THIRTY YEARS OF DEPOSIT GROWTH

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In the past two years our economy has become fully integrated into war and is now looking toward the post-war period. Banks are playing a significant part in the war program by making credit available for war purposes through purchases of Government securities. This has raised deposits to unprecedented levels. Demand deposits of individuals and businesses in all member banks have risen 57 per cent since December 1941 and 111 per cent since December 1939. Banks, looking back on this phenomenal increase and forward to the post-war period, are raising fundamental questions as to the immediate and more remote prospects for these deposits. An analysis of past growth and factors determining the trend of deposits is essential to an understanding of future developments and is helpful as a basis for policy.

Past Experience

Since the inauguration of the Federal Reserve System total deposits of member banks in the United States have grown from $8.3 billion to $92.3 billion. The factors which have directly influenced deposit changes have varied markedly in importance over the past thirty years.

These factors form three groups:

(1) those which create "primary" deposits and in which banks are passive;

(2) those which create "derivative" deposits and in which banks play an active part;

(3) those in which the central bank is the determining factor and which cut across both (1) and (2).

(1) Primary deposits are created when customers deposit cash. This occurs mainly when there is a flow of gold into the country or a decrease of currency in

circulation. When a dealer receives gold he usually sells it to the Treasury and deposits the check he receives in a commercial bank. A decrease of currency demand increases bank deposits as individuals exchange their currency holdings for deposits. These processes are called passive creation because a bank customarily has no choice in the process. Opposite movements in the items would result in a passive destruction of deposits. There is no automatic check on the creation of deposits by these forces since they result in a corresponding increase in reserves. Moreover, these reserves may provide the basis for a further expansion by active creation. Although the central bank has no direct control over such deposit creation, it may take action to offset the passive creation of deposits by the methods discussed in (3) below.

(2) Banks may create deposits actively by extending loans and purchasing securities. The first is undertaken at the initiative of the borrower, encouraged or discouraged by the terms on which banks will lend; the second is undertaken at the initiative of the banks themselves. Thus active deposit creation is not dependent solely on the demands of borrowers, for banks may take the initiative by increasing investments. When a bank makes a loan it seldom pays out cash but sets up a deposit to the credit of the borrower. Although all of this deposit probably will not remain with the lending bank during the life of the loan, when the borrower checks against it his checks are deposited with other banks whose deposits are thereby increased. Similarly, when a bank purchases securities, it does not ordinarily pay with cash but creates additional deposits by crediting the seller or by drawing checks upon itself or upon correspondent accounts, which in turn are deposited in other banks. These forces cannot continue without limit since deposits have increased while reserves have remained the same. Eventually inadequate reserves, reflected in a low reserve ratio, will check the active creation of deposits.

(3) Active creation is thus limited by reserves; and although passive creation is not so limited it may be offset by central bank action. The Federal

Reserve Banks may stimulate active creation of deposits by increasing aggregate reserves. This may be accomplished by

(a) lending to or buying securities from banks, in which case Reserve Bank deposits - which are member bank reserves - are created;

(b) buying securities in the open market, in which case the security dealer receives a check in payment which he deposits in a commercial bank, raising both deposits and reserves;

(c) lowering reserve requirements, in which case reserves are freed for further expansion of deposits.

Insufficient reserves can limit active creation, but more than adequate reserves do not guarantee active creation. If the increased amount of reserves results in expansion of loans and investments, the reserves will be needed against the larger volume of deposits thus created. If the reserves are not used for further credit expansion, there is merely an increase in excess reserves. Opposite actions to those described will reduce aggregate reserves and thus reduce the limit of active deposit creation. They may be used also to offset passive creation.

In the following charts the close relationship between bank deposits, loans, and investments is clearly illustrated along with legal reserves and related items. In considering the second chart it should be noted that reserves tend to decrease when currency in circulation increases and to increase with increases in gold stock and earning assets of the Federal Reserve Banks.

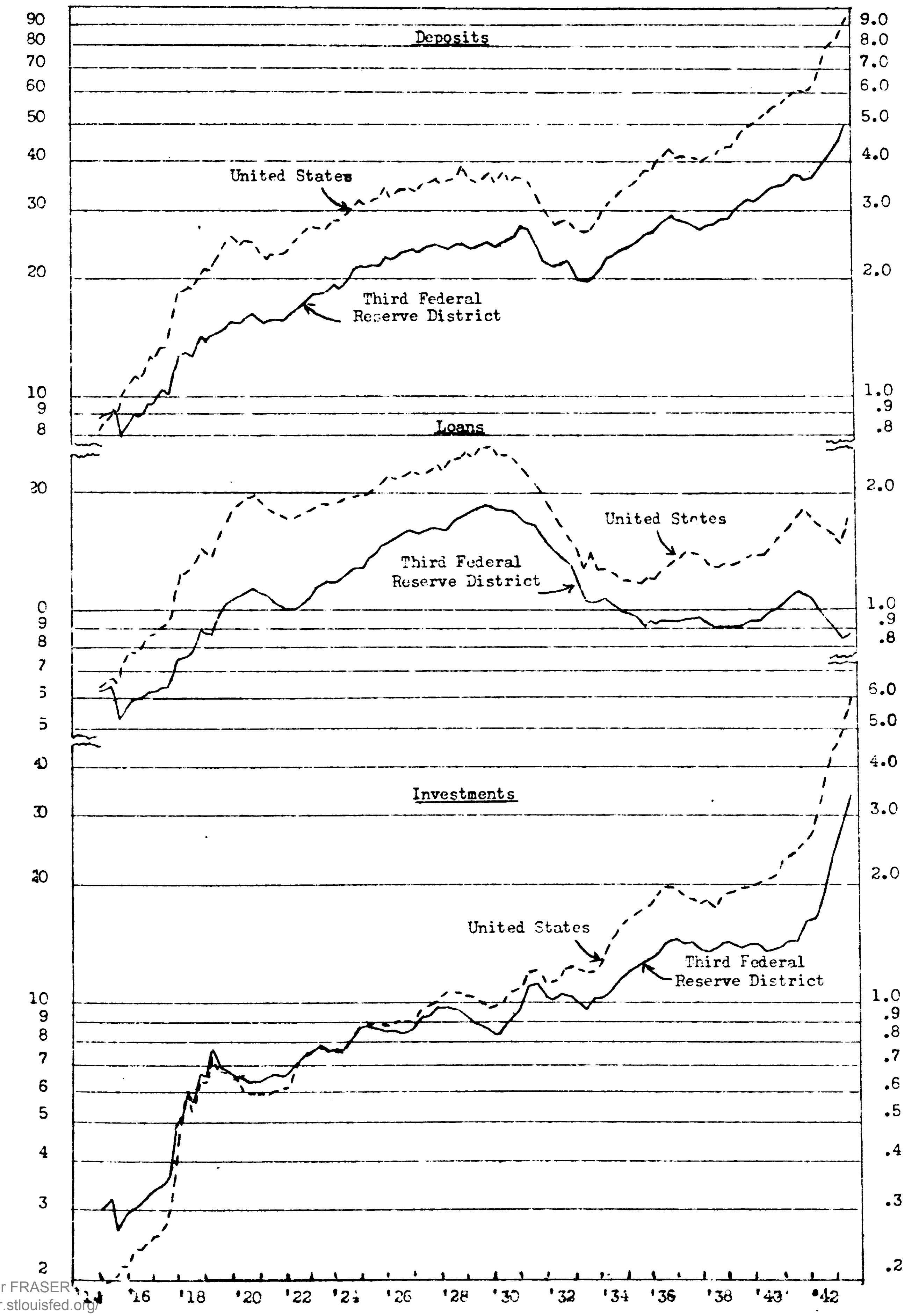
In the following table the developments of the past thirty years have been divided into periods in order to bring out the striking contrasts in the relative importance of the various factors influencing deposits as well as changes in Federal Reserve policy. These periods may be characterized as follows:

1. The First World War - 1914-1919.
   Active creation, principally through loans, tripled deposits.

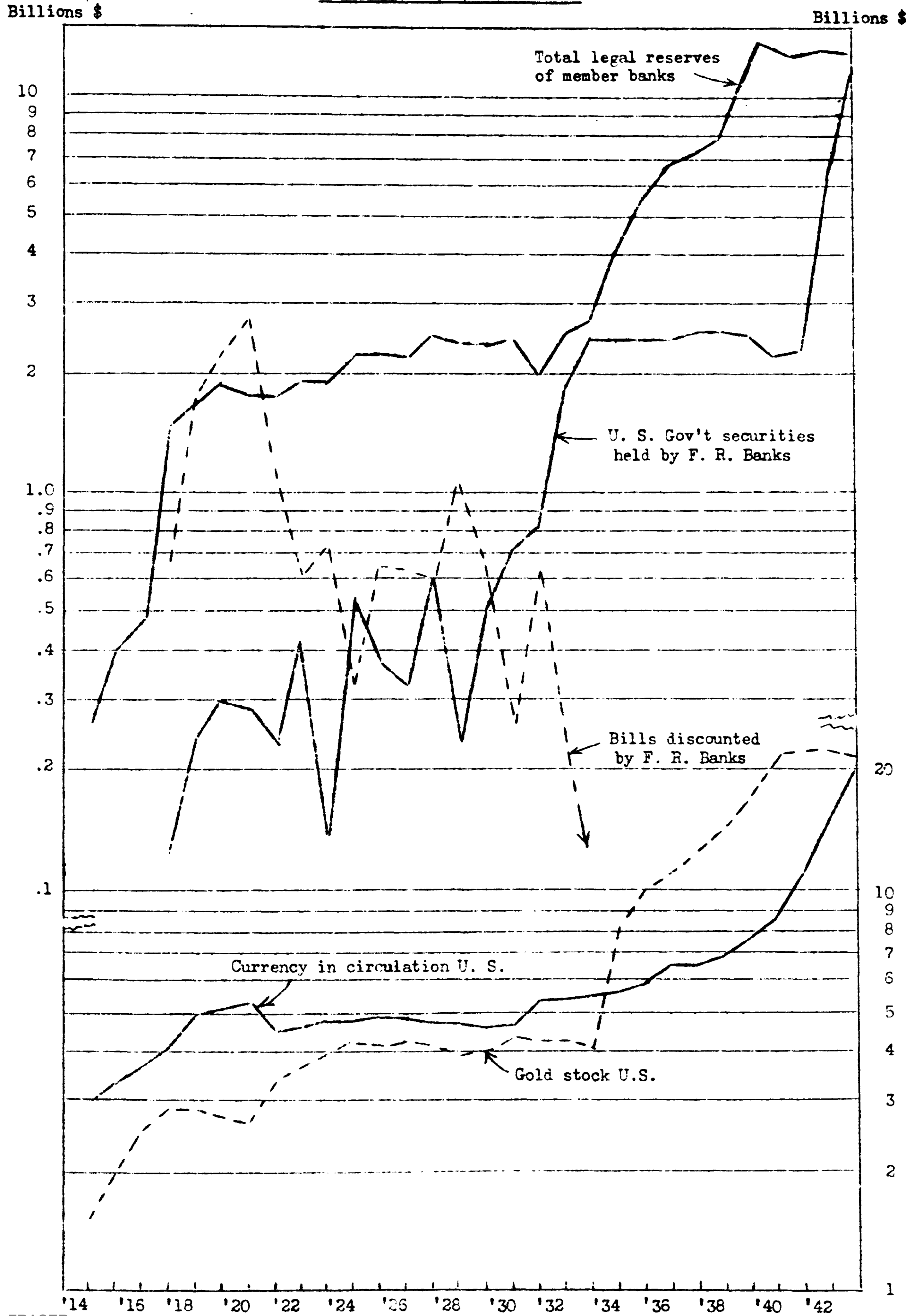
2. The Depression of 1920-1921.
   Active destruction of deposits by liquidation of loans and investments.

DEPOSITS AND RELATED FACTORS
(Billions $)

United States District



RESERVES AND RELATED FACTORS



3. The prosperity of the twenties.
   Active creation through loans and investments raised deposits $12 billion.

4. The Great Depression - 1929-1933.
   Active destruction through loans, offset only partly by increased investments.

5. The period of recovery - 1933-1941.
   Passive creation resulting from the gold inflow and active creation through loans and investments increased deposits by $32 billion.

6. The War Period - 1941-1943.
   Active creation through purchases of Government securities raised deposits to record levels.

Table I

MAJOR FACTORS INFLUENCING DEPOSITS

Member banks (Thousands $)	1914-19	1919-21	1921-29	1929-33	1933-41	1941-43
Deposits (adj.)......................	+ 15,930	- 2,017	+ 12,199	- 8,050	+ 32,299	+ 29,576
Active creation or destruction:						
Loans............................	+ 11,730	- 755	+ 8,756	- 13,317	+ 5,188	- 1,733
Investments......................	+ 4,551	- 542	+ 3,696	+ 2,602	+ 13,114	+ 32,470
Passive creation or destruction:						
Currency*........................	- 2,059	+ 688	- 175	- 941	- 5,641	- 9,289
Gold.............................	+ 1,181	+ 666	+ 624	+ 39	+ 18,701	- 799
Federal Reserve operations						
U. S. Governments................	+ 300	- 66	+ 277	+ 1,926	- 183	+ 9,289
Bills discounted.................	+ 2,205	- 1,071	- 512	- 534	- 95	+ 2
Other credit.....................	+ 776	- 592	+ 255	- 287	- 49	+ 587
Member bank reserves.............	---	- 137	+ 602	+ 374	+ 9,721	+ 436
Excess reserves..................	---	---	---	+ 859	+ 2,226	- 849

*Actual movements of currency in circulation are opposite to the sign shown.

It should be noted that increases and decreases in deposits shown at the top of Table I do not correspond exactly to the net resultant of the four factors of deposit creation and destruction. The explanation lies principally in "Federal Reserve operations", also shown in the table. If the Federal Reserve adds to its earning assets by purchasing securities from member banks, the operation does not of itself increase member bank deposits but does increase their reserves. When, on the other hand, such securities are purchased from others than member banks both deposits and reserves are increased by like amount, since the proceeds of such purchases are deposited by the sellers with their banks and forwarded to the Federal Reserve for credit to member bank reserve accounts. When the Federal Reserve sells securities, the reverse is of course true. Figures are not available for the various periods to indicate the relative importance of transactions directly with member banks or with others in the open market.

The first World War period was characterized by active deposit creation through loans; and deposits of all member banks more than tripled. During that war loans were made in large volume to war producers and also to individuals to purchase Government securities in accordance with the "borrow and buy" slogan. Investments increased by $4.6 billion as banks participated in the rise of $24.6 billion of Government debt to help finance the war. But in general bank financing in the first World War was primarily by loans whereas in this war it is almost entirely by sales of Government securities. In the post-war boom bank loans were increased to finance peacetime production and the accumulation of inventories which characterized the period. Government debt and bank investments continued to rise somewhat after the close of the war. As banks' reserve positions became tighter during the period, they borrowed from the Reserve Banks.

Following the boom came a period of depression lasting through 1920 and 1921. As business activity fell off, old loans were repaid and few new ones were made, so that total loans fell $755 million. Investments fell more than $500 million as Government debt declined by a like amount. Although an increased inflow of gold and a decline of currency in circulation tended to increase deposits, the combined effect of smaller loans and investments together with some minor items was to decrease deposits by $2 billion. This was a period of debt liquidation and active deposit destruction; as customers paid their debts to banks, banks in turn paid their debts to Federal Reserve Banks so that Reserve Bank credit declined $1.7 billion.

The prosperity of the twenties witnessed a large growth of deposits actively created through loans and investments. Loans expanded $8.8 billion as business activity rose. Investments rose $3.7 billion, of which two-thirds was in non-Government securities; during this period corporations were expanding their borrowings for new capital and refunding. Although the Government debt declined over the period, there was a widespread shift of the ownership of the debt from nonbank investors to banks so that bank holdings rose $1.3 billion. Currency demand, in comparison with recent developments, provided an extremely slight drain in view of the high degree of industrial expansion. Reserve Bank credit remained practically constant, but there was already in evidence a shift from discounting to open market operations as the main device for extending reserve credit.

From the height of prosperity to the depth of depression in the 1929-33 period, deposits declined $8 billion, or two-thirds as much as they had risen in the twenties. Deposits were actively destroyed through repayment of loans, but the net effect was mitigated by active creation rising out of increased investments resulting from Government deficit financing. Open market operations had become the major device for extending Reserve Bank credit and net purchases of $1.9 billion were made in an effort to induce expansion.

The period 1933-41, in contrast to earlier periods of rising deposits, was characterized by passive creation of deposits as an outgrowth of the tremendous influx of gold. The full expansionary possibilities, however, were not realized since a large part of the funds remained as excess reserves, which rose to unprecedented levels. Owing to this passive creation and a smaller amount of active creation from increased investments and loans, deposits recouped the loss suffered during the depression and in addition attained a level 62 per cent higher than in 1929.

The War Period

Developments during this war bring out several points of contrast with previous periods. Investments have dominated the picture for the past two years whereas loans were the principal basis for deposit expansion in the last war. Member bank investments aggregating $32 billion have meant active creation of deposits by a like amount. By far the most important factor acting to reduce deposits has been the demand for currency. The effect of the currency drain has been exactly offset by Federal Reserve purchases of securities in the open market in the amount of $9.3 billion. This action on the part of the Federal Reserve authorities is in accordance with a policy of maintaining the reserve position of banks to assure the success of the Government war financing program. During the last war this purpose was accomplished by discounting. Declines in loans and monetary gold stock appear small in comparison with the other items.

In the last four years total deposits have expanded 87 per cent or at a compound rate of 16 per cent annually. Demand deposits of individuals and businesses have risen at an even faster rate - 111 per cent, or 21 per cent compounded annually. The rate of expansion rose decidedly in the second half of the four-year period as war production and Government borrowing grew in dimension.

Deposits in the remainder of the war period will depend on movements of the various factors tending to increase or decrease deposits. The major item will continue to be investments. But although these will increase further, the rate of increase is likely to decline as the Treasury becomes increasingly successful in borrowing from nonbank sources and as the rate of war spending levels off and eventually decreases. Consequently, deposits may be expected to grow more slowly. Currency demand will in all likelihood continue to provide a drain on deposits, but Federal Reserve policy of maintaining banks' reserve positions will act as an offsetting factor. Loans show no great promise of increasing and gold stock may decline further.

Third Federal Reserve District

The growth of deposits in any area of the country is determined by the same factors that influence the system as a whole, plus changes in the importance of the area's business relative to the whole. If, for example, individuals and businesses in the area buy more from outside than they sell, there will be a net drain of funds out of the area. Thus an analysis similar to that already applied to the country as a whole is applicable to the Third District. The general trend of deposits in this district, as the chart shows, tends to parallel closely that of the United States and the same general reasons for deposit changes prevail. That the district has not conformed exactly to the United States is illustrated, however, by the fact that member banks - which are typical in this respect of all banks - in this district held 7.9 per cent of all deposits in 1915 as compared with 5.2 per cent in 1943. The decline is not surprising, for it is to be expected that newer areas will grow more rapidly than established areas. This declining trend is common to all long-established areas in the East and Northeast sections of the country. It is of interest to observe that during the depression deposits in this district declined relatively less than in the entire system. In the past, the general tendency has been for this district to increase more slowly than the country as a whole in periods of rising deposits and fall less rapidly in periods of declining deposits. This greater degree of stability is probably the result of the district's early settlement, the diversified character of its industry, and a slight predominance of industries producing nondurable goods less subject to fluctuations of the business cycle.

Table II

TOTAL DEPOSITS
PER CENT THIRD DISTRICT OF UNITED STATES
(End of year)

1915	7.9%	1925	6.7%	1935	6.8%
1916	7.6	1926	6.9	1936	6.8
1917	6.9	1927	6.7	1937	6.7
1918	6.5	1928	6.4	1938	6.6
1919	6.0	1929	6.5	1939	6.5
1920	6.6	1930	7.0	1940	6.1
1921	6.7	1931	7.4	1941	6.0
1922	6.5	1932	7.7	1942	5.3
1923	6.8	1933	7.4	1943	5.2
1924	6.6	1934	7.0		

During this war, as in the last war, deposits of Third District member banks increased much less rapidly than in the country as a whole and therefore the district's proportion declined. This is the outgrowth of the recent expansion of war facilities and production in other areas, principally the South and West. Although the district is engaged to a large extent in war production, the character of its industry is such that it is producing many of the same, or similar, goods as in peacetime, suggesting that any scaling down of war production and gradual resumption of the production of peacetime goods during the remainder of the war will tend to increase the proportion of deposits held by the district.

Just as deposits in the Third District may be analyzed by comparison with the United States, so areas within the district may be compared with the district as a whole. Although the same general factors apply, as the area becomes smaller the decisions of each banker, businessman, and depositor become of greater importance. Banks in similar areas may be expected to react similarly to changes in their environment.

Post-War Prospects

The trend of deposits after the war will be complicated by many factors now unknown. Yet by making various reasonable assumptions as to developments in the principal items affecting deposits some indication of the possible trend of aggregate deposits may be obtained.

It seems likely that there will be no reduction in bank holdings of Government securities for some time after the war. Indeed, if there is any liquidation of nonbank holdings, as after the last war, bank holdings may increase. It is probable that as industries turn once again to peacetime production there will be a demand for new loans to finance reconversion. But loans will be affected as well by general economic conditions. If boom and inflation occur, loans will probably increase substantially. Likewise, if the history of 1920-1921 is repeated and boom is followed by recession, loans will decline. The trend of currency demand will also be affected by general economic developments. After the last war currency demand reached a peak in 1920, but over the next year declined sharply, and somewhat less than one-half of the currency increase returned from circulation. But post-war inflation might very well increase the demand for currency, while recession would return currency to banks. The trend of gold stock will depend on many developments international in scope.

The general conclusion to be drawn from this analysis is that the tremendous size of the national debt necessitating many years for retirement will mean that bank holdings of Governments will continue to dominate the picture; and deposits, in the aggregate, show no prospects of declining below present levels. There will, however, be shifts in these deposits among areas and among banks. As the economy adjusts itself to peace, new areas may retain only part of their war-derived population, plant and business activity. There will be a tendency for a return to a more "normal" distribution of deposits, although it is unlikely that this will ever be the same as before the war. To the extent that this is realized, the Third District may expect to gain deposits relatively to other districts. This is substantiated by developments after the last war when this district's share of the total, after falling from 7.9 to 6.0 per cent during the war, rose again to 6.7 per cent in 1921.

Within this district individual banks in the various areas will tend to gain or lose deposits as the business activity of the locality increases or decreases in relative importance. It is the problem of each bank, if it is to know the post-war prospects of its deposits, to discover the prospects of business and incomes in its locality.

Bank policy must be adapted to possible changes in deposits. The ownership of deposits will be important in this respect, for business balances may behave very differently from personal deposits. The next section of this survey will have to do with the ownership of these deposits and its implications for bank policy.