank or trust company may have and exercise any and all of the powers and privileges at which may be exercised by member banks under the provisions of the Federal reserve act.

The amount of acceptances which the commercial departments of State banks and trust companies may discount is not limited by law. Investments of deposits (and income thereon) in savings banks and of deposits in the savings or participation departments of State banks and trust companies is governed by section 1 of chapter 272 of the General Laws. Such section does not list bankers acceptances among the investments eligible for such deposits, but the bank commissioner advises that it has been ruled that savings banks can buy such acceptances under that clause of such section, which authorizes savings banks—if unable to make certain other investments—to invest not more than one-third of such deposits in "promissory notes" or other personal securities, payable and to be paid within six months from date thereof, with at least one responsible surety or secured by collateral with a market value of at least 20 per cent in excess of amount loaned thereon.

The State has no law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

VERMONT

The laws of the State do not confer any specific acceptance powers upon trust companies organized under its general laws. Under paragraph 6 of section 5347 of chapter 225 of the General Laws, a trust company has authority "to issue letters of credit."

Under an act approved February 21, 1919, a bank or trust company incorporated under the laws of this State has the power to subscribe to the capital stock and become a member of a Federal reserve bank and any such member bank is vested with all powers conferred upon member banks by the terms of the Federal reserve act.

The investment of assets of all banks is governed by section 5363 of chapter 225 of the General Laws of the State. Subdivision 12 of that section provides that a bank may invest in bankers acceptances and bills of exchange: *Provided,* The same are accepted by an incorporated savings bank or a savings bank and trust company or a national bank doing business in this State or by a bank incorporated in Boston, New York, or Philadelphia to an amount not to exceed 20 per cent of its deposits; and a bank may invest in notes indorsed or guranteed by any of the above-named banks to an amount not to exceed 20 per cent of its deposits.

The State does not have any law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

Federal Reserve Bank of Chicago

Digest of the Laws of States included in the seventh Federal reserve district respecting acceptance powers of State banks and the limitations on the amount of acceptances which State banks may discount

ILLINOIS

State banks and trust companies are permitted to accept under general provisions of the banking law, effective January 1, 1921, section 1, as follows: "It shall be lawful to form banks and banking associations, as hereinafter provided, for the purpose of discount and deposit, buying and selling exchange and doing a general banking business."

In Illinois banking law, 1925, section 10, it is provided that "The total liabilities to any association, of any person or of any corporation or firm for money borrowed, including in the liabilities of a company or firm the liabilities of the several members thereof, shall at no time exceed 15 per cent of the amount of the capital stock of such association actually paid in and unimpaired, and 15 per cent of its unimpaired surplus fund.

* * * * * * *

"*And, provided, also,* That the total liabilities of any such person, firm or corporation for money borrowed under the provisions of this section shall not exceed 25 per cent of the deposits of any such bank or association, and also that such total liabilities shall at no time exceed the amount of the capital stock of such bank or association."

WISCONSIN

State banks not members of Federal reserve system have no power to execute acceptances or trade acceptances, as shown by ruling in Wisconsin Banking Department Bulletin No. 22, November 3, 1922, based on an opinion of the Wiscosin Attorney General, October 18, 1922. And the case of American Express Co. *v.* Citizens State Bank, 181 Wisconsin 172, 194 N. W. (1923) 427, confirmed this ruling where the accepting bank received no consideration.

MICHIGAN

Acceptance of drafts.—Upon making and filing the articles of incorporation required by this act the bank shall become a body corporate, and as such shall have power: * * * to accept for payment at a future date, not to exceed six months, drafts drawn by its patrons, but no bank shall accept such drafts in the aggregate to an amount exceeding 50 per cent of its capital and undivided surplus, such acceptances to be considered liabilities within the meaning and limitations provided in section 25 of this act. (Public Acts, 1929, No. 66, sec. 4, eighth.)

Limitation of personal, etc., liability.—The total liabilities to any bank of any person or of any company, corporation, or firm for moneys advanced, including in the liabilities of the company or firm the liabilities of the several members thereof, except special partners, shall at no time exceed one-tenth part of the amount of capital and surplus of such bank: *Provided, however,* That by a two-thirds vote of directors, the liabilities to any bank of any person or company, or corporation or firm may be increased to a sum not exceeding one-fifth of the capital and surplus of the bank; but such additional one-tenth of such capital and surplus shall not be loaned to any officer or director, or to any partnership in which such officer or director is a partner, or to any corporation in which such officer or director owns a majority of the capital stock, until such officer, director, partnership, or corporation furnishes collateral or indorsements satisfactory to he directors, or files with the bank a sworn statement of assets and liabilities thowing a net worth of sufficient amount to be entitled to such credit: *Provided surther,* That before any bank under the supervision of the laws of this State shall loan any of its funds to its officers or its employees, such loans shall be first submitted to the directors of such bank for their approval. The discounting of bills of exchange drawn in good faith against actually existing values shall not be considered as money borrowed. The limitations prescribed in this section shall not apply to the securities enumerated in section 24 of this act. (Public Acts, 1929, No. 66, sec. 25.)

Drafts.—Three-fifths of the remainder of the savings deposits shall be invested by the board of directors as follows:

(m) In accepted drafts or bills of exchange having not more than six months to run growing out of transactions involving the importation or exportation of goods; or growing out of transactions involving the domestic shipment of goods providing shipping documents conveying or securing title are attached at the time of acceptance; or which are secured at the time of acceptance by official warehouse receipt or other document conveying or securing title covering readily marketable staples. For the purpose of this section the acceptance of any one person, company, firm, or corporation shall not exceed at any time more than 20 per cent of its paid-up capital and unimpaired surplus. The aggregate of such accepted drafts or bills of exchange shall not exceed at any one time the amount of capital stock and unimpaired surplus of the banks. (Public Acts, 1929, No. 66, sec. 24, (m).)

IOWA

Acceptance of drafts.—Any State bank, savings bank, or trust company may accept drafts or bills of exchange drawn upon it having not more than six months' sight to run, exclusive of days of grace, which grow out of transactions involving the importation or exportation of goods; or which grow out of transactions involving the domestic shipment of goods: *Provided,* Shipping documents conveying or securing title are attached at the time of acceptance, or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples. (Banking Law of Iowa, 1929, ch. 415, sec. 9272.)

Acceptances limited.—No State bank, savings bank, or trust company shall accept, whether in a foreign or domestic transaction, for any one person, company, firm, or corporation to an amount equal at any time in the aggregate to more than 10 per cent of its paid-up and unimpaired capital stock and surplus, unless the bank is secured either by attached documents or by some other actual security growing out of the same transaction as the acceptance; nor shall the total of bills accepted for and money borrowed by any one person, company, firm, or corporation exceed in the aggregate more than 20 per cent of its paid-up capital and surplus; and no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half of its paid-up and unimpaired capital stock and surplus. (Banking Law of Iowa, 1929, ch. 415, sec. 9273.)

Superintendent to regulate acceptances.—The superintendent of banking, under such general regulations as he may prescribe, which shall apply to all banks alike regardless of the amount of capital stock and surplus, may authorize any State bank, savings bank, or trust company to accept such bills to an amount not exceeding at any time in the aggregate of 100 per cent of its paid-up and unimpaired capital stock and surplus; but the aggregate of acceptances growing out of domestic transactions shall in no event exceed 50 per cent of such capital stock and surplus. (Banking Law of Iowa, 1929, ch. 415, sec. 9274.)

INDIANA

Power.—Such corporation shall exercise the powers and possess the privileges conferred on banks by the laws of this State * * * to accept for payment at a future date drafts drawn upon it; to issue letters of credit authorizing the holders thereof to draw drafts on it or its correspondents at sight, or on time, not exceeding one year. (Bank Laws of the State of Indiana, 1929, p. 37, 38, ch. 4, loan, trust, and safe deposit companies, sec. 10, par. 9.)

There are no provisions in any State laws of States included in the seventh district regarding acceptance banks of the type permitted by the provisions of the Edge Act.

FEDERAL RESERVE BANK OF CLEVELAND

There is given below a digest of the laws of those States included within our district respecting the acceptance powers of State banks, the limitations on the amount of acceptances which State banks may discount, and the provisions of any State law permitting acceptance banks of the type permitted by the provisions of the Edge Act.

The Ohio statute on this point is General Code, section 710-137. It is as follows:

Drafts, bills of exchange of future date may be accepted; letters of credit may be issued, when; limitation of amount of accepted drafts or bills.—A commercial bank may accept for payment at a future date, drafts or bills of exchange having not more than six months sight to run, drawn upon it by its customers under acceptance agreements and which grow out of transactions involving the importation or exportation of goods; and issue letters of credit authorizing the holders thereof to draw upon it or its correspondents: *Provided,* That there is a definite bona fide contract for the shipment of goods within a specified reasonable time and the existence of such contract is certified in the acceptance agreement; or which grow out of transactions involving the domestic shipment of goods: *Provided,* That shipping documents conveying or securing to the accepting bank title to readily marketable goods, are attached or in the hands of an agent of the accepting bank, independent of the drawer, for its account, at the time of acceptance or which are secured at the time of acceptance, by warehouse receipts or other such documents conveying or securing to the accepting bank title to readily marketable goods fully covered by insurance, the warehouse receipts or other such documents to be those of a responsible warehouse independent of the drawer, the acceptor to remain so secured during the life of the acceptance unless other suitable security of the same character, or cash, be substituted: *And provided,* That no commercial bank shall accept drafts or bills under this section, to an aggregate amount at any time more than equal to the sum of its paid up and unimpaired caiptal stock and surplus: *And provided further,* That no commercial bank shall accept whether in a foreign or domestic transaction, for any one person, firm or corporation, to an amount equal at any time to more than 20 per cent of its paid-up and unimpaired capital stock and surplus, unless the accepting bank is secured either by the attached documents or those held for its account by its agent independent of the drawer, or by some other actual security of the same character. Should the accepting bank purchase or discount its own acceptances, such acceptances will be considered as a direct loan to the drawer and be subject to the limitation of (G. C. 710-122) of this act. The superintendent of banks may issue such further regulations as to such acceptances as he may deem necessary in conformity with this act.

The Kentucky statute on this point is section 579, of Carroll's Kentucky Statutes, 1930 edition and is as follows:

579. *Business; when may begin; powers of corporation; power to discount evidences of debt; pledge of assets for United States deposits.*— * * * Any bank or trust company may accept for payment at a future date drafts or bills of exchange drawn upon it by its customers and issue letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents at sight or on time, not exceeding one year, and may also accept drafts or bills of exchange drawn upon it, having not more than six months' sight to run, growing out of transactions involving the importation or exportation of goods, and any bank or trust company may discount acceptances which are based upon the importation or exportation of goods and which have a maturity at time of discount of not more than three months and are indorsed by at least one other bank or trust company, but no bank or trust company shall accept such drafts or bills of exchange to an amount equal at any time in the aggregate to more than one-half of its paid-up and unimpaired capital stock and surplus, except by authority of the banking commissioner under such general regulations as said commissioner may prescribe, and in no event to an amount exceeding the capital stock and surplus of such bank or trust company; and such regulation shall apply to all banks or trust companies alike regardless of the amount of capital stock and surplus.

The Pennsylvania statute in point is found in the Digest of Pennsylvania Statute Law for 1920. Section 6348 and is as follows:

6348. *Acceptance of drafts; issuance of letters of credit.*—Any bank or trust company incorporated under the laws of this Commonwealth shall, from and after the passage of this act, have the power to accept, for payment at a future date, drafts drawn upon such bank or trust company by its customers, and to issue letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents at sight, or on time not exceeding one year.

The West Virginia statute on the point is found in the official code of West Virginia, 1931, chapter 31, corporations; article 4, banking institutions, section 6:

Powers of banking institutions defined.— * * * Any banking institution may accept for payment at a future date, drafts drawn upon it by its customers and issue letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents, at sight or on time, not exceeding one year. * * *

Federal Reserve Bank of Dallas

Provisions of the laws of the States of the eleventh Federal reserve district respecting the acceptance powers of State banks, the limitations on the amount of acceptances which State banks may discount, and permitting acceptance banks of the type permitted by the provisions of the Edge Act.

TEXAS

Revised Civil Statutes of Texas, 1925, article 392:

Powers of corporation.—Banking corporations shall be authorized to conduct the business of receiving money on deposit, allowing interest thereon, and of buying and selling exchange, gold and silver coins of all kinds; of lending money upon real estate and personal property and upon collateral and personal securities at a rate of interest not exceeding that allowed by law; and of buying, selling, and discounting negotiable and nonnegotiable commercial paper of all kinds. No such bank shall lend more than 50 per cent of its securities upon real estate, nor make a loan on real estate to an amount greater than half the reasonable cash value thereof.

Revised Civil Statutes of Texas, 1925, article 515:

Limitation of indebtedness.—No State banking corporation shall at any time be indebted or in any way liable to an amount exceeding the amount of its capital stock at such time actually paid in and remaining undiminished by losses or otherwise, except on account of demands of the nature following:

1. Moneys deposited with or collected by it.
2. Bills of exchange or drafts drawn against money actually on deposit to the credit of the corporation or due thereto.
3. Liabilities to the stockholders of the association for dividends and reserve profits.
4. Liabilities incurred under the provisions of the Federal reserve act.
5. Liabilities incurred under the provisions of the Federal agricultural credits act of 1920.
6. This article shall not apply to any guaranty executed by any bank and trust company whose demand deposits are not in excess of its interest-bearing deposits, provided such company is not a member of a Federal reserve bank.
7. Upon a written permit obtained from the commissioner, any bank may borrow a sum not in excess of its unimpaired surplus in addition to its capital stock.

Revised Civil Statutes of Texas, 1925, article 525:

Loans on cotton.—All State banks and bank and trust companies shall be permitted to loan upon or discount commercial or business paper secured by lien upon cotton and cottonseed products to the same extent and upon the same conditions as is now or may be provided for national banks under the laws of the United States.

Revised Civil Statutes of Texas, 1925, article 528:

Bills payable and discounts.—No bank organized under the laws of this State shall ever make any bills payable, and no bills shall ever be rediscounted by such bank, except with the consent of the board of directors, said consent to be a matter of record.

Revised Civil Statutes of Texas, 1925, article 416 (as amended acts 1929, 41st Leg., 1st called sess., p. 48, ch. 17, sec. 1):

Investment of savings.—Such corporation shall invest not more than 85 per cent of the total amount of its savings deposits in any of the following classes of securities, and not otherwise:

* * * * * * *

6. In bankers' acceptances as defined by the Federal reserve act or in collateral loans, which loans are collateraled and secured by marketable stocks or bonds, the market value of which shall be at all times equal to 125 per cent of the amount of the loan, such collateral loans always having a maturity of not longer than six months from the date of the purchase thereof: *Provided*, That not more than 25 per cent of such savings deposits may be invested in the class of securities mentioned in this subdivision:

* * * * * * *

Revised Civil Statutes of Texas, 1925, article 1302:

Purposes.—The purposes for which private corporations may be formed are:

* * * * * * *

55. To accept, guarantee, enforce, become surety upon, buy, sell, contract with reference to, or otherwise deal in acceptances, bills of exchange, bills of

lading and warehouse, and other receipts growing out of or to be used in aid of the transportation, warehousing distribution, or financing, in either domestic or foreign trade, of readily marketable, staple, nonperishable, agricultural products, and so executed or supported as to be secured upon or to represent such products in amounts at least equal in clear market value to the amount of the financial undertaking of such corporations upon or on account of such instruments; to buy, sell, indorse, contract with reference to, or otherwise deal in acceptances of approved banking corporations, not secured upon nor representing any such products, but eligible for rediscount to, or for purchase in, the open market by Federal reserve banks.

* * * * * * *

Revised Civil Statutes of Texas 1925, articles 1514 to 1519, inclusive:

ART. 1514. *Purposes.*—This subdivision embraces private corporations formed for the purpose of dealing in acceptances and other receipts growing out, or to be used in aid, of the transportation, warehousing, distribution, or financing, in either domestic or foreign trade, of readily marketable, staple, nonperishable, agricultural products; and for dealing in acceptances of banking corporations not secured upon nor representing any such products.

ART. 1515. *Agricultural products.*—By ready marketable, staple, nonperishable agricultural products are meant those classes of agricultural products which are subject to such constant dealing in ready markets as to make their values easily and definitely ascertainable and realizable on short notice, and which are not ordinarily subject to substantial depreciation in quality within the period of immaturity of the obligations which they secure, or by which they are represented.

ART. 1516. *Assets and liabilities.*—The total liabilities to any corporation chartered under this law of any such banking corporation, on account of any such unsecured acceptances, shall at no time be permitted to exceed 10 per cent of the unimpaired capital of such corporation. Each such corporation shall invest and keep invested in obligations of the United States, Texas, or political subdivisions or incorporated cities of Texas, not less than one-half of its paid-in capital. Such corporation shall have an authorized capital stock of not less than $500,000, which shall not be reduced by amendment to less than such sum.

ART. 1517. *Limit of indebtedness.*—No such corporation shall enter into any contract or contracts of acceptances, guaranty, indorsement, or suretyship when its obligation thereon in connection with its entire existing obligation and indebtedness primary or secondary, fixed or contingent, shall exceed five times its then unimpaired capital and surplus, unless previously authorized in writing by the banking commissioner so to do, in which case it may enter into such contract not to exceed the limit so fixed by such commissioner, in no case to exceed ten times its said capital and surplus. Those obligations, to pay which at maturity, any such corporation has been furnished funds by other parties liable thereon, need not be considered in determining the amount of its existing obligations and indebtedness hereunder. All such contracts and obligations entered into in violation of this article shall be unenforceable against such corporation. Nothing herein shall prevent the enforcement of any such prohibited obligations by any holder who has acquired the same in due course, for value, before maturity, and without notice of its infirmity.

ART. 1518. *Ownership of stock.*—Any private corporation formed under this title, and any banking corporation or trust company, except savings banks, may hold stock in corporations created hereunder, and in corporations chartered under the laws of the United States or in any State thereof, and principally engaged in financing domestic or foreign trade in any such agricultural products, in amounts not to exceed in the aggregate 10 per cent of the capital and surplus of such private corporation, banking or trust company, nor to exceed 10 per cent of the capital stock of such corporation in which such stock is to be held. No banking corporation or trust company shall acquire stock in such corporation without express written authorization therefor from the banking commissioner, under such rules and regulations as he may provide, except in payment of debt. If it shall acquire same in payment of debt, it shall promptly dispose of same unless expressly permitted to retain same by such commissioner.

ART. 1519. *Regulation.*—Such corporations shall be subject at all times to the supervision and control of the banking commissioner and shall conform to all lawful regulations of such commissioner. No such corporation shall begin business until authorized to do so by such commissioner after satisfactory showing made that such corporation has complied with the law, and thereafter it shall make reports to such commissioner and be subject to such periodical visitations and examinations under his direction, and shall pay fees therefor, all as in the case of State banking corporations. Said commissioner shall have such powers with reference to taking charge of such corporations, liquidating same, and for like causes as are possessed by him with reference to State banks.

LOUISIANA

Acts Louisiana 1924, regular session Act No. 115, sections 1, 2, 3, 4, 5, page 184:

SECTION. 1. *Be it enacted by the Legislature of Louisiana,* That banks and trust companies organized under the laws of this State be, and they are hereby, authorized to accept for payment at a future date drafts drawn upon them by their customers and to issue letters of credit authorizing the holders thereof to draw drafts upon them or their correspondents at sight or on time: *Provided,* That it shall not be lawful for any such bank or trust company to accept a draft or drafts or to issue a letter or letters of credit to any one customer in an amount larger than is or shall be permitted by law to be loaned by such bank or trust company to any one borrower.

SEC. 2. That each letter of credit issued by any bank or trust company organized under the laws of this State shall be signed by two officers of such bank or trust company.

SEC. 3. That all drafts accepted or letters of credit issued, whether obligation thereon is direct or indirect, by any bank or trust company organized under the laws of this State shall be duly recorded on the reconds of such bank and trust company and carried as a liability on the daily statement of the condition of such bank or trust company.

SEC. 4. That each and every violation of the provisions of the above shall subject the offending bank or trust company to a penalty of not less than $100 nor more than $500 to be collected by civil suit in the name of the State of Louisiana by the district attorney of the Parish in which said bank or trust company shall have its domicile.

SEC. 5. That all laws, or parts of laws, in conflict herewith, particularly Act 22 of 1915, are hereby repealed.

Acts Louisiana 1924, regular session Act No. 229, section 3, page 447:

That banking companies organized under this act shall consist of banks of deposit, discount, exchange and circulation, and savings banks, to known as banking associations and savings banks. Banking associations shall have the following powers and no others: To receive deposits; to lend money on real and personal security; to accept for payment at a future date drafts drawn upon them by their customers; and to issue letters of credit authorizing the holders thereof to draw drafts upon them or their correspondents at sight or on time; to discount and buy and sell promissory notes and bills of exchange, and other evidences of indebtedness, gold and silver and bonds of the United States, and of this State, and of the several levee districts of this State and of the Parishes and school districts, drainage districts, road districts, and of the municipal corporations of this State, on which bonds there shall have been no default in the payment of interest for the five years preceding the acquisition of the bonds by the bank: *Provided,* This prohibition shall not apply to bonds which have been outstanding for less than five years and upon which there has been no default in the payment of interest. * * *

Acts Louisiana, 1924, regular sesssion, Act No. 229, section 26, page 448: That it shall not be lawful for any banking association or savings bank or trust company to loan to any one borrower more than 20 per cent of its capital stock and declared surplus: *Provided,* That loans secured by pledge of good collateral securities or solvent indorsement shall not be included in the 20 per cent limitation above described, nor shall any banking association or savings bank or trust company loan to any one borrower directly or indirectly more than an amount e ual to one-half of its capital and declared surplus, either with collateral security or solvent indorsement: *And provided further,* That it shall be lawful for any banking association or savings bank and trust company to loan to one borrower an amount not greater than its capital and declared surplus when such loan is secured by pledge of the obligations of the United States, or of the State of Louisiana, or any subdivision thereof, or of ready marketable staples, generally referred to as commodity loans. That it shall not be lawful for any banking association or savings bank or trust company to make any loans to its president, vice president, cashier, assistant cashier, or employees whenever said officers or employees are in active management of said banking association, trust company, or savings bank, unless these loans are approved by a resolution of the board of directors at a meeting, at which the applicant for the loan shall not be present or participate in. * * *

ARIZONA

Session Laws of Arizona, 1922, chapter 31, section 16, page 129:

Commercial bank defined.—The term "commercial bank," when used in this chapter, means any bank authorized by law to receive deposits of money, deal in commercial paper, or to make loans thereon, and to lend money on real or personal property, and to discount bills, notes, or other commercial paper, and to buy and sell securities, gold, and silver bullion or foreign currency or bills of exchange.

Session Laws of Arizona, 1922, chapter 31, section 17, page. 129:

Savings bank defined.—The term "savings bank," when used in this chapter, means a bank organized for the purpose of accumulating and loaning its funds; receiving deposits of money; loaning, investing, and collecting the same with interest and having power to invest said funds in such property, securities, and obligations as may be prescribed by its board of directors; and to pay a stipulated rate of interest on deposits made for a stated period or upon special bonds.

Session Laws of Arizona, 1922, chapter 31, section 26:

Savings banks loans.—A savings bank may invest the capital and deposits and the income derived therefrom:

* * * * * * *

Subdivision 5, page 133:

In loans upon promissory notes secured by pledge or mortgage of personal property worth at least 40 per cent more than the amount of the loan; or upon promissory notes or other negotiable instruments with at least two sureties or indorsers, or upon notes where the borrower is worth over and above all his other liabilities at least five times the amount of the note.

* * * * * * *

Session Laws of Arizona, 1927, chapter 92, section 19, page 278:

Loans to persons, corporations, etc.—The total liability to any banking corporation or any person or any one company, corporation, or firm, for money borrowed after the date upon which this act becomes effective, shall at no time exceed 15 per cent of the amount of the capital stock paid in and of the surplus earned and set aside as a surplus fund of such bank: *Provided, also*, That loans may be made up to 25 per cent of the capital stock and surplus when secured by readily marketable, nonperishable, staple commodities in warehouse or in transit. But the discount of bills of exchange drawn in good faith against existing values, and the discount of commercial or business paper actually owned by the person negotiating the same, shall not be construed as borrowed money. Deposits of commercial banks, with commercial banks, or the commercial department of banks having commercial and savigs department, on open account to facilitate business transactions shall be permitted and shall not be construed as loans.

NEW MEXICO

Session Laws of New Mexico 1915, chapter 67, section 4:

The term "commercial bank," when used in this act means any bank authorized by law to receive deposits of money, deal in commercial paper or to make loans thereon, and to lend money on real or personal property, and to discount bills, notes, or other commercial paper, and to buy and sell securities, gold and silver bullion, or foreign coins or bills of exchange.

Session Laws of New Mexico 1915, chapter 67, section 5:

The term "savings bank," when used in this act, means a bank organized for the purpose of accumulating and loaning the funds of its members, stockholders, and depositors, and which may loan and invest the funds thereof, receive deposits of money; loan, invest, and collect the same with interest; and invest its funds in such property, securities, and obligations as may be prescribed by this act.

Session Laws of New Mexico 1929, chapter 131, section 12, page 313:

That section 30, chapter 67, Session Laws of 1915 as amended by section 11, chapter 56, Session Laws of 1917 and section 16, chapter 120, Session Laws of 1919, and section 7, chapter 149, Session Laws of 1923, be, and the same hereby is, amended to read as follows:

"Sec. 30. Whenever the capital of any bank shall be impaired, it shall make no new loans or discounts." * * *

Session Laws of New Mexico 1929, chapter 131, section 9, page 312:

That section 36, chapter 67 of the Session Laws of 1915, as amended by section 21 of chapter 120, Session Laws of 1919, be, and the same hereby is, amended to read as follows:

"SEC. 36. No bank shall become the creditor of any person, firm, or corporation including in the liabilities of any such firm the liabilities of the members thereof, and including the liabilities of any person the liabilities of any firm of which such person is a member, in an amount exceeding 20 per cent of its capital and surplus, but the discount of bills of exchange drawn against actually existing values, loans upon produce in transit and upon warehouse and elevator receipts as collateral security, and negotiable paper secured by collateral having an actual market value in excess of the paper secured shall not be considered as money borrowed: *Provided, however,* That no bank shall at any time have invested more than 30 per cent of its unimparied cpaital and surplus in the notes, bonds, or other securities of any person, firm, or corporation; * * *"

OKLAHOMA

Compiled Oklahoma Statutes Annotated 1921, section 4116, as amended Session Laws 1924, page 74, section 1:

Powers and duties of banks.—1. A banking corporation organized under the provisions of this chapter shall be permitted to receive money on deposit, and to pay interest thereon, not to exceed the rate that may from time to time be fixed by the bank commissioner, as the maximum rate that may be paid upon deposits by banks in this State; to buy and sell exchange, gold, silver, coin, bullion, uncurrent money, bonds of the United States or this State, or of any city, county, school district, or other municipal corporation thereof, and State, county, city, township, school district, or other municipal indebtedness; to lend money on chattel and personal security, or on real estate secured by first mortgages, running not longer than two years: *Provided,* That such real estate loans shall not exceed 20 per cent of the aggregate loans of any such bank; to own a suitable building, furniture, and fixtures, for the transaction of its business, the value of which shall not exceed one-third of the capital of such bank fully paid; * * *.

Compiled Oklahoma Statutes Annotated 1921, section 4125, as amended Session Laws 1924, page 74, section 4:

Total liabilities.—4. The total liabilities to any bank or any person, corporation, or firm for money borrowed, including in the liabilities of such person, corporation, or firm the liabilities of the several stockholders, officers, or members thereof, shall not at any time exceed 15 per cent of the combined capital stock and surplus of such bank; but the discount of bills of exchange drawn in good faith against actual existing values, as collateral securities and a discount of commercial or business paper, actually owned by the person, shall not be considered as money borrowed; * * *.

FEDERAL RESERVE BANK OF KANSAS CITY

Digest of laws of the States of the Tenth Federal Reserve District respecting the acceptance powers of State banks, in compliance with topic 14 of questionnaire No. 10 of the subcommittee of the Senate Committee on Banks and Currency

No statutory provisions relating to the acceptance powers of State banks are contained in the laws of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, and Wyoming.

In Missouri State banks and trust companies are expressly authorized to accept for payment at a future date drafts drawn upon such banks or trust companies by their customers, but the amount of liability so incurred shall not at any time exceed the paid-up and unimpaired capital stock and surplus fund of the accepting bank or trust company. (Secs. 5354 and 5421, R. S. Mo., 1929.)

It is further provided by statute in Missouri that no bank or trust company shall lend to any individual, partnership, corporation, or body politic by acceptance of drafts or otherwise, an amount in the aggregate which will exceed 15 per cent of the capital stock actually paid in and surplus fund of such bank or trust company if located in a city having a population of 100,000 or over, and 20 per cent of the capital stock actually paid in and surplus fund of such bank or trust company if located in a city having a population of less than 100,000 and over 7,000, and 25 per cent of the capital stock actually paid in and surplus fund of such bank or trust company if located elsewhere in the State, with certain exceptions set forth in the statute. (Secs. 5357 and 5429 R. S. Mo., 1929.)

FEDERAL RESERVE BANK OF NEW YORK

Digest of the laws of Connecticut, New Jersey, and New York respecting (1) the acceptance powers of State banks and trust companies (2) the limitations on the amount of acceptances which State banks and trust companies may discount, and (3) the provisions of any State law permitting acceptance banks of the type permitted by the provisions of the Edge Act (Sec. 25 (a) of the Federal Reserve act)

CONNECTICUT

[References are to General Statutes of Connecticut, Revision of 1930]

(1) *Acceptance powers.*

"SEC. 3901. *Acceptances limited.*—Any State bank or trust company may accept for payment at a future date not exceeding six months, drafts drawn by its patrons, but no bank shall accept such drafts in the aggregate to an amount exceeding 50 per cent of its capital and unimpaired surplus. No bank shall accept for payment from one person, firm, corporation, or association an amount exceeding 10 per cent of its capital stock and unimpaired surplus. Such liability of customers may be in addition to all liabilities provided for in section 3900. A record of such acceptances shall be kept in such form as shall be approved by the commissioner, and shall at all times be kept posted to date and open for inspection by said commissioner or his authorized examiners.

"SEC. 3903. *Acceptances defined.*—Any acceptance issued under section 3901 shall be either of a draft or bill of exchange drawn in good faith against existing values with bills of lading or warehouse receipts attached, or with stocks or bonds of known value and worth at least 20 per cent in excess of the draft, or of commercial or business paper owned by the person or firm negotiating the same and indorsed by such person or persons without limitation and subject to the restrictions defined in section 3901."

(2) *Limitations on discount of acceptances.*

The laws of Connecticut contain no limitations upon the amount of bankers acceptances which State banks and trust companies may discount, unless section 3900 imposes such a limitation. This section limits the total liabilities to any State bank or trust company of any person, corporation, firm or association "for money borrowed," and presumably would not be interpreted to apply to the discount of bankers acceptances (i. e., to the acquisition of bankers acceptances from parties other than the accepting banks), but probably would apply to the acquisition of bankers acceptances direct from accepting banks. Section 3900 reads as follows:

"SEC. 3900. *Loans limited—Penalty.*—The total liabilities to any State bank or trust company of any person, corporation, firm, or association for money borrowed, including in the liabilities of a firm the liabilities of the several members thereof, shall at no time exceed 10 per cent of the amount of the capital stock of such bank or trust company actually paid in and its surplus and undivided profits combined, the provisions of any State bank or trust company charter to the contrary notwithstanding. The provisions of this section shall not apply to loans secured by collateral, so long as the market value of such collateral shall exceed by 20 per cent the total liabilities secured in each case by such collateral, but no loan on collateral shall at any time exceed 20 per cent of the amount of the capital stock of such bank or trust company actually paid in and its surplus and undivided profits combined, and the total loans to any one person, corporation, firm, or association, including in the liabilities of the firm the liabilities of the several members thereof, shall at no time exceed 20 per cent of the capital, surplus, and undivided profits combined of such bank or trust company."

(3) *Acceptance banks of the type permitted by the provisions of the Edge Act.*

There are no provisions in the laws of Connecticut dealing particularly with banks of this type.

NEW JERSEY

(1) *Acceptance powers.*

Chapter 307 of the Laws of 1915 (p. 56 of Laws of New Jersey Relating to Banks and Banking, Trust Companies and Safe Deposit Corporations, 1930) provides that each State bank or trust company

"shall have power to accept for payment at a future date drafts drawn upon it by its customers, and to issue letters of credit authorizing holders thereof to draw drafts upon it or its correspondents at sight or on time not exceeding one year: *Provided,* That the total amount of such drafts so accepted or letters of credit so issued for any one person, firm, or corporation shall not at any time exceed 10 per cent of the capital and surplus of the accepting or issuing bank.

(2 *Limitations on discount of acceptances.*

The laws of New Jersey contain no limitations on the amount of acceptances which State banks and trust companies may discount. Chapter 29 of the Laws of 1920, as amended by chapter 167 of the Laws of 1922 (p. 57 of the Laws of New Jersey Relating to Banks and Banking, Trust Companies, and Safe Deposit Corporations, 1930) limits the total liabilities to any bank of any person or of any company, corporation or firm "for money borrowed" but provides that:

"The following shall not be considered as money borrowed within the meaning of this section, namely:

"(*a*) The discount of bills of exchange drawn in good faith against actually existing values, including drafts and bills of exchange secured by shipping documents conveying or securing title to goods shipped, and including demand obligations when secured by documents covering commodities in actual process of shipment and also including bankers' acceptances which are eligible for rediscount with any Federal reserve bank.

"(*b*) The discount of commercial or business paper of other makers actually owned by the person, company, corporation, or firm negotiating the same."

(3) *Acceptance banks of the type permitted by the provisions of the Edge Act.*

There are no provisions in the Laws of New Jersey relating to banks dealing particularly with banks of this type.

NEW YORK

[References are to New York Banking Law]

(1) *Acceptance powers.*

"SEC. 106. *General powers.*—In addition to the powers conferred by the general and stock corporation laws, every bank shall, subject to the restrictions and limitations contained in this article, have the following powers:

"2. To accept for payment at a future date, drafts drawn upon it by its customers and to issue letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents at sight or on time not exceeding one year."

Section 185 contains precisely similar provisions with reference to trust companies.

"SEC. 108. *Restrictions on loans, purchases of securities and total liabilities to bank of any one person.*—A bank subject to the provisions of this article.

"1. Shall not directly or indirectly lend to any individual, partnership, unincorporated association, corporation, or body politic, an amount which, including therein any extension of credit to such individual, partnership, unincorporated association, corporation or body politic, by means of letters of credit or by acceptance of drafts for, or the discount or purchase of the notes, bills of exchange or other obligations of, such individual, partnership, unincorporated association, corporation or body politic, will exceed one-tenth part of the capital stock and surplus of such bank, with the following exceptions:"

In the enumerations of the exceptions it is provided (in paragraphs (b) and (c)) that "the total liabilities to such bank of any individual, partnership, unincorporated association, or of any other corporation or body politic, may equal but not exceed 25 per cent" (40 per cent in the case of a bank located elsewhere than in a borough having a popluation of 1,500,000 or more) "of the capital and surplus of such banks, provided such liabilities are upon drafts or bills of exchange drawn in good faith against actually existing values, or upon commercial or business paper actually owned by the person negotiating the same to such bank, and are indorsed by such person without limitation, or provided such liabilities in excess of 10 per cent of such capital and surplus, and not in excess of an additional 15 per cent" (30 per cent in the case of a bank located elsewhere than in a borough having a population of 1,500,000 or more) "of such capital and surplus, are secured by collateral having an ascertained market value of at least 15 per cent more than the amount of the liabilities so secured."

Section 190 contains precisely similar provisions relating to trust companies.

(2) *Limitations on discount of acceptances.*

The laws of New York contain no limitation upon the amount of acceptances which State banks and trust companies may discount, but sections 108 and 190, referred to above, would probably apply to the acquisition of bankers acceptances direct from accepting banks.

(3) *Acceptance banks of the type permitted by the provisions of the Edge Act.*

Banking corporations of this type may be organized as "investment companies" under article 7 of the banking law. Sections 293 defines the general powers of corporations so organized, and such powers include the following:

"SEC. 293. *General powers.*—In addition to the powers conferred by the general and stock corporation laws, an investment company shall, subject to the restrictions and limitations contained in this article, have the following powers:

"1. To sell, offer for sale or negotiate bonds or notes secured by deed of trust or mortgages on real property situated in this State or outside of this State, or choses in action owned, issued, negotiated or guaranteed by it; to advance money upon the security of such bonds, notes or choses in action; to purchase or otherwise acquire bonds, notes or choses in action and to pledge them to secure the payment of collateral trust bonds or notes; to sell or otherwise negotiate such collateral trust bonds or notes: *Provided, however,* That the grant of powers which an investment company may exercise pursuant to this subdivision one shall not be deemed to affect the right of a corporation now or hereafter organized pursuant to the provisions of any other statute to exercise similar powers; or to prevent the organization under the stock corporation law of a corporation for such purposes.

"1a. To accept bills of exchange or drafts drawn upon it payable on demand or on time not exceeding one year from the date of acceptance; to issue letters of credit authorizing the holders thereof to draw drafts upon it at sight or on time not exceeding one year from the date of any such letter of credit; to discount bills of exchange, drafts, notes, acceptances, or other choses in action; to buy and sell coin, bullion and exchange; to issue, at any branch office authorized by the superintendent of banks pursuant to section 51 of this chapter and established in a country or Province of Asia in which the principal local currency consists of silver coin or bullion, notes payable in the local currency to bearer on demand without interest: *Provided, however,* That the total amount of such notes issued by any such investment company and outstanding at any one time shall not exceed twice the paid-in capital of such investment company and that there shall be kept on hand at each branch office where such notes are issued a reserve in silver bullion or in the local silver coin of at least 50 per cent of the notes so issued at such branch office."

Attached is a copy of the full text of article 7 of the banking law. It contains, among others, provisions to the following effect:

"That corporations exercising powers conferred by subdivision 1a of section 293 (quoted above) shall have paid-up capital stock of at least $2,000,000, all of which must be paid in in cash before the corporation commences business." (Sec. 291, and sec. 294, subdivision 1.)

"That corporations organized under article 7 shall not hold any of its own stock (unless taken to prevent a loss upon a debt previously contracted in good faith, and stock so acquired shall be disposed of within six months), and shall not make any discount to a person to enable him to pay for or hold such stock." (Sec. 294, subdivision 5.)

"That corporations organized under article 7 shall conform their methods of keeping books and records to orders duly promulgated by the superintendent of banks." (Sec. 295.)

"That each official communication from the superintendent of banks relating to an examination or investigation by the banking department, or containing suggestions or recommendations as to the conduct of business, shall be submitted to the board of directors at its next meeting and duly noted in the minutes." (Sec. 297.)

"That corporations organized under article 7 and foreign corporations licensed by the superintendent to transact the business of a corporation so organized shall make annual reports to the superintendent of banks which shall contain statements of their condition and shall be in form prescribed by the superintendent; and such corporations shall also make such other special reports to the superintendent as he may from time to time require." (Sec. 298.)

Corporations organized under article 7 of the banking law are subject not only to the provisions contained in that article, but also to various other provisions of the banking law which relate generally to the various types of corporations organized under different articles of the banking law. Such other provisions include those granting authority to the superintendent of banks to examine such corporations and under some circumstances to take possession of and liquidate the property and business of such corporations.

ARTICLE VII.—*Investment companies*

SEC. 290. *Incorporation; organization certificate; amount of capital stock.*—When authorized by the superintendent of banks, as provided by section 23 of this chapter, five or more persons may form a corporation to be known as an investment company. Such persons shall subscribe and acknowledge and submit to the superintendent of banks at his office an organization certificate in duplicate which shall specifically state:

1. The name by which the investment company is to be known.
2. The place where its business is to be transacted.
3. That the investment company is, or is not, being organized for the purpose of exercising the powers set forth in subdivisions four and five of section 293 of this chapter.
4. The amount of its capital stock and the number of shares into which such capital stock shall be divided, which capital stock shall amount to not less than $100,000, except that, if such investment company is being organized for the purpose of exercising the powers conferred by subdivisions 4 and 5 of section 293 of this chapter, it may have a capital stock of not less than $25,000 if the place where its business is to be transacted is a city or village the population of which does not exceed 50,000, and a capital stock of not less than $50,000 if the place where its business is to be transacted is a city the population of which exceeds 50,000 but does not exceed 150,000, and except further that, if such investment company is being organized for the purpose of exercising only the powers conferred by subdivision 1 of section 293 of this chapter, it may have a capital stock of not less than $50,000 if the place where its business is to be transacted has a population of not to exceed 25,000 and is located in a county in which there is no first or second class city, and if the shares are to be classified between common shares and preferred shares, the number of shares to be included in each class and all the designations, preferences, privileges, and voting powers or restrictions or qualifications of the shares of each class. Neither preferred nor common stock shall be issued at less than par value of such stock and the aggregate par value of the common stock issued and outstanding shall at least equal the aggregate par value of the preferred stock issued and outstanding, and the par value of the preferred stock shall be not less than $5,000,000: *Provided, however,* That no preferred stock shall be issued by an investment company exercising the powers conferred by subdivision 3 of section 293 of this article and no investment company having preferred stock issued and outstanding shall exercise said powers. Common and preferred shares of an investment company shall have equal voting powers and shall be of equal par value. (Amended by ch. 362, L. 1924, and ch. 51, L. 1926.)
5. The full name, residence, and post-office address of each of the incorporators and the number of shares subscribed for by each.
6. The term of its existence, which may be perpetual.
7. The number of its directors, which shall not be less than five, and the names and addresses of the incorporators who shall be its directors until the first annual meeting of stockholders.

Such certificate may provide for the manner in which the stock of the corporation may be transferred and for the number of directors necessary to constitute a quorum. (Amended by ch. 227, L. 1917.)

SEC. 291. *When corporate existence begins; conditions precedent to commencing business.*—When the superintendent shall have indorsed his approval on the organization certificate, as provided by section 23 of this chapter, the corporate existence of the investment company shall begin and it shall then have power to elect officers and transact such other business as relates to its organization. But it shall transact no other business until:

1. All of its capital stock shall have been fully paid in cash and an affidavit stating that it has been so paid, subscribed and sworn to by its two principal officers, shall have been filed in the clerk's office of the county in which its place of business is located, and a certified copy thereof in the office of the superintendent;

2. It shall have made the deposit with the superintendent required by section 292 of this article;

3. The superintendent shall have duly issued to it the authorization certificate specified in section 24 of this chapter.

SEC. 292. *Deposit of securities with the superintendent.*—Every investment company shall, until an order of the supreme court is obtained declaring its business closed, keep on deposit with the superintendent of banks as a pledge of good faith and as a guaranty of compliance with the provisions of this chapter, interest-bearing stocks or bonds of this State or of the United States to the amount of $1,000, which shall be registered in the name of the superintendent of banks of the State of New York in trust for such investment company. The investment company, so long as it shall continue solvent and comply with the laws of the State, may be permitted by the superintendent to collect the interest on the securities so deposited, and from time to time to exchange such securities for others as provided by section 35 of this chapter, and may examine and compare such securities as provided by section 36 of this chapter.

SEC. 293. *General powers.*—In addition to the powers conferred by the general and stock corporation laws, an investment company shall, subject to the restrictions and limitations contained in this article, have the following powers:

1. To sell, offer for sale, or negotiate bonds or notes secured by deed of trust or mortgages on real property situated in this State or outside of this State, or choses in action owned, issued, negotiated, or guaranteed by it; to advance money upon the security of such bonds, notes, or choses in action; to purchase or otherwise acquire such bonds, notes, or choses in action and to pledge them to secure the payment of collateral trust bonds or notes; to sell or otherwise negotiate such collateral trust bonds or notes: *Provided, however,* That the grant of powers which an investment company may exercise pursuant to this subdivision one shall not be deemed to affect the right of a corporation now or hereafter organized pursuant to the provisions of any other statute to exercise similar powers; or to prevent the organization under the stock corporation law of a corporation for such purposes. (Amended by ch. 247, L. 1916, and ch. 327, L. 1929.)

1a. To accept bills of exchange or drafts drawn upon it payable on demand or on time not exceeding one year from the date of acceptance; to issue letters of credit authorizing the holders thereof to draw drafts upon it at sight or on time not exceeding one year from the date of any such letter of credit; to discount bills of exchange, drafts, notes, acceptances, or other choses in action; to buy and sell coin, bullion, and exchange; to issue, at any branch office authorized by the superintendent of banks pursuant to section 51 of this chapter and established in a country or province of Asia in which the principal local currency consists of silver coin or bullion, notes payable in the local currency to bearer on demand without interest: *Provided, however,* That the total amount of such notes issued by any such investment company and outstanding at any one time shall not exceed twice the paid-in capital of such investment company and that there shall be kept on hand at each branch office where such notes are issued a reserve in silver bullion or in the local silver coin of at least 50 per cent of the notes so issued at such branch office. (Amended by ch. 49, L. 1921.)

2. To receive money or property in installments or otherwise from any person or persons, with or without an allowance of interest upon such installments; to enter into any contract or undertaking with such persons for the withdrawal of such money or property, at any time, with any increase thereof, or for the payment to them or to any person of any sum of money at any time, either fixed or uncertain.

3. To engage in the business of receiving deposits, provided that it shall not engage in such business in this State until it shall have first made such deposit of securities with the superintendent of banks as is required of trust companies by section 184 of this chapter. (Amended by ch. 98, L. 1918.)

4. To deduct interest in advance on loans at the rate of 6 per cent per annum, provided such loans are secured by assignments of choses in action of other evidences of indebtedness issued by it and to be paid for in uniform monthly or weekly installments. To charge for a loan exceeding $50 made pursuant to this

subidvision $1 for each $50 dollars or fraction thereof loaned for expenses including any examination or investigation of the character and circumstances of the borrower, comaker or surety, and the drawing and taking the acknowledgment of necessary papers, or other expenses incurred in making the loan: *Provided,* That no fee collected hereunder shall exceed $5; and provided that for a loan exceeding $250, 1 per cent additional of the amount loaned in excess of $250 may be charged for such expenses, not exceeding a total fee of $20. (Amended by ch. 721, L. 1920.)

If any such loan made pursuant to this subdivision is $50 or less, such charge shall not be more than $1.

Whenever an additional loan shall be made to anyone borrowing within three months of the date of a previous loan, no further charge for examination, investigation, drawing of necessary papers, and taking acknowledgments, shall be made against him under any pretext whatever.

No such charge shall be collected unless a loan shall have been made as the result of such examination or investigation.

5. To impose a fine of 5 cents for each default in the payment of $1 or fraction thereof at the time any periodical installment upon a certificate assigned as collateral security for the payment of a loan made pursuant to subdivision 4 of this section becomes due: *Provided, however,* That such fines shall not be cumulative; that the aggregate of such fines collected in connection with any such loan of $50 or less, or any renewal thereof, shall not exceed 50 cents, and that the aggregate of such fines collected in connection with any such loan of more than $50, or any renewal thereof, shall not exceed 1 per cent of such loan and shall in no event exceed $5. (Amended by ch. 228, L. 1917.)

6. *To establish branches pursuant to section 51 of this chapter* (amended by ch. 139, L. 1915)—

7. To purchase, acquire, invest in, and hold all or any of the stocks of any corporation, domestic or foreign, and to sell and dispose of all or any such stocks owned by it: *Provided, however,* That the grant of powers which an investment company may exercise pursuant to this subdivision shall not be deemed to affect the right of a domestic corporation now or hereafter organized pursuant to the provisions of any other statute to exercise similar powers, nor to constitute "the business of an investment company or any part thereof" within the meaning of section 304 of this chapter: *And further provided,* That any such investment company shall not invest and keep invested an amount in excess of 10 per cent of the capital and surplus of such investment company in any one moneyed corporation, nor an amount in all moneyed corporations in excess of 30 per cent of the capital and surplus of such investment company. (Added by ch. 622, L. 1922; amended by ch. 596, L. 1926, and ch. 465, L. 1929.)

SEC. 293a. *Application to the payment of promissory notes of certain collateral securities.*—Whenever to secure the payment of a promissory note made to an investment company there shall be deposited with such company a chose in action or other evidence of indebtedness issued by such company, such company shall if default be made in the payment of the note so secured, receive and apply to the payment of such note the reasonable value of the security so pledged, or of the equity therein to which the pledgor thereof is entitled; and in any action instituted by such company against the maker, comaker, or surety on such promissory note, to recover upon the same, such company shall show by its complaint the amount so applied against the payment of such promissory note. (Added by ch. 384, L. 1925.)

SEC. 294. *Restrictions on powers of investment companies.*—An investment company shall not—

1. Exercise the powers conferred by subdivision 1a of section 293 of this chapter, unless it shall have a paid-up capital stock of at least $2,000,000; exercise, within this State, the powers conferred by both subdivisions 1a and 3 of section 293 of this chapter, or exercise the powers conferred by both subdivisions 3 and 4 or by both subdivisions 1a and 4 of section 293 of this article. (Amended by ch. 591, L. 1917, and ch. 98, L. 1918.)

2. Hold at one time the obligations of one person for more than $5,000, secured by assignments of choses in action or other evidences of indebtedness issued by it and to be paid for in uniform monthly or weekly installments.

3. Make any loan under the provisions of subdivision 4 of section 293 of this article for a longer period than one year from the date thereof.

4. Deposit any of its funds with any other moneyed corporation unless such other corporation has been designated as such depositary by a vote of a majority of the directors of the investment company, exclusive of any director who is an

officer, director, or trustee of the depositary so designated: *Provided, however*, That this limitation shall not apply to the deposit of funds by an investment company with another moneyed corporation, which owns all or a majority of the capital stock of such investment company. (Amended by ch. 271, L. 1919.)

5. Be the holder of any shares of its own capital stock unless such stock shall have been taken to prevent loss upon a debt previously contracted in good faith, and stock so acquired shall, within six months from the time of its acquisition, be sold or disposed of at public or private sale; nor shall it, either directly or indirectly, make any discount to any person for the purpose of enabling him to pay for or hold shares of its stock either subscribed for or purchased by him. Any investment company making any such discount shall forfeit to the people of the State twice the amount of such discount.

SEC. 295. *Restrictions as to entries in books.*—1. No investment company shall by any system of accounting or any device of bookkeeping, direcly or indirectly, enter any of its assets upon its books in the name of any other individual, partnership, unincorporated association, or corporation, or under any title or designation that is not truly descriptive thereof.

2. Every investment company shall conform its methods of keeping its books and records to such orders in respect thereto as shall have been made and promulgated by the superintendent pursuant to section 56 of this chapter. Any investment company that refuses or neglects to obey such order shall be subject to a penalty of $100 for each day it so refuses or neglects.

SEC. 296. *Change of location.*—Any investment company may make a written application to the superintendent of banks for leave to change its place of business to another place in the same county. The application shall state the reasons for such proposed change, and shall be signed and acknowledged by a majority of its board of directors and accompanied either by the written assent thereto of stockholders owning at least two-thirds in amount of its stock; or by an affidavit of two or the principal officers of the corporation showing that such change of location had been authorized by the affirmative vote of stockholders owning at least two-thirds in amount of the stock of the corporation adopted at a meeting duly called for the purpose of voting upon such change upon notice given as required by the stock corporation law. If the proposed place of business is within the limits of the village, borough, or city, if in a city not divided into boroughs, in which the principal place of business of the investment company is located, such change may be made upon the written approval of the superintendent; if beyond such limits, notice of intention to make such application, signed by the two principal officers in charge of its affairs shall be published once a week for two successive weeks immediately preceding such application in a newspaper published in the city of Albany in which notices by State officers are required by law to be published, and in a newspaper to be designated by the superintendent, published in the county in which the place of business of such investment company is located. If the superintendent shall grant his certificate authorizing the change of location, as provided in section 50 of this chapter, the investment company shall cause such certificate to be published once in each week for two successive weeks in the newspapers in which the notice of application was published. When the requirements of this section shall have been fully complied with, the investment company may, upon or after the day specified in the certificate, remove its property and effects to the location designated therein, and thereafter its principal place of business shall be the location so specified; and it shall have all the rights and powers in such new location which it possessed at its former location. (Amended by ch. 281, L. 1930.)

SEC. 297. *Communications from banking department must be submitted to directors and noted in minutes.*—Each official communication directed by the superintendent of banks or one of his deputies to an investment company or to any officer thereof, relating to an examination or investigation conducted by the banking department or containing suggestions or recommendations as to the conduct of the business of the investment company, shall be submitted, by the officer receiving it, to the board of directors at the next meeting of such board, and duly noted in the minutes of the meetings of such board.

SEC. 298. *Reports to superintendent; penalty for failure to make.*—On or before the 1st day of February in each year, every investment company and every foreign corporation licensed by the superintendent to transact the business of an investment company in this State, shall make a written report to the superintendent of banks which shall contain a statement of its condition on the morning of the 1st day of January in said year and shall be in the form and contain the matters prescribed by the superintendent. The superintendent may, however, in his discretion, accept from an investment company which has branches in a foreign country or countries a report containing a statement of its condition as of a date not later than the 1st day of January and not earlier than the 1st day of November in the preceding year. Every such report shall be verified by the oaths of the two principal officers in charge of the affairs of the investment company or foreign corporation at the time of such verification, which shall state that the report is true and correct in all respects to the best of the knowledge and belief of the persons verifying it, and that the usual business of the investment company or foreign corporation has been transacted at the location required by this article and not elsewhere. (Amended by ch. 720, L. 1920.)

Every such investment company and foreign corporation shall also make such other special reports to the superintendent as he may from time to time require, which shall be in such form and filed at such date as may be prescribed by the superintendent and shall, if required by him, be verified in such manner as he may prescribe.

If any such investment company or foreign corporation shall fail to make any report required by this section on or before the day designated for the making thereof, or shall fail to include therein any matter required by the superintendent, it shall forfeit to the people of the State the sum of $10 for every day that such report shall be delayed or withheld, and for every day that it shall fail to report any such omitted matter, unless the time therefor shall have been extended by the superintendent as provided by section 49 of this chapter.

SEC. 299. *Liability of investment company for assessments by superintendent.*—When the superintendent, pursuant to the powers conferred on him by article 2 of this chapter, shall have levied any assessment upon any investment company and shall have duly notified such investment company of the amount thereof, the amount so assessed shall become a liability of and shall be paid by such investment company to the superintendent.

SEC. 300. *Preservation of records of investment company.*—Every investment company shall preserve all its records of final entry, including cards used under the card system and deposit tickets, for a period of at least six years from the date of making the same or from the date of the last entry thereon.

SEC. 301. *Restrictions on officers, directors and other employees.*—No officer, director, clerk, or other employee of any investment company, and no person in any way interested or concerned in the management of its affairs, shall as individuals discount, or directly or indirectly, make any loan upon any note or other evidence of debt, which he shall know to have been offered for discount to such corporation, and to have been refused. Every person violating the provisions of this subdivision, shall, for each offense, forfeit to the people of the State twice the amount of the loan which he shall have made.

No officer, director, clerk, or other employee of any investment company shall borrow, directly or indirectly, from such investment company any sum of money without the written approval of a majority of the board of directors thereof filed in the office of the investment company or embodied in a resolution adopted by a majority vote of such board exclusive of the director to whom the loan is made. If an officer, director, clerk, or other employee of any investment company shall own or control a majority of the stock of any other corporation a loan to that corporation shall be considered for the purpose of this subdivision as a loan to such officer, director, clerk, or other employee. Every person violating this provision shall, for each offense, forfeit to the people of the State twice the amount which he shall have borrowed.

Vacancies in the board of directors occasioned by resignations, deaths or other cause shall be reported by each investment company to the superintendent within 10 days after the event; and the investment company shall likewise report each election by the board to fill such vacancy with the name, address and occupation of the person elected and the name of the person whose place he fills. (Amended by ch. 243, L. 1930.)

SEC. 302. *Prohibition against encroachments on certain powers of investment companies.*—No person shall act in this State as the representative of any foreign corporation in transacting the business described in this chapter as the business of an investment company unless such corporation shall have complied with the provisions of this article relating to such corporations.

Any foreign corporation either selling or offering for sale in this State accumulative investment certificates or debentures upon payments of money in installments in sums of less than $500 each, shall be construed as transacting the business of an investment company and shall be subject to the provisions of this article relating to such corporations. (Amended by ch. 75, L. 1929.)

SEC. 303. *Conditions to be complied with by foreign corporation applying for license.*—Every foreign corporation before being licensed by the superintendent of banks to transact in this State the business of an investment company, or any part thereof, and annually thereafter during the month of November shall subscribe and acknowledge and submit to the superintendent of banks at his office an application certificate in duplicate, which shall specifically state:

1. The name of such foreign corporation.
2. The place where its business is to be transacted in this State.
3. The amount of its capital stock actually paid in cash and the amount subscribed for and unpaid.
4. A complete and detailed statement of its financial condition as of a date within 60 days prior to the date of such application certificate.

At the time such application certificate is first submitted to the superintendent, such corporation shall also submit a duly authenticated copy of its charter.

SEC. 304. *When foreign corporation may transact business of an investment company in this State.*—No foreign corporation shall transact in this State the business defined in this chapter as the business of an investment company or any part thereof, unless such corporation shall have

1. Been authorized by its charter to carry on such business and shall have complied with the laws of the State or country under which it is incorporated;
2. Made the deposit with the superintendent of banks required by section 306 of this article;
3. Designated the superintendent of banks, by an instrument in writing duly executed, its true and lawful attorney upon whom all process in any action or proceeding by any resident of the State against it may be served with the same effect as if it were a domestic corporation and had been lawfully served with process within the State;
4. Received a license duly issued to it by the superintendent as provided in section 27 of this chapter.

SEC. 305. *Rights and privileges of foreign corporation under license.*—When the superintendent shall have issued a license to any such foreign corporation, it may engage in the business of an investment company at the location specified in such license until the first day of January succeeding the date of such license, subject to all the provisions of article 2 of this chapter relating to foreign investment corporations doing business in this State.

SEC. 306. *Deposit of securities by foreign corporation with superintendent.*—Every such foreign corporation, before receiving a license to transact business in this State, shall deposit with the superintendent in trust as security for the depositors with and creditors of such corporation in this State, registered public stocks or bonds of the United States or this State or of any city, county, town, village, or free school district in this State authorized by the legislature to be issued, of the value of $100,000. Such foreign corporation so long as it shall continue solvent and comply with the laws of this State, may be permitted by the superintendent to collect the interest on the securities so deposited and from time to time to exchange such securities for others, as provided by section 35 of this chapter, and may examine and compare such securities, as provided by section 36 of this chapter.

SEC. 307. *Foreign corporation to submit names of its agents in this State.*—Every foreign corporation duly licensed by the superintendent to transact in this State the business of an investment company, or any part thereof, shall within 30 days after the date of such license submit to the superintendent of banks a statement verified by two of its principal officers, which shall contain the full name and business address of every individual, partnership, or unincorporated association, who is acting or whom it proposes to have act as its agent or representative in this State. Whenever any such corporation shall engage any person to act for it in this State and the name and address of such person is not contained in such verified statement submitted to the superintendent, such foreign corporation shall forthwith submit to the superintendent an amended statement verified in the same manner as the original. A violation of this provision shall subject such foreign corporation to a forfeiture of $1,000 for each offense.

SEC. 308. *Effect of revocation by superintendent of license to foreign corporation.*—Whenever the superintendent shall have revoked his license of any such foreign corporation and shall have taken the action to make such revocation effective specified in section 29 of this chapter, all the rights and privileges of such foreign corporation to transact the business in this State of an investment company, or any part thereof, shall forthwith cease and determine.

SEC. 309. *Reincorporation of certain corporations organized under the business corporations law.*—Any business corporation heretofore organized under the business corporations law whose corporate purposes include the transaction of any part of the business of an investment company and which has not heretofore sold any securities issued by it or guaranteed any securities sold by it or transacted any business which a savings and loan association is empowered to transact, may, within 90 days after this act takes effect, become an investment company under its former name with all the powers and subject to all the obligations and duties of investment companies organized under the provisions of this article. Such a corporation desiring to become an investment company shall proceed in the following manner:

1. It shall call a meeting of its stockholders upon not less than 20 days' written notice to each stockholder, which notice shall be served personally or by mail, postage prepaid, directed to each stockholder at his last known post-office address, and shall contain a statement of the purpose for which such meeting is called. Proof by affidavit of the due service of such notice shall be filed in the office of the corporation at or before the time of such meeting.

2. At the meeting so called the stockholders of such corporation may by a vote of at least two-thirds of the entire capital stock direct that such corporation shall be transformed into an investment company. In the event that such action is taken by the prescribed vote, a resolution may be adopted directing not less than five of the stockholders of such corporation who shall be designated by name in such resolution to execute an organization certificate in the form and manner required by section 290 of this article. The proceedings of such meeting shall be entered in the minutes of such corporation.

3. The persons named in such resolution shall thereafter subscribe and acknowledge in duplicate the said organization certificate and attach thereto copies of the minutes of such meeting duly verified by the president and secretary of the meeting, and duplicates of the affidavits of service of the notice of such meeting, and shall submit both of such duplicate certificates to the superintendent of banks at his office.

4. When the superintendent shall have indorsed his approval on the organization certificate as provided by section 23 of this chapter, such corporation shall be held and regarded as an investment company subject to the provisions of this article. It shall transact no business as such investment company other than that relating to its organization until it shall have complied with the conditions precedent to commencing business prescribed by section 291 of this article.

At the time when the corporate existence of such investment company begins, all the property of such corporation shall immediately by act of law and without any conveyance or transfer, be vested in and become the property of such investment company, but such reincorporation shall not be construed as a ratification of any ultra vires contracts therefore entered into by such corporation. The persons named in such organization certificate shall be the directors of such investment company until the first annual election of directors thereafter, and shall have power to take all necessary measures to perfect its organization and to adopt such regulations concerning its business and management as may be proper and not inconsistent with law.

SEC. 310. *How net earnings credited for dividend purposes, credits to surplus fund and to undivided profits, dividends to stockholders.*—When the net earnings of an investment company having preferred shares issued and outstanding have been determined at the close of a dividend period, if the surplus fund does not equal 20 per cent of the investment company's capital, one-tenth of such net earnings shall be credited to the surplus fund, or so much thereof, less than one-tenth, as will make such fund equal 20 per cent of such capital. The balance of such net earnings, or the entire amount thereof if such fund equals such 20 per cent, may be credited to the investment company's profit and loss account; or, if its expenses and losses for such dividend period exceed its gross earnings, such excess shall be charged to its profit and loss account. The credit balance of such account shall constitute the undivided profits at the close of such dividend period, which undivided profits shall be available for dividends.

The directors of any investment company may annually, semiannually, or quarterly, but not more frequently, declare such dividends as they shall judge expedient from such undivided profits. No investment company shall declare any dividends to its stockholders until it shall have made good any existing impairment of its capital and any existing encroachment on its reserves required to be maintained against deposits. (Added by ch. 50, L. 1926.)

FEDERAL RESERVE BANK OF PHILADELPHIA

DELAWARE

There is no general incorporation act in Delaware under which banks are chartered, each bank or trust company deriving its powers from the special charter under which it operates. There are no provisions in the Delaware laws relating specifically to the acceptance powers of State banks or trust companies, the authority to create acceptances being construed as existing by virtue of the general power to transact all such business as shall appertain to the business of banking.

There are no provisions of law in Delaware permitting acceptance banks of the type permitted by the provisions of the Edge Act.

(This information was received from Hon. Harold W. Horsey, State bank commissioner of Delaware.)

NEW JERSEY

Banks

(Laws of 1915, ch. 307)

7. *Acceptance of drafts and issuance of letters of credit.*—In addition to the powers conferred by the act entitled "An act concerning banks and banking (revision of 1899), approved March 24, 1899," by every bank hereafter organized to the extent set forth in its certificate of incorporaton, original or amended, and every bank heretofore created by special charter or organized under any law of this State, whether such powers are set forth in the charter or certificate of incorporation or not, shall have power to accept for payment at a future date drafts drawn upon it by its customers, and to issue letters of credit authorizing holders thereof to draw drafts upon it or its correspondents at sight or on time not exceeding one year: *Provided,* That the total amount of such drafts so accepted or letters of credit so issued for any one person, firm, or corporation shall not at any time exceed 10 per cent of the capital and surplus of the accepting or issuing bank.

Trust companies

(Laws of 1915, chapter 306)

4. *Acceptance of drafts and issuance of letters of credit.*—In addition to the powers conferred by the act entitled "An act concerning trust companies (revision of 1899), approved March 24, 1899," every trust company hereafter organized to the extent set forth in its certificate of incorporation, original or amended, and every trust company heretofore created by special charter or organized under any law of this State, whether such powers are set forth in the charter or certificate of incorporation or not, shall have power to accept for payment at a future date drafts drawn upon it by its customers and to issue letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents at sight or on time not exceeding one year: *Provided,* That the total amount of such drafts so accepted or letters of credit so issued for any one person, firm or corporation shall not at any time exceed 10 per cent of the capital and surplus of the accepting or issuing trust company.

There are no provisions of law in New Jersey permitting acceptance banks of the type permitted by the provisions of the Edge Act.

PENNSYLVANIA

Neither banks nor trust companies are specifically empowered to create acceptances, but this authority is deemed to be present by virtue of the general provision "and transact all such other business as shall appertain to the business of banking."

On the basis of the latest information available there are 17 State banks and 11 trust companies which possess special charters. The powers of each of these institutions may be ascertained only by reference to their charters.

There are no provisions of law in Pennsylvania permitting acceptance banks of the type permitted by the provisions of the Edge Act.

(The above information was secured from a deputy secretary of banking of the Commonwealth of Pennsylvania.)

34718—31—PT 6——18

Federal Reserve Bank of Richmond

Digest of the laws of the States of the fifth Federal reserve district, respecting the acceptance powers of State banks, the limitations on the amount of acceptances which State banks may discount, and the provisions of State laws permitting acceptances of banks of the type permitted by the provisions of the Edge Act

MARYLAND

Acceptance powers.—Section 23, article 11, of the Code of Maryland provides that every bank shall have the following powers:

"To exercise by its board of directors all such powers as shall be usual in carrying on the business of banking; * * * by accepting for payment at a future date, drafts or bills of exchange drawn upon it, having not more than six months to run, which grow out of transactions involving the importation or exportation of goods, or which grow out of transactions involving the domestic shipment of goods: *Provided,* That shipping documents conveying or securing title are attached at the time of acceptance, or which are secured at the time of acceptance, by a warehouse receipt or other such documents conveying or securing title covering readily marketable staples; by accepting drafts or bills of exchange drawn upon it having not more than three months' sight to run, by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange as required by the usages of trade in the respective countries, dependencies, or insular possessions: *Provided,* That it shall not accept such drafts or bills of exchange for the purpose of furnishing dollar exchange for any one bank or banker to an amount not exceeding in the aggregate 10 per cent of the paid up and unimpaired capital and surplus of the accepting bank unless the draft or bill of exchange is accompanied by documents conveying or securing title or by some other adequate security: *And provided further,* That it shall not accept such drafts or bills of exchange for the purpose of furnishing dollar exchange in any amount exceeding at any time the aggregate of one-half of its paid up and unimpaired capital and surplus; by issuing letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents at sight or on time not exceeding one year."

Note.—Identical powers are conferred upon trust companies by secton 46 of article 11 of the Code of Maryland.

Limitations.—There is no special limitation on the amount of bankers' acceptances which a State bank or trust company in Maryland may discount. In my opinion, the discount by a bank of an acceptance made by it would be subject to the limitations placed upon loans to any one customer by section 67 of article 11 of the Code of Maryland. This section limits the loans for any one customer to 20 per cent of the capital and surplus of the bank or 30 per cent of the capital and surplus if approved by two-thirds of the board of directors and on good security. The discount of bills of exchange drawn in good faith against actual existing values are excepted from the above limitations, and I think that the discount of acceptances of other banks should be construed as within the exception.

Edge Act corporations.—There is no reference in the Code of Maryland to acceptances of corporations similar to those created by the Edge Act.

NORTH CAROLINA

Acceptance powers.—Section 220 (1) of the Code of North Carolina reads in part as follows:

"Any bank doing business under this chapter may accept for payment at a future date, drafts or bills of exchange having not more than six months sight to run, drawn upon it by its customers under acceptance agreements, and which grow out of transactions involving the importation or exportation of goods; and issue letters of credit authorizing the holders thereof to draw upon it or its correspondents: *Provided,* That there is a definite bona fide contract for the shipment of goods within a specified reasonable time, and the existence of such contract is certified in the acceptance agreement or which grow out of transaction involving the domestic shipment of goods, provided that shipping documents, conveying or securing to the accepting bank title to readily marketable goods, are attached or in the hands of an agent of the accepting bank, independent of the drawer, for his account, at the time of acceptance, or which are secured at the time of acceptance by warehouse receipts or other documents conveying or securing to the accepting bank title to readily marketable goods fully covered by insurance, the warehouse receipts or other documents to be those of a responsible warehouse, independent of the drawer, the acceptance to remain secured during the life of the acceptance unless suitable security of same character, or cash, be substituted: *Provided,* No bank shall accept drafts or bills of exchange under this section to an aggregate amount at any time more than equal to the sum of its capital and permanent surplus: *Provided further,* That no bank shall accept, whether in a foreign or domestic transaction, for any one person, firm, or corporation, to any amount at any time equal to more than 25 per cent of its capital and permanent surplus, unless the accepting bank is secured either by attached documents or those held for its account by its agent, independent of the drawer, or by some other actual security of the same character. Should the accepting bank purchase or discount its own acceptances, such acceptances will be considered as a direct loan to the drawer, and be subject to the limitation on loans hereinbefore provided. The corporation commission may issue such further regulations as to such acceptances as it may deem necessary in conformity with this chapter. As used herein, the word 'goods' shall be construed to mean and include goods, wares, merchandise, or agricultural products, including livestock."

Limitations.—It is expressly provided by the above that the discount by any bank of its own acceptances is reckoned a direct loan to the drawer, and the discount of such acceptances is therefore subject to the limitations of section 220 (d) of the Code of North Carolina, which limits loans and discounts to any one customer to an amount equal to 20 per cent of the first $250,000 of the unimpaired capital and surplus of the bank and 10 per cent of the amount of capital and surplus exceeding $250,000. The discount of bills of exchange drawn in good faith against actual existing values is excepted from this limitation, and, in my opinion, the discount of acceptances of other banks would fall within the exception.

Edge Act corporations.—There is no reference to acceptances of corporations similar to those created under the Edge Act.

SOUTH CAROLINA

Acceptance powers.—Section 3992 of the Code of South Carolina provides in part as follows:

"Every such banking corporation may accept drafts or bills of exchange drawn upon it having not more than six months sight to run, exclusive of grace, which grow out of transactions involving the importation or exportation of goods or which grow out of transactions involving the domestic shipment of goods: *Provided,* Shipping documents conveying or securing title are attached at the time of acceptance, or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples. No such banking corporation shall accept, whether in a foreign or domestic transaction, for any one person, company, firm, or corporation, to an amount equal at any one time in the aggregate to more than 10 per cent of its paid-up and unimpaired capital stock and surplus, unless the banking corporation is secured either by attached documents or by some other actual security out of the same transaction as the acceptances; and no banking corporation shall accept such bills to an amount equal at any time in the aggregate to more than one-half of its paid-up and unimpaired capital stock and surplus: *Provided, however,* That the bank examiner, under such general regulations as he may prescribe, which shall apply to all banking corporations alike regardless of the amount of capital stock and surplus, may authorize any banking corporation to accept such bills to an amount not exceeding at any time in the aggregate 100 per cent of its paid-up and unimpaired capital stock and surplus: *Provided, further,* That the aggregate of acceptance growing out of domestic transactions shall in no event exceed 50 per cent of such capital stock and surplus."

Limitations.—There is no special limitation upon the amount of acceptances which may be discounted by any bank. In my opinion the discount by any bank of its own acceptances would be limited by section 3999 of the Code of South Carolina, which limits the amount of loans and discounts for any one customer to 10 per cent of the capital and surplus of the bank unless authorized by two-thirds vote of the directors. This section excepts the discount of bills of exchange drawn in good faith against actual existing values, and, in my opinion, the discount of bankers' acceptances of other banks would fall within the exception.

Edge Act corporations.—There is no reference to acceptances of corporations similar to those created under the Edge Act.

VIRGINIA

Acceptance powers.—Section 52, chapter 505, of the acts of 1928, provides as follows: "Any bank or trust company doing business in this State may accept drafts or bills or exchange drawn upon it, having not more than six months, sight to run, which grow out of transactions involving the importation or exportation of goods, or which grow out of transactions involving the domestic shipment of goods: *Provided*, Shipping documents conveying or securing title are attached at the time of acceptance, or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples. No bank shall accept, whether in a foreign or domestic transaction for any one person, company, firm or corporation to an amount equal at any time in the aggregate to more than 10 per cent of its paid-up and unimpaired capital stock and surplus, unless the bank is secured either by attached documents or by some other actual security growing out of the same transaction as the acceptance; and no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half of its paid-up and unimpaired capital stock and surplus: *Provided, however*, That with the approval of the banking division, State corporation commission, regardless of the amount of capital stock and surplus any bank may accept such bills to an amount not exceeding at any time in the aggregate 100 per cent of its paid-up and unimpaired capital stock and surplus: *Provided further*, That the aggregate of acceptances growing out of domestic transactions shall in no event exceed 50 per cent of such capital stock and surplus and that all banks which may have or shall hereafter become members of the Federal reserve system may accept drafts or bills of exchange drawn upon them by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange as required by the usages of trade in the respective countries, dependencies or insular possessions, according to the condition, limitations, and restrictions then in force, as prescribed by the Federal Reserve Board of the United States. Any bank or trust company doing business in this State may issue letters of credit authorizing the holders thereof to draw drafts upon it or upon its correspondent at sight or on time not exceeding one year, but the total amount issued for one person, firm, or corporation shall not at any one time exceed 10 per cent of the capital and surplus of the issuing bank or trust company."

Limitations.—There is no special limitation on the discount of bankers' acceptances. In my opinion, the discount by any bank of its own acceptances would fall within the limitations imposed by section 48 of chapter 505 of the acts of 1928, which limits loans and discounts for any one customer to 15 per cent of the capital and surplus of the bank, or with the approval of a majority of the board of directors or executive committee to 40 per cent of the capital and surplus. This section excepts, among other things, the discount of bills of exchange drawn in good faith against actual existing values, and, in my opinion, bankers' acceptances of other banks would fall within the exception.

Edge Act corporations.—There is no reference to acceptances of corporations similar to those created under the Edge Act.

WEST VIRGINIA

Acceptance powers.—Section 6 of article 4 of chapter 31 of the Code of West Virginia provides in part as follows:

"Any banking institution may accept, for payment at a future date, drafts drawn upon it by its customers, and issue letters of credit authorizing the holders thereof to draw drafts upon it or its correspondents, at sight or on time, not exceeding one year."

Limitations.—There is no special limitation on the amount of bankers' acceptances which may be discounted by any bank. ——— a discount by a bank of its own acceptance would fall within the limitations of section 18 of article 8 of chapter 31 of the Code of West Virginia, which limits the loans and discounts of any bank for any one customer to 20 per cent of the capital and surplus of such bank. The discount of bills of exchange drawn in good faith against, actual existing values are, among other things, excepted from the above limitation and, in my opinion, the discount of bankers' acceptances of another bank would fall within the exception.

Edge Act corporations.—There is no reference to acceptances of corporations similar to those created under the Edge Act.

Federal Reserve Bank of St. Louis

Digest of laws of States within eighth district respecting acceptances, as requested in question 14 of questionnaire 10

ARKANSAS

Permitted not exceeding six months. Total must not exceed capital and surplus. Acceptances included in loan limit of 30 per cent of bank's capital and surplus to one person, unless properly secured.

ILLINOIS

No mention.

INDIANA

No mention in banking law. Authorized for trust companies, without limitations.

KENTUCKY

Limit 50 per cent of capital and surplus except with approval bank commissioner; then limit 100 per cent. Time limit, six months.

MISSISSIPPI

Authorized for not exceeding six months. May not accept exceeding 10 per cent of capital and surplus for one person, unless secured. Total acceptances limit, 50 per cent of capital and surplus.

MISSOURI

Must not exceed 100 per cent of capital and surplus except with persmision of commissioner.

TENNESSEE

Authorized for not exceeding one year. No mention as to limit of amount.

Laws of States in this district do not provide for acceptance banks of the type permitted by the Edge Act.

Federal Reserve Bank of San Francisco

ARIZONA

(1) *Acceptance powers.*—No provisions.
(2) *Limitation State banks may discount.*—No provisions.
(3) *State laws governing Edge banks.*—No provisions.

CALIFORNIA

(1) *Acceptance powers.*—Any commercial bank may accept drafts or bills of exchange of not more than six months' maturity growing out of transactions involving domestic shipment of goods or importation or exportation of goods, provided shipping documents conveying or securing title are attached at time of acceptance; or which are secured at time of acceptance by warehouse receipt or other such document conveying or securing title covering readily marketable staples.

Any commercial bank may accept drafts or bills of exchange of not more than three months' maturity drawn under regulations prescribed by the superintendent of banks by banks in foreign countries or dependencies or insular possessions of United States for the purpose of furnishing dollar exchange as required by usages of trade in such countries or possessions. (Sec. 80, subdivision 4, Calif. bank act.)

(2) *Limitation State banks may discount.*—No commercial bank shall accept in domestic or foreign transactions for any one person, firm, or corporation, to an amount equal at any time in the aggregate to more than 10 per cent of paid-up and unimpaired capital and surplus, unless secured either by attached documents or some other actual security growing out of the same transaction as the acceptance. No commercial bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half of paid-up and unimpaired capital and surplus; provided, the superintendent of banks under regulations applying to all commercial banks regardless of capital and surplus, may authorize any com-

mercial bank to accept such bills to an amount not exceeding at any time in the aggregate 100 per cent of paid-up and unimpaired capital and surplus.

No commercial bank shall accept drafts or bills for furnishing dollar exchange for any one bank to an amount exceeding in the aggregate 10 per cent of paid-up and unimpaired capital and surplus of the accepting bank unless the draft or bill of exchange is accompanied by documents conveying or securing title or by some other adequate security. No commercial bank shall accept such drafts or bills in an amount exceeding at any time the aggregate of one-half of its paid-up and unimpaired capital and surplus. (Sec. 80, subdivision 4, Cal. bank act.)

Provisions as to savings banks.—A savings bank may discount or purchase bankers' acceptances of the kind and character and maturities defined and made eligible for rediscount with the Federal reserve bank: *Provided, also,* Such bankers' acceptances are accepted or indorsed without qualification by a bank or trust company having a paid-in capital of at least $1,000,000. No savings bank shall at any time hold or acquire, by discount or purchase, bankers' acceptances from any one acceptor in any amount equal at any time in the aggregate to more than 10 per cent of its paid-up capital and surplus, unless the acceptance is secured either by attached documents or actual security growing out of the same transaction as the acceptance: *Provided, however,* Any savings bank may, regardless of such security, acquire and hold acceptances equal to 25 per cent of its capital and surplus, of any one acceptor having a paid-in capital of not less than $3,000,000.

No savings bank shall acquire or hold, by discount or purchase, a combined total of bankers' acceptances and bills of the character defined by this section greater than 20 per cent of the deposits of such bank. Any savings bank may, however, acquire and hold bankers' acceptances in the amount of $2,500. (Sec. 67, 1 (d), Calif. bank act.)

(3) *State laws governing Edge banks.*—The Edge Act has been adopted in toto with minor changes too numerous to set forth, but with the same powers and limitations. (Ch. 772, p. 1341, Laws, 1921.)

IDAHO

(1) *Acceptance powers.*—No provisions.
(2) *Limitation State banks may discount.*—No provisions.
(3) *State laws governing Edge banks.*—No provisions.

NEVADA

(1) *Acceptance powers.*—No provisions.
(2) *Limitation State banks may discount.*—No provisions.
(3) *State laws governing Edge banks.*—An act approved March 23, 1921, 373, provides that banks organized under the laws of Nevada may, upon filing proper application therefor with State bank examiner, and under regulations prescribed by State bank examiner, invest not to exceed 10 per cent of its paid-in capital stock and surplus in stock of one or more banks or corporations of the type chartered or incorporated under section 25a of the Federal reserve act, as approved December 24, 1919 (Edge Act).

OREGON

(1) *Acceptance powers.*—May accept drafts or bills of not over six months' maturity growing out of importation or exportation transactions or domestic shipment of goods, provided shipping documents conveying or securing title are attached at the time of acceptance or secured at time of acceptance by warehouse receipt or other such document conveying or securing title covering readily marketable staples. May accept drafts or bills of not over six months' maturity, drawn under regulations prescribed by superintendents or bankers in foreign countries or dependencies or insular possessions of the United States, for furnishing dollar exchange.

(2) *Limitation State banks may discount.*—No bank shall accept drafts or bills of exchange in foreign or domestic transactions for any one person, company, firm, or corporation to an amount equal at any one time in the aggregate to more than 20 per cent of paid-up and unimpaired capital and surplus, unless secured by attached documents or some other actual security growing out of the same transaction as the acceptance.

No bank shall accept bills to an amount equal at any time in the aggregate to more than its paid-up and unimpaired capital and surplus: *Provided, however,* The aggregate of acceptances growing out of domestic transactions shall not exceed 50 per cent of capital and surplus.

Acceptances for the purpose of furnishing dollar exchange, for any one bank shall not exceed in the aggregate 20 per cent of paid-up and unimpaired capital and surplus of accepting bank, unless the draft or bill of exchange is accompanied by documents conveying or securing title or some other adequate security. In any event, no bank shall accept for the purpose of furnishing dollar exchange in an amount exceeding at any time the aggregate of paid-up and unimpaired capital and surplus.

The foregoing restrictions do not apply to extensions of credits secured by Liberty bonds or other bonds or securities issued by United States if the market value of such securities exceed by 10 per cent the amount of the loan or extension of credit. (Oregon Laws 1925, ch. 207, sec. 128, p. 307.)

Subject to the provisions of the act relating to limitations on loans and power to accept drafts and bills of exchange, the assets of the savings department of any savings bank or any bank maintaining a savings department, may invest in bankers' acceptances of the kinds described in section 13 of the Federal reserve act, in an amount not exceeding 20 per cent of the total savings deposits of such bank. (Laws 1925, ch. 207, sec. 135; Oregon Code 22-1109.)

(3) *State laws governing Edge banks.*—Any bank which is a member of the Federal reserve system having a capital and surplus of $1,000,000 or more, may file with superintendent of banks, under conditions to be prescribed by him, application for permission to establish branches in foreign countries or dependencies or insular possessions of the United States for the furtherance of foreign commerce. Any bank, without regard to its capital and surplus, may apply for permission to invest an amount not exceeding 10 per cent of capital and surplus in the stock of a bank or banks chartered under section 25a of the Federal reserve act approved December 24, 1919 (Edge Act). (Laws 1925, ch. 207, sec. 82; Oregon Code 22-905.)

UTAH

(1) *Acceptance powers.*—No provisions.
(2) *Limitation State banks may discount.*—No provisions.
(3) *State laws governing Edge banks.*—No provisions.

WASHINGTON

(1) *Acceptance powers.*—No express power granted.[1]
(2) *Limitation State banks may discount.*—No provisions.[1]
(3) *State Laws governing Edge banks.*—No provisions.

By an opinion dated March 31, 1926, the Attorney General of the State of Washington ruled also that as an abstract proposition a Washington State bank has no power to lend its credit by guaranteeing by acceptance the payment of a time bill of exchange. However, the Attorney General ruled that if the drawee of a bill of exchange accepts it and arranges with the bank for a stated line and limit of credit, within the law, such bank may be permitted to guarantee such acceptance, carrying it on its books as such.

The foregoing is exclusive of the special statute passed in 1929 applying only to mutual savings banks, which statute is as follows:

"A mutual savings bank may invest not to exceed 20 per cent of its funds in bankers' acceptances and bills of exchange of the kind and character following:

"(1) Bankers' acceptances, and bills of exchange made eligible by law for rediscount with Federal reserve banks, provided the same are accepted by a bank or trust company which is a member of the Federal reserve system and which has a capital and surplus of not less than $2,000,000.

"(2) Bills of exchange drawn by the seller on the purchaser of goods and accepted by such purchaser, of the kind made eligible by law for rediscount with Federal reserve banks, provided the same are indorsed by a bank or trust company which is a member of the Federal reserve system and which has a capital and surplus of not less than $2,000,000.

"The aggregate amount of the liability of any bank or trust company to an mutual savings bank, whether as principal or indorser, for acceptances held by such savings bank and deposits made with it, shall not exceed 25 per cent of the paid up capital and surplus of such bank or trust company, and not more than 5 per cent of the funds of any mutual savings bank shall be invested in the acceptances of or deposited with a bank or trust company of which a trustee of such mutual savings bank is a director." Laws 1929, p. 115, sec. 17—sec. 171, Washington Banking Code.)

[1] The Attorney General of the State of Washington, by opinion dated Feb. 11, 1926, has, however, ruled that banks and trust companies in Washington have power to receive and discount time bills of exchange.