Monthly Review

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Deposit Growth and Ownership

At the close of 1947, total deposits in the commercial banks of the United States amounted to $144 billion. Two years earlier, after the Victory Loan, commercial bank deposits totaled $150 billion. In December, 1941, just after we entered World War II, the commercial banks held $71 billion in deposits.

The story of the wartime deposit gain and postwar contraction has been told in sufficient detail in this Review and elsewhere so as to need no great space here. It should suffice to point out merely that the major factor of gain during the war years was Treasury financing requirements met by the banking system. Government security holdings of the commercial banks rose $69 billion between December, 1941 and December, 1945, while loans expanded by $4 billion.

In the postwar years, the major factors in deposit change were the using of Treasury surpluses to retire maturing Government securities which tended to reduce deposits, and the continued and accentuated expansion in loans which tended to increase deposits. In 1946, deposits declined; in 1947, they expanded, although they failed to regain their previous peak.

The process of deposit expansion and contraction is not generally understood and the major reason seems to be confusion of the actions of an individual bank with the banking system as a whole, or vice versa. An individual bank receives its funds from its depositors or its stockholders. For the average bank more than nine-tenths of the funds come from depositors who receive income and use banks as a convenient place to hold their funds.

In this nation a portion of the deposits must be held as reserve—the balance can be used by the bank to lend or invest. An individual bank tends to lend to its customers in response to demand for credit and to employ the balance of its funds in investments (disregarding sums above legal reserves which are kept as cash). It cannot lend or invest more funds than it has available. It can sell investments to get funds for loans or it can take its notes and sell them or use proceeds of maturing loans to buy investments. But it cannot employ more funds than it has.

Deposit expansion in the banking system takes place as a result of the original loan or investment because as the borrowers withdraw and spend the funds advanced to them they go to others. These, and the sellers of investments to banks, as they receive the funds, usually deposit them with other banks (or perhaps the same bank) and these funds, less the required reserve, can be loaned or invested by the other banks (or, again, the same bank). If the funds are not redeposited, the process stops. To the extent that it continues, however, the original funds become the basis for a multiple expansion of deposits, which multiple depends on the legal reserve ratio and the banks' opportunity and willingness to extend loans or make investments.

Thus deposit growth for the banking system stems from bank credit expansion. The individual bank, however, is less interested in this process than in the amount of deposits it receives from the process and which can be used to make loans or investments on its own account. And the deposit level

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at an individual bank depends on the flow of income to its customers, the amount of their expenditures which go to others not customers of the particular bank, and the customers' decisions as to the form in which they hold their funds.

Differences in deposit levels among banks and between geographical areas thus reflect income-expenditure patterns of customers or residents of the areas and their willingness to hold funds in the form of bank deposits.

There are various types of bank deposits. Most bank deposits represent balances of individuals or businesses. At present, of total deposits at commercial banks, about 60 per cent are in the form of demand deposits of individuals and businesses and 25 per cent in time deposits of these holders. The remainder is in the form of U. S. Government balances, deposits of states and political subdivisions or interbank deposits.

It was noted earlier that total deposits increased from 1941 to 1945, declined in 1946, but increased again in 1947. Non-Government deposits increased in both 1946 and 1947. The decline in total deposits in 1946 was due to the fact that the Treasury drew down the huge War Loan balances built up in the Victory Loan and used the funds to pay off certain maturing issues. Part of these funds were, in effect, returned to the banks in the form of private balances since nonbank holders, of the issues paid off, deposited their receipts in banks. Private deposits also expanded as a result of loan expansion and other factors. In 1947, Treasury balances withdrawn from the banks represented only current cash surpluses and were much smaller than the Victory Loan accumulations. Deposit creation from loan expansion and other factors, plus the funds obtained by nonbank investors from the cash redemptions, more than offset the Treasury withdrawals in 1947, and total deposits as well as private deposits rose in that year.

REGIONAL VARIATIONS IN DEPOSIT GROWTH

In comparing regional differences in deposit growth it should be remembered that the major factors resulting in these differences are variations in income-expenditure patterns of individuals and businesses. Consequently it is the deposits owned by individuals and businesses which should be considered in the comparisons. Furthermore, it is the action of the more volatile deposits that provides the major variation so that, in effect, comparisons are most pointed when demand deposits of individuals, partnerships and corporations are used—about three-fifths of total deposits at commercial banks.

The following table shows percentage changes in such deposits at member banks in the 12 Reserve districts between 1941 and 1947.

TABLE I
PERCENTAGE CHANGE IN DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS AND CORPORATIONS AT ALL MEMBER BANKS

District	Dec., 1941-Dec., 1947	Dec., 1941-Dec., 1945	Dec., 1945-Dec., 1947
Dallas	+245%	+187%	+ 20%
Kansas City	+241	+179	+ 22
Minneapolis	+215	+145	+ 29
San Francisco	+210	+187	+ 8
Atlanta	+207	+174	+ 12
St. Louis	+167	+118	+ 22
Richmond	+155	+123	+ 15
Chicago	+128	+ 88	+ 21
Cleveland	+119	+ 84	+ 19
Philadelphia	+101	+ 79	+ 13
Boston	+ 80	+ 60	+ 13
New York	+ 67	+ 47	+ 13
All Districts	+120	+ 90	+ 16

The districts are arranged in descending order of increase over the whole period. The deposit changes between December, 1941 and 1945 point to the effect of war on the various Reserve districts. Those between December, 1945 and 1947 reflect postwar activity.

The major factors of income gain during the war years were war manufacturing payrolls, other manufacturing payrolls, Federal civilian payrolls, military pay, allowances and allotments, and agricultural income. The rise of industry in the South, Southwest and Pacific Coast, the location of military establishments in those same regions, and the great increase in farm output and prices in the agricultural areas led to much larger-than-average income gains in those regions. And since the rise in bank deposits reflects not only income changes but the amount of income retained, the fact that taxes and bond drives weighed less heavily on farm areas than urban centers, and that farmers' purchases of goods (farm implements especially) probably were more retarded by shortages than urban residents' purchases, led to larger deposit growth in the less urbanized areas.

The St. Louis district ranked seventh among the Reserve districts in wartime demand deposit gain. It did not get as much of a boost from war activity as the more southern and western areas, and its gains from agriculture were tempered somewhat by crop increases relatively less impressive (because of weather) than those in the other farm districts. Furthermore, one of this district's major cash crops —cotton—was a relative late comer to the group of farm products with large price increases.

Since the end of the war, however, deposit increase in Eighth District banks has been second only to that in Minneapolis District banks. The St. Louis region suffered less than most districts from elimination of war production and from reconversion dislocations. Farm income, of course, held up well and the natural stability of the area maintained much of its funds within its boundaries.

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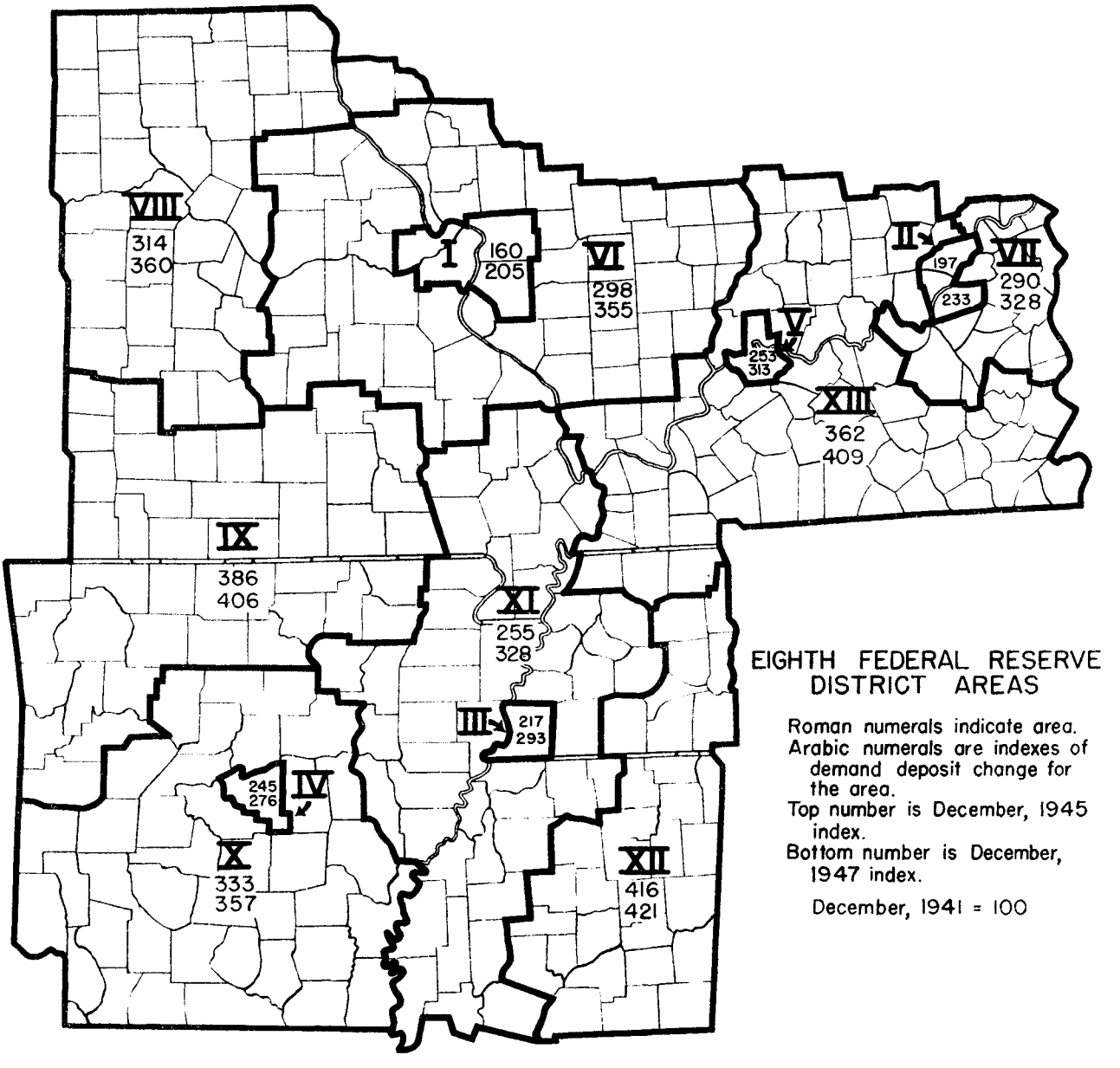

REGIONAL VARIATIONS IN DEPOSIT GROWTH WITHIN THE EIGHTH DISTRICT

Table II shows dollar figures for demand deposits of individuals, partnerships and corporations by district area on December 31, for the years 1941, 1945, and 1947. The map shows the district areas and for each area indexes of private demand deposits with December, 1941 = 100. Taken together, table and map illustrate regional differences in private demand deposit growth since 1941 in the Eighth District.

TABLE II
DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS AND CORPORATIONS AT ALL EIGHTH DISTRICT BANKS—BY AREA
(In millions of dollars)

Area	Dec., 1947	Dec., 1945	Dec., 1941
I St. Louis	$1,142.0	$ 891.2	$ 558.2
II Louisville	320.4	271.0	137.4
III Memphis	261.8	194.0	89.4
IV Little Rock	84.1	74.6	30.5
V Evansville	93.6	75.6	29.9
Total—Metropolitan Areas	$1,901.9	$1,506.4	$ 845.4
VI St. Louis outlying	$ 442.5	$ 371.5	$ 124.5
VII Louisville outlying	120.0	106.0	36.6
VIII North Missouri	333.3	291.0	92.6
IX Ozark	236.5	225.3	58.3
X South Arkansas	241.0	224.6	67.5
XI Delta	434.8	338.1	132.5
XII East Mississippi-Tennessee	159.6	157.7	37.9
XIII Kentucky-Indiana	482.8	426.7	118.0
Total—Rural Areas	$2,450.5	$2,140.9	$ 667.9
Total—District	$4,352.4	$3,647.3	$1,513.3

As pointed out earlier, differences in deposit growth among regions reflect differences in income, expenditure patterns, and choices of individuals and businesses as to the manner of holding assets.

During the war period, high farm income plus the flow of other income resulting from military and war production activity led to relatively greater income gains in the rural regions than in the urban centers. At the same time, goods shortages weighed more heavily and taxes and bond subscriptions more lightly on the rural residents. The net result was a larger spread between income and expenditure in rural regions than in cities, and deposit

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growth indicates that fact. Since the end of the war, the situation has been reversed—goods have become more plentiful and since most goods are produced in cities, funds have flowed there. While farm income has increased, other income factors (especially those rooted in the war effort) have fallen off somewhat in rural sections. Deposits in these areas have grown but not as much as in the urban centers.

Thus, between December, 1941 and December, 1945, demand deposits of individuals, partnerships and corporations at all district banks in the rural areas combined (VI through XIII in table and chart) increased 220 per cent, while those in the metropolitan regions combined (I through V) gained but 78 per cent. From December, 1945 to December, 1947, private demand deposits in the metropolitan regions rose 26 per cent and in the rural areas but 15 per cent.

Taking the period as a whole, however, deposit growth in the rural areas was still more than twice as large, relatively, as in the urban centers. As a result, the concentration of deposits in December, 1947 was 44 per cent in metropolitan areas and 56 per cent in rural areas, the exact reverse of the December, 1941 pattern.

Metropolitan Areas—Demand deposit gains during the war years were especially marked in Evansville and Little Rock, which were the major war boom cities of this district. Every metropolitan district except St. Louis, however, showed a better than metropolitan area average gain in those years. Since 1945, deposit growth has been largest at Memphis and St. Louis. The former city has experienced pretty much of a postwar boom and the flow of income into the St. Louis region in the past two years reflects the return of that area to its prewar position. Elimination of war plant activity in Louisville and Little Rock has resulted in deposits gaining appreciably less than metropolitan area average in the past two years. The Evansville area has managed to maintain its position pretty well and still ranks ahead of any other district metropolitan area in deposit growth from 1941 through 1947.

Rural Areas—During the war years the rural area which showed the smallest percentage gain in demand deposits was region XI, the Delta area. The major factor in this situation apparently was the fact that war production activity was not very important in the Delta region, which is essentially very rich farm land, and that its major crop—cotton—failed to yield the high income gains true of other agricultural sections in the district. This in turn reflected some relatively poor crop years and the fact that price rises in cotton came relatively late in the war period.

Since the end of the war, the Delta area has shown the most pronounced deposit gain among the rural regions of the district, with the percentage increase about twice that of the average for all rural areas combined. Good cotton crops and the sharp advance in cotton prices were the major factors in this development.

In the other rural sections, those that showed average or close to average gains in the postwar years were regions VI, VII, VIII, and XIII. Generally speaking, diversified agriculture and the influx of new small-scale industry into these areas tended to maintain their rate of deposit growth. The Ozark, south Arkansas and eastern Mississippi-Tennessee areas showed relatively small deposit gains between December, 1945 and December, 1947. Mostly this was due to poor crop years, but partly it reflected the closing down of military establishments and of war production plants.

Growth Differences by Size of Bank—The increase in demand deposits during the war years was greatest, percentagewise, at the smallest banks, and decreased as the size of bank increased. This situation reflected the fact that the smaller banks are located primarily in the rural regions, and the factors that led to increased deposit growth in those areas naturally were expressed in growth at the smaller banks. On the other hand, the big banks are, of course, located in the major metropolitan areas and deposit increases in those banks were influenced by the factors applying to the metropolitan centers. The reverse of the situation holds for the postwar period.

OWNERSHIP OF DEMAND DEPOSITS

The preceding sections of this article deal with deposits in the aggregate and with growth in those deposits—by major type and by region. This section deals with demand deposits of individuals, partnerships and corporations by type of owner.

As pointed out earlier, demand deposits of individuals, partnerships and corporations represent the bulk (about 60 per cent) of customers' funds held by the commercial banks of the United States. The owners of these funds, as the classification implies, are individuals (including farmers) and businesses (either corporate or noncorporate). Prior to the Federal Reserve surveys of deposit ownership there was little exact knowledge concerning the ownership pattern of these deposits, and there was virtually no information concerning shifts in that pattern over a period of time.

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This deposit category was the only major one where ownership pattern was so largely undetermined. While more information about other deposit categories would be helpful for better understanding of the workings of the banking system, the general patterns of ownership of the rest of the deposits have been fairly clear for some time. Call reports (and other data) provide a classification of demand and time balances by interbank, U. S. Government, state and other political subdivision, and individual, partnership and corporation accounts. The first three classes obviously indicate the owners of the deposits. Time balances of individuals, partnerships and corporations are believed to consist almost completely of nonbusiness balances.[1] But the characteristics of ownership of the largest single category—private demand balances—would be largely unknown without the System surveys.

The importance of information on ownership of private demand deposits is based on two major factors. First, more precise knowledge of the pattern of ownership and shifts in that pattern lead to a clearer understanding of the effects of economic developments on the banking system. Second, such information provides detail useful in appraising the future (as an oversimplified example—if business activity is high and business balances low, substantial business borrowing might be anticipated).

These two factors are important for the three major users (or potential users) of the information. The supervisory authorities who are called on for a host of definite policy decisions can make wiser decisions on the basis of better and more extensive information than on fragmentary and inexact information. Students of banking (aside from those connected with the supervisory authorities), while not faced with the necessity for establishing policy, can obtain a better understanding of the workings of the banking system with this information. And their studies often lead to better understanding by the supervisory authorities and by the bankers themselves of their problems and ways to meet them. Finally, the bankers can apply the data on ownership to their own cases—and can better understand how economic events affect their banks.

Information on deposit ownership obviously will not provide all of the answers to all of the questions on banking. But it throws light on an area where information is needed, and, in conjunction with other data on banking, is very useful.

[1] It would be useful to know more precisely the proportions of nonbusiness and business holdings of time balances. Also it would be useful to have information on the proportions of such deposits held in various size classes of accounts and held by various types of individuals (say, by occupation).

Ownership Pattern in Eighth District Banks—Table III gives estimates of ownership of demand deposits of individuals, partnerships and corporations in all Eighth District banks as of January 31, 1948. As can be seen, personal deposits constitute just about half of all private demand balances in banks in this district, with farmers' balances accounting for almost one-third of the personal deposits. Business deposits make up nine-tenths of the nonpersonal balances; the remainder are held by nonprofit organizations and trust funds of banks. Among the business deposits, those owned by nonfinancial businesses make up the bulk, with manufacturing and mining concerns' funds and those of trade establishments being by far the most important.

TABLE III

OWNERSHIP OF DEMAND DEPOSITS AT ALL EIGHTH DISTRICT BANKS, JANUARY 31, 1948

Type of Depositor	Amount (Millions of dollars)	Per Cent of Total
Total Domestic Business	$1,847.3	44.3%
Nonfinancial	1,643.2	39.4
Manufacturing and Mining	510.3	12.3
Public Utilities	175.9	4.2
Trade	751.9	18.0
Other	205.1	4.9
Financial Business	204.1	4.9
Insurance Companies	53.7	1.3
Other financial (including foreign)	150.4	3.6
Trust Funds	55.4	1.3
Nonprofit	155.0	3.7
Personal	2,114.4	50.7
Farmers	624.6	15.0
Other	1,489.8	35.7
Total	$4,172.1	100.0%

This pattern reflects the general economic structure of the district and it differs appreciably from that of the nation as a whole. Business balances in all banks in the United States account for over one-half of all private demand deposits. Only in trade establishment accounts as a percentage of total private demand accounts do district banks exceed those of the entire country—which reflects mainly the underdevelopment of general business in this area rather than the overdevelopment of trade. Deposits of farmers are, relatively speaking, twice as important in district banks as in the commercial banks of the nation as a whole.

As Chart I (next page) indicates, the deposit ownership pattern varies appreciably among different sizes of banks.[2] Personal deposits, especially those of farmers, are of much greater relative importance in smaller banks than in larger ones, as the smaller banks are located mostly in rural areas where businesses are relatively unimportant and where business balances are relatively small. But it should be noted that the

[2] Banks are divided into size classes as of December, 1945, and held in these classes. While there actually are shifts back and forth among size classes, the holding of the same size class for the different surveys permits more understandable comparisons of shifts in deposit ownership over a period of time.

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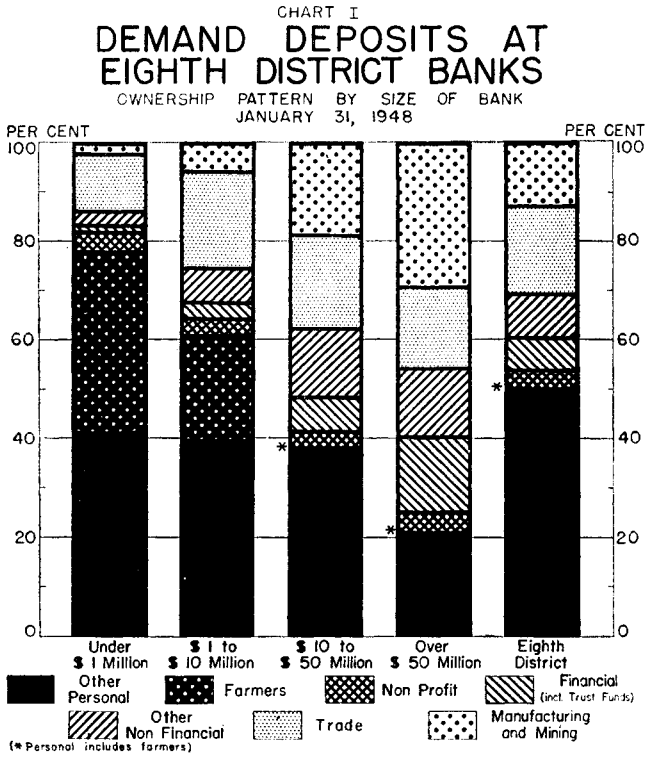

pattern of ownership in small rural banks is not much different from that in small urban banks (except for farmers' deposits), and the small urban banks hold little more business balances relative to total private demand deposits held than do the small rural banks. In both cases personal deposits constitute the bulk of private demand deposits held.

As size of bank increases, the importance of business deposits to the total increases. This statement also applies in general to the various classes of business deposits—the only real exception being balances of trade establishments, which seem to be spread fairly uniformly among different size classes of banks. For example, demand deposits of manufacturing concerns account for only 2 per cent of total private demand balances at the very small banks (less than $1 million each in such deposits). In the $1-$10 million class, manufacturing and mining deposits constitute 6 per cent of the total, in the $10-$50 million class 19 per cent of the total, and in the over $50 million class 27 per cent of the total. Just as striking is the variation in importance of financial business balances—from 1 per cent of the total in the smallest banks to 14 per cent in the largest banks.

Changes in Ownership Pattern—Chart II indicates that the pattern of ownership of demand deposits of individuals, partnerships and corporations at all Eighth District banks has changed very little in the past two years. On January 31, 1948, deposits of businesses (including trust funds of banks) constituted 45.6 per cent of total private demand deposits, those owned by individuals accounted for 50.7 per cent, and those held by nonprofit organizations were 3.7 per cent of the total. Two years earlier the proportions were 45 per cent, 51 per cent, and 4 per cent. In February, 1947 they were 44.2 per cent, 52.2 per cent, and 3.6 per cent. Part of the variation between last February's and this January's patterns probably is due to differences in survey dates.

At the end of January, 1948, private demand balances at Eighth District banks were $158 million higher than at the close of February, 1947, and almost $500 million more than on January 31, 1946. Practically all of the gain since February, 1947 was in business balances and all types of business shared in the increase. Nonprofit organization accounts also registered a gain. Personal balances were up only $17 million in the eleven months and farmers' balances were down during the period—due mainly, as footnote three indicates, to differences in survey dates. As compared with January, 1946, business deposits were up $246 million in January, 1948, and personal deposits up $241 million.

All types of business deposits showed an increase —February, 1947 to January, 1948—and in each case, except manufacturing and mining, and public utilities and transportation concerns, the percentage gain was larger than that for all private demand deposits. In other words, all types of business balances, except the manufacturing and mining, and public utility and transportation accounts, were of somewhat greater relative importance in the total private demand deposit structure on January 31, 1948, than on February 26, 1947.

All types of private demand deposits showed an increase from January, 1946 to January, 1948, although, percentagewise, the gains varied. Among nonfinancial businesses, only trade establishments showed a larger percentage increase than the average for all private demand deposits—the others showed somewhat smaller percentage gains. Financial businesses (including trust funds of banks) showed larger-than-average increases, while nonprofit organization and personal accounts registered less-than-average gains.

The chart also highlights the substantial shifts that have taken place in relative importance of various types of demand balances since 1941 and the end of the war. Business balances were much more important relatively in 1941 than now. In dollar terms business balances now are, of course, much larger than in 1941 but they have grown less percentagewise, reflecting both changes in income distribution and changes in decisions on the part of

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businesses and individuals as to the manner of holding liquid assets. Considerable shift in importance of the various types of demand balances also is evident since the end of the war, as business need for funds resulted in relatively smaller gains in its accounts than in those of individuals. Farmers' balances have risen sharply in dollars and in relative importance, reflecting increased farm output at much higher prices.

The very small banks (less than $1 million each in demand deposits of individuals, partnerships and corporations as of December, 1945) showed a total gain of $14 million in such deposits between February, 1947 and January, 1948. This gain reflects increases in balances of farmers and of nonprofit organizations, offset by declines in balances of nonfarm individuals and of businesses. At the end of January, 1948, total business demand balances at these banks were only $1 million larger than on the same date in 1946, while nonprofit organization accounts were up $6 million and total personal accounts up $55 million. The lion's share of the dollar increase from two years earlier was in farmers' balances.

The banks with $1 to $10 million in private demand deposits held more than half of all such deposits in district banks. On January 31, 1948, these banks had $51 million more in demand deposits of individuals, partnerships and corporations than on February 26, 1947, and had $219 million more than two years earlier. The increase between February, 1947 and January, 1948, in balances of business and nonprofit organizations accounted for the entire gain in this period as personal demand deposits showed a slight decline. The drop in personal deposits reflects a decrease in farmers' balances, since other personal accounts showed a gain, and apparently is due mainly to the fact that this year's survey date was a month earlier than last year's. In this district tobacco marketings swell farm balances early in the year but sales run on through February; thus the time factor probably influences the level of farmers' balances strongly.[3]

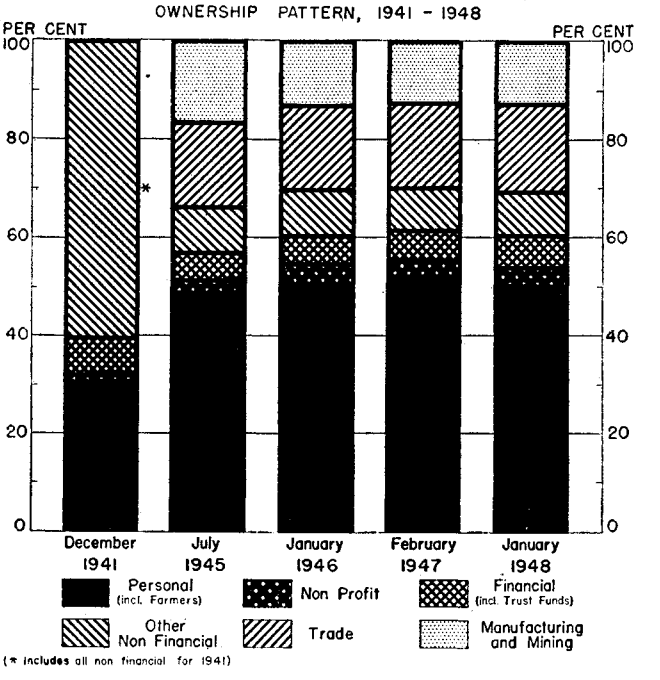
Relative to January, 1946 the deposit structure of this size class of bank in January, 1948 showed a slightly greater concentration of business balances and a slightly smaller concentration of personal accounts.

[3] It should be noted that farmers' balances in all district banks combined showed a drop from last February to January, 1948, but the decline was concentrated in the $1-$10 million deposit class while farm balances in the very small banks showed a rise. This situation apparently is due to the banking structure of the district. The $1-$10 million size class happens to contain more of the banks in the tobacco region; the under $1 million size class has relatively fewer banks in that area. A later date for this year's survey probably would show farm balances up from a year earlier in both size classes.

CHART II

DEMAND DEPOSITS AT EIGHTH DISTRICT BANKS

OWNERSHIP PATTERN, 1941 - 1948



In the bank size class, $10-$50 million in private demand deposits, such balances gained $27 million between February, 1947 and January, 1948, and on the latter date were up $63 million relative to January, 1946. Practically all of the increase between February, 1947 and January, 1948 was in business balances, with personal accounts showing but a slight increase and nonprofit organization accounts a decrease. Measured against two years earlier, the dollar rise in business balances was about two-and-one-half times the increase in personal accounts.

About the same pattern of change was evident at the very large banks—those with more than $50 million each in demand deposits of individuals, partnerships and corporations. The total gain in such deposits since February, 1947 was $65 million, and from January, 1946 was $152 million. Business balances rose $53 million between February, 1947 and January, 1948, nonprofit organization accounts rose $7 million, and personal balances increased $5 million. As against two years earlier, business deposits on January 31, 1948 were up $101 million, nonprofit organization accounts $8 million, and personal balances $43 million.

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