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MEMBER BANK RESERVES

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C O N T E N T S

MEMBER BANK RESERVES

by

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Volume of excess reserves

Excess reserves of member banks are about $2,000,000,000 and are likely to be about $2,200,000,000 before the end of the month. Further increases of excess reserves are likely to be relatively small so long as the Treasury continues in effect its policy of absorbing reserves arising from gold imports and production. The only two sources from which additional reserves could come are the issuance of silver certificates by the Treasury and return of currency from hoards. In the long run the amounts involved may be substantial, but it is probable that the increase will not be rapid. On the other hand, there is not likely to be a considerable decrease in reserves, except for seasonal fluctuations, unless the recent increase in the demand for currency continues. There is no reason to expect large gold exports in the near future.

Changes in situation since last summer

In considering the desirability of a further reduction in member bank reserves at this time, it should be recognized that the situation is not the same as it was last summer. A substantial reduction in reserves at this time would be more of a positive action and less of a merely precautionary step than was the move in August. One difference is that the total volume of excess reserves in prospect now is $2,200,000,000, while at that time, with allowance for the abnormal volume of Treasury balances, it was $3,500,000,000. While excess reserves are still large and widely distributed, there would be somewhat more banks now that would not be in a position to meet an increase without some liquidation or borrowing. Action now would, therefore, probably have some effect on short-time money rates and might exert a retarding influence on the growth of bank credit.

Consideration bearing on desirability of action

In view of the difference in the situation, the question is: what are the considerations that make further action at this time desirable in the public interest?

Business conditions and prospects are not the same as last summer. Recovery has proceeded farther and its momentum appears to be great. Industrial production has increased rapidly, but has not kept pace with the demand for goods, with the consequence that a substantial volume of unfilled orders has accumulated. Shortages of equipment and skilled labor are appearing in certain lines, although there is still a large number of unemployed. There has been a rapid rise in prices for two months and a half, not only in farm products but also in industrial materials, which had shown little change in price for three years. Increased buying accompanying greater industrial activity has been supplemented by buying of a speculative nature and by foreign and domestic buying for armament purposes, with the purchasers more concerned about promptness of delivery than about price. The most important factor in the situation that may interrupt the progress of recovery is in the field of labor relations, with the possibility of extended strikes in some leading industries. In general, developments in production and prices indicate that some restraint in the rate of advancement may be desirable for the purpose of having a sustained recovery.

Mr. Parry's opinion that the probable effect of an increase in reserve requirements on stock market speculation would be in the public interest is given in an attached memorandum.

In the banking field there has been a definite and sustained increase in commercial loans. This increase in itself is to be welcomed, provided the proceeds are not used for speculation, but it is not desirable to have the banks make unsound loans or investments or to have a further increase in bank deposits. The volume of bank deposits is now as large as it has ever been and the volume of demand deposits is larger by $3,000,000,000 than it was in 1929. A large volume of idle deposits is awaiting investment or other use and is adequate for financing a much larger volume of business than is being done at the present time. It is clear that further expansion of credit will carry a danger of inflation. A memorandum by Mr. Longstreet on banking developments is attached.

The situation requires careful weighing of the evidence. It is not likely that action would retard legitimate recovery, which has gained a strong momentum. The principal point to be decided is whether by inaction at this time the Board would incur the risk of a boom getting a sufficient start to make control at a later time more difficult and less effective.

<u>Time for action</u>

Experience shows that monetary measures for maintaining business stability are most effective when applied in the early stages of expansion. Timeliness of action is the essence of the matter. When speculative boom psychology prevails monetary restraints lose their effectiveness, and there is no evidence that monetary methods alone can arrest a deflation when it is under way, certainly not without support from Government activity. It is, therefore, possible that this is the one time when by proper action the Board may prevent the recurrence of a dangerous expansion with its consequent collapse. In acting at this time the Board can do so with the definite assurance that it will not arrest recovery which is still far from complete. The upward surge of business is such at the present time that there is little danger that it will be stopped or materially retarded by the kind of action that the Board may wish to consider at this time.

What method should be adopted?

It would seem, therefore, that action to absorb member bank reserves should be taken in the course of this month or early next month. The problem arises next whether this action should be in the nature of raising reserve requirements further, or of disposing of some of the securities in the System's portfolio. It would seem that in the end both instruments of control will have to be used. With excess reserves of $2,200,000,000, and a portfolio of $2,400,000,000 the System would have to sell all of its securities before there would be any considerable amount of member bank indebtedness, and even if it denuded itself of all its holdings with a consequent complete loss of earnings the banks would still be essentially independent of the System, since the total volume of indebtedness would be very small. Since both instruments will probably have to be used, and certainly should be kept in readiness, it is merely a question of which instrument should be used first.

Advantages of reserve action first

The advantages of raising reserve requirements first have been discussed quite fully before. Briefly restated they are that adjustment of reserve requirements should be made while it is still possible to do so without putting too many banks into debt. As was said in the press statement in August: "It is far better to sterilize a part of these superfluous reserves while they are still unused than to permit a credit structure to be erected upon them and then to withdraw the foundation of the structure." It will be increasingly difficult from now on to raise reserve requirements, if the present course of business continues, because banks would greatly resent being placed in debt by what would seem to them to be an arbitrary action of the Board in raising their requirements. Open-market operations are much better adapted to such a situation, because their effects are indirect and are at first concentrated on the money market banks which understand this practice and are in a better position to adjust their operations to declining reserves. An additional reason why action on reserves is desirable is that it reduces the ratio of expansion on the basis of existing reserves. Prior to last summer's action every dollar of reserves could support $12 of deposits. By this action the ratio was reduced to 1 to 8. A further increase in requirements would reduce the ratio to 1 to 6. A smaller ratio of expansion simplifies the problem of credit control in a period of upswing.

It would seem desirable to have the action taken at this time be of a character that would not as yet constitute a definite reversal of policy calculated seriously to tighten credit conditions. If reserve requirements were raised, one could still say, as was said in July, that the action "does not constitute a reversal of the easy money policy which has been pursued by the System since the beginning of the depression. Rather, it is an adjustment to a changed reserve situation brought about through the extraordinary inflow of gold from abroad." There has since that time been a further inflow of $600,000,000 of gold and it seems desirable at this time still to maintain that the System's easy money policy is not being reversed. It would be much more difficult to make that claim in case open-market sales were undertaken. It seems useful to maintain the distinction between adjustment to a new reserve position and affirmative credit control. This distinction was strongly emphasized last summer and ought not to be abandoned.

Is flexibility of portfolio desirable?

There are some who believe that it is desirable to make some sales out of the portfolio for the purpose of indicating that it is not a fixed and unalterable amount. This argument seems to me to be entirely inconclusive. I can see no advantage in abandoning the additional psychological effect that would support open-market operations if they were understood to signalize a change in policy. Changes in the open-market portfolio just for flexibility would seem to me to indicate a policy of not knowing one's own mind. The advocates of this policy, as a matter of fact, in most cases are persons who would like to see large-scale action through the portfolio and who advance the flexibility argument in an attempt to achieve their objective gradually. It would seem to me that open-market action should not be undertaken until the System is definitely prepared to reverse its easy money policy, to announce such a reversal, and to proceed with vigorous open-market operations on a large scale. At the present time, in view of the incompleteness of recovery, the slow progress in the construction industry, and the continuance of a large volume of unemployment, it does not seem that the time for such a policy has yet arrived.

Extent of desirable action

It is clear from the foregoing discussion that in my judgment an increase in reserve requirements at this time is desirable. The next question is the extent of such action. In my opinion the increase should be by the full 50 percent of the original requirements, or by 33 1/3 percent of the existing level. It does not seem desirable to have a smaller increase in reserves and leave a portion of the power unused. The Board announced last summer that "frequent changes in reserve requirements of member banks should be avoided because they affect all banks regardless of their reserve position." It would help a great deal if the present action were accompanied by a statement that, since no further increase in reserves through gold imports is now anticipated, there is no present intention of asking Congress for additional powers to raise reserve requirements and that, therefore, this particular uncertainty is removed from the banking situation. I am certain that the banks would prefer such an action rather than have a part-way advance now with the possibility of further action in the future hanging over them.

An increase in reserve requirements to the limits permissible under existing law would still leave perhaps $700,000,000 of excess reserves, or nearly as large an amount as was in existence in the autumn of 1933 when the System's open-market operations for the purpose of creating reserves were discontinued. There seems to be good logic in raising requirements to the point where excess reserves would be at the level at which open-market operations were dropped, so that a reversal of open-market policy could begin at the point where the easing policy by that method was discontinued.

Effects on individual member banks

The effects of the action on individual member banks is summarized in the following table and given in more detail by districts in the table at the end of this memorandum. A discussion of the effects of the action on the position of individual member banks by Mr. Piser and Mr. Thomas is attached.

BANKS HAVING INSUFFICIENT FUNDS TO MEET INCREASE
OF 33 1/3 PERCENT IN RESERVE REQUIREMENTS
(Based on daily average figures for first half of November 1936)

Class of bank	Number of banks unable to meet increase from			Amount by which increase for these banks would exceed		
	Reserve balances alone	Reserve balances plus one-half bankers' balances	Reserve balances plus total bankers' balances	Reserve balances alone	Reserve balances plus one-half bankers' balances	Reserve balances plus total bankers' balances
				(In thousands of dollars)		
All member banks	2,616	165	61	354,647	121,679	90,760
Central reserve city banks:						
New York City	22	18	11	122,240	103,871	89,459
Chicago	5	---	---	2,642	---	---
Reserve city banks - total	181	17	4	163,218	15,452	566
Country banks - total	2,408	130	46	66,547	2,356	735

Effect on money rates

An increase of 33 percent in reserve requirements at this time would probably result in some advance in short-time open-market money rates. These rates are at too low a level to be maintained in a period of active business. Continued availability of a considerable volume of reserve funds at banks, however, particularly at country banks, and of idle deposits in the hands of corporations and individuals places definite limits to the probable advance in rates, as is discussed in some detail in an attached memorandum by Mr. Woodlief Thomas.

Effect on membership in the System

The most important hazard involved in raising reserve requirements by 33 percent is the possible effect of this action on membership in the Federal Reserve System. Such an increase in requirements would raise the question of differential between reserve requirements for member banks and nonmember banks. Information on this matter has been compiled by the Counsel's office and is being analyzed. If this consideration is given much weight, a concession could be made by excluding from the action member banks outside of reserve and central reserve cities. Differentials in reserves between member and nonmember banks exist for city banks as well as for country banks, but city banks are less likely to leave the System because they are more aware of other advantages of membership in the System. On general grounds of credit policy there is no reason for making an exception for country banks. Their reserve position is stronger than that of city banks, and in addition they hold exceptionally large balances with correspondents, so that they are in effect the owners of a large part of existing excess reserves.

In case, however, as a matter of tactics, or strategy, a concession in favor of country banks is contemplated, it could be made directly by limiting the increase in requirements to reserve cities, or indirectly by excluding from the increase in requirements all time deposits. In the following table a comparison is made of the effects of a flat increase of 33 percent, of an increase excluding country banks, and of an increase excluding time deposits.

EFFECT OF INCREASES IN RESERVE REQUIREMENTS
(In millions of dollars)

	Present excess reserves (Nov. av.)	Amount that would be absorbed by			Amount that would be left after			Percent excess over required reserves that would be left after		
		Full increase of 33 1/3 percent	Increase outside of country banks	Increase in demand deposits alone	Full increase of 33 1/3 percent	Increase outside of country banks	Increase in demand deposits alone	Full increase of 33 1/3 percent	Increase outside of country banks	Increase in demand deposits alone
All member banks	2,219	1,522	1,278	1,359	697	940	860	11.4	16.1	14.5
Central reserve city banks:										
New York	751	648	648	638	103	103	113	4.0	4.0	4.4
Chicago	221	143	143	137	78	78	84	13.6	13.6	14.8
Reserve city banks	724	487	487	421	237	237	303	12.2	12.2	16.1
Country banks	523	244	—	163	279	523	360	28.6	71.5	40.3

Exclusion of country banks or of time deposits

It will be seen from the table that the exclusion of country banks would save them $240,000,000 of reserves, while an exclusion of time deposits would save the country banks about $80,000,000 of reserves, and would save another $80,000,000 of reserves chiefly to banks in reserve cities. Mr. Currie is in favor of excluding time deposits, both because, on general monetary grounds, he believes that reserves on time deposits should be as small as possible, and because he believes that it would be easier at a future time to raise requirements on time deposits alone rather than to raise reserves for country banks alone. Mr. Currie's memorandum on the subject is attached. My own view is that an increase in the spread between time and demand deposits -- whatever may be its desirability from the point of view of monetary theory -- is highly undesirable from the administrative point of view, because it increases the inducement for classifying active deposits as time deposits. A wide spread between the two types of deposits would result in numerous attempts at circumvention. The actual spread has been increased by the increase in requirements and would be further widened by another advance in requirements. A still greater widening of the spread by excluding time deposits from the advance would certainly be hazardous.

I believe that an increase in the difference between country banks and city banks is also undesirable, because it results in changes in reserve conditions as a consequence of shifts of deposits from one group of banks to the other, particularly since such shifts are likely to occur at the wrong time from the point of view of Federal Reserve policy. Without elaborating this point, I believe that on the whole exclusion of country banks is the lesser of two evils and that, if a concession to the sentiment of country banks is to be made, it should be made by that method. For one thing, the exclusion of time deposits would save the country banks in the aggregate only $80,000,000, whereas an exclusion from the increase altogether would save them $240,000,000. It would seem that if a concession is to be made it should be substantial.

It is probable that if reserve requirements for country banks are not increased now it will be difficult to raise them in the future. This difficulty would apply to both methods because in both cases the country banks would be the chief sufferers and it would be difficult to raise requirements for country banks without corresponding action for city banks. I say it would be difficult, but it would not be necessarily impossible. An increase in country bank requirements could, for example, be accompanied by a substantial sale of Government securities in the open market which would affect principally city banks. If a situation developed where positive credit control was necessary, these two actions could be taken and explained to the public as being action on country banks through reserve requirements and on city banks through the open market.

Reduction in bill rates

It may be worth considering the desirability of accompanying action on reserve requirements at this time by a reduction of bill rates and discount rates at the Reserve banks. This is discussed in Mr. Thomas' memorandum on the effect on rates. The rates now are completely out of touch with the market, and since it is not desirable at this time to have the banks go in debt, they should be offered an opportunity to sell acceptances to the Reserve banks at a rate that is not out of line with market rates. A reduction in discount rates would be more in the nature of a gesture, but a useful one and one that might have some significance in relation to a possible small volume of borrowing that might result.

It may be desirable also to couple the action with assurance to the member banks that the Federal Reserve System is prepared to take off their hands any Government securities that they may need to sell in order to meet the increase in requirements. Such an offer need not necessarily mean an increase in the System portfolio, because a corresponding amount of bills may be allowed to run off. It would indicate clearly that, while the System is placing itself in a position to exert an affirmative tightening policy, it is not at this time departing from its long-continued easy money policy.

EFFECT OF INCREASE IN RESERVE REQUIREMENTS ON STOCK MARKET SPECULATION

by

Carl E. Parry

An increase in the reserve requirements at this time would affect speculation in securities in two principal ways. In the first place, because of its general implications, it would weaken the conviction and impair the influence of such brokers and other financial advisers as have long been advertising aggressively the view that inflation is absolutely inevitable and that investors and speculators should govern their policies accordingly. In the second place, because of its tightening effect on the very lowest of short-term money rates and its stiffening effect on long-term rates, it would curtail some of that demand for securities which arises from the widespread belief that prices of income-bearing securities have not yet risen far enough to bring them into line with the current level, or in any event with the prospective level, of long-term interest rates.

With the volume of stock speculation as large as it has now become, both of these effects would be in the public interest at the present time. There can be little doubt that the broad underlying trend of the stock market is still upwards, notwithstanding the fact that a very substantial advance has already occurred. The factors accounting for this trend are quite sufficiently strong without the reinforcement they have been receiving from belief in the inevitability of inflation or from expectation that money rates are destined to go even lower than they have already gone.

DEPOSITS AND LOANS AND INVESTMENTS OF BANKS

by

Victor M. Longstreet

Since the raising of reserve requirements of member banks in the middle of August there has been a marked growth in loans to customers of weekly reporting member banks in 101 leading cities. As a consequence total loans and investments of these banks have continued to expand, notwithstanding some reduction in their holdings of Government securities. There appears also to have been a continued growth in loans and investments of other member banks. Bank deposits have also increased further, reflecting the increases in total bank loans and investments, as well as gold imports and a reduction in Treasury balances with the Reserve banks. The amount of money in circulation has also increased and by more than the usual seasonal amount. As a consequence, the total amount of bank deposits and currency held by the general public was about $2,-300,000,000 larger at the end of 1936 than in the middle of the year and about $1,300,000,000 larger than at the end of 1929.

Increase in bank loans

The following table shows for the central reserve cities of New York and Chicago and for each Federal Reserve district the increase in so-called "other" loans to customers of reporting member banks since August 12, 1936, just before the raising of reserve requirements, and for the year 1936 as a whole.

"OTHER" LOANS OF REPORTING MEMBER BANKS

	December 30, 1936 (Million dollars)	Change since:			
		August 12, 1936		December 31, 1935	
		Million dollars	Percent	Million dollars	Percent
Total....................	4,290	+607	+16	+889	+26
New York City.........	1,556	+318	+26	+395	+34
City of Chicago.......	405	+57	+16	+148	+58
Federal Reserve district:					
Boston................	307	--	--	+33	+12
New York 1/...........	157	+8	+5	+19	+14
Philadelphia..........	191	+4	+2	+21	+12
Cleveland.............	239	+31	+14	+61	+34
Richmond..............	119	+19	+19	+10	+9
Atlanta...............	176	+44	+33	+31	+21
Chicago 1/............	162	+20	+14	+62	+62
St. Louis.............	144	+26	+22	+29	+25
Minneapolis...........	123	+15	+14	-4	-3
Kansas City...........	151	+9	+6	+19	+14
Dallas................	159	+23	+17	+26	+20
San Francisco.........	401	+33	+9	+39	+11

1/Excludes central reserve city banks.

These loans include all loans other than loans on securities, loans to banks, loans on real estate, and acceptances and commercial paper bought. They cover, therefore, loans for agricultural, commercial, and industrial purposes, as well as instalment loans, personal loans, etc. As shown by the table, these loans at reporting member banks increased by nearly $900,-000,000, or by 25 percent, during 1936 and the increases occurred in all Federal Reserve districts outside Minneapolis, where there was a slight decline. Increases have been especially marked since the raising of reserve requirements last August, and since that time the Minneapolis district has shared in the general increase. A part of the recent increases is undoubtedly attributable to some seasonal demand for credit in the late summer, but during

December there was further marked growth, contrary to the usual seasonal movement. Some of the growth in these loans as compared with a year ago is also a result of special transactions, such as the purchase last July of Commodity Credit Corporation notes, chiefly by banks in the city of Chicago, and the granting of loans to receivers of closed banks, which was important in Detroit last spring. It is believed, however, that perhaps the bulk of the increase reflects a demand for additional funds by producers and distributors of goods.

No statement of condition for all member banks is available since June 30, 1936. The above figures for weekly reporting member banks, however, are fairly indicative of what has taken place at central reserve and reserve city member banks. Latest figures for country member banks, set forth in the table below, show that there was also an increase of about $100,000,000 in "other" loans at these banks between March 4 and June 30, 1936. Again, increases were in each Reserve district outside Minneapolis. It is likely that as much as one-half of the growth in "other" loans of country banks during this period might have been of a seasonal character. As explained later, there appears to have been a further substantial increase in total loans and investments of country member banks in the last half of the year, although there is no way of telling what part of this might have been in "other" loans.

Loans on real estate, loans to banks, acceptances and commercial paper bought, and loans on securities to customers have shown no significant change at weekly reporting member banks for some time. Loans to brokers and dealers, although they have fluctuated widely, have exhibited no definite tendency to increase or decrease during 1936.

"OTHER" LOANS OF COUNTRY MEMBER BANKS

	June 30, 1936 (Million dollars)	Change since March 4, 1936	
		Million dollars	Percent
Total	1,893	+101	+6
Federal Reserve district:			
Boston	195	+15	+8
New York	346	+11	+3
Philadelphia	238	+3	+1
Cleveland	154	+13	+9
Richmond	160	+12	+8
Atlanta	105	+5	+6
Chicago	140	+10	+8
St. Louis	88	+5	+6
Minneapolis	88	-1	-1
Kansas City	130	+6	+5
Dallas	130	+8	+7
San Francisco	119	+12	+12

Holdings of United States Government obligations

In the last half of 1936 United States Government direct and fully guaranteed obligations, which had theretofore been the principal factor accounting for the growth in member bank credit, declined from $10,800,000,-000 to $10,500,000,000 at reporting member banks, reflecting a reduction of $500,000,000 in holdings of New York City banks and an increase of $200,-000,000 at reporting banks in other leading cities. In the first half of 1936 Government direct and fully guaranteed securities held by reporting member banks had increased by $1,200,000,000. The recent reduction in holdings of Government securities at New York City banks appears to have been due in part to the fact that the Treasury has been issuing fewer short-term obligations, of which New York banks usually take a large share, and in part to the desire to maintain large reserve balances in anticipation of a further increase in reserve requirements. An additional consideration might be the expectation that an increase in reserve requirements may possibly result in a rise in short-term money rates and a fall in the prices of shorter-term Government issues.

Securities other than Government obligations held by reporting member banks, after increasing by about $300,000,000 in the first four months of 1936, declined somewhat in the last quarter. At the end of the year they amounted to $3,250,000,000, representing an increase of about $200,000,000 during the year.

Increase in total loans and investments

Total loans and investments of all member banks probably increased during the last half of the year by roughly $500,000,000, as compared with an increase of $2,300,000,000 in the first half. Total loans and investments of reporting member banks, which are representative of central reserve and reserve city banks, increased by about $350,000,000 in the last half of 1936, and loans and investments of country member banks are estimated to have increased by about half of that amount. Although figures on loans and investments of country banks are not available since June 30 last, a rough indication of the increase in their total is afforded by the difference between the increase in deposits of country banks and the increase in the total of their reserve balances and estimated due from banks. The greater increase in loans and investments of member banks during the first half of the year was due principally to acquisition of United States Government obligations by weekly reporting member banks in leading cities.

Increase in member bank deposits

Expansion in loans of banks, further gold imports, and expenditures by the Treasury from balances previously accumulated have resulted in continued growth of bank deposits during the last half of 1936, notwithstanding the flow of additional currency into circulation.

It is estimated that deposits of banks in central reserve and reserve cities are now $3,700,000,000 greater than they were at the end of 1929, an increase of 21 percent. As shown by the following table, deposits at country banks, however, are somewhat smaller than in 1929. This is due partly to the fact that failures among country banks were relatively more numerous than among city banks, so that losses to depositors were also greater. There has also been a greater increase in Postal Savings deposits in smaller cities, where country banks are located, than in the larger cities. Another important factor has been the movement of idle funds, especially in the early stages of depression, to the money markets of the financial centers in order to seek profitable employment. Since the middle of the year the percentage increase in deposits has been half again as large at country banks as at city banks and deposits at banks in New York City and Chicago have shown much smaller increases than in other parts of the country. There is evidence, therefore, that a redistribution of deposits more in accordance with the pre-depression pattern is under way.

DEPOSITS OF MEMBER BANKS
(In millions of dollars)

	Dec. 31, 1929	June 30, 1933	June 30, 1936	Dec. 31, 1936 (est.)
Central reserve city banks:				
New York City	5,900	5,000	7,400	7,600
Chicago	1,400	1,300	2,000	2,000
Reserve city banks	10,000	6,900	10,800	11,400
Country banks	12,200	7,000	10,600	11,300
All member banks	29,500	20,200	30,800	32,300

Note: Deposits, other than United States Government deposits, interbank deposits, and Postal Savings redeposited in banks, and less cash items in process of collection.

The estimated volume of deposits and currency in the hands of the general public at the end of 1936 is compared in the following table with the volume at the end of June 1933, the low point of recent years, and at the end of 1929, before the decline of the early 30's. The figures are estimates covering total deposits in all banks, except private banks for which comparable data are not available, and they are adjusted to exclude items in process of collection, interbank deposits, and United States Government deposits. Deposits in the Postal Savings System, whether or not they are redeposited in banks, are included in the figures for time deposits. Vault cash of banks has been excluded in obtaining the amount of currency held outside banks.

DEPOSITS AND CURRENCY HELD BY PUBLIC
(In millions of dollars)
Partly estimated

	Dec. 31, 1929	June 30, 1933	June 30, 1936	Dec. 31, 1936
Demand deposits—adjusted	22,400	14,100	23,600	25,300
Time deposits	28,500	21,600	24,700	25,100
Mutual savings banks	8,900	9,700	10,100	10,200
Postal Savings System	200	1,200	1,200	1,300
Commercial banks	19,400	10,700	13,400	13,600
Currency outside banks	3,600	4,800	5,200	5,400
Total deposits and currency	54,500	40,500	53,500	55,800

Note: Total includes currency in circulation outside banks, deposits at all banks in the United States, and deposits with the Postal Savings System. Demand deposits are adjusted to exclude interbank and United States Government deposits and cash items in process of collection. Private banks are excluded.

By the middle of 1936, prior to the raising of reserve requirements, total deposits and currency held by the public had increased to $53,500,000,000, which was about $1,000,000,000 below the 1929 figure. In the last half of 1936 further increases brought the total to $55,800,000,000, about $1,300,000,000 or over 2 percent more than in 1929. The recent increase, as well as the increase since the low point of 1933, has been largely in demand deposits, which are now at an all-time peak of $25,300,000,000 and are about 13 percent larger than in 1929.

Velocity of bank deposits

The volume of checks drawn against bank deposits is currently below the volume of pre-depression years, and accordingly the rate of turnover of deposits is also smaller, reflecting the fact that although the volume of bank deposits and currency held by the public is above the pre-depression level, there is a large amount of idle funds awaiting investment or other use. The rate of turnover of deposits in all banks, excluding mutual savings banks, as measured by the ratio of check payments to deposits, has been at about 15 times per annum since 1933, as compared with about 20 times per annum in the period 1922-1926, prior to the speculative boom that culminated in 1929.

In view of the increase in population and the consequent likelihood of an increase in the volume of business — when prosperity is restored — the volume of funds in the hands of the public does not appear to be excessive. The volume, however, is sufficiently large so that an increase in turnover to the level of 1922-1926 would carry total transactions to a level where inflationary tendencies might develop. It is clear that no further increase in deposits should be encouraged by the Federal Reserve System.

VOLUME AND DISTRIBUTION OF EXCESS RESERVES

by

L. M. Piser and Woodlief Thomas

Excess reserves in November and the early part of December averaged about $2,200,000,000. As a result of a seasonal increase in currency in circulation and additions to Treasury balances in the second and third weeks of December, excess reserves declined to about $1,900,000,000, but with the return flow of currency and disbursements by the Treasury from accumulated balances member banks in February will probably have excess reserves of $2,200,000,000, about the same as in November.

Distribution by classes of banks

It is difficult to estimate what shifts may take place by February in the distribution of excess reserves among the individual banks and classes of banks. The likelihood of withdrawals of bankers' balances in case of an increase in reserve requirements makes such estimates even more difficult. Assuming that the distribution will be approximately the same as in November, the following table shows probable excess reserves of the various classes of member banks after an increase of 33 1/3 percent in reserve requirements.

DISTRIBUTION OF EXCESS RESERVES

(Amounts in millions of dollars)

	Actual Nov.16-30, 1936	Probable Feb.1937 After increase of 33 1/3% in requirements	Percent excess over required (Feb.)
Central reserve city banks			
New York City	768	110	4.2
Chicago	225	80	13.7
Reserve city banks	728	240	12.1
Country banks	516	270	27.2
All member banks	2,237	700	11.3

It is expected that after an increase in requirements all member banks in the aggregate would have about $700,000,000 of excess reserves -- approximately 11 percent over the enlarged requirements. Total reserves of country banks would be about one-fourth larger than requirements and their excess reserves in dollars would be about the same as in the early part of 1934. Reserves of banks in Chicago and in reserve cities would be in excess of requirements by about one-eighth, while those of central reserve city banks in New York would be only 4 percent in excess of requirements.

While no allowance has been made in estimating these figures for shifts in bankers' balances, which might involve withdrawals of some $200,000,000 from New York City and Chicago banks, it is likely that a number of banks in those cities would continue to have excess reserves, and that the aggregates of these holdings would be little if any less than the amounts given in the table. As shown later 15 New York City banks, on the basis of their November reserve position, would continue to have excess reserves of $200,000,000 after the increase in requirements. Some of the withdrawals of bankers' balances would come from these banks and, moreover, banks deficient in reserves would make up their shortages by borrowing or by selling assets to banks with excess reserves both in New York and outside.

Distribution by districts

Detailed tables attached show the effect of an increase in reserve requirements upon the various classes of banks in different districts. It would appear that in November reserve city banks as a whole in the New York, Atlanta, Dallas, and San Francisco districts did not have quite sufficient reserves to meet a one-third increase in requirements. The largest ratios of remaining excess reserves to increased requirements among reserve city banks would be held by those in Boston and Philadelphia. Country banks in the aggregate in all districts would still possess substantial amounts of excess reserves, with the smallest excess over requirements in the San Francisco district and the largest in the Chicago, Kansas City, and Dallas districts.

Distribution by individual banks

The survey, recently completed by the Division of Bank Operations, of the reserve position of individual member banks in the first half of November indicates that there was a substantial number of banks, 2,600 out of 6,400, which did not have reserves sufficient to meet an increase of 33 1/3 percent in requirements. The amount by which the reserves of these 2,600 banks fell short of the requisite volume was $350,000,000. All but 165 of these, however, could meet the increase by drawing upon not more than half of their balances with correspondents. These 165 banks would still have lacked $120,000,000 of having sufficient reserves. The following table shows the number of banks of each class that would have had insufficient reserves to meet the increase.

Classes of banks	Number of banks		
	Total	With insufficient reserves	With shortage after using 1/2 of bankers' balances
Central reserve city banks			
New York City	37	22	18
Chicago	17	5	-
Reserve city banks	336	181	17
Country banks	5,998	2,408	130
Total	6,388	2,616	165

That banks can dispense with one-half of the balances they now hold with correspondents is a reasonable assumption, since balances now carried by banks outside of New York City with correspondents are about twice as large as those carried prior to the last few years, when excess reserves have become abundant and widespread. The amounts formerly carried are no doubt sufficient to cover needs for secondary reserves and for clearing purposes. On June 30, 1936, all member banks held demand balances with other domestic banks amounting to $3,800,000,000, whereas from 1922 to 1929 they held an average of $1,900,000,000, which may be considered as more nearly normal working levels. From June to November there was a further increase of fully

$200,000,000 in bankers' balances. It may be said, therefore, that about one-half of outstanding bankers' balances represent excess secondary reserves.

The following table summarizes the amount of the shortage by classes of banks, with and without using their excess bankers' balances.

Classes of banks	Additional reserves required to meet 33 1/3% increase in requirements		
	Total	Obtainable from bankers' balances	Required after use of 1/2 of bankers' balances
	(In millions of dollars)		
Central reserve city banks			
New York City	122	18	104
Chicago	3	3	---
Reserve city banks	163	147	16
Country banks	67	65	2
Total	355	233	122

Of the 163 banks that would have been short after using half of their bankers' balances about 130 were country banks, but the amount of the deficiency for country banks would have been very small, only $2,350,000. Reserve city banks would have been able to supply all but $15,500,000 of their needs from excess bankers' balances; over half of this remaining shortage would have been at two banks in the San Francisco district. Most of the deficiency would have been in New York City, where 22 banks, holding about two-fifths of the deposits at all banks in the city, would have been short by $122,000,000. For these banks no allowance can be made for the use of balances due from banks since New York City banks hold only small working balances with other banks which have not been increased in recent years. New York City banks would lose additional reserves through withdrawals from them of balances held for country banks and reserve city banks.

A similar study made prior to the time reserve requirements were increased last August indicated that 2,100 member banks would have needed $215,000,000 of additional reserves to meet an increase of 50 percent in reserve requirements, but that by using one-half of their bankers' balances they would have reduced their needs by $133,000,000, leaving only $82,000,000, mostly at New York City banks, to be obtained by the sale of open-market material and by borrowing.

Actually, $110,000,000 of bankers' balances were withdrawn from New York City banks in the week in which the previous increase in requirements became effective. Outside of New York City $100,000,000 of bankers' balances were withdrawn from reporting banks, but these banks apparently adjusted their position in the aggregate by withdrawing balances from other banks, so that as a group they showed no net change in their position. Only a few scattered banks borrowed from the Reserve banks, and the total amount of borrowing was negligible, amounting to about $2,000,000. There was apparently no interbank borrowing or trading in Federal funds. Shifts of earning assets among banks apparently were small. After all of the adjustments were completed reserves were still ample and widely distributed among all classes of banks in all parts of the country and among individual member banks. The increase in reserve requirements consequently had no perceptible effect upon the money market.

By comparing the actual results of last August with those indicated in the previous study, it may be possible to estimate the effect of a further increase in requirements. Member banks outside of New York City would need to raise about $230,000,000 of additional reserve funds, as compared with about $125,000,000 last summer. Most of this amount would probably be obtained, as before, by withdrawals from bankers' balances. Less than half of these balances are held with New York City banks, and some of the withdrawals will be absorbed by reserve city banks with adequate excess reserves, but a substantial portion of the withdrawals from reserve city banks will be met in turn by withdrawals from New York. As a consequence a large part of the additional reserve funds obtained from bankers' balances will in the end come from New York. These withdrawals may be as much as $200,000,000. Outside of New York City, borrowings should be negligible and sales of assets unimportant in amount.

New York City banks would be subjected not only to an increase of one-third in their present reserve requirements but also to a further loss of perhaps $200,000,000 of reserves through the withdrawal of bankers' balances. Probably half of the withdrawals would come from the 15 New York City banks which, after the increase in requirements, would still have excess reserves of more than $200,000,000. Excess reserves of New York City banks would probably not be entirely absorbed. Individual New York City banks that would be short of reserves could adjust their position temporarily by purchasing Federal funds from banks that still had an excess or more permanently by the sale of assets to such banks. In view of the public discussion of the possibility of an increase in requirements, it is likely that many of the banks that would have been deficient in November will by February have taken steps to build up their reserves. These adjustments would probably have some effect on money rates, a matter which is discussed in another memorandum.

EFFECT OF SPECIFIED INCREASES IN RESERVE REQUIREMENTS
(In millions of dollars)

	Present excess reserves (Nov.av.)	Amount that would be absorbed by			Amount that would be left after			Percent excess over required reserves that would be left after		
		Full increase of 33 1/3 percent	Increase outside of country banks	Increase in demand deposits alone	Full increase of 33 1/3 percent	Increase outside of country banks	Increase in demand deposits alone	Full increase of 33 1/3 percent	Increase outside of country banks	Increase in demand deposits alone
All member banks	2,219	1,522	1,278	1,359	697	940	860	11.4	16.1	14.5
Central reserve city banks:										
New York City	751	648	648	638	103	103	113	4.0	4.0	4.4
Chicago......	221	143	143	137	78	78	84	13.6	13.6	14.8
Reserve city banks:										
Boston.......	106	48	48	46	58	58	60	30.2	30.2	31.6
New York......	2	11	11	9	-9	-9	-7	-20.9	-20.9	-17.1
Philadelphia.	111	52	52	48	59	59	63	28.4	28.4	30.9
Cleveland....	120	70	70	59	50	50	61	17.9	17.9	22.8
Richmond.....	59	28	28	25	31	31	34	27.9	27.9	31.5
Atlanta......	12	24	24	22	-12	-12	-10	-12.4	-12.4	-10.5
Chicago......	91	48	48	41	43	43	50	22.5	22.5	27.2
St. Louis....	38	30	30	27	8	8	11	6.6	6.6	9.3
Minneapolis..	15	16	16	15	-1	-1	--	-1.6	-1.6	--
Kansas City..	48	36	36	34	12	12	14	8.4	8.4	9.9
Dallas.......	23	23	23	21	--	0	2	--	--	2.2
San Francisco.	98	102	102	74	-4	-4	24	-1.0	-1.0	6.3
Total....	724	487	487	421	237	237	303	12.2	12.2	16.1
Country banks:										
Boston.......	50	30	--	21	20	50	29	16.8	56.2	26.4
New York.....	96	53	--	33	43	96	63	20.3	60.4	32.8
Philadelphia.	46	28	--	14	18	46	32	16.1	54.8	32.7
Cleveland....	48	23	--	14	25	48	34	27.5	70.6	41.5
Richmond.....	27	16	--	11	11	27	16	17.2	56.2	27.1
Atlanta......	23	13	--	10	10	23	13	19.6	60.5	27.1
Chicago......	88	26	--	18	62	88	70	59.6	112.8	72.9
St. Louis....	22	11	--	8	11	22	14	25.6	68.7	35.0
Minneapolis..	31	11	--	7	20	31	24	45.5	93.9	60.0
Kansas City..	37	11	--	9	26	37	28	57.8	108.8	65.1
Dallas.......	38	11	--	10	27	38	28	61.4	115.2	65.1
San Francisco	17	12	--	8	5	17	9	10.6	48.6	20.9
Total....	523	244	--	163	279	523	360	28.6	71.5	40.3

BANKS HAVING INSUFFICIENT FUNDS TO MEET INCREASE
OF 33 1/3 PERCENT IN RESERVE REQUIREMENTS
(Based on daily average figures for first half of November 1936)

Class of bank	Number of banks unable to meet increase from			Amount by which increase for these banks would exceed		
	Reserve balances alone	Reserve balances plus one-half bankers' balances	Reserve balances plus total bankers' balances	Reserve balances alone	Reserve balances plus one-half bankers' balances	Reserve balances plus total bankers' balances
				(In thousands of dollars)		
Central reserve city banks:						
New York City	22	18	11	122,240	103,871	89,459
Chicago	5	--	--	2,642	--	--
Reserve city banks:						
Boston	4	1	1	5,249	263	202
New York	9	5	1	8,574	1,684	45
Philadelphia	14	3	--	6,646	256	--
Cleveland	13	1	--	20,345	3,322	--
Richmond	11	--	--	7,968	--	--
Atlanta	16	--	--	14,789	--	--
Chicago	30	1	--	12,833	1	--
St. Louis	13	2	1	4,131	170	66
Minneapolis	4	--	--	3,926	--	--
Kansas City	29	2	1	16,880	1,349	253
Dallas	18	--	--	6,121	--	--
San Francisco	20	2	--	55,756	8,407	--
Total	181	17	4	163,218	15,452	566
Country banks:						
Boston	155	17	6	9,041	422	34
New York	290	48	25	14,256	1,290	530
Philadelphia	337	19	--	9,356	209	--
Cleveland	263	13	4	6,151	87	31
Richmond	128	3	2	5,310	42	4
Atlanta	132	3	--	4,106	33	--
Chicago	186	6	1	4,791	43	1
St. Louis	160	12	6	2,882	146	74
Minneapolis	185	4	--	2,519	9	--
Kansas City	237	2	--	1,889	3	--
Dallas	161	--	--	2,143	--	--
San Francisco	174	3	2	4,103	72	61
Total	2,408	130	46	66,547	2,356	735
All member banks	2,616	165	61	354,647	121,679	90,760

PROBABLE EFFECT OF AN INCREASE IN RESERVE REQUIREMENTS ON MONEY RATES

by

Woodlief Thomas

Analysis of the reserve position of individual member banks indicates that an increase of 33 1/3 percent in reserve requirements will necessitate the sale of a not inconsiderable amount of marketable assets as well as probably some borrowing on the part of a number of New York City banks. There will also be some readjustment by banks outside of New York but, except for withdrawals of balances carried with correspondents, which in the end will be drawn mostly from New York banks, the amounts will not be large.

The adjustment of the reserve positions of New York City banks may be large enough to be reflected at least temporarily in an advance in short-term open-market money rates. In view of the remaining excess reserves, however, and the large volume of idle funds held by corporations and others awaiting profitable use, it is not likely that the rise in money rates will be considerable. Some open-market rates, which have been exceptionally low, may become established at a slightly higher level than at present. Rates on customers' loans and long-time rates are not likely to be much affected.

There appear to be definite limits on the probable rise in money rates. These limits are set by two entirely different considerations -- (1) the level of rates at which idle funds would be attracted from banks outside of New York and from non-banking lenders, and (2) the bill-buying rate of the Federal Reserve Bank of New York.

Rates most likely to be affected are those on readily saleable open-market paper. The following table shows the level of the principal money rates and Reserve bank rates in New York during December, together with corresponding rates in January 1934. After a further increase in requirements excess reserves would be no larger than in January 1934. It does not follow that money rates should return to or above the level then prevailing, but that level may indicate an approximate maximum. At that time complete adjustment had not been made in some of the rates to the comparatively new easy money situation. This was especially true of Treasury bonds and notes and rates on customers' loans, which are slower in reflecting changed conditions.

MONEY RATES IN NEW YORK CITY

	December 1936	January 1934
Bills, 90-day unendorsed	3/16	1/2
Prime commercial paper, 4-6 months	3/4	1 1/4 - 1 1/2
Stock exchange call loans	1	1
Federal Reserve funds (interbank loans)	1/8	1/8
U. S. Government obligations - yields		
Treasury bills	0.21	0.67
Treasury notes, 3-5 years	1.04	3.11
Treasury bonds, long-term	2.27	3.50
Customers' loans	2.43	3.58
Federal Reserve bank		
Rediscount rate	1 1/2	2
Buying rate for 90-day endorsed bankers' bills	1/2	1/2

Banks and bill dealers might take advantage of the opportunity, as they did last summer, to raise rates on bankers' acceptances another fraction.

The rate is now 3/16 of one percent on 90-day bills. The present ceiling on this rate is 1/2 of one percent, which is the buying rate of the Federal Reserve bank. Rates cannot advance beyond that limit so long as the Reserve banks stand ready to purchase all eligible bills offered.

The rate on open-market commercial paper -- now 3/4 of one percent -- might rise to one percent or 1 1/4 percent, which is almost back to the level of late 1933. In view of the fact that such paper is largely purchased by country banks, which will continue to have substantial excess reserves, a greater rise in this rate is not likely.

The call money rate is now fixed by New York City banks at one percent and they charge correspondents 1/2 of one percent for making loans for them, which effectively keeps outside banks from this market. The ceiling on this rate is the level at which outside banks would come into the market; this is probably not over 1 1/2 percent, which would give the banks a net return of one percent. The inflow of money from the interior would keep the rate from rising above that level.

Treasury bills, which now provide the most important medium for liquid investment in the money market, are largely held by New York City banks. The rate on these bills might be expected to rise above the recent extremely low level; in fact there has been a slight increase in recent weeks, reflecting in part increased offerings by the Treasury, but perhaps in part adjustment of reserve position of New York banks in anticipation of increased reserve requirements. Since, however, several New York City banks would still have substantial excess reserves, and since these bills are also popular investments for institutions and others seeking short-term uses for funds, much of a rise would bring a substantial amount of funds into this market. It is to be doubted that Treasury bills would rise above 3/4 of one percent, especially in view of the fact that bankers' bills cannot go above 1/2 of one percent. Treasury bills have a maturity of nine months, while the rate quoted on bankers' bills is for 90-day paper, which might justify a difference in rates.

Some increase in yields on Treasury notes has already occurred in recent weeks, partly because of the likelihood that exchange rights on future issues will be smaller in coming years than they have been in the past and perhaps partly because of adjustments of reserve positions. The shorter-term Treasury bonds, which have been selling on a yield basis of about one percent, have also been affected somewhat, but in view of the large amount of liquid funds that would still be held by banks outside of New York and by others than banks, no substantial rise in these rates would be anticipated.

The long-term bond market might be somewhat affected by the readjustment of the reserve position of a few banks, but this effect would probably be temporary. A change in reserve requirements by itself should not have a lasting effect upon the bond market, since the large supply of available investment funds outside banks is an important factor in this market.

Rates charged customers by banks should not be in the least affected by increased reserve requirements. These rates have been slow in coming down and may continue to show a downward tendency, notwithstanding increased borrowing by customers.

Reserve System action to check increase in rates

Federal Reserve authorities could limit the effect of the increase in reserve requirements on money rates, if the maintenance of present extremely low short-term rates should be desired. Since the bill-buying rate of the New York Reserve Bank establishes an effective ceiling on the open-market rate for bankers' bills and probably also on that for Treasury bills, increases in these rates could be checked by a reduction in the New York Bank's buying rate from 1/2 of one percent on bills maturing in 90 days or less to 3/8 or 1/4 of one percent, with corresponding reductions for the longer maturities. Reduction in the New York Bank's rate on Government securities bought under repurchase agreement and of its discount rate from 1 1/2 percent to one percent or 1/2 of one percent might also assist in keeping money rates down. Although banks might not borrow from the Reserve banks, there would probably be an increase in interbank borrowing, and the rate charged by banks on interbank loans -- now 1/8 of one percent among New York City banks -- would not rise above the Reserve bank rediscount rate. Other Reserve banks might reduce discount rates to one percent, although in most cases such action would be merely a gesture.

The effect of the adjustment upon the money market might be further reduced if the Open Market Committee should authorize any Federal Reserve bank to purchase Government securities from member banks needing to sell them in order to obtain sufficient funds to meet the increase in requirements. Such securities might also be bought from banks or dealers under repurchase agreements. The System's holdings can, of course, be readjusted, if it is not desired to increase the total.

PROPOSAL TO EXEMPT TIME DEPOSITS FROM INCREASE IN RESERVE REQUIREMENTS

by

Lauchlin Currie

The main argument against a uniform 33 1/3 percent rise at this time is that it will lessen the attractiveness of membership in the Federal Reserve System. This would probably not apply in the case of city banks but might be a serious factor in the case of country banks.

If it is desired to absorb the bulk of excess reserves while at the same time not lessen appreciably the attractiveness of membership in the System, consideration might be given to the proposal to confine the rise in reserve requirements to demand deposits. The following arguments can be urged in support of this proposal:

1. On the basis of the November 1-15 figures, when the excess reserves of member banks amounted to $2.2 billion, this proposal would reduce excess reserves by $1,360 million, or only $160 million less than the reduction if reserve requirements were raised to the full amount against both types of deposits.

2. Since over 80 percent of net demand deposits is in central reserve and reserve city banks while nearly 50 percent of time deposits is in country banks, this proposal permits the two main classes of banks to be treated differently in substance though not in form. This is brought out in the following table which contrasts the effect of the two proposals under discussion. Another table showing the different effects by classes of banks by districts is appended.

Classes of banks	Excess reserves (first half of Nov.)	Amount that would be absorbed by		Percent that would be absorbed by	
		Flat 33 1/3 percent increase	33 1/3 percent increase on demand deposits alone	Flat 33 1/3 percent increase	33 1/3 percent increase on demand deposits alone
Central reserve city banks					
New York City	734	646	636	88.1	86.8
Chicago	216	143	137	66.1	63.2
Reserve city banks	720	487	421	67.7	58.5
Country banks	529	244	163	46.1	30.8
All member banks	2,199	1,521	1,357	69.1	61.7

3. The exclusion of reserves against time deposits from the flat 33 1/3 percent increase in requirements would aid various reserve city banks whose time deposits are large relatively to their volume of excess reserves. In the San Francisco district, for example, a flat 33 1/3 percent increase in the requirements of reserve city banks against all deposits would absorb 107 percent of their excess, whereas if the reserve requirements against the time deposits were left unchanged only 78 percent of their excess reserves would be absorbed.

4. A uniform increase would absorb nearly half of country bank excess reserves, whereas the adoption of the present proposal would result in an absorption of about one-third. There would, therefore, be a considerably smaller diminution in the attractiveness of membership in the System in the places where the competition with nonmember banks is keenest. An actual example is appended which indicates that in the case of one country banker

who has written the Board, a uniform rise in reserve requirements would raise his requirements above those of competing nonmember banks, whereas if requirements against time deposits are left unchanged, his reserve requirements will be on a par with nonmember banks.

5. There would be less resistance to raising reserve requirements in the future against all time deposits as compared with raising reserve requirements for all deposits for a particular class of bank. The occasion for such a rise could be the firming of interest rates.

6. On general monetary grounds it is desirable that reserve requirements against time deposits be as low as possible. The argument for raising requirements is one of expediency as an indirect means of absorbing reserves otherwise available for expansion of demand deposits. The situation is not as yet sufficiently serious to warrant the resort to expediency.

COMPARISON OF THE EFFECT OF RAISING RESERVE REQUIREMENTS BY 33 1/3 PERCENT AGAINST (a) ALL DEPOSITS, (b) DEMAND DEPOSITS
(In millions of dollars)

Classes of banks	Excess reserves (first half of Nov.)	Amount that would be absorbed by		Percent that would be absorbed by	
		Flat 33 1/3 percent increase	33 1/3 percent increase on demand deposits alone	Flat 33 1/3 percent increase	33 1/3 percent increase on demand deposits alone
Central reserve city banks:					
New York City	733,552	646,126	636,383	88.1	86.8
Chicago	216,455	143,182	136,752	66.1	63.2
Total	950,007	789,308	773,135	83.1	81.4
Reserve city banks:					
Boston	104,655	48,248	46,410	46.1	44.3
New York	3,044	10,855	8,748	356.6	287.4
Philadelphia	115,326	52,107	48,501	45.2	42.1
Cleveland	120,612	69,431	58,679	57.6	48.7
Richmond	57,428	28,602	25,621	49.8	44.6
Atlanta	11,723	24,364	21,963	207.8	187.3
Chicago	90,341	47,196	40,397	52.2	44.7
St. Louis	35,510	30,322	27,779	85.4	78.2
Minneapolis	14,040	15,696	14,282	111.8	101.7
Kansas City	49,457	35,544	33,113	71.9	67.0
Dallas	22,186	22,756	21,106	102.6	95.1
San Francisco	95,482	102,300	74,488	107.1	78.0
Total	719,804	487,421	421,087	67.7	58.5
Country banks					
Boston	52,415	29,900	21,361	57.0	40.8
New York	98,451	53,047	32,937	53.9	33.5
Philadelphia	46,711	28,046	15,495	60.0	33.2
Cleveland	47,493	22,599	13,642	47.6	28.7
Richmond	30,364	15,867	11,000	52.3	36.2
Atlanta	23,396	12,756	9,796	54.5	41.9
Chicago	86,479	25,864	17,530	29.9	20.3
St. Louis	22,385	10,856	7,760	48.5	34.7
Minneapolis	30,525	11,099	7,103	36.4	23.3
Kansas City	36,508	11,203	8,874	30.7	24.3
Dallas	38,059	10,988	9,630	28.9	25.3
San Francisco	16,472	11,576	7,898	70.3	47.9
Total	529,258	243,801	163,026	46.1	30.8
Total all member banks	2,199,069	1,520,530	1,357,248	69.1	61.7

COMPARISON OF RESERVE REQUIREMENTS UNDER STATE LAW AND THE FEDERAL RESERVE FOR THE TOBACCO EXCHANGE BANK OF EDGERTON, WISCONSIN

Reserve period 1936	State reserve requirements	Federal Reserve (assuming uniform 33 1/3 percent increase in requirements) plus due from banks, cash items and vault cash 1/	Federal Reserve (assuming 33 1/3 percent increase in requirements for demand deposits alone) plus due from banks, cash items and vault cash 1/
August 16-31	105,000	115,100	107,921
September	104,000	105,000	97,822
	104,000	114,600	107,509
October	104,000	111,100	104,050
	102,700	112,300	105,182
November	102,000	107,600	100,365
	100,000	107,900	100,773
December	99,700	107,600	100,322

1/ Vault cash of $10,000 used for these computations.