

The Functions and Policies
of the
Federal Reserve System

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FEDERAL RESERVE BOARD



PUBLISHED BY
FEDERAL RESERVE BANK
OF PHILADELPHIA

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Address by
W. P. G. HARDING, Governor
FEDERAL RESERVE BOARD
Before the Chamber of Commerce
of Cleveland, Ohio
SEPTEMBER 16, 1920



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The Functions and Policies of the Federal Reserve System

THE Federal reserve system is now passing through a crucial stage of its existence. Despite the publicity which has always been given to its operations from the beginning and the efforts that have been made to explain the principles and objects of the Federal Reserve Act, there is still a wide-spread misunderstanding of the functions, policies, powers, and limitations of the Federal reserve banks and of the Federal Reserve Board.

The fundamental objects in establishing the Federal reserve banks, as defined in the short title of the Act, were "to furnish an elastic currency, to afford means of rediscounting commercial paper, and to establish a more effective supervision of banking in the United States."

The experience of the past four years has demonstrated the expansive power of the Federal reserve system, but an elastic system of Federal reserve bank credit and note issue implies capacity to control and power to curtail as well as to expand. The ability of the system to check undue expansion and to induce normal and healthy liquidation is still on trial.

The enactment of the Federal reserve law and of its various amendments and the operation of the Federal reserve banks have brought about changes in our banking structure hardly less marked than the economic changes that have been caused by the world war. Cash in vault and balances with banks other than the Federal reserve banks no longer count as lawful reserve for the member banks of the Federal reserve system—their entire reserve must now be carried with the Federal reserve banks. The lend-

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ing power of the member banks has been greatly increased because of the substantial reduction, in more than 50 per cent, in the reserve they are required to carry and because of the phenomenal growth in their deposits, without taking into account the greatly extended rediscount facilities afforded them by the Federal reserve banks and the power given them in the Federal Reserve Act to lend their credit by accepting drafts drawn upon them in domestic transactions involving the shipment of goods and in transactions growing out of importations and exportations. No one has denied that our old banking system, with the rigidity of its currency and with the limitations upon its rediscount facilities, would have collapsed under the strain which would have been imposed upon it by war conditions. Even had there been no war, the old system would have been unable to respond to the business requirements of the present day.

The Federal reserve banks, as the custodians of the ultimate banking reserves of the country, as the mainstay of the acceptance market, as the agencies of last resort in the matter of rediscounts, and as the media through which so large and important a part of the currency is issued, must always be kept in an absolutely sound and strong position. Their strength must be measured by the liquidity and intrinsic value of their invested assets, which include rediscounts for member banks, as well as by the proportion of gold and lawful money to their liabilities. A gold reserve is essential to a sound financial system. This percentage of reserve ought normally to be considerably higher than the minimum required by law, in order to provide ample margin for meeting unusually large seasonal requirements and unexpected emergencies, but even though the reserve should fall temporarily below legal requirements, there would be no

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occasion for uneasiness provided the assets of the banks are of the self-liquidating character which would admit of the restoration of the reserve within a reasonable time. It would be folly to inflict serious injury upon agriculture, commerce, and industry merely for the sake of maintaining an arbitrary minimum reserve, but it would be still more consummate folly to treat a low reserve position, brought about by an emergency, as a normal base from which future emergencies are to be met.

The average reserve now required of all national banks is about 8 per cent of their net deposits. As this reserve must be carried with the Federal reserve bank, it will amount to 8 per cent in terms of gold and lawful money, only when the reserve of the Federal reserve bank is 100 per cent of its liabilities, and it is reduced *pari passu* as the reserve of the Federal reserve bank declines. There are some who believe that the minimum reserve required by law may be lightly infringed upon, for they say "what is a reserve for, if it is not to use." Some who hold these views are fond of referring to the case of a hospital where all the beds are occupied except a few which are held in reserve. The ambulance brings in a badly injured man, who is denied admission upon the ground that all the beds are full. The ambulance surgeon points to two or three unoccupied beds and is met with the response, "Those are reserve beds and can not be used." Certainly any hospital under sane management would use those beds in case of real emergency, but would not permit their use by strangers of sound and healthy appearance who might have been unable to obtain hotel accommodations, or by husky hoboes who find park benches too hard for comfort, nor would a hospital with the capacity taxed to the limit

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encourage convalescent patients to remain a day longer than necessary.

The law fixes the minimum reserve to be carried by Federal reserve banks against their note issues at 40 per cent, and against their member banks' deposits at 35 per cent. It permits temporary suspension by the Federal Reserve Board of these minimum reserves under certain graduated penalties, but in order to illustrate the danger of regarding the legal minimum as the normal base from which to operate, I would like you to consider what would be the outcome if we had to meet another emergency such as war, with Federal reserve bank reserves at their present level. When a state of war was declared on April 6, 1917, the combined reserves against deposits and note issues of all Federal reserve banks averaged 84.7 per cent. Due to this condition the United States was able to meet all financial obligations incurred without any impairment of its own ability or of that of the banks to redeem currency in gold, thus preserving the parity of all forms of money in circulation. This was an achievement impossible of accomplishment during the Civil War, when current prices were quoted in terms of irredeemable paper money, which was not brought back to a parity with gold until fourteen years after the close of the war.

Early in January, 1919, shortly after the armistice, the combined reserve of the Federal reserve banks was 51.3 per cent, showing a diminution of 33.4 per cent from the date of our country's entry into the war. The gold embargo was removed in June, 1919, when large amounts of gold held for foreign account were released. Even after this the reserves stood at 51 per cent on September 26th, after which date they showed a steady and continuous decline to 44.8 per cent at the close of the year.

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During the last six months of the year 1919, tendencies towards unrestrained extravagance and abuse of credit were manifest all over the country. It became evident that the rediscount facilities of the Federal reserve banks were being used too freely and that unless corrective measures were applied the situation would become exceedingly dangerous. The rediscount rates of the Federal reserve banks were much below the market rates for money, thus affording member banks an opportunity for profit in their rediscount transactions, and making it exceedingly difficult to keep in check borrowing demands made upon them. The Federal Reserve Board and the Federal reserve banks, while recognizing the necessity of holding these dangerous tendencies in check by means of a reasonable and effective control of credit in order that its flow might be once more regulated and related to the economic welfare of the country and the needs of its producing industries, were reluctant to take any precipitate action. It was realized that productive industries are profoundly affected by credit conditions, that modern business is done on credit and that the mood and temper of the business community are deeply affected by the state of credit and may be easily disturbed by ill-considered or hasty action. The test of the functioning of a credit system must be found in what it does to promote the production and distribution of goods. It is well understood that too rapid or too drastic deflation would defeat the very purpose of a well regulated credit system by its unsettling effect upon productive industry. On the other hand, over production at high cost on expanded credit would be a grave menace. The Federal reserve authorities recognized the importance of avoiding extremes and their energies were therefore directed more particularly to the prevention of further

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expansion for non-essential purposes and to the gradual and orderly liquidation of non-essential loans. The predominant idea was not necessarily to reduce the loan accounts of the banks of the country but to bring about such a readjustment in them as would ultimately lead to a restoration of a proper balance between the volume of credit and the volume of concrete things, which credit helps to produce and which are the normal basis of credit. The Board believes that this equilibrium can be restored only by speeding up the processes of production, by the orderly distribution of goods, by the avoidance of excessive consumption and by the increased accumulation of savings.

On several occasions, before changes were made in the discount rates of the Federal reserve banks, the Federal Reserve Board brought these matters to the attention of the public with a view of testing thoroughly the theory that the credit situation could be controlled without advancing the discount rates of the Federal reserve banks. But because of the exhaustion of capital throughout the world and of the universal demand for credit, it soon developed that this was impossible. Rates were advanced slightly during November, 1919, and again on January 23, 1920, approximately to their present level. The rates established, however, were still considerably lower than current market rates. It became evident early in the spring that no reduction in the total volume of loans was taking place, and that unless a more discriminating judgment was used by member banks in granting accommodations, the country would be confronted with a real crisis during the crop moving period, into which we have now entered.

At a conference held last May between members of the Federal Reserve Board, members of the Federal

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Advisory Council and the Class "A," or banker, directors of the Federal reserve banks, there was an exhaustive discussion of the banking and financial situation. In presenting to the conference an outline of the Board's views, I pointed out that since June 30, 1914, there had been an expansion of banking credit in the United States, properly attributable to the war, of \$11,000,000,000, and that during the same period there had been an increase in the volume of money in actual circulation of about \$1,900,000,000. When it is considered that our Government during a period of three years floated \$26,000,000,000 of securities to meet war requirements, the credit expansion which had taken place could not be regarded as excessive or alarming when viewed from the standpoint of war necessity. Attention was called, however, to the continued expansion which had taken place since the flotation of the Victory Loan in May, 1919, in the face of a decreased production of essentials.

In order that you may understand the Board's viewpoint of some of our major problems last May, I shall quote literally from the statement presented to the conference.

"It is this tendency of production to decline, particularly in some essential lines, which constitutes a very unsatisfactory element in the present outlook. It is evident that the country can not continue to advance prices and wages, to curtail production, to expand credits and to attempt to enrich itself by non-productive operations and transactions without fostering discontent and radicalism, and that such a course, if persisted in, will eventually bring on a real crisis.

"The fact must be recognized that however desirable on general principles continued expansion of trade and industry may be, such developments must

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accommodate themselves to the actual supply of capital and credit available.

“Every effort should be made to stimulate necessary production, and to avoid waste. War waste and war financing result inevitably in diminished supplies of goods and increased volume of credits. The normal relationship between the volume of goods and the volume of money and credits thus unsettled can be restored in either of two ways; one, the drastic method of contraction of credit, and the other, by far the more desirable way, increased production. In the same way progress towards the restoration of the normal relationship between goods and credit may be made by reducing credit more rapidly than production is diminished, or by increasing production at a greater rate than credit is expanded. If it should prove impracticable in the existing circumstances to increase essential production, then we must through economy in consumption and through moderation in the use of credit check the tendency towards a further widening of the margin between goods and credit.

“Our problem, therefore, is to check further expansion and to bring about a normal and healthy liquidation without curtailing essential production and without shock to industry, and, as far as possible, without any disturbance to legitimate commerce and business.

“Regardless of the extent of its legal powers, it would be a most difficult task for the Federal Reserve Board to attempt by general rule of country-wide application to distinguish between ‘essential’ and ‘non-essential’ loans. During the war there was a broad underlying principle that essentials must be ‘necessary or contributory to the conduct of the war,’ but notwithstanding the sharp outline of this principle much difficulty was experienced by the various war boards

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in defining essentials and non-essentials. It would be all the more difficult for the Federal Reserve Board to make such a general definition now when there is no longer that purpose as a guide.

“Section 13 of the Federal Reserve Act in defining the eligibility of paper for discount by Federal reserve banks lays down the general rule that any paper maturing within the time prescribed, and issued or drawn for commercial, agricultural or industrial purposes, or the proceeds of which have been used or are to be used for such purposes, is eligible. No express condition is made regarding the essential or non-essential character of the transaction giving rise to a note which may be offered for discount, and the Federal Reserve Board is not required and properly could not be expected generally to adopt such a criterion of eligibility. It is too much a matter of local conditions and local knowledge to justify at this time any general country-wide ruling by the Board even if such a ruling were deemed helpful.

“On the other hand, there is nothing in the Federal Reserve Act which *requires* a Federal reserve bank to make any investment or to rediscount any particular paper or class of paper. The directors of a Federal reserve bank are, however, required by law to administer its affairs ‘fairly and impartially and without discrimination in favor of or against any member bank,’ and subject to the provisions of law and the orders of the Federal Reserve Board to extend ‘to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks.’ Thus the directors of a Federal reserve bank have the power to limit the volume and character of loans which in their judg-

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ment may be safely and reasonably made to any member bank.

“It is the view of the Board, however, that while Federal reserve banks might properly undertake in their transactions with member banks to discriminate between essential and non-essential loans, nevertheless that discrimination could much better be made at the source by the member banks themselves. The individual banker comes in direct contact with his customer; he is better qualified than anyone else to advise him because of his familiarity, not only with the customer’s business but with general business conditions and needs in his immediate locality. He is entirely free to exercise discretion and can make one loan and decline another as his judgment may dictate. He can estimate with a fair degree of accuracy the legitimate demands for credit which are liable to be made upon him, as well as the fluctuations in the volume of his deposits. He knows what industries sustain his community, and is thus qualified to pass upon the essential and non-essential character of loans offered him. He knows, or should know, what rediscount line he may reasonably expect of his Federal reserve bank, and he ought not to regard this line as a permanent addition to his capital. With knowledge of the limitations or penalties put upon his borrowings from the Federal reserve bank the banker must be depended upon to use a more discriminating judgment in granting credit accommodations to his customers.

“It is true that under existing conditions the volume of credit required in any transaction is much greater than was the case in pre-war times, but it is also true that the resources of the member and non-member banks would be ample to take care of the essential business of the country and to a large extent

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of non-essentials as well if there were a freer flow of goods and credit. If 'frozen loans' were liquified, and if commodities which are held back either for speculative purposes or because of lack of transportation facilities should go to the markets, and if large stocks of merchandise should be reduced, the resultant release of credit would have a most beneficial effect upon the general situation. In the meantime everything must be done to expedite the release of these credits and to restrict non-essential credits in future.

"While the problem of credit regulation and control is national and even international in its scope, yet in the last analysis it is merely an aggregation of individual problems, and the proper working out of the situation must depend upon the public and upon the banks which deal with the public. The public should realize the necessity of economy in expenditures and in consequent demands for banking credit. The banks themselves are best able to impress the importance of this policy upon the public, and both must do their part in accelerating the processes of production and distribution and in restricting waste and extravagance."

The policies outlined by the Board have, generally speaking, met with the approval of solid banking and business sentiment, and there has been since last spring a marked improvement in the credit situation. This is due to the better character and greater liquidity of bank credits rather than to any actual decrease in the volume of credit. As a matter of fact, the expansion in loans and currency during the past twelve months has been greater than for any like period in the history of the country with the single exception of the period between September, 1917, and September, 1918, when we were in the midst of the war.

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I wish to call your attention to a comparative statement showing certain items of resources and liabilities of the Federal reserve banks as of the last Friday in August, 1918, 1919, and 1920.

	August, 30, 1918	August 29, 1919	August 27, 1920
Total Gold Reserves	\$2,013,794,000	\$2,066,788,000	\$1,971,825,000
Legal Tender Notes, Silver, etc.....	53,168,000	69,188,000	156,002,000
Total Cash Reserves..	\$2,066,962,000	\$2,135,976,000	\$2,127,827,000
Bills discounted secured by Government			
War obligations ...	896,333,000	1,609,296,000	1,314,830,000
All others	531,862,000	205,838,000	1,352,297,000
Bills bought in open market	232,603,000	363,138,000	321,965,000
Total bills on hand... (Long-term Securities)	1,660,798,000	2,178,272,000	2,989,092,000
United States Government Bonds	30,350,000	27,096,000	26,810,000
Victory Notes		198,000	69,000
Treasury Certificates of Indebtedness ...	25,772,000	243,411,000	273,701,000
All other earning assets	67,000		
Total earning assets ..	1,716,987,000	2,448,977,000	3,289,672,000
Government Deposits.	104,729,000	54,494,000	43,510,000
Due to Member Banks (Reserve Acct.) ...	1,478,639,000	1,729,950,000	1,818,502,000
F. R. Notes in actual circulation	2,092,708,000	2,580,629,000	3,203,637,000
Federal Reserve Bank notes	20,687,000	219,815,000	200,793,000

These figures show that the banks of the country and the Federal reserve banks have functioned well in meeting business requirements. While the process of bond distribution and liquidation of loans secured by Government obligations has proceeded steadily, there has been a large expansion of commercial loans. This expansion would be disquieting if the character of the loans was not understood, but as long as the advances are made on short time and for essential

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purposes in connection with the processes of production and distribution of goods, there is no reason for apprehension. There has been little change in the actual reserve held by the Federal reserve banks during the past two years, but the total amount of bills held by them has increased from \$1,660,798,000 on August 30, 1918, to \$2,178,272,000 on August 29, 1919, and \$2,989,092,000 on August 27, 1920, the increase from August 30, 1918, to August 29, 1919, having been \$517,474,000, and from August 29, 1919, to August 27, 1920, \$810,820,000. The total amount of bills held by the Federal reserve banks on January 23, 1920, the date when the present rate schedule became effective, was \$2,729,247,000 so that the increase from that date to August 27, 1920, has been \$259,845,000.

This increase in loans of the Federal reserve banks during the past year is a net increase despite a reduction in bills secured by Government war obligations of \$294,466,000 and of bills bought in open market of \$41,173,000, the increase in all other bills, including commercial rediscounts, having been \$1,146,459,000.

On August 30, 1918, Federal reserve notes in actual circulation amounted to \$2,092,708,000, on August 29, 1919, to \$2,580,629,000 an increase of \$487,921,000, and on August 27, 1920, to \$3,203,637,000, an increase during the past year of \$623,008,000. Since the end of August, this year, the crop moving demands have accelerated, and Federal reserve note issues have increased at the rate of from \$30,000,000 to \$40,000,000 a week, and bills discounted and bought by Federal reserve banks at the rate of about \$50,000,000 a week. The increase in the volume of Federal reserve notes outstanding from January 23, 1920, to August 27, 1920, was \$360,000,000.

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Your attention is also invited to the following statement giving some of the figures furnished by a number of banks, including all of the more important member banks in the Federal reserve and branch bank cities and clearing house cities throughout the country. For convenience they are designated as "reporting member banks." Their resources are estimated to be between 65 and 70 per cent of the resources of all member banks and between 35 and 40 per cent of all commercial banks in the country.

	September 5, 1919	September 3, 1920
REPORTING MEMBER BANKS		
Number of Reporting member banks	774	819
Liberty Bonds	\$636,804,000	\$604,105,000
Victory Notes	316,489,000	192,778,000
Certificates of indebtedness	1,334,416,000	422,050,000
U. S. Bonds securing circulation ...	269,393,000	268,906,000
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Total United States securities owned	\$2,557,102,000	\$1,487,839,000
Loans secured by Government obligations (x)	1,294,285,000	695,291,000
Loans secured by stocks and bonds other than United States securities	2,956,596,000	3,044,120,000
All other loans and investments (x)	8,425,179,000	10,286,315,000
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Total loans and investments, exclusive of rediscounts	\$15,233,162,000	\$15,513,565,000
Total loans and investments, including rediscounts with F. R. Banks		
Reserve balances with F. R. Banks	1,342,058,000	1,394,957,000
Cash in vault	365,330,000	349,505,000
Net demand deposits	10,901,999,000	11,252,334,000
Time deposits	1,921,549,000	2,767,782,000
Government deposits	686,443,000	61,755,000
Bills payable with F. R. Banks	1,147,401,000	786,692,000
Bills discounted with F. R. Banks..	297,805,000	1,414,413,000
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(x) Exclusive of bills rediscounted with other banks, including Federal Reserve Banks.		

The figures given in the foregoing table for September 5, 1919, were furnished by 774 member banks, and those for September 3, 1920, by 819 member

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banks. United States securities owned by all reporting member banks on September 5, 1919, amounted to \$2,557,102,000 against \$1,487,839,000 on September 3, 1920, a decrease of \$1,069,263,000, of which \$156,410,000 represents the permanent distribution of Liberty Bonds and Victory Notes to the investing public and \$912,366,000 the decrease in the amount of Treasury certificates held by the reporting banks. During the same period the loans of these banks secured by Government obligations (exclusive of rediscounts) declined from \$1,294,285,000 to \$695,291,000, a decrease of \$598,994,000. An increase of \$87,524,000 in loans secured by stocks and bonds other than United States securities is not significant, but all other loans and investments, which include commercial loans (exclusive of rediscounts), increased from \$8,425,179,000 to \$10,286,315,000 an increase of \$1,861,136,000, or 22.1 per cent. On January 23, 1920, the loans and investments (less rediscounts) of the reporting member banks, exclusive of loans secured by Government obligations and by other stocks and bonds, amounted to \$9,505,927,000. The increase in these loans from that date up to September 3, 1920, has been \$780,388,000, being an increase of 8.2 per cent for the period. If the increase is figured on the amounts of loans, inclusive of rediscounts with the Federal reserve banks, the increase since that date works out at \$1,252,379,000, or 12.3 per cent.

As shown in the table, total loans and investments (exclusive of rediscounts) of these reporting member banks show a net increase for the annual period covered from \$15,233,162,000 to \$15,513,565,000, or \$280,403,000. If the larger amounts of rediscounts with the Federal reserve banks on the more recent date are taken into account, an increase of \$1,397,011,000 from \$15,530,967,000 to \$16,927,978,000 is shown.

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Reserve balances with Federal reserve banks and cash in vault show a negligible increase of but \$37,074,000, on the two items combined, while net demand deposits of these reporting banks increased from \$10,901,999,000 to \$11,252,334,000 or \$350,335,000.

(Note:—Increase of time deposits due to a very large extent to admission of California state banks and trust companies with large savings deposits.)

During the same time Government deposits held by them declined from \$686,443,000 to \$61,755,000, a loss of \$624,688,000. Bills payable with Federal reserve banks, consisting principally of member banks' collateral notes secured by Government obligations, amounted on September 5, 1919, to \$1,147,401,000, while on September 3, 1920, they had declined to \$786,692,000, a decrease of \$360,709,000. On September 5, 1919, the reporting member banks showed bills discounted with Federal reserve banks (this item includes commercial paper of various types) amounting to \$297,805,000, and on September 3, 1920, \$1,414,413,000, an increase of \$1,116,608,000. The total accommodation received by these member banks from Federal reserve banks, being the sum total of bills payable and bills rediscounted, amounted on September 5, 1919, to \$1,445,206,000, and on September 3, 1920, to \$2,201,105,000, an increase of \$755,899,000.

It is known that as a direct result of the discount policy of the Federal reserve banks there has been a very large decrease in the amount of speculative and non-essential loans, and it is believed that the increase in the loan account of these reporting member banks has been due largely to a response to legitimate agricultural, commercial and industrial requirements.

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The rapid expansion in loans which is just now taking place is due, undoubtedly, to crop moving requirements. Seven Federal reserve banks are now rediscounting paper with three other Federal reserve banks, and at the close of business on September 9, 1920, the Federal Reserve Bank of New York had rediscounted with other Federal reserve banks bills receivable amounting to \$35,250,000. The Federal Reserve Bank of Richmond has rediscounted \$20,000,000; Atlanta, \$30,200,000; St. Louis, \$27,422,000; Minneapolis, \$21,293,000; Kansas City, \$18,902,000; and Dallas, \$37,618,000; making a total of rediscount transactions of \$190,685,000. Of this amount the Federal Reserve Bank of Boston advanced \$76,195,000; the Federal Reserve Bank of Philadelphia, \$4,000,000 and the Federal Reserve Bank of Cleveland, \$110,490,000.

With the exception of New York all of the borrowing Federal reserve banks are located in agricultural sections. The Federal Reserve Bank of New York is the greatest single supporter of the acceptance market and it is known that member banks in New York City are lending heavily just now to country banks in the farming sections. Consequently it is not overstating the case to say that all of the Federal reserve banks inter-bank borrowing is for crop moving purposes.

Your attention is called to a statement of bills discounted by Federal reserve banks in the South and West which represent advances in support, directly and indirectly, of agricultural and live stock interests.

Of the total amount of bills under discount as of September 3, 1920, the Federal Reserve Bank of Richmond estimates that 27.3 per cent were in support of agricultural and live stock interests. The Federal Reserve Bank of Atlanta estimates its per-

**BILLS DISCOUNTED BY FEDERAL RESERVE BANKS IN THE SOUTH AND WEST WHICH
REPRESENT ADVANCES IN SUPPORT DIRECTLY OR INDIRECTLY
OF AGRICULTURAL AND LIVE STOCK INTERESTS**

Federal Reserve Bank	1 Bills discounted for members outstanding September 3, 1920	2 Discounts directly in support of agricultural and live stock interests	3 Estimated amount of discounts indirectly in support of agricultural and live stock interests	4 Total estimated amount of discounts in support of agricultural and live stock interests	Ratio of 2 to 1	Ratio of 3 to 1	Ratio of 4 to 1
	Amounts in thousands of dollars				Per cent	Per cent	Per cent
Richmond	128,411	16,000	19,000	35,000	12.5	14.8	27.3
Atlanta	150,612	17,508	(a) 18,213	35,721	11.6	12.1	23.7
Chicago	448,855	(b) 142,000	(c) 75,000	217,000	31.6	16.7	48.3
St. Louis	(d) 131,900			29,000			22.0
Minneapolis	103,618	58,000	(e) 10,000	68,000	56.0	9.6	65.6
Kansas City	131,238			78,500			59.8
Dallas	112,280	33,452	22,688	56,140	29.8	20.2	50.0
San Francisco	162,559	38,300	(f) 57,200	95,500	23.5	35.2	58.7

- (a) Includes \$13,200,000 advanced against Government war securities to banks in strictly agricultural sections.
- (b) Includes loans made directly or indirectly to banks in strictly agricultural sections.
- (c) Loans to industries directly allied with agriculture.
- (d) Figures for August 13 to which date estimate of \$29,000,000 of loans for agricultural and live stock purposes applies.
- (e) Advances against Government war securities.
- (f) Includes \$24,300,000 advanced against Government war securities.

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centage of agricultural and live stock bills to be 23.7 per cent, and this does not include the large amount of export bills discounted by the New Orleans Branch of the Federal Reserve Bank. At Chicago the percentage of paper rediscounted in support of agricultural and live stock interests to total bills held was 48.3 per cent; at St. Louis, 22 per cent; at Minneapolis, 65.6 per cent; Kansas City, 59.8 per cent; Dallas, 50 per cent, and at San Francisco, 58.7 per cent. The total of bills discounted for member banks by these eight Federal reserve banks on September 3rd was \$1,369,673,000.

As non-member banks cannot rediscount with Federal reserve banks and as by far the larger part of the loans of member banks are made out of their own resources, it is evident that the total of bank accommodations to agriculture and live stock interests are far greater than the amounts rediscounted at the Federal reserve banks. As a majority of these loans are seasonal in their character, it is evident also that their liquidation will do more than any other single factor towards strengthening the banking position.

Speaking for myself personally, I desire to say, however, that I am a firm believer in gradual and orderly methods of marketing our great agricultural staples. Agriculture is the most important of all industries, for upon its fruits depend the lives of those engaged in all other industries. The farmer is a great consumer of manufactured products and anything that affects his buying power is soon reflected in the business of the merchant and the manufacturer. While the individual farmer may be just as well off with small production and high prices, the mass of the population is far better off with full production and moderate prices. But farming as a business must be remunerative or production will languish. It is,

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therefore, important that the efforts of the farmer be supported and stimulated, that he be aided in preserving the full measure of his harvest and that he be afforded an opportunity of marketing his products on terms sufficiently profitable to warrant his staying in the business of farming.

Great staple crops, the production of which extends over a period of several months, must meet the requirements of consumption for a full year and in order to prevent possibility of shortage it is desirable that there be a reasonable surplus held over from one crop pending the marketing of the next. The gradual and orderly marketing of our great staple crops is, therefore, a matter of importance both to producers and consumers. The dumping upon the market within a short period of time of a large part of a crop, consumption of which extends throughout the year, means not only a loss to the producers, often to those who can least afford it, but involves also a great strain upon our transportation facilities and upon the banks in providing the funds necessary for large purchases in advance of actual requirements for consumption. Dumping of farm products promotes speculation and usually results in higher prices to the ultimate consumer. Farm products, however should not be hoarded or held back from the market by the use of credit merely in the hope of forcing prices up to an artificial level. It is estimated by some that the value of this year's staple crops will be around \$22,000,000,000, and it is manifestly impossible for any banking system to provide funds to withhold these staples entirely from the market. There is no occasion to discuss the questions of public policy involved for it is clear that the volume of our great staple crops is so large and the value so enormous, that any efforts to valorize them by means of bank credits would inevit-

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ably result in disaster by the operation of economic law. But I think that all reasonable assistance should be given producers to enable them to market their crops in an orderly way provided they are willing to sell enough to meet current requirements and that consumers should concede to the farmer reasonable profits in order that future production may be adequate.

What is needed is an open market in which the law of supply and demand is given free play and in which buyer and seller may meet on equal terms. Theoretically at least it is possible, if adequate warehousing facilities are provided, for the farmer to obtain the benefit of the average price for the year without any increase in cost to the consumer and with lessened strain upon transportation lines and banks by distributing the marketing process over a reasonable period.

I have called your attention to figures which should convince anyone that there has been no restriction of credit for legitimate business but on the other hand an unusually large expansion of credit. Exception is frequently taken, however, to the discount rates now prevailing at the Federal reserve banks. There has been some criticism of the Federal reserve banks' percentage of profits as related to their paid-in capital. As is the case with other banking institutions, the earnings of the Federal reserve banks are derived principally from interest on their loans and investments. Their earnings vary according to the volume of loans and with the rate of discount. The return from \$3,000,000,000 of invested assets at 6 per cent is exactly the same as that from \$4,500,000,000 of loans at 4 per cent. While the Federal reserve banks were not organized for the purpose of making money, their present high rate of earning is unavoidable and would not be reduced by a reduction in the

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discount rate, which would merely attract a larger volume of rediscounts and involve a reduction in reserve already nearly at the legal minimum.

The law allows Federal reserve banks to retain for distribution annually to their stockholding member banks, out of their net earnings, only an amount equal to 6 per cent of their paid-in capital stock. The remainder of their net earnings goes to the Government, either indirectly in the shape of additions to surplus or directly as a franchise tax. Very large payments will be made to the Treasury by the Federal reserve banks next January which can be used in the discretion of the Secretary of the Treasury either to supplement the gold reserve held against outstanding United States notes or they can be applied to the reduction of the outstanding bonded indebtedness of the United States.

Discount rates of a Federal reserve bank are established from time to time by the directors of the bank, subject to the review and determination of the Federal Reserve Board. The law provides further that these rates shall be fixed with a view of "accommodating commerce and business." Section 13 of the Federal Reserve Act provides that "nothing in this Act contained shall be construed to prohibit notes, drafts and bills of exchange, secured by staple agricultural products or other goods, wares or merchandise from being eligible for discount; but such definition shall not include notes, drafts or bills covering merely investments, or issued or drawn for the purpose of carrying or trading in stocks, bonds or other investment securities, except bonds and notes of the Government of the United States."

There is a world wide demand for credit. There are nearly \$25,000,000,000 of Liberty Bonds, Victory Notes and Treasury Certificates outstanding. Prom-

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issory notes secured by any of these bonds or notes of the United States are eligible for discount at the Federal reserve banks. A low rate of discount at the Federal reserve banks would attract heavy offerings of paper secured by these obligations, the proceeds of which could be used for any purpose and the result would be that pressure on member banks for loans of this character would be greatly increased, and the lending power of the Federal reserve banks absorbed by non-liquid loans in a very short time. The Federal reserve banks would then lose their ability to accommodate commerce and business.

As I have already pointed out, a thorough test was made last year of the theory that the credit situation could be controlled without advancing discount rates, but it was found that control could not be effected by an appeal to reason alone. As long as the customers of banks were aware of the fact that the member banks with which they dealt could lend them money and discount with the Federal reserve banks at a profit, it was much more difficult for the member banks to refuse accommodations than is the case when they can point out to would-be borrowers that member banks can rediscount with Federal reserve banks only on even terms or at a loss.

Interest rates at the Bank of England and other central banks are higher than the current market rates; for instance, the Bank of England rate is 7 per cent while current market rates in London range from 6-1/2 to 6-3/4 per cent.

Interest rates are, in the last analysis, governed by the time honored law of supply and demand. As the demand for credit becomes less acute and as the supply of loanable funds increases, interest rates will fall. Do not understand me, however, as attempting to justify any effort to keep the general level of rates

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above the Federal reserve bank discount rates, for when our banking system reaches the point where it can function normally the Federal reserve discount rates ought always to be somewhat higher than the current market rates.

If a member bank or a group of member banks have been in the habit of charging customers interest at the rate of, say, 6 per cent per annum, the mere fact that these banks may be rediscounting 4 or 5 per cent of their total loans with the Federal reserve bank at 6 or 7 per cent does not, in my judgment, justify a corresponding increase in the member bank's rate on all loans. However, this is a matter which the member banks must settle with their own customers, with the Comptroller of the Currency or the state superintendent of banks as the case may be.

In view, however, of the present insistent demand for credit accommodations, I can appreciate the fact that the pathway of the average member bank is not strewn with roses. Our money market at present is distinctly a lenders' and not a borrowers' market, and banks all over the country are having applications for loans which they cannot make and many of which they would not care to make even during a period of extreme ease in the money market. However, I do not think it altogether fair for any bank to say to an applicant that it cannot make a loan because the Federal Reserve Board or the Federal reserve bank will not permit it to do so. The Federal reserve authorities have no jurisdiction whatever over the loans which the directors and officers of a member or non-member bank may deem it expedient to make or to decline. The Board's function is to define eligible paper under the terms of the law and the managements of the Federal reserve banks use their judgment in discounting offerings of eligible paper as defined by the Board.

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All banks have perfectly good paper which is not eligible for discount at the Federal reserve bank under the terms of the law and it does not follow, merely from the fact that any particular loan is technically eligible that it must necessarily be intrinsically good.

The limitations upon the lending power of national banks are defined in those sections of the Revised Statutes of the United States known as the "National Bank Act," and the banking departments of the respective states administer the laws applying to banking institutions operating under state charters. I would like to have it distinctly understood that the Federal Reserve Board has never sought to influence a bank either to make or to decline a loan.

The Federal reserve banks are authorized to purchase in the open market bankers' acceptances and bills of exchange of the kinds and maturities made eligible for rediscount, but with this exception they have no authority to deal directly with the public in their discount transactions; they are limited to eligible paper endorsed by a member bank. The extent, however, to which their discount facilities are now being used shows that through the medium of member banks the Federal reserve banks are participating actively in extending credits.

In order to show the tendency of the banks of the country to lean more and more upon the Federal reserve banks, I would ask your attention to some figures showing the amount of net deposits, loans and discounts, and bills payable and rediscounts of national banks at corresponding periods during a series of years, the figures being compiled from reports made to the Comptroller of the Currency in response to calls sent out by this office. It is impossible to give the exact figures for the state banks and trust compa-

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nies but the tendencies manifested in the national bank figures relate also to other banks.

STATEMENT SHOWING NET (DEMAND PLUS GOVERNMENT AND TIME) DEPOSITS, LOANS AND DISCOUNTS, ALSO REDISCOUNTS AND BILLS PAYABLE OF NATIONAL BANKS ON DATES OF COMPTROLLER'S CALLS SPECIFIED BELOW

(In thousands of dollars)

Dates	Net demand plus time and Government deposits	Loans and discounts, gross, i. e., including rediscounts and overdrafts	Total Rediscounts and Bills Payable	Percentage of total bills payable and rediscounts to total loans and discounts
September 4, 1906.....	5,024,641	4,331,459	48,842	1.13
August 22, 1907.....	5,399,367	4,709,027	59,177	1.26
September 23, 1908.....	5,809,887	4,781,522	53,285	1.11
September 4, 1912.....	7,140,596	6,061,009	82,375	1.36
September 12, 1914.....	7,362,621	6,417,910	150,071	2.34
September 12, 1916.....	10,247,920	7,921,070	91,893	1.16
September 11, 1917.....	11,676,340	9,234,289	285,104	3.09
August 31, 1918.....	12,412,213	10,111,113	1,294,005	12.8
September 12, 1919.....	14,561,218	11,541,503	1,505,516	13.04
June 30, 1920.....	15,008,567	13,623,892	2,205,633	16.2

The latest figures available at the Comptroller's office are taken from the statements of June 30, 1920. On that date the net deposits of all national banks were three times what they were on September 4, 1906, while loans and discounts had increased to the same extent. Their investments, however, which include bonds and securities, more than make up the difference. Figures are given for ten years, between 1906 and 1920, and show an unbroken gain in deposits as well as continuous increase in loans.

Your attention is directed particularly, however, to the proportion of bills payable and rediscounts of all national banks to their total volume of loans and discounts. On August 22, 1907, just before the panic of that year, bills payable and rediscounts of all national banks amounted to \$59,177,000 against total loans and discounts of \$4,709,027,000. The percent-

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age of bills payable and rediscounts to total loans was 1.26 per cent. On September 23, 1908, the percentage was 1.11 per cent, on September 12, 1914, total bills payable and rediscounts had increased to the unprecedented amount of \$150,071,000 or 2.34 per cent of the total loans which amounted to \$6,417,910,000. This increase was due to the disturbance incident to the outbreak of the European war. On September 12, 1916, bills payable and rediscounts had fallen to \$91,893,000, or 1.16 per cent of the total of loans of all national banks. On September 11, 1917 (the first year of our participation in the war), bills payable and rediscounts amounted to \$285,104,000, or 3.09 per cent of the total loans, which amounted to \$9,234,289,000. These figures, of course, reflect war financing. The same observation will apply to figures for August 31, 1918, and September 12, 1919, when the percentages to total loans were 12.8 and 13.04 per cent respectively.

But there has been no new financing by the Government since the flotation of the Victory Loan; the total volume of Government obligations outstanding has decreased since September 12, 1919, when rediscounts and bills payable of all national banks amounted to \$1,505,516,000, while on June 30, 1920, the national banks' liability for money borrowed in this way amounted to \$2,205,633,000, or 16.2 per cent of their total loans of \$13,623,892,000.

In conclusion I would say that the Federal reserve system is still confronted with conditions more or less abnormal, but we have passed through the period of exhilaration or intoxication which characterized American business activities several months ago, and notwithstanding the gloomy predictions which were frequently made at that time the transition to a more normal basis is proceeding quietly and without alarm-

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ing features. Credit which is required for seasonal needs is being granted, and business generally is looking forward to a fall and winter of at least average activity. Sentiment is being helped by the bountiful harvests, by the better outlook for the railroads and by the knowledge that many highly essential developments which have been long deferred by force of circumstances, such as enlargement of our transportation facilities and additions to housing accommodations throughout the country, must soon be undertaken. A broad demand, which will probably extend over a period of years, is opening up for the products of our basic industries, and if in the readjustments ahead of us, any lines of business should prove to be overdone, there is every assurance that any surplus of brains and energy now engaged in such lines can be readily utilized in other fields of activity.

We have problems confronting us and we shall always have them—but, as always in the past, we can cope with them successfully if we approach them with a spirit of confidence and self-reliance tempered with common sense.