

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Financial Intermediaries in the American Economy Since 1900

Volume Author/Editor: Goldsmith, Raymond W.

Volume Publisher: UMI

Volume ISBN: 0-870-14101-5

Volume URL: <http://www.nber.org/books/gold58-1>

Publication Date: 1958

Chapter Title: Changes in Uses and Sources of Funds by Financial Intermediaries

Chapter Author: Raymond W. Goldsmith

Chapter URL: <http://www.nber.org/chapters/c2584>

Chapter pages in book: (p. 126 - 179)

## CHAPTER VI

### CHANGES IN USES AND SOURCES OF FUNDS BY FINANCIAL INTERMEDIARIES

#### 1. *Approach*

Since financial intermediaries are way stations in the flow of funds from ultimate savers to investors, the essential quantitative features of their activities are reflected roughly in their balance sheets, though their sources-and-uses-of-funds statements show them more satisfactorily. The latter, particularly on a gross basis showing separately inflows and outflows which determine net flows of the various items of assets and liabilities, are not available on a comprehensive basis or for long periods. We must, therefore, use to best advantage the data provided in balance sheets and supplementary statements and the changes in individual assets and liabilities between balance sheet dates (in the present study the four- to twelve-year intervals between benchmark dates) that can be derived therefrom. Three limitations in the material should be recognized:

First, we have information only on net changes between balance sheet dates and know little about the movements (i.e. the increases and decreases) that brought about the observable net results. We may, for instance, determine the net increase in the holdings of residential mortgages by life insurance companies between 1922 and 1929, but we do not know to what extent this net figure reflects the addition of new loans to the portfolio as against the reduction, repayment or other disposal of loans held at the beginning of the period.

Second, the balance sheets can give us only changes in reported holdings, not actual cash flows of funds. The two figures would not differ if all balance sheets were based strictly on cost and did not contain write-ups, write-downs, and other bookkeeping adjustments. Such adjustments are of considerable importance, particularly in periods like the 1930's when large-scale declines in asset prices, defaults, and foreclosures inevitably led to widespread departures of book values from original cost in balance sheets.

Third, the valuation of assets and liabilities is not uniform among different types of financial intermediaries, different institutions within the same group of intermediaries, different types of assets and liabilities, and different balance sheet dates. Hence, even the

seemingly simple task of determining the distribution of assets and liabilities of one group of intermediaries as of a given date is subject to limitations inherent in differences in method of valuation. These differences are so numerous and intricate and so little known in detail that an attempt to put all items in the balance sheets of one type of financial intermediary for one date on a fully comparable basis is in itself a task of substantial difficulty. The idea of doing so for all types of financial intermediary and for all nine benchmark dates between 1900 and 1952 is obviously chimerical. All that can be accomplished in the present state of the basic material and of specialized research by other investigators is in a few cases to substitute a more uniform and adequate valuation base for that provided in the original balance sheets, and in other cases to supplement the figures in the textual discussion with warnings about the distortions they probably contain.

Fortunately the defects are by no means fatal. Most liabilities and a large part of the assets of financial intermediaries—particularly short-term loans and mortgages—have a fixed face amount and are normally not subject to price changes. For these items the valuation in the available balance sheets is generally identical with what it would be under consistent valuation at original cost or at market. Furthermore a substantial part of the assets of financial intermediaries consists of bonds, which usually fluctuate only to a moderate extent. For these assets balance sheet valuation is generally fairly close to original cost or market, probably within 10 per cent, and even closer for government bonds and for other short-term securities. Moreover, where stocks constitute a substantial proportion of assets—as they do for investment companies, personal trust departments, pension funds and property insurance companies—often there is information on, or a basis for estimating, market value of assets in addition to their book value.

Notwithstanding these mitigating circumstances, the lack of uniform valuation in balance sheets and the changes in methods of valuation over time not only prevent statistical neatness but constitute a serious obstacle to close analysis, particularly during periods of sharp changes in asset prices and of divergencies between original cost, book, and market values such as occurred in the 1920's and 1930's. All ratios derived from the balance sheets now available must therefore be regarded as only approximations to uniform valuation, e.g. at cost for fixed-face amount claims and at market for equities. The figures available are comprehensive and quite ade-

## CHANGES IN USES AND SOURCES OF FUNDS

quate for a study of the main structural characteristics and trends, but do not lend themselves to microscopic analysis.

From the point of view of this study the main contribution of balance sheets (as they stand or as they can be modified) is that they provide at least a rough picture of the proportion in which the funds used by financial intermediaries (in particular their liabilities) have been provided by different economic groups, and of the proportion in which these funds are made available to the same groups in the form of loans or acquisition of securities.<sup>1</sup>

For almost all types of financial intermediary and for all benchmark dates the allocation of sources and destination of funds that is essential for present purposes unfortunately requires a considerable amount of estimation, and much of it has to be done on a rather tenuous basis. On the asset side of the balance sheet, funds made available to the federal government by means of the acquisition of its securities are the only exception; such holdings are almost always shown separately. There is likewise little doubt about the extent of holdings of state and local government securities, of all corporate securities taken together, and of total mortgage loans. In many cases difficulties, often serious, arise when an attempt is made to divide corporate securities into bonds and stocks or to allocate them among even the major industries (railroads, public utilities, all other), or to show mortgage loans either by group of borrower (individuals, farmers, unincorporated business, corporations) or by types of structure financed (e.g. one- to four-family homes, multifamily structures, nonresidential real estate, farm real estate).

The difficulties are even more serious in the case of the origin of funds. With a few exceptions—chiefly the deposits of federal, state, and local governments—the balance sheets of financial intermediaries do not permit identification of groups of creditors or stockholders. If we want to separate the liabilities of financial intermediaries into those owed to the main economic groups or to allocate their net worth among different groups of owners, we generally have to work indirectly and be content with rough estimates. For example, in order to distribute commercial banks' deposit liabilities,

<sup>1</sup> A second aspect of the picture, less important for an analysis of the flow of funds in the economy but easier to investigate with the help of the data available, is the distribution of sources and uses of funds by type of instrument such as short-term, intermediate and long-term loans, and bonds and stocks of different types.

## CHANGES IN USES AND SOURCES OF FUNDS

we must estimate corporate deposits not from bank records but from corporate balance sheets, and must obtain the deposits of nonfarm households as the difference between total reported bank deposits and the deposits of all other groups that can be identified from their balance sheets or estimated from other data. For many financial intermediaries, however, we may assume—it is hoped without committing too serious an error—that all funds are provided by only one or two groups. For example, all funds of mutual savings banks, savings and loan associations, credit unions, and the postal savings system, as well as the reserves of private pension funds, may be attributed to nonfarm households, on the assumption that the shares belonging to other groups are small enough to be ignored. In the case of life insurance reserves and veterans' insurance funds it seems sufficient to estimate roughly the share of farmers and then to allocate the remainder to nonfarm households.

If we did not go beyond the breakdowns specifically provided in the balance sheets of all, or nearly all, financial intermediaries, we would be limited to the separation between government and all other groups taken together. If we seek to know the sources and destinations of funds of financial intermediaries during the last half century, we are forced to make use of estimates some of which are admittedly tenuous in nature. This chapter attempts to show for each group of financial intermediaries—separately for loans and securities on the asset side, and for deposits or reserves on the liability side—the proportions made available to, or drawn from, seven main economic groups: nonfarm households, farmers, unincorporated business, nonfinancial corporations, financial intermediaries, state and local governments, and the federal government. This breakdown could not be achieved for all financial intermediaries and for all benchmark dates, but it has been carried through for all important groups and for most benchmark years, particularly those in the latter half of the period. Undoubtedly the breakdowns need improvement and contain numerous inaccuracies, but it is believed that the errors are not such that they invalidate the broad outlines of the picture presented.

Sections 3 to 5 will deal in turn with three broad groups each containing about half a dozen types of institutions: the banking system, insurance organizations, and miscellaneous other financial intermediaries. First, we examine developments for the three groups combined.

*2. Structural Changes in Uses and Sources of Funds*

Statements on the main uses and sources of funds of all financial intermediaries are necessarily limited in analytical significance since some of the institutions included differ greatly in character of operations and in structure of uses and sources of funds. But the combined figures have the advantage of reducing to workable status a mass of data which in detail might confuse rather than enlighten and of permitting the main tendencies to emerge clearly; their defects will be remedied to some extent by the discussion of the peculiarities of the main types of institutions in the following sections.

The rapid expansion of the resources of financial intermediaries during the first half of the twentieth century, from less than \$20 billion in 1900 to slightly over \$150 billion in 1929 and to approximately \$550 billion in 1952,<sup>2</sup> was accompanied by significant changes in sources of funds. These changes are reflected in liabilities and equities as shown in the balance sheets, and in uses of funds as indicated in the distribution of assets. Table 27, which presents the combined balance sheet of all main groups of financial intermediaries for each of the nine benchmark dates between 1900 and 1952, shows the changes. They appear more clearly in Table 29 and Charts 9 and 10, which express the same figures as percentages of total resources at each benchmark date, and in Table 30, which shows changes between benchmark dates in relative figures. Between 1900 and 1952 none of the uses or sources of funds shown in Table 27 declined in absolute amount. Differences in the rate of growth were, however, pronounced. Against a thirty-fold average growth during the half century, some uses and sources increased less than ten times and one important use (U.S. government securities) as much as 280 times.<sup>3</sup> The wide range of growth is evident from Table 28 which shows all main uses and sources at the end of 1952 as multiples of the level of 1900 and breaks the increase down into that occurring before and after 1929.

Only one of the main uses of funds—United States government securities—increased more rapidly than the aggregate assets of all

<sup>2</sup> Figures given in this chapter cover only those financial intermediaries for which reasonably reliable estimates of balance sheet items can be derived. For intermediaries not included see Table 10.

<sup>3</sup> Uses of funds are determined from assets or their change; sources of funds, from liabilities and net worth or their change. This simplified approach does not allow for valuation changes, in particular for realized capital gains and losses.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 27  
Combined Balance Sheet of Financial Intermediaries  
(billions of dollars)

	1900	1912	1922	1929	1933	1939	1945	1949	1952
1. Total assets	18.2	39.4	93.8	152.1	132.9	198.5	400.7	446.8	549.0
2. Total tangible assets	0.9	1.6	3.0	4.6	6.3	9.0	26.9	8.4	9.6
3. For own use	0.8	1.6	2.9	3.7	3.2	4.9	26.1	7.4	8.0
4. For investment	0	0	0	0	0.1	0.1	0.1	0.8	1.4
5. Other	0.1	0.1	0.1	0.8	3.1	3.9	0.7	0.2	0.2
6. Cash	2.8	5.3	12.6	16.7	15.5	44.2	61.1	69.7	81.3
7. Funds made available	13.7	31.6	74.1	123.6	107.0	141.2	305.7	362.5	450.4
8. Nonfarm households	3.0	6.3	12.4	30.4	25.3	25.3	26.6	50.3	80.7
9. Short-term loans	1.0	2.3	4.3	11.7	9.3	8.1	8.6	13.5	20.8
10. Long-term loans	2.0	3.9	8.1	18.7	16.0	17.2	18.0	36.7	59.9
11. Agricultural	1.2	3.4	8.4	8.5	6.7	6.9	5.8	11.0	13.6
12. Short-term loans	0.5	1.6	3.3	3.0	2.1	2.1	2.9	7.7	9.3
13. Long-term loans	0.7	1.8	5.1	5.6	4.6	4.8	3.0	3.3	4.3
14. Business	7.8	18.9	39.0	66.7	47.9	56.4	64.3	94.6	133.9
15. Unincorporated	2.5	4.4	8.0	10.8	5.7	4.9	8.0	11.2	16.3
16. Short-term loans	2.0	3.6	6.7	8.5	3.7	3.4	6.7	9.0	13.5
17. Long-term loans	0.5	0.8	1.3	2.3	1.9	1.5	1.3	2.1	2.7
18. Corporate	5.3	14.5	30.9	56.0	42.3	51.5	56.3	83.4	117.6
19. Short-term loans	1.7	4.2	10.6	13.8	8.5	8.4	8.9	14.5	24.2
20. Long-term loans	0.4	0.9	1.8	4.1	3.8	3.4	3.0	4.9	6.3
21. Fixed-interest-bearing securities	2.4	6.3	11.2	20.0	18.0	21.6	19.7	35.2	47.1
22. Stocks	0.9	3.1	7.4	18.0	12.0	18.0	24.7	28.9	40.0
23. State and local governments	1.0	2.1	4.7	8.0	9.7	12.6	11.6	16.0	23.2
24. Federal government	0.7	0.8	8.8	8.4	16.4	39.0	195.1	179.2	186.0
25. Foreigners	0.1	0.2	1.0	1.6	1.0	1.0	2.3	8.1	9.7
26. International institutions	—	—	—	—	—	—	—	3.4	3.4
27. Unclassified and miscellaneous assets	0.8	0.8	4.1	7.3	4.1	4.2	6.8	6.1	7.7

(continued on next page)

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 27, Intermediaries' Combined Balance Sheet (continued)

	1900	1912	1922	1929	1933	1939	1945	1949	1952
28. Total liabilities and net worth	18.2	39.4	93.8	152.1	132.9	198.5	400.7	446.8	549.0
29. Short-term liabilities	9.0	19.7	42.7	58.2	50.6	81.9	177.9	179.1	210.7
30. Nonfarm households	3.9	9.2	21.0	27.2	23.2	31.2	67.0	76.7	87.2
31. Agriculture	0.4	1.1	2.7	2.9	1.9	3.0	9.0	10.0	10.9
32. Business	4.4	8.6	16.7	24.7	21.4	40.5	67.9	75.7	92.2
33. Unincorporated	1.0	1.6	4.0	4.5	3.3	4.6	14.1	14.1	15.5
34. Corporate	3.4	7.0	12.7	20.3	18.1	35.9	53.8	61.6	76.7
35. Corporate excluding financial intermediaries	2.0	4.0	6.4	9.8	8.6	10.1	19.6	23.8	28.9
36. Financial intermediaries	1.4	2.9	6.3	10.5	9.6	25.8	34.2	37.8	47.7
37. State and local governments	0.1	0.5	1.5	2.5	2.4	3.6	5.7	8.8	10.5
38. Federal government	0.1	0.1	0.5	0.2	1.3	1.5	24.8	4.4	5.9
39. Foreigners	0.1	0.2	0.3	0.6	0.3	2.1	3.5	3.5	4.0
40. Long-term liabilities: insurance reserves and trust assets	4.7	11.4	27.2	49.8	49.9	71.9	118.4	154.9	190.3
41. Nonfarm households	4.4	10.7	26.1	47.6	47.3	68.7	113.6	148.6	183.5
42. Agriculture	0.2	0.5	0.9	1.8	2.2	2.7	4.0	5.3	5.5
43. Foreigners	0.2	0.3	0.2	0.4	0.4	0.5	0.8	1.0	1.3
44. Long-term liabilities: bonds, debentures	—	—	0.9	2.3	2.1	8.3	1.7	2.7	4.2
45. Currency issued	0.3	0.7	3.1	2.6	4.0	5.0	24.6	23.5	26.2
46. Unclassified and miscellaneous liabilities	1.3	1.7	8.6	15.3	6.3	8.6	23.1	27.4	37.6
47. Net worth	2.9	5.8	11.4	24.1	20.1	22.8	54.8	59.3	80.0
48. Share capital	0.4	0.8	2.4	6.5	5.3	4.7	7.8	13.2	20.5
49. Private	0.4	0.8	2.4	6.5	5.3	4.4	7.7	13.2	20.5
50. Government	—	—	—	—	—	0.3	0	0	0
51. Surplus	2.4	5.0	8.9	17.6	14.8	18.1	47.1	46.1	59.5

Source: Sum of Appendix Tables A-1, A-7, and A-15.

**TABLE 28**  
**Percentage Increase in Balance Sheet Items of Combined Financial Intermediaries between 1900, 1929, and 1952**

	1952 <u>1900</u>	1952 <u>1929</u>	1929 <u>1900</u>
1. Total assets	30.2	3.6	8.4
2. Total tangible assets	11.0	2.1	5.2
3. Cash	29.1	4.9	6.0
4. Funds made available	32.8	3.6	9.0
5. Nonfarm households	27.3	2.7	10.3
6. Short-term loans	20.9	1.8	11.8
7. Long-term loans	30.4	3.2	9.5
8. Agriculture	11.1	1.6	7.0
9. Short-term loans	18.7	3.1	6.0
10. Long-term loans	5.9	0.8	7.7
11. Business	17.2	2.0	8.6
12. Unincorporated	6.6	1.5	4.4
13. Short-term loans	6.7	1.6	4.2
14. Long-term loans	6.0	1.2	5.0
15. Corporate	22.1	2.1	10.5
16. Short-term loans	14.6	1.7	8.3
17. Long-term loans	17.2	1.5	11.3
18. Fixed-interest-bearing securities	19.8	2.4	8.4
19. Stocks	43.1	2.2	19.4
20. State and local governments	22.4	2.9	7.7
21. Federal government	280.5	22.2	12.6
22. Foreigners	158.7	6.1	25.9
23. Unclassified and miscellaneous assets	10.0	1.1	9.5
24. Short-term liabilities	23.3	3.6	6.4
25. Nonfarm households	22.1	3.2	6.9
26. Agriculture	27.4	3.7	7.4
27. Business	21.1	3.7	5.7
28. Unincorporated	15.8	3.4	4.6
29. Corporate	22.7	3.8	6.0
30. Corporate excluding financial intermediaries	14.8	3.0	5.0
31. Financial intermediaries	33.5	4.6	7.4
32. State and local government	75.8	4.2	17.8
33. Federal government	57.8	28.6	2.0
34. Foreigners	41.7	6.6	6.3
35. Long-term liabilities: insurance reserves and trust assets	40.3	3.8	10.5
36. Nonfarm households	42.0	3.9	10.9
37. Agriculture	30.8	3.1	9.9
38. Foreigners	7.3	3.4	2.1
39. Long-term liabilities: bonds, debentures	—	1.8	—
40. Currency issued	89.9	10.3	8.8
41. Unclassified and miscellaneous liabilities	29.8	2.5	12.1
42. Net worth	27.9	3.3	8.4
43. Share capital	48.5	3.1	15.5
44. Surplus	24.3	3.4	7.2

Source: Derived from the sum of Appendix Tables A-1, A-7, and A-15.

CHANGES IN USES AND SOURCES OF FUNDS

financial intermediaries in both periods from 1900 to 1929 and from 1929 to 1952.<sup>4</sup> On the other hand, in both periods four types of uses lagged behind the rate of growth of aggregate assets: loans to unincorporated business, loans to agriculture, state and local government securities, and tangible assets. Loans to nonfarm households, loans to corporations, corporate bonds and stocks, and the heterogeneous "miscellaneous assets" increased more rapidly than total assets before 1929 but less rapidly after. Cash lagged behind the growth of aggregate assets in the first period, but outstripped it in the second.

The differences in rate of growth for the various uses are, of course, reflected in changes in the distribution of total assets and liabilities of financial intermediaries. These changes result from two forces: changes in the structure of assets or liabilities of given groups of financial intermediaries, and differences among groups in the relative growth of total assets. No attempt will be made here to separate the effect of these two forces. They can, of course, be isolated by a study of the basic tables (Appendix A) or of the combined balance sheets for banks, insurance organizations, and miscellaneous financial intermediaries, given in sections 3 to 5 below.

The main structural change in the uses of funds<sup>5</sup> is the upward trend in the proportion of funds made available to the federal government. The federal share in the funds of financial intermediaries was insignificant up to World War I. After reaching a peak of 12 per cent, it declined rapidly to less than 7 per cent in 1929. From then on it increased steadily through the end of World War II. At that time well over one-half of the total resources of financial intermediaries were put at the disposal of the federal government; three-fifths, if uninvested assets are excluded. The decline after World War II was remarkably rapid. By 1952 the share of the federal government was down to approximately two-fifths. Moreover, the decline was due not so much to a reduction in the volume of funds supplied to the federal government, which shrank only

<sup>4</sup> A less important use also increased more than the aggregate both times—loans to foreigners, where the federal government's post-World War II transactions caused the increase in the 1929-1952 period. So also did three sources, one major—long-term liabilities to nonfarm households (insurance reserves and trust assets), and two minor—liabilities to state and local governments and currency issued.

<sup>5</sup> Throughout the following discussion "funds" refer to total assets less tangibles, cash, and miscellaneous assets.

*CHANGES IN USES AND SOURCES OF FUNDS*

5 per cent, as to the rapid expansion—by more than one-third—in total assets of financial intermediaries between 1945 and 1952, a movement which was to a considerable extent the accompaniment and cause of the postwar inflation. The main offset to the increased allocation of funds to the federal government was a decline in the proportion of funds going to business. This share averaged approximately one-half from 1900 to the early thirties, declined to one-fifth at the end of World War II, but recovered to approximately 30 per cent by 1952. Sharp changes also occurred in the distribution of funds made available to business. At the turn of the century long-term loans (mortgages and bonds) accounted for slightly over two-fifths and short-term loans for almost one-half, while only one-eighth of the total was made available through stocks. In 1952 long-term loans still accounted for over 40 per cent of the total funds supplied by financial intermediaries to business, but the share of stock had risen to almost one-third and that of short-term loans had declined sharply to not much over one-fourth.

The share of funds made available to agriculture increased from 1900 to 1922, reflecting a period of rapid expansion in that sector before World War I as well as the inflation in land and agricultural product prices during and immediately after it. From the early twenties, on, however, the decline was sharp until the end of World War II, and recovery in the following years was moderate. As a result, the share of funds supplied to agriculture declined from 9 per cent in 1900 to only 3 per cent in 1952 after having reached a peak of over 10 per cent around 1920.

The share of nonfarm households has fluctuated considerably. It averaged about one-fifth from 1900 to the Great Depression, declined sharply from the mid-1930's to the mid-1940's, and recovered markedly after World War II. The 18 per cent share in total resources of financial intermediaries reached in 1952 was slightly lower than the level of the first three decades, yet was higher in proportion to funds made available to all borrowers other than the federal government than it had been before 1929. This movement was largely due to an increase in the share of financial intermediaries' funds employed in home mortgages.

State and local governments have always provided an outlet for only a small proportion of the funds of financial intermediaries. Their share fails to show a pronounced trend, averaging slightly over 6 per cent between 1900 and 1929 and approximately 4.5 per cent after World War II.

## CHANGES IN USES AND SOURCES OF FUNDS

Foreigners have at all times accounted for only a negligible proportion of the funds of financial intermediaries. The rise to slightly over 2 per cent in the last few years is due exclusively to loans and investments made by federal lending institutions.

Changes in sources of funds of financial intermediaries have been much less pronounced than those in uses of funds if attention is limited to the rough classification in Table 29. Net worth has remained fairly stable, about one-seventh of total funds, but this stability hides important differences in movement. The share of net worth has declined markedly among private financial intermediaries, from 16 per cent in 1900 to 10 per cent in 1952, and the stability of the over-all figure is primarily due to the advent of government lending institutions. Most of their funds are in the form of equity contributions made by the Treasury, but since the Treasury itself over the period as a whole has not shown a net saving, they may be regarded economically as borrowed funds.

The movements stand out more clearly in Table 30, which shows the distribution of the changes in main assets and liabilities between benchmark dates, than in Table 29, which is based on the distribution at benchmark dates. For example the shift in cash in the period from 1934 to 1939, which raised the share of cash in total resources of financial intermediaries from 12 to 22 per cent, is now seen to have involved the use of over two-fifths of the increase in total resources between the benchmark dates of 1933 and 1939. Similarly, it is shown that two-fifths of the total increase in resources between 1945 and 1949 went into home mortgages, although the increase in their share in total assets from 4.5 to 8.2 per cent does not look spectacular. Finally, the differences in the supply of funds to the federal government on the one hand, and to business on the other, become even more pronounced. For example, between 1933 and 1945 only a small percentage on balance of the large total increase in resources was supplied to business, but between 1945 and 1952 as much as one-half of all additional resources available to financial intermediaries were used to finance business through the extension of loans or the acquisition of securities—approximately the same proportion that was made available to business during the period from 1900 to 1929. Short-term loans to business did not absorb as much as one-third of the total increase in resources of financial intermediaries in any period, and failed entirely to participate in the expansion of resources between 1933 and 1945. Corporate securities, on the other hand, absorbed more

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 29  
Percentage Distribution, Balance Sheet Items of Combined Financial Intermediaries

	1900	1912	1922	1929	1933	1939	1945	1949	1952
1. Total assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2. Total tangible assets	4.8	4.2	3.2	3.0	4.7	4.5	6.7	1.9	1.7
3. For own use	4.3	4.0	3.1	2.5	2.4	2.5	6.5	1.7	1.5
4. For investment	0	0	0	0	0.1	0.1	0	0.2	0.3
5. Other	0.5	0.2	0.1	0.5	2.3	2.0	0.2	0	0
6. Cash	15.4	13.5	13.5	11.0	11.7	22.3	15.3	15.6	14.8
7. Funds made available	75.6	80.3	78.9	81.2	80.5	71.1	76.3	81.1	82.0
8. Nonfarm households	16.3	15.9	13.2	20.0	19.0	12.7	6.6	11.2	14.7
9. Short-term loans	5.5	5.9	4.6	7.7	7.0	4.1	2.1	3.0	3.8
10. Long-term loans	10.8	10.0	8.6	12.3	12.0	8.7	4.5	8.2	10.9
11. Agriculture	6.7	8.6	8.9	5.6	5.0	3.5	1.5	2.5	2.5
12. Short-term loans	2.7	4.0	3.5	1.9	1.6	1.0	0.7	1.7	1.7
13. Long-term loans	4.0	4.6	5.4	3.7	3.4	2.4	0.7	0.7	0.8
14. Business	42.9	48.0	41.5	43.9	36.1	28.4	16.1	21.2	24.4
15. Unincorporated	13.6	11.2	8.6	7.1	4.3	2.5	2.0	2.5	3.0
16. Short-term loans	11.1	9.1	7.2	5.6	2.8	1.7	1.7	2.0	2.5
17. Long-term loans	2.5	2.1	1.4	1.5	1.5	0.8	0.3	0.5	0.5
18. Corporate	29.3	36.8	33.0	36.8	31.8	25.9	14.1	18.7	21.4
19. Short-term loans	9.1	10.6	11.2	9.1	6.4	4.2	2.2	3.2	4.4
20. Long-term loans	2.0	2.3	1.9	2.7	2.8	1.7	0.8	1.1	1.2
21. Fixed-interest-bearing securities	13.1	16.1	11.9	13.1	13.5	10.9	4.9	7.9	8.6
22. Stocks	5.1	7.8	7.9	11.9	9.1	9.1	6.2	6.5	7.3
23. State and local governments	5.7	5.3	5.0	5.2	7.3	6.3	2.9	3.6	4.2
24. Federal government	3.6	2.0	9.4	5.5	12.3	19.7	48.7	40.1	33.9
25. Foreigners	0.3	0.4	1.0	1.0	0.8	0.5	0.6	1.8	1.8
26. International institutions	—	—	—	—	—	—	—	0.8	0.6
27. Unclassified and miscellaneous assets	4.2	2.1	4.4	4.8	3.1	2.1	1.7	1.4	1.4

(continued on next page)

CHANGES IN USES AND SOURCES OF FUNDS

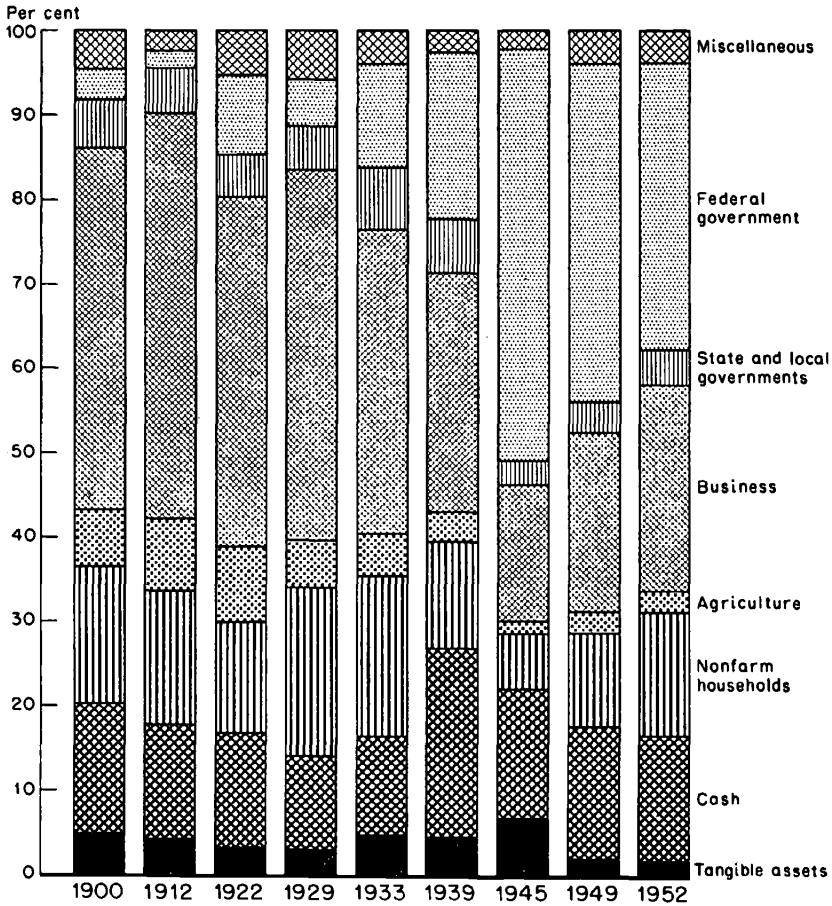
TABLE 29, Percentage Distribution, Balance Sheet Items of Combined Financial Intermediaries (continued)

	1900	1912	1922	1929	1933	1939	1945	1949	1952
28. Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29. Short-term liabilities	49.7	50.0	45.5	38.2	38.0	41.3	44.4	40.1	38.4
30. Nonfarm households	21.7	23.4	22.4	17.9	17.4	15.7	16.7	17.2	15.9
31. Agriculture	2.2	2.9	2.9	1.9	1.4	1.5	2.2	2.2	2.0
32. Business	24.0	21.8	17.8	16.3	16.1	20.4	17.0	16.9	16.8
33. Unincorporated	5.4	4.1	4.3	3.0	2.5	2.3	3.5	3.2	2.8
34. Corporate	18.6	17.7	13.5	13.3	13.6	18.1	13.4	13.8	14.0
35. Corporate excluding financial intermediaries	10.8	10.3	6.8	6.4	6.4	5.1	4.9	5.3	5.3
36. Financial intermediaries	7.8	7.5	6.7	6.9	7.2	13.0	8.5	8.5	8.7
37. State and local governments	0.8	1.3	1.6	1.6	1.8	1.8	1.4	2.0	1.9
38. Federal government	0.6	0.1	0.5	0.1	1.0	0.8	6.2	1.0	1.1
39. Foreigners	0.5	0.5	0.3	0.4	0.2	1.1	0.9	0.8	0.7
40. Long-term liabilities: insurance reserves and trust assets	26.0	29.0	29.0	32.7	37.5	36.2	29.6	34.7	34.7
41. Nonfarm households	24.0	27.1	27.8	31.3	35.6	34.6	28.4	33.3	33.4
42. Agriculture	1.0	1.2	1.0	1.2	1.7	1.4	1.0	1.2	1.0
43. Foreigners	1.0	0.8	0.3	0.2	0.3	0.3	0.2	0.2	0.2
44. Long-term liabilities: bonds, debentures	—	—	0.9	1.5	1.6	4.2	0.4	0.6	0.8
45. Currency issues	1.6	1.8	3.3	1.7	3.0	2.5	6.2	5.3	4.8
46. Unclassified and miscellaneous liabilities	7.0	4.4	9.1	10.0	4.7	4.3	5.8	6.1	6.9
47. Net worth	15.8	14.7	12.1	15.8	15.1	11.5	13.7	13.3	14.6
48. Share capital	2.3	2.1	2.6	4.3	4.0	2.4	1.9	2.9	3.7
49. Private	2.3	2.1	2.6	4.3	4.0	2.2	1.9	2.9	3.7
50. Government	—	—	—	—	—	0.1	0	0	0
51. Surplus	13.4	12.6	9.5	11.5	11.1	9.1	11.8	10.3	10.8

Source: Derived from the sum of Appendix Tables A-1, A-7, and A-15.

CHART 9

Distribution of Assets of Financial Intermediaries,  
Benchmark Dates, 1900-1952



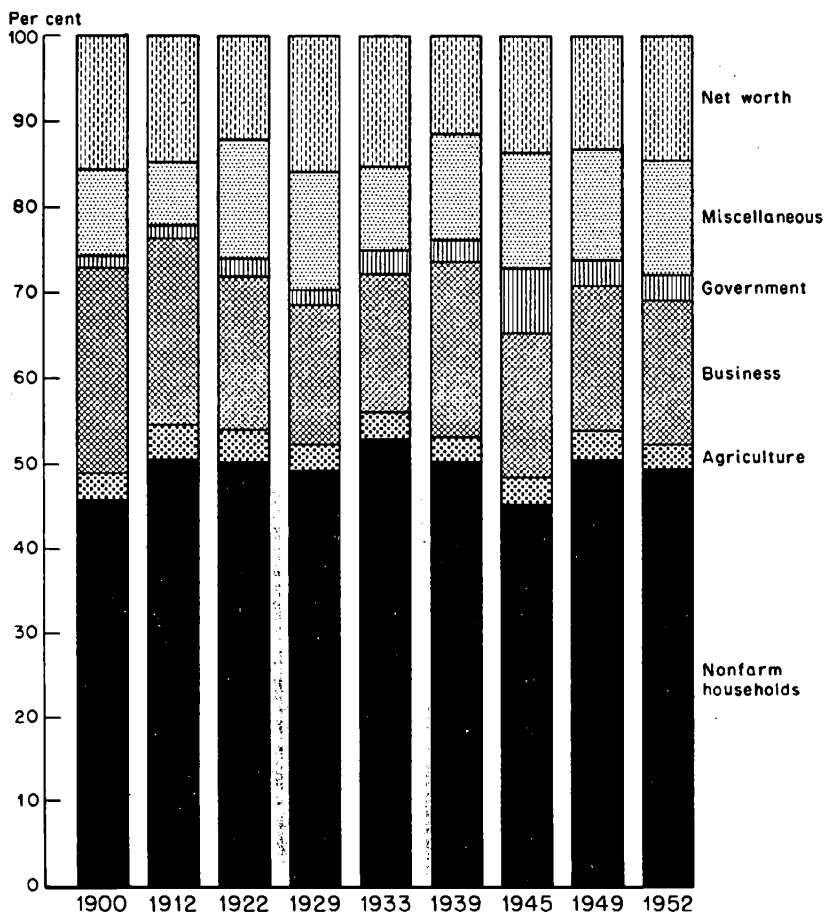
Source: Table 29.

than two-fifths of the total increase in resources between 1945 and 1949, and even for the longer period from 1945 to 1952 accounted for one-third, considerably more than between 1900 and 1929. Fluctuations are, of course, most pronounced in the share of funds made available to the federal government. Between 1939 and 1945 no less than three-fourths of the immense increase in total resources went to the federal government. Its second highest share—slightly

CHANGES IN USES AND SOURCES OF FUNDS

CHART 10

Distribution of Liabilities and Net Worth of Financial Intermediaries, Benchmark Dates, 1900-1952



Source: Table 29.

over one-third—occurred in the 1930's and during World War I.<sup>6</sup> On the other hand, the decrease in funds made available to the federal government between 1945 and 1949 was equal to approximately one-third of the total substantial increase in resources, and

<sup>6</sup> The federal government accounted for approximately one-seventh of the total increase in resources between the benchmark dates of 1912 and 1922. For the years 1917 to 1919 alone, which are not shown separately in Table 30, the proportion was considerably higher.

TABLE 30

Percentage Distribution of Changes in Balance Sheet Items  
between Benchmark Dates, Combined Financial Intermediaries  
(per cent of change in total assets)

	1900	1912	1922	1929	1933	1939	1945	1949
	to	to	to	to	to	to	to	to
	1912	1922	1929	1933	1939	1945	1949	1952
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1. Total assets								
2. Total tangible assets	3.6	2.5	2.7	-9.0	4.0	8.9	-40.1	1.1
3. For own use	3.7	2.5	1.4	3.0	2.7	10.5	-40.5	0.6
4. For investment	0	0	0	-0.3	0	0	1.5	0.6
5. Other	-0.1	0	1.2	-11.7	1.3	-1.6	-1.0	0
6. Cash	11.8	13.4	7.0	6.1	43.7	8.4	18.6	11.3
7. Funds made available	84.2	78.0	84.9	86.2	52.1	81.4	123.1	86.0
8. Nonfarm households	15.5	11.2	31.0	26.7	-0.1	0.7	51.3	29.8
9. Short-term loans	6.2	3.6	12.7	12.5	-1.9	0.2	10.7	7.1
10. Long-term loans	9.3	7.6	18.2	14.1	1.8	0.4	40.5	22.6
11. Agriculture	10.3	9.1	0.3	9.6	0.3	-0.5	11.2	2.6
12. Short-term loans	5.1	3.1	-0.5	4.3	-0.1	0.4	10.4	1.6
13. Long-term loans	5.2	6.0	0.8	5.3	0.4	-0.9	0.8	0.9
14. Business	52.4	36.8	47.7	98.0	13.0	3.9	65.6	38.4
15. Unincorporated	9.2	6.6	4.7	26.5	-1.1	1.5	6.8	5.0
16. Short-term loans	7.5	5.8	2.9	24.7	-0.4	1.6	5.0	4.4
17. Long-term loans	1.7	0.9	1.7	1.9	-0.7	-0.1	1.8	0.6
18. Corporate	43.2	30.1	43.0	71.5	14.1	2.4	58.8	33.4
19. Short-term loans	11.9	11.7	5.6	27.8	-0.1	0.2	12.2	9.5
20. Long-term loans	2.5	1.7	4.0	2.0	-0.5	-0.2	4.1	1.4
21. Fixed-interest-bearing securities	18.7	8.9	15.1	10.3	5.6	-1.0	33.6	11.7
22. Stocks	10.2	7.9	18.3	31.3	9.1	3.3	9.0	10.9
23. State and local governments	4.9	4.7	5.7	-9.1	4.3	-0.5	9.5	7.1
24. Federal government	0.6	14.7	-0.7	-41.7	34.5	77.2	-34.5	6.6
25. Foreigners	0.5	1.5	1.1	3.0	-0.1	0.6	12.7	1.6
26. International institutions	-	-	-	-	-	-	7.3	0
27. Unclassified and miscellaneous assets	0.3	6.0	5.4	16.7	0.1	1.3	-1.6	1.6

(continued on next page)

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 30, Percentage Distribution of Balance Sheet Changes, Combined Intermediaries (continued)

	1900	1912	1922	1929	1933	1939	1945	1949
	to	to	to	to	to	to	to	to
	1912	1922	1929	1933	1939	1945	1949	1952
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
28. Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29. Short-term liabilities	50.3	42.2	26.6	39.5	47.8	47.5	2.4	31.0
30. Nonfarm households	24.9	21.6	10.6	20.8	12.2	17.7	20.9	10.3
31. Agriculture	3.4	2.8	0.5	5.5	1.7	3.0	2.2	0.9
32. Business	19.9	14.9	13.8	17.4	29.1	13.6	16.9	16.1
33. Unincorporated	2.9	4.5	0.8	6.2	1.9	4.7	-0.1	1.4
34. Corporate	17.0	10.5	13.0	11.1	27.1	8.8	17.0	14.7
35. Corporate excluding financial intermediaries	9.8	4.3	5.8	6.4	2.4	4.7	9.2	5.0
36. Financial intermediaries	7.1	6.2	7.1	4.7	24.7	4.2	7.8	9.7
37. State and local governments	1.7	1.8	1.7	0.2	1.8	1.0	6.8	1.7
38. Federal government	-0.2	0.9	-0.5	-5.8	0.3	11.5	-44.3	1.5
39. Foreigners	0.5	0.1	0.6	1.5	2.8	0.7	-0.1	0.5
40. Long-term liabilities: insurance reserves and trust assets	31.6	29.0	38.6	-0.8	33.6	23.0	79.0	34.6
41. Nonfarm households	29.6	28.3	37.0	1.8	32.7	22.2	75.8	34.1
42. Agriculture	1.4	0.9	1.4	-2.3	0.8	0.6	2.7	0.2
43. Foreigners	0.6	-0.1	0.2	-0.4	0.1	0.1	0.5	0.2
44. Long-term liabilities: bonds, debentures	-	1.6	2.4	1.1	9.5	-3.3	2.2	1.4
45. Currency issues	2.0	4.4	-1.0	-7.6	1.4	9.7	-2.5	2.7
46. Unclassified and miscellaneous liabilities	2.3	12.5	11.5	46.9	3.5	7.2	9.4	10.0
47. Net worth	13.8	10.2	21.8	21.0	4.2	15.9	9.6	20.3
48. Share capital	1.9	3.0	7.0	6.4	-0.9	1.5	11.7	7.1
49. Private	1.9	3.0	7.0	6.4	-1.3	1.6	11.8	7.1
50. Government	-	-	-	-	0.4	-0.1	0	0
51. Surplus	11.9	7.3	14.8	14.6	5.1	14.3	-2.2	13.2

Source: Derived from the sum of Appendix Tables A-1, A-7, and A-15.

## CHANGES IN USES AND SOURCES OF FUNDS

the federal government received practically no part of the increase in resources in the periods from 1900 to 1912, 1922 to 1929, and 1949 to 1952.<sup>7</sup>

The distribution of changes in total resources among the different sources shows few definite tendencies and few movements worthy of comment. Perhaps the main exception is the extremely large share—approximately three-fourths—of long-term liabilities to nonfarm households between 1945 and 1949, which contrasts with proportions of 22 to 37 per cent in all other periods except 1930 to 1933. The size of this share is a result of the high level of nonfarm individuals' saving through insurance reserves, coupled with relatively small increases in business deposits with the banking system and a sharp reduction of the federal government's bank deposits accumulated during the latter part of World War II.

### 3. *The Banking System*

Measured by total resources the banking system constitutes by far the most important group of financial intermediaries, although its share in total assets has declined from about two-thirds in 1900 to slightly under one-half in 1952. This group comprises commercial banks, mutual savings banks, the Federal Reserve System, and the postal savings system. Because of the predominant position of commercial banks, which accounted for approximately 80 per cent of the group's total assets from 1900 to 1929 and for approximately 70 per cent in the last two decades, the tables generally show not only the combined aggregates for all four types of banks but also the figures for operating commercial banks alone. Although the tables have their origin in published balance sheets which can be regarded as comprehensive and reliable, the data were manipulated in order to provide the detail necessary for economic analysis. The estimates discussed in this section, therefore, must be regarded only as approximations to the quantities called for by the descriptive headings.

#### a. STRUCTURAL CHANGES IN USES OF BANK FUNDS

An attempt has been made in Table 31 to rearrange the assets customarily shown in the banks' balance sheets so as to provide in-

<sup>7</sup> Discussion of changes during the period from 1929 to 1933 is generally omitted because of their erratic character. It should also be noted that since total resources of financial intermediaries declined during that period, a negative share in Table 30 indicates an absolute increase, and a positive share, an absolute decrease.

## CHANGES IN USES AND SOURCES OF FUNDS

formation on the distribution of the funds among main groups of borrowers and among funds of different maturity. This necessitates in many cases a breakdown of the data by processes of estimation which sometimes involve substantial margins of error. The figures are limited to funds made available by the banking system to other groups in the economy. They therefore exclude banks' holdings of currency, bank deposits, and tangible and miscellaneous assets. Table 31 is restricted to five benchmark dates selected to show long-term trends since 1900. The years 1922 and 1945 are omitted because of strong war influences; 1933 because of the effect of the Great Depression; 1949 because of its closeness to the latest available date, 1952. Figures for the omitted dates, and detailed figures for all benchmark dates and for each of the four groups of financial intermediaries included in Table 31, will be found in Appendix A, Tables A-1 to A-6.

The outstanding structural change in the uses of bank funds during the first half of the twentieth century is the decline of the proportion made available to domestic business, concomitant with the increased share supplied to the federal government. This shift occurred primarily between 1929 and 1939, although it continued until after World War II. Since that time there has been a moderate decline in the share of funds absorbed by the federal government. The figures for 1952 shown in Table 31, therefore, do not represent the highest share of the federal government and the lowest share of domestic business in total bank funds.

Up to 1929 structural changes in the uses of bank funds were relatively small. Domestic business constituted by far the most important outlet in the form of nominally short-term loans and, secondarily, of banks' holdings of corporate bonds and debentures. The share of business was close to 60 per cent in all benchmark years through 1929, if allowance is made for the fact that in 1929 a considerable amount of what ultimately must be regarded as credit to business (loans on corporate securities) appears in the statistics as funds made available to recipients of these loans, i.e. nonfarm households.

Another structural change is marked but is of considerably smaller quantitative importance—the shrinkage of the share of funds made available to agriculture. The decline is from about 10 per cent in 1900 and 1912 to 6 per cent in 1929 and 3 per cent in 1939 and 1952. This movement reflects the lessening importance of agri-

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 31

Percentage Distribution of Bank Funds by Main Use  
(excluding cash, tangibles, and miscellaneous assets)

ITEM	ALL BANKS					OPERATING COMMERCIAL BANKS				
	1900 (1)	1912 (2)	1929 (3)	1939 (4)	1952 (5)	1900 (6)	1912 (7)	1929 (8)	1939 (9)	1952 (10)
1. Nonfarm households	19.3	18.5	25.1	17.6	17.1	15.4	14.4	22.0	14.2	16.4
2. Agriculture	7.3	11.0	5.8	3.2	2.6	9.1	13.1	6.9	4.2	3.5
3. Business	57.9	59.9	53.0	29.8	22.9	65.0	64.3	55.6	32.6	28.0
4. Unincorporate	24.5	20.1	15.4	6.9	7.4	30.0	23.2	17.7	8.4	9.7
5. Corporate	33.4	39.8	37.6	22.9	15.5	35.0	41.1	37.8	24.1	18.3
6. State and local governments	8.4	6.6	4.9	7.4	5.4	2.7	3.2	4.1	8.4	7.2
7. Federal government	6.9	3.9	9.4	41.4	51.8	7.6	4.8	9.4	40.1	44.7
8. Foreigners	0.2	0.2	1.7	0.5	0.2	0.2	0.3	2.0	0.6	0.1
9. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	A. By destination									
	B. By original maturity									
	a. Narrow classification									
10. Short-term loans	55.1	55.2	51.7	24.2	25.3	70.6	66.7	60.2	31.9	34.2
11. Long-term loans	15.4	17.5	19.1	16.5	13.9	7.5	10.8	12.5	10.5	11.1
12. Securities	29.5	27.3	29.2	59.3	60.8	21.9	22.5	27.3	57.6	54.7
13. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	b. Broad classification									
14. Short-term loans and securities	..	..	..	30.0	45.0	..	..	..	40.0	50.0
15. Long-term loans and securities	..	..	..	70.0	55.0	..	..	..	60.0	50.0

Column Source

1-5 Appendix Table A-1.

6-10 Appendix Tables A-3 and A-4.

The split into short and long-term securities required for lines 14 and 15 is based (1) on data on government security holdings for 1952 in the *Treasury Bulletin*, March 1953, pp. 36, 38; and for 1939 in *Federal Reserve Bulletin*, February 1940 for Federal Reserve Banks, and in *Assets and Liabilities of Operating Insured Banks*, Federal Deposit Insurance Corporation, Report No. 13 for commercial and mutual savings banks; (2) on estimates of term loans derived for 1940 from data in *Term Lending to Business*, N. H. Jacoby and R. J. Saulnier, 1942, p. 30, and for 1952 from *An Analysis of the Business Loans of Commercial Banks in the United States*, by B. H. Beckhart, a paper read before the International Credit Conference, Rome, 1951, p. 42.

## CHANGES IN USES AND SOURCES OF FUNDS

culture within the economy and the reduced reliance of agriculture on short-term borrowing.<sup>8</sup>

The share of the remaining three groups of borrowers has changed little over the entire period of more than five decades. Non-farm households throughout the period absorbed slightly less than one-fifth of total bank funds.<sup>9</sup> This total contains a varying proportion of home mortgage loans, short-term consumer loans, and loans on securities. Disregarding minor fluctuations, one finds the following changes in proportion: an upward trend in home mortgage loans, a sharp decline after 1929 in loans on securities, and an increase in other consumer loans during the second half of the period. Funds made available to state and local governments through the acquisition of their securities declined slowly and irregularly from 8 per cent in 1900 to 5 per cent in 1952 mainly because mutual savings banks, which until the late 1930's directed a higher proportion of their total funds into this outlet, grew more slowly than commercial banks. Funds made available to foreigners were of importance only during the twenties and consisted almost exclusively of foreign bonds held in the portfolios of commercial and mutual savings banks.<sup>10</sup>

The picture is the same in almost all respects for operating commercial banks alone. The level of the shares of funds made available to business and to agriculture is somewhat higher than for all banks combined, and to nonfarm households and the federal government somewhat lower, but the movements are similar. State and local governments present the only exception. They have increased in importance as outlets of funds for commercial banks, while decreasing in importance for all banks combined.

An attempt to arrange the total of bank funds by the length of time for which the funds are advanced is even more hazardous than the distribution between main groups of borrowers. Balance sheets provide a rough distribution of bank assets by the formal criterion of the legal duration of the credit instrument used to transfer the

<sup>8</sup> The relative importance of short-term borrowing and of bank credit for the financing of agriculture will be discussed in Chapter VII, section 4.

<sup>9</sup> The considerably higher figure shown for 1929 is due to the extremely high volume of loans on securities to individuals (either directly or through brokers and dealers), which may properly be regarded as an indirect form of credit to domestic business.

<sup>10</sup> Although no allowance is made in Table 31 for loans to foreign borrowers by commercial banks because data are inadequate, it is reasonably certain that such loans were insignificant throughout the period except perhaps for loans on securities during the late twenties.

## CHANGES IN USES AND SOURCES OF FUNDS

funds from the bank to the borrowers. Thus all loans made in the form of open accounts, notes receivable, or bills of exchange are usually classified as short-term; those in the form of a mortgage, as long-term; and those made through acquisition of securities, either by the original length of life of the instrument (equity securities always being regarded as long-term) or by its distance from maturity at time of acquisition.<sup>11</sup> But the actual distance between investment and recovery of funds differs greatly from the formal length of the engagement. Many open accounts and notes receivable, for instance, may remain for years on the books of a bank by means of renewals. On the other hand, engagements of apparently long-term nature, such as the acquisition of stocks, bonds, and mortgages, may be liquidated quickly by resale. Classifications by length of engagement, necessarily based on formal criteria and on the generally insufficiently detailed information provided in the balance sheets, are by their very nature of limited significance. Until more detailed studies of the actual length can be made from far better primary data, they must suffice.

By balance sheet classifications (see section B-a of Table 31), far-reaching structural changes appear to have occurred in the maturity distribution of bank funds. Short-term loans, which accounted for slightly more than half of the total up to 1929, appear to have fallen to only one-fourth since the thirties, while long-term loans, consisting of mortgages and securities, seem to have advanced correspondingly. The direction of the changes remains the same, but their extent is much lessened if allowance is made, as in section B-a of Table 31 for 1939 and 1952, for two significant changes that have taken place since 1929. The first is the introduction of term loans, running up to about ten years, which have come to account for approximately one-third of all loans (other than mortgage and security loans) made by commercial banks.<sup>12</sup> The second is the in-

<sup>11</sup> The distinction between loans and mortgages on the one hand and securities on the other is to some extent arbitrary and fuzzy. Particularly in the case of medium-term engagements it is sometimes difficult to determine whether a security in the sense of a claim embodied in an easily transferable instrument is involved. Moreover the information is generally lacking on which a distinction between loans and securities could be based with reasonable definiteness and consistency.

<sup>12</sup> According to estimates of B. H. Beckhart, term loans represented approximately 30 per cent of total commercial and industrial loans of commercial banks from 1940 to 1950 (*An Analysis of the Business Loans of Commercial Banks in the U.S.*, paper for International Credit Conference, Rome, October 18, 1951, p. 42). Their share in 1938 has been estimated at 19 per cent by N. H. Jacoby and R. J. Saulnier (*Term Lending to Business*, 1947, p. 30).

## CHANGES IN USES AND SOURCES OF FUNDS

creasing proportion of short-term paper, defined as issues with an original maturity of not over one year, among the banks' holdings of U.S. Treasury securities. With allowance for both changes, it appears that the decline in the share of short-term loans and securities is reduced for the entire banking system from approximately 60 per cent in 1900 and 1912 (rough estimates not shown in Table 31) to approximately 45 per cent in 1952. The decline remains somewhat more pronounced for commercial banks alone (from approximately three-fourths of total funds in 1900 to two-fifths in 1939 and one-half in 1952), though considerably less pronounced than in the unadjusted figures.

### b. DISTRIBUTION OF FUNDS AMONG BUSINESS ENTERPRISES

Analysis of the banking system as a source of funds must take account of the distribution of the aggregate among business enterprises in different industries and among enterprises of varying size and form of organization. The reasons for this are both quantitative and qualitative. Up to 1929 business accounted for well over one-half of total uses of bank funds and even at present absorbs about one-fourth. Moreover, the supply of funds to business has always been regarded as one of the primary functions of the banking system; and the borrower's point of view, funds obtained from the banking system are one of the main means of financing business. It is therefore extremely unfortunate that relevant direct information is so scarce, both for direct loans and for corporate securities acquired. The little available refers only to the recent past. Even the indirect information that can be obtained from the balance sheets of business on bank loans only, not on bank holdings of corporate securities, is far from satisfactory. It does not go back beyond the late 1920's; and it is entirely unavailable for unincorporated enterprises, which account for a substantial part of all bank financing of business.

1. *Distribution by Industry.* Reasonably comprehensive and detailed information on the industrial distribution of bank funds supplied to business is found for only one date, late in 1946, and is limited to business loans made by Federal Reserve member banks, which then accounted for approximately three-fourths of all funds made available by the banking system to business. This information is summarized in Table 32.<sup>13</sup>

<sup>13</sup> The results of a comparable inquiry made by the Federal Reserve Board in October 1955 were not available when this study was completed.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 32

Business Loans Outstanding in Federal Reserve Member Banks,  
November 20, 1946: Percentage Distribution by Type of Business

TYPE OF BUSINESS	AMOUNTS OF LOANS			NUMBER OF LOANS		
	All <sup>a</sup> (1)	Term (2)	Other (3)	All (4)	Term (5)	Other (6)
1. Retail trade	11.2	9.0	12.3	37.6	37.3	37.7
2. Wholesale trade	18.3	4.9	25.3	13.1	6.8	14.7
3. Manufacturing and mining	42.8	52.0	38.0	17.2	14.6	17.9
4. Public utilities	9.3	21.1	3.0	5.6	11.7	4.0
5. Services	3.7	5.1	3.0	11.3	16.7	9.8
6. Construction	3.4	1.4	4.4	6.4	5.3	6.6
7. Sales finance	5.9	1.6	8.2	1.0	0.2	1.3
8. Other	5.4	4.9	5.7	7.7	7.4	7.8
9. Total, per cent	100.0	100.0	100.0	100.0	100.0	100.0
10. Total, absolute values <sup>b</sup>	13,189	4,558	8,631	673	144	529

<sup>a</sup> Includes mortgage loans.

<sup>b</sup> Millions of dollars for cols. 1 to 3; thousands for cols. 4 to 6.

Source: *Federal Reserve Bulletin*, 1947, pp. 255, 502.

At that time considerably more loan financing was made available to manufacturing and mining than to any other section of business. The two industries accounted for somewhat more than two-fifths of the total amount of business loans outstanding of Federal Reserve member banks. It is unlikely that the proportion would be much different for all commercial banks or for the entire banking system. The next group—wholesale trade—received less than one-half as much as manufacturing and mining (less than one-fifth of total bank loans outstanding). Retail trade and public utilities each accounted for approximately one-tenth of the banks' loan funds, and all other groups together shared the remainder of less than one-fifth. It is interesting, and significant for the applicability of these figures to earlier dates, that term loans and other (i.e. short-term) loans differ considerably in industrial distribution. The differences are particularly pronounced in three cases: wholesale trade, with one-fourth of the short-term and only 5 per cent of the term loans; sales finance companies, with 8 per cent but less than 2 per cent, respectively; and public utilities with practically no short-term loans but more than one-fifth of all term loans.

No industrial breakdown is available for commercial banks' hold-

ings of corporate securities for recent years.<sup>14</sup> Using rough estimates based on the distribution for mutual savings banks and earlier data for commercial banks, it can be estimated that nearly one-half of the banking system's holdings of corporate securities (almost exclusively bonds) can be allocated to the manufacturing and mining industries, while the other half is divided about evenly between railroads and other public utilities; holdings of securities of corporations in other industries are very small. Combining these rough figures with the distribution of business loans of Federal Reserve member banks (taken to be representative of all banks), it may then be estimated that in the late forties approximately two-fifths of all bank funds made available to business—excluding mortgage loans to business, which may be assumed to have gone primarily to real estate enterprises—went to mining and manufacturing; approximately one-fourth to the wholesale and retail trade; approximately one-sixth to public utilities; and the remainder (approximately one-fifth) to all other branches of nonfinancial business other than real estate. A further subdivision by industry covering both direct bank loans and banks' holdings of corporate securities is not possible. This limitation, however, is not as serious as it appears, since even for 1946 banks' holdings of securities provided business with only about one-fourth the amount supplied in direct loans from banks, and the ratio declined to less than one-fifth by 1952.

Evaluation of changes, if any, in the distribution of funds made available by the banking system to the various industries is difficult because no figures comparable to those of Table 32 are available for earlier periods. Almost the only relevant information is the data on notes payable to corporations, which were published in *Statistics of Income* for a few years during the twenties and which are assumed to be reasonably close to, although somewhat in excess of, borrowing from banks.

Comparison of Tables 32 and 33 suggests that the industrial distribution of bank loans to business was similar for the years 1927 and 1946 if in both cases loans to borrowers in the "finance" category (which includes banks, security brokers and dealers, finance companies, and real estate) and in the "other" and "agricultural"

<sup>14</sup> Up to 1942, holdings of corporate bonds by national banks were divided in the reports to the Comptroller of the Currency into railroad, public utility, and other bonds. Since then, however, no breakdown whatever of corporate bonds is reported for national or insured banks, and a breakdown is available for state chartered institutions only in a few of the smaller states.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 33

Notes Payable of Corporations, 1927: Percentage Distribution by Type of Business

<i>Type of business</i>	<i>Total</i>	<i>Total (excluding lines 8 and 9)</i>
1. Manufacturing	28.9	41.3
2. Mining and quarrying	3.7	5.3
3. Trade	20.1	28.7
4. Public utilities	9.2	13.1
5. Services	3.9	5.6
6. Construction	2.2	3.1
7. Agriculture	2.0	2.9
8. Finance	29.6	—
9. Nature of business not given	0.3	—
10. Total, per cent	100.0	100.0
11. Total, millions of dollars	13,021	9,123

Source: *Statistics of Income for 1927*, p. 372.

categories are eliminated. The share of manufacturing and mining in the smaller total was 48 per cent both in 1927 and 1946. The proportion for trade was slightly lower in 1927 (30 per cent) than in 1946 (33 per cent). On the other hand, public utilities accounted for 13 per cent of bank loans in 1927 against only 10 per cent in 1946, and the share of service and construction was slightly higher with 9 compared to 8 per cent. In evaluating these differences it is necessary to remember that the statistics cover all borrowers in 1946 but only corporations in 1927. Since unincorporated borrowers are particularly heavily represented in trade, service, and construction,<sup>15</sup> one would expect the share of these industries to be higher in 1946 than in 1927 and the opposite relation to prevail for public utilities. The figures thus show the anticipated movements. This may be taken as strengthening, though by no means proving, the hypothesis that changes in the industrial distribution of bank loans would be small if the statistics covered all borrowers in both years and if they were compiled on a strictly comparable basis.

Nothing is known in quantitative terms about possible changes in the industrial distribution of bank loans before the late twenties. A little more is known for the period before World War II about the industrial distribution of those bank funds which were made avail-

<sup>15</sup> See section 3b (3) of this chapter.

## CHANGES IN USES AND SOURCES OF FUNDS

able to borrowers through acquisition of their securities by banks. Two facts stand out in the comparison of the two main forms in which business has received bank funds.

First, there was a relative decline of financing through the sale of securities to banks. Up to World War I about one-fourth of all bank funds made available to business took the form of portfolio holdings of corporate bonds and stocks. Since 1929 the proportion has fallen to one-fifth.<sup>16</sup>

Secondly, funds made available through the purchase of securities were distributed among industries quite differently from loans made directly to business. In particular the share of funds supplied to railroads and other public utilities has been much higher for securities than for loans; with most other industries, the reverse. Trade, service, and construction industries, which account for approximately one-third of all business loans at least since the twenties, have remained practically unrepresented in the security portfolios of banks. Public utilities including railroads, on the other hand, which can hardly have absorbed more than one-tenth of all bank loans at any time, accounted for nearly nine-tenths of banks' holdings of corporate securities in 1900. They still represented considerably over one-half of the banks' corporate bond portfolios in 1929, and have declined to less than one-half only in the last few years. The result is that the share of public utilities in total funds made available by banks to business has declined from about one-fifth in 1900 to about one-eighth in 1952. Most of this share was made available in the form of securities up to the 1930's and in the form of term loans in the 1940's.

2. *Distribution by Size of Borrowers.* The manner in which the banking system distributes its funds among borrowers of different size has been a major subject of discussion in this field. In particular, the question is often asked: Do banks make an "adequate" part of their funds available to small business? This brief discussion will not attempt an answer. We lack not only detailed information for protracted periods of time on the distribution of bank loans and securities by size of the borrower or issuer, but—what is much more important—some test of adequacy. Up to now no one has been able to develop such a test even in theory, much less to produce the figures necessary to implement it. We shall therefore have to be

<sup>16</sup> The statement refers to the banking system as a whole. For commercial banks taken separately, corporate securities constituted approximately one-fifth of total funds made available to business up to 1929, and after a temporary peak in the thirties, reaching 30 per cent, declined sharply to not much over 10 per cent in 1952.

## CHANGES IN USES AND SOURCES OF FUNDS

content with the bare bones of a few statistics of bank loans classified by size of borrower since there is no information whatever about the size distribution of issuers of corporate securities held in bank portfolios. Even the limited statistics on size distribution of borrowers concern only the recent past.

In 1946 almost 45 per cent of all business loans made by member banks went to borrowers with assets of \$5 million or more, although these borrowers represented at most 2 per cent of all business enterprises to which loans were made available. Even if allowance is made for the somewhat smaller share of large borrowers from nonmember banks, it is likely that enterprises with more than \$5 million assets received at least two-fifths of all business loans made by the banking system. This share, while high in absolute terms, will appear in more adequate perspective if it is noted that among nonfinancial corporations, enterprises with assets of \$5 million or more accounted for nearly three-fourths of total assets (1947) and that their share in the assets of both corporate and unincorporated business enterprises is not likely to have been much below 70 per cent.<sup>17</sup> In other words, the ratio of bank borrowing to assets was smaller for large than for small enterprises.<sup>18</sup> Loans to what may be regarded as typically "small" business enterprises (i.e. firms with less than \$50,000 assets) accounted for less than one-tenth of the advances made by member banks and are not likely to have represented a much higher proportion of the loans of the entire banking system.

Although no data are available on the size distribution of the issuers of corporate securities held in bank portfolios, it is evident that almost all of them must have had assets in excess of \$5 million. On that assumption enterprises with assets of more than \$5 million may be estimated to have absorbed somewhat more than one-half of the total funds available to business by commercial banks and not much less than one-half of the total supply of funds to business by the banking system as a whole.

More recent information is available for manufacturing and trade, but it is limited to bank loans to corporate borrowers. Table 35 reveals essentially the same situation for manufacturing and trade as Table 34 does for all borrowers, although of course the proportion of loans to large enterprises is somewhat higher among corporations alone than among all business enterprises. It does not

<sup>17</sup> For total assets of business enterprises in 1949 see *A Study of Saving . . .*, Vol. III, Table W-16.

<sup>18</sup> For discussion of this ratio see Chapter VII, section 6.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 34

Business Loans Outstanding in Federal Reserve Member Banks  
November 20, 1946: Percentage Distribution  
by Size of Borrower

ASSETS OF BORROWER	AMOUNT			NUMBER
	<i>All Loans</i> <sup>a</sup>	<i>Term Loans</i>	<i>Other Loans</i>	<i>All Loans</i>
	(1)	(2)	(3)	(4)
1. Under \$50,000	9.4	7.9	10.2	65.4
2. \$50,000-250,000	16.6	8.6	20.7	24.5
3. 250,000-750,000	11.1	5.3	14.2	5.4
4. 750,000-5 million	18.2	11.6	21.6	3.0
5. 5 million and over	44.7	66.6	33.3	1.7
6. Total, per cent	100.0	100.0	100.0	100.0
7. Total, absolute figures <sup>b</sup>	13,022	4,487	8,535	662

<sup>a</sup> Includes mortgage loans.

<sup>b</sup> Millions of dollars for cols. 1-3; thousands for col. 4.

Source: *Federal Reserve Bulletin*, March 1947, pp. 256, 503.

appear, however, that substantial changes in the distribution of bank loans by size of borrower have taken place since 1945, and nothing definite can be said about changes in the distribution which may have occurred before World War II.<sup>18</sup>

3. *Distribution by Form of Organization.* In view of the advances made by the corporate form of organization since the turn of the century, it is to be expected that an increasing proportion of the funds supplied to business by the banking system have been made available to corporations. According to the estimates of Table 36 the share of corporations increased from 58 per cent in 1900 to a maximum of 77 per cent in 1933, but has since declined to approximately 68 per cent. These movements are the combined effect of two factors—the relative importance of holdings of corporate securities among the assets of the banking system and the relative share of corporations in bank loans to business. The first factor

<sup>18</sup> It is safe to state that the proportion of loans to borrowers above a given size (e.g. \$5 million of assets) has increased considerably since the turn of the century, and that of enterprises of given small size (e.g. with assets of less than \$50,000) has decreased. Such statements, however, have little economic significance since the typical assets of enterprises of all categories—or of all “real” sizes—have greatly increased over the last half century if measured in current dollars. What is required is information for different dates on the share of loans to borrowers of size groups that occupied approximately the same position on the Lorenz curve of all enterprises, and such data are entirely lacking.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 35

Bank Loans to Manufacturing and Trade Corporations:  
Percentage Distribution by Size of Borrower

ASSET SIZE	Total	PAYABLE WITHIN:		Total	PAYABLE WITHIN:	
		One Year	More than One Year		One Year	More than One Year
<i>Manufacturing:</i>		1949		1952		
1. Under \$250,000	3.2	4.7	1.5	3.5	4.0	2.8
2. \$250,000-1 million	6.3	8.7	3.7	6.4	7.6	4.1
3. 1-5 million	14.4	18.9	9.7	13.8	16.4	8.9
4. 5-50 million	37.4	39.5	35.2	27.1	28.8	23.8
5. 50-100 million				10.3	11.3	8.6
6. 100 million and over	38.7	28.1	49.9	38.9	31.9	51.9
7. Total	100.0	100.0	100.0	100.0	100.0	100.0
<i>Retail Trade:</i>		1950 <sup>a</sup>		1951		
8. Under \$250,000	27.0	28.6	22.9	23.3	28.0	15.2
9. \$250,000-1 million	22.2	24.3	16.8	17.5	21.7	10.2
10. 1-5 million	18.3	19.7	14.8	15.1	18.6	9.0
11. 5-50 million	21.1	17.5	30.3	16.0	16.1	15.9
12. 50-100 million	4.0	4.3	3.2	4.7	5.7	3.0
13. 100 million and over	7.3	5.5	11.9	23.4	9.8	46.7
14. Total	100.0	100.0	100.0	100.0	100.0	100.0
<i>Wholesale trade:</i>						
15. Under \$250,000	12.0	11.2	20.2	12.1	11.0	22.1
16. \$250,000-1 million	21.7	21.4	24.4	20.1	19.3	28.1
17. 1-5 million	27.5	28.0	22.0	25.3	25.6	22.1
18. 5-50 million	29.1	29.5	25.6	26.4	26.6	24.3
19. 50 million and over	9.7	9.9	7.7	16.1	17.4	3.4
20. Total	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> Figures not available for 1949 or 1952.

Source: Federal Trade Commission and Securities and Exchange Commission: *Quarterly Industrial Financial Report Series*, Fourth Quarter 1950, pp. 4-6; Fourth Quarter 1952, pp. 2-5; *Quarterly Financial Report, U.S. Retail and Wholesale Corporations, 1950-51*, pp. 2-7, 14-18.

is partly responsible for the decline in the share of corporations in total funds made available to business by the banking system in the twenty years after the Great Depression. The share of corporations in total bank loans to business, on the other hand, increased from almost 45 per cent in 1900 to slightly over 60 per cent since 1929.

In 1946, the only date for which reliable data are available, corporations accounted for 72 per cent of all loans held by member

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 36

Funds Made Available to Business by the Banking System:  
Percentage Distribution by Type of Investment

YEAR	CORPORATIONS				UNINCORPORATED BUSINESS ENTERPRISES		
	Total (1)	Short- Term Loans	Long- Term Loans	Securities (4)	Total (5)	Short- Term Loans	Long- Term Loans
		(2)	(3)			(6)	(7)
1900	57.7	30.5	3.0	24.2	42.3	38.5	3.7
1912	66.4	34.8	3.9	27.7	33.6	30.1	3.5
1922	69.0	43.4	4.3	21.4	31.0	27.9	3.1
1929	71.0	40.0	6.2	24.8	29.0	25.6	3.5
1933	77.4	32.0	8.2	37.1	22.6	18.3	4.3
1939	76.7	35.2	8.2	33.3	23.3	19.5	3.7
1945	65.2	38.8	5.5	20.8	34.8	32.3	2.5
1949	67.8	41.7	7.1	19.1	32.2	29.0	3.2
1952	67.8	46.6	6.2	14.9	32.2	29.4	2.8

Source: Appendix Table A-1.

banks of the Federal Reserve System, the proportion exceeding four-fifths for term loans but reaching only two-thirds for other (i.e. short-term) loans. There are, of course, marked differences in the distribution among industries, which can be followed in Tables 37 and 38. The only branches in which the share of unincorporated enterprises equaled or exceeded that of corporations were retail trade, service and construction.

C. STRUCTURAL CHANGES IN SOURCES OF BANK FUNDS

During the past fifty years the outstanding change in the sources of bank funds is the reduction in the proportion of equity funds. For the entire banking system the decline, as shown in Table 39, is from approximately 20 per cent in the period from 1900 to 1929, to about 10 per cent in 1939, and to as little as 8 per cent in 1952. The movement is as pronounced for commercial banks alone, the share of equity funds declining from 25 per cent in 1900 to only 8 per cent in 1952. Even liberal allowance for undisclosed reserves would not make the adjusted ratio of equity funds to total assets as much as one-tenth for either the entire banking system or commercial banks alone.

The reason for the reduced importance of equity as a source of

TABLE 37

Business Loans Outstanding in Federal Reserve Member Banks, November 20, 1946:  
 Percentage Distribution among Main Industries and between  
 Corporations and Unincorporated Business Enterprises

TYPE OF BUSINESS	ALL LOANS			TERM LOANS			OTHER LOANS		
	All Bor- rowers		Unincor- porated Business	All Bor- rowers		Unincor- porated Business	All Bor- rowers		Unincor- porated Business
	towers	Corpora- tions	Business	towers	Corpora- tions	Business	towers	Corpora- tions	Business
1. Retail trade	11.2	5.0	6.2	8.9	4.2	4.7	12.3	5.4	6.9
2. Wholesale trade	18.3	12.1	6.2	5.0	3.5	1.5	25.4	16.7	8.7
3. Manufacturing and mining	42.9	35.7	7.2	52.1	47.4	4.7	38.1	29.6	8.5
4. Public utilities	9.3	7.9	1.4	21.1	19.2	1.9	3.0	1.9	1.1
5. Services	3.7	1.6	2.1	5.2	2.7	2.5	3.0	1.0	2.0
6. Construction	3.5	1.5	2.0	1.4			4.6		
7. Sales finance	5.9	5.1	0.8	1.6	4.7	3.2	8.2	11.8	6.3
8. Other	5.2	2.8	2.4	4.9			5.4		
9. Total, per cent	100.0	71.7	28.3	100.0	81.6	18.4	100.0	66.5	33.5
10. Total, millions of dollars	13,175	9,444	3,731	4,557	3,718	839	8,618	5,727	2,891

Source: Federal Reserve Bulletin, 1947, pp. 259, 502, 504.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 38

Distribution of Business Loans Outstanding in Federal Reserve Member Banks  
November 20, 1946 by Size and Business of Borrower

TYPE OF BUSINESS	ALL BUSINESS <sup>a</sup> (1)	ASSET SIZE OF BORROWER (IN THOUSANDS OF DOLLARS)				
		<i>Under</i>	<i>50</i>	<i>250</i>	<i>750</i>	<i>5,000</i>
		<i>50</i>	<i>to 250</i>	<i>to 750</i>	<i>to 5,000</i>	<i>and Over</i>
		(2)	(3)	(4)	(5)	(6)
		<i>Amount outstanding (millions)</i>				
1. Retail trade	1,458	471	408	146	154	279
2. Wholesale trade	2,400	171	536	401	544	748
3. Manufacturing and mining	5,631	187	594	547	1,141	3,162
4. Public utilities	1,203	72	80	59	108	884
5. Services	478	144	138	48	59	89
6. Construction	444	86	169	77	93	19
7. Sales finance	774	9	52	59	115	539
8. All other	636	86	182	109	154	105
9. All borrowers <sup>a</sup>	13,022	1,226	2,158	1,445	2,368	5,825
		<i>Number of loans (thousands)</i>				
10. Retail trade	251	197	46	5	2	1
11. Wholesale trade	86	40	32	9	4	1
12. Manufacturing and mining	115	52	37	12	9	5
13. Public utilities	38	27	7	1	1	2
14. Services	76	61	12	2	1	b
15. Construction	43	27	12	3	1	b
16. Sales finance	6	1	2	1	1	1
17. All other	45	27	13	3	2	b
18. All borrowers <sup>a</sup>	662	433	162	36	20	11

<sup>a</sup> Excludes a small number and amount of loans unclassified by size and business of borrower.

<sup>b</sup> Less than 500.

Source: *Federal Reserve Bulletin*, March 1947, p. 256.

bank funds since 1930 is not to be found in the decline in the absolute value of equity funds, except during the Great Depression. Actually the net worth of the banking system, which had shrunk from \$10.5 billion in 1929 to approximately \$8 billion in the thirties, by 1952 reached an all-time high of \$16 billion (all figures represent book values of equity). These increases, however, were dwarfed by the rise of 228 per cent in total assets. Indeed, the absolute increase in assets between 1929 and 1952 was over 30 times

TABLE 39

Main Sources of Bank Funds  
(percentage distribution, excluding domestic interbank deposits  
and unclassified and miscellaneous liabilities)

SOURCE	ALL BANKS					OPERATING COMMERCIAL BANKS				
	1900	1912	1929	1939	1952	1900	1912	1929	1939	1952
1. Liabilities										
2. Nonfarm household	76.2	77.2	79.3	81.6	80.0	71.4	74.0	80.7	86.9	91.8
3. Agriculture	38.6	41.5	43.0	42.5	41.0	22.0	30.3	35.8	36.0	39.5
4. Business	3.9	5.1	4.7	4.0	5.1	5.1	6.2	5.8	5.5	6.9
5. Unincorporated	30.4	27.2	26.5	25.3	24.4	39.9	33.3	32.7	34.0	33.2
6. Corporate	9.6	7.2	7.1	6.2	7.2	12.6	8.8	8.8	8.4	9.8
7. Nonfinancial	20.8	20.1	19.4	19.1	17.2	27.3	24.5	24.0	25.6	23.3
8. Financial intermediaries other than banks	19.2	18.2	15.3	13.6	13.4	25.1	22.2	18.9	18.0	18.2
9. State and local governments	1.7	1.9	4.0	5.5	3.8	2.2	2.3	5.1	7.6	5.1
10. Federal government	1.4	2.3	3.9	4.9	4.9	1.8	2.8	4.9	6.7	6.7
11. Foreigners (including foreign banks)	1.0	0.2	0.3	2.0	2.6	1.3	0.3	0.3	1.5	3.3
12. Liabilities on account of currency issued	0.9	0.9	1.0	2.9	1.9	1.2	1.1	1.2	3.2	2.2
13. Net worth	2.9	3.2	4.1	6.8	12.3	3.7	3.9	1.3	—	—
14. Total	20.9	19.6	16.6	11.6	7.7	24.9	22.1	18.0	13.1	8.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Appendix Tables A-1 and A-3.

## CHANGES IN USES AND SOURCES OF FUNDS

as large as the increase in equity funds. The failure of equity funds to keep step with the growth of assets and liabilities, which is responsible for the sharp decline in the observed ratio of equity funds to total assets, in turn reflects the relatively low level of retained earnings and the small volume of sales of new bank stock since the Great Depression. This is not the place to discuss the reasons for these two developments. But it should be emphasized that the decline in the ratio of equity funds to total assets or liabilities is not in itself an indication of a deterioration in the financial position of the banking system or of an increase in the risk taken by bank depositors. In interpreting the decline, account must be taken of the changes in the degree of risk involved in the assets held and of protective devices such as deposit insurance introduced since the thirties. Even without detailed investigation it is obvious that the risk of loss in the banking system has been considerably reduced by the increasing share of cash and short-term United States government securities among assets. More important for an evaluation of the significance of movements in the ratio of equity to assets or liabilities is the extent of fluctuations to which the entire economy is subjected. The less pronounced these fluctuations, the smaller the proportion of net worth required to provide an equally adequate cushion of safety for depositors.

Changes in the sources of deposits have been far from negligible, though less spectacular than movements in the ratio of net worth to liabilities. The share of nonfarm households in total sources of funds of the banking system (see Table 39) has increased only slightly and has kept close to two-fifths since 1912. The increase in the share of nonfarm households becomes more pronounced if account is taken of the banking system's liability for currency issued. This has increased more rapidly than bank deposits, and most of it is held by individuals. The share of nonfarm households is then seen to have risen from approximately two-fifths of total bank funds in 1900 to slightly over one-half in 1952. Probably the most pronounced change in the sources of bank funds is the reduction of the proportion coming from business other than banks. This share has declined slowly but fairly continuously from almost one-third of total bank funds in 1900 to one-fourth in 1952. Concurrently, the share of government deposits increased from only 2 per cent in 1900 and 1912 to 7 per cent since 1939.

Unfortunately no further subdivision is possible for the largest single source of bank funds—nonfarm households. It is impossible

## CHANGES IN USES AND SOURCES OF FUNDS

to say whether or not the relative stability in the share of all nonfarm households taken together was the result of a similar stability in the share of most households (which is unlikely) or was due to increases in the share of some groups offset by declines in the share of others. However, an estimate of the sources of nonfarm households' deposits at the present time can be made.

There is no doubt, first, that the bulk of nonfarm households' deposits are contributed by a relatively small number of households each of which supplies a substantial amount of funds. Although the nature of available data prevents close estimates, it would appear that at the end of 1949, as well as in other recent years, hardly more than one-half of all households, and certainly not more than two-thirds of them, supplied any funds to the banking system.<sup>20</sup> The 3 million households having \$2,000 or more of demand deposits in commercial banks<sup>21</sup> apparently accounted for almost three-fourths of the total contribution by all nonfarm households.<sup>22</sup> Concentration was even more pronounced among savings accounts. Here the nearly 6 million households with a savings account balance of \$2,000 or more supplied more than four-fifths of the total attributable to households.<sup>23</sup>

These figures are compatible with the more comprehensive but less detailed figures derived from banking statistics (Table 41), which, of course, cannot make allowance for the fact that some households keep a deposit account with more than one institution. They indicate that the 3 per cent of accounts with a balance of over

<sup>20</sup> The estimate is based on the fact that approximately 40 per cent of all nonfarm households had checking and savings accounts, as well as United States government bonds, while 70 per cent owned at least one of these three assets (*Federal Reserve Bulletin*, 1951, p. 637).

<sup>21</sup> This figure includes an unknown number of cases in which the proprietors of unincorporated business enterprises included the firm checking accounts with their personal checking accounts.

<sup>22</sup> The figures are derived from the holdings of checking and savings accounts reported by a sample of households early in 1950, through the process of estimation indicated in Table 40. Several technical difficulties which cannot be discussed here preclude the use of these figures as more than rough indicators of the checking and savings accounts of different groups of households.

<sup>23</sup> The figures from which the estimate is derived include not only savings accounts in commercial banks, mutual savings banks, and the postal savings system, but also shares in, and deposits with, savings and loan associations and credit unions. It is unlikely, however, that adjustment for these last two types of institutions, which together account for only about one-fourth of all savings deposits, would substantially change the picture. The inclusion of some accounts held by unincorporated business enterprises rather than individuals is of much less importance here than in the case of checking accounts.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 40  
Size Distribution of Bank Deposits of Households, Early 1950

AMOUNT OF DEPOSITS	CHECKING ACCOUNTS				SAVING ACCOUNTS			
	Proportion of Spending Units (per cent) (1)	Number of Spending Units (million) (2)	Amount of Deposits (billions of dollars) (3)	Proportion of Spending Units (per cent) (4)	Proportion of Spending Units (per cent) (5)	Number of Spending Units (million) (6)	Amount of Deposits (billions of dollars) (7)	Proportion of Spending Units (per cent) (8)
1. Zero	59	30.7	—	—	58	30.2	—	—
2. \$1 to 499	24	12.5	8	2.5	18	9.4	3	1.9
3. 500 to 1,999	11	5.7	21	7.1	13	6.8	13	8.5
4. 2,000 and over	6	3.1	71	24.0	11	5.7	84	55.9
5. All amounts	100	52.0	100	33.6	100	52.0	100	66.3

Column Line Source

1,5 *Federal Reserve Bulletin*, June 1951, p. 637.

2,6 Cols. 1 and 3 multiplied by 52 million (*Federal Reserve Bulletin*, June 1950, p. 645).

3,7 Derived from cols. 4 and 8 respectively.

4 Col. 2 multiplied by assumed mean of \$200.

3 Col. 2 multiplied by mean of range (\$1,250), which is probably somewhat above true mean.

4 Line 5 minus sum of lines 2 and 3.

5 Table A-3.c (Appendix A), lines 5 and 8.

2-4 Same procedure as for col. 4, using col. 6 instead of col. 2.

5 Sum of Table A-3.c, lines 6 and 9, Table A-5, line 30, Table A-6, line 6, Table A-19, line 20, and Table A-20, line 16.

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 41

Size Distribution of Deposits in Commercial and Savings Banks, 1951, and in Savings and Loan Associations, 1950

SIZE OF BALANCE	INSURED COMMERCIAL BANKS <sup>b</sup>			SAVINGS AND LOAN ASSOCIATIONS <sup>c</sup>
	Demand Deposits (1)	Savings and Time Deposits (2)	MUTUAL SAVINGS BANKS <sup>b</sup> (3)	(4)
	<i>Per cent of accounts</i>			
1. Under \$5,000	94.9	96.9	92.7	95.0-96.0
2. 5,000-10,000	2.6	2.5	6.8	3.5
3. 10,000-25,000	1.6	0.5	0.5	} 0.5- 1.5
4. Over 25,000	0.9	0.1	0	
	<i>Per cent of balances</i>			
5. Under \$5,000	25.4	61.8	56.6	71.0-76.0
6. 5,000-10,000	9.0	21.7	37.8	17.0
7. 10,000-25,000	11.6	10.0	5.1	} 7.0-12.0
8. Over 25,000	54.0	6.5	0.5	

<sup>a</sup> Figures refer to deposits of individuals, partnerships, and corporations in commercial banks; all savings and time deposits for mutual savings banks, and all private savings capital accounts for savings and loan associations.

<sup>b</sup> As of September 19, 1951.

<sup>c</sup> Data refer to the end of 1950.

- |        |   |
|--------|---|
| Column | Source  |
| 1-2    | <i>Annual Report of the Federal Deposit Insurance Corporation for the Year Ended December 31, 1951, pp. 85 and 95.</i>  |
| 3      | <i>Op. cit., pp. 103 and 105.</i>   |
| 4      | Rough estimates derived from the amount of insured and uninsured deposits, i.e. deposits in excess of \$5,000 until September 1950 and in excess of \$10,000 thereafter, as given in <i>Annual Report of the Federal Home Loan Bank Board</i> , various issues. While the number and amount of deposits over \$10,000 can be roughly estimated for 1950, they are known to have amounted to 1.5 per cent of accounts and 12.3 per cent of balances at the end of 1952 (accounts between \$5,000 and \$10,000 not separately reported for 1952). |

\$5,000 contain nearly two-fifths of all time and savings deposits in commercial banks. The statistics include deposits of partnerships and corporations, which have been estimated at approximately 13 per cent of all individual, partnership and corporate time and savings deposits (Table A-3.c), and whose size distribution is not separately known. Even among individuals, however, the share of accounts with balances of over \$5,000 probably is not below one-third. Accounts of this size are not likely to be commonly owned by

## CHANGES IN USES AND SOURCES OF FUNDS

households in the lower or even the middle income and wealth groups.

Notwithstanding the uncertainties inherent in the methods of estimation, it is evident that the bulk of funds supplied to the banking system by households is attributable to a relatively small minority of households, each of which has substantial holdings of bank deposits. We lack comparable data to show whether the situation was considerably different before World War II, but it is unlikely that it was.<sup>24</sup>

At the present time fully one-half of households' deposits in the banking system are provided by managerial, self-employed, professional and semi-professional and retired persons.<sup>25</sup> The share of clerical and manual workers is low, probably well below two-fifths of the total, though they represent together over one-half of all households. This distribution of the bank deposits of households by occupation of head confirms the findings from the size distribution statistics: a relatively small number of households account for the bulk of households' bank deposits. Distribution is more equal for time deposits, where two groups—self-employed, managerial, professional and retired persons; and manual and clerical workers—each supply nearly one-half, than for demand deposits, where their shares are about three-fifths and one-fourth respectively.<sup>26</sup>

<sup>24</sup> Before 1951 the available statistics of commercial bank deposits by size of balance are limited to aggregates for all accounts without distinction between demand and time deposits and without separation of individuals from other depositors (cf. *Annual Report of the Federal Deposit Insurance Corporation for the Year ended December 31, 1949*, pp. 70-71). The aggregate figures available for 1934, 1936, 1938, 1941, 1945, 1949, and 1951 fail to show a marked trend in size distribution. A small decrease in the share of accounts with balances of less than \$5,000 (from 34.7 per cent in 1938 to 29.2 per cent in 1951), and a still smaller increase for accounts of over \$25,000 (from 49.4 to 50.6 per cent) are observable; but the movement is less than one would expect in view of the rise in the price level (and, hence, the reduction in the purchasing power of an account of the same absolute size), and is hard to interpret because one cannot separate household from business accounts.

In the case of mutual savings banks, on the other hand, a definite upward trend is evident in the share of larger deposits (for accounts with balances of over \$5,000 from 31 per cent in 1945 to 43 per cent in 1951), and it is easier to interpret this movement since nonindividual accounts are much less important than for commercial banks (*op. cit.*, 1949, p. 71, and 1951, pp. 102 and 104). The figures here seem to point to a genuine shift among different groups of individual depositors.

<sup>25</sup> These statements are based on data in the *Federal Reserve Bulletin*, 1951, p. 634, and supplementary Federal Reserve estimates.

<sup>26</sup> The comparisons are influenced, though probably not greatly, by the inclusion, among checking deposits of self-employed nonfarm households, of those deposits of unincorporated business enterprises which are kept or reported

## CHANGES IN USES AND SOURCES OF FUNDS

### 4. Insurance Organizations

Of the three major groupings of financial intermediaries, insurance organizations have grown fastest during the first half of the twentieth century. Their total assets increased from not much over \$2 billion in 1900 to nearly \$150 billion in 1952, and their share in the assets of all financial intermediaries increased from a little over one-tenth to nearly three-tenths. This development has been strongly influenced by the rapid growth, since the mid-thirties, first of social insurance organizations and later of private pension funds, both of which were small in size during the first quarter of the century.

Up to 1929 private life insurance companies accounted for at least 70 per cent of the assets of all insurance organizations, and private property insurance companies for most of the remainder. Thus the distribution of funds of all insurance organizations by main uses (shown on the left-hand side of Table 42) is very similar to that of life insurance companies alone (on the right-hand side). By 1939 government trust and insurance funds accounted for approximately one-seventh of total assets of all insurance organizations, and their share rose to almost one-third by 1952. Since these organizations make practically all their funds available to the government, primarily to the United States Treasury, the distribution of funds of all insurance organizations has begun to deviate considerably from that of private life insurance companies. Variations in the distribution of insurance funds between benchmark dates (as shown on the left-hand side of Table 42) are therefore the combined result of changes in investment policies of the various branches of insurance companies (particularly life, property insurance companies, and private pension funds); and of the changing share of the various branches in the total assets of all insurance. The detailed tables for each branch of insurance in Appendix A permit a separation of the two factors.

#### a. STRUCTURAL CHANGES IN USES OF INSURANCE FUNDS<sup>27</sup>

Up to 1929 private life insurance companies accounted for the bulk of all insurance funds, and changes in the shares of the main uses

---

commingled with the personal deposits of proprietors. Eliminating them would reduce the concentration of demand and total deposits somewhat, but should hardly influence the distribution of time deposits.

<sup>27</sup> Throughout this discussion the share of funds made available refers in the denominator to total assets less cash, tangibles and miscellaneous assets.

## CHANGES IN USES AND SOURCES OF FUNDS

of funds were of moderate dimensions. Probably the most important changes were the increases in the share of funds made available to nonfarm households, agriculture and government, and the decline of the share supplied to business and foreigners.

The increase in the share of nonfarm households from 16 per cent in 1900 to 23 per cent in 1929 is the result on the one hand of the rapid expansion of home mortgage loans in the twenties, and on the other of the rise of policy loans, primarily during the first decade of the century. The large increase in the share of funds made available to agriculture from 9 per cent in 1900 to 13 per cent in 1922 reflects the increasing participation of insurance companies in the rapidly growing farm mortgage debt. The agricultural depression of the twenties, coupled with the rapid expansion of assets of insurance companies, reduced the share of agriculture in 1929 to 10 per cent. The rise in the share of funds supplied to the government, from about 10 per cent in 1900 and 1912 to 16 per cent in 1929 after a peak of 23 per cent in 1922, is due primarily to the heavy purchases of U.S. government securities during World War I. It is also influenced by the increasing share of government pension and retirement funds, whose growth in the combined assets of insurance organizations became noticeable in the 1920's. As a result of these tendencies, the share of funds made available to business declined from over 60 per cent in 1900 and 55 per cent in 1912 to slightly under 50 per cent in 1929, having reached a low of 40 per cent in 1922. Substantial changes took place during the same period in the distribution of funds supplied to business. In funds made available to corporations in the form of loans (chiefly mortgages) and of corporate bonds and stocks, the share of the railroads may be estimated to have declined from approximately 65 to 40 per cent, and that of public utilities to have increased sharply from not much over 5 to 25 per cent, while the shares of all other branches of business increased from approximately 25 to 35 per cent.

Changes in the destination of funds were much more pronounced in the quarter century following 1929; they reflect both changes in the investment policies of private insurance organizations and the rapid growth of government pension and retirement funds. The most striking development is the increase in the share of funds made available to the federal government, from 7 per cent in 1929 to a peak of 63 per cent in 1945 and to 45 per cent in 1952. This movement well illustrates the combination of the two factors men-

CHANGES IN USES AND SOURCES OF FUNDS

TABLE 42  
Main Uses of Insurance Funds  
(percentage distributions, excluding cash, tangibles and miscellaneous assets)

USE	ALL INSURANCE ORGANIZATIONS					PRIVATE LIFE INSURANCE COMPANIES				
	1900 (1)	1912 (2)	1929 (3)	1939 (4)	1952 (5)	1900 (6)	1912 (7)	1929 (8)	1939 (9)	1952 (10)
	<i>A. By destination</i>									
1. Nonfarm households	16.5	20.9	23.1	15.8	13.2	18.9	24.4	30.2	21.6	25.7
2. Agriculture	8.7	12.8	10.4	3.2	1.4	11.1	15.7	14.5	4.6	2.9
3. Business	62.5	55.4	48.6	38.4	35.1	61.1	52.5	47.0	43.5	52.7
4. Unincorporated	6.3	4.7	4.2	2.0	1.0	6.9	5.2	5.6	2.8	2.0
5. Corporate	56.2	50.8	44.4	36.4	34.1	54.1	47.3	41.4	40.8	50.7
6. State and local governments	7.2	8.2	8.6	10.5	4.0	5.1	4.5	3.6	6.9	1.7
7. Federal government	2.5	0.2	7.2	30.3	45.1	0.4	0	2.1	21.2	15.0
8. Foreigners	2.7	2.5	2.1	1.8	1.2	3.4	3.0	2.7	2.3	2.0
9. Total <sup>a</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>B. By original maturity</i>									
10. Short-term loans	8.7	12.2	11.6	9.3	2.1	11.0	14.9	15.0	12.8	4.0
11. Long-term loans	31.5	31.6	34.0	16.1	16.0	36.1	36.5	45.5	22.3	31.1
12. Securities	59.8	56.1	54.4	74.5	82.0	52.8	48.6	39.5	65.0	65.0
13. Total <sup>a</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> Excludes minor amounts of income tax liability to federal government also.  
Source: Appendix Tables A-7 and A-8.

## CHANGES IN USES AND SOURCES OF FUNDS

tioned. The increase in the share of the federal government in the funds made available by private insurance organizations, from only 2 per cent in 1929 to 48 per cent in 1945, and the precipitous decline to 15 per cent in 1952—less than the share in 1939—are measures of the effects of changes in investment policy. The remainder of the movement for all insurance organizations reflects the growing relative weight of government retirement and pension assets among the funds of the insurance group.

Under the impact of the large increase in the share of funds made available to the federal government, the shares of all other outlets decreased between 1929 and 1952. In the case of agriculture, the decline was from 10 per cent in 1929 to approximately one per cent in 1952.<sup>28</sup> The decline for state and local governments was also pronounced. Their share fell from nearly 9 per cent to 4 per cent for all insurance organizations, and from 3.6 to 1.7 per cent for private life insurance companies alone. This was due primarily to the growth of federal pension and retirement funds, which do not invest in state and local government securities, and to the decline of the share of state and local government securities in the portfolios of private life insurance companies—probably a reflection of decreasing attractiveness of such securities for institutions which do not benefit from the tax exemption on them.

The share of funds made available to business declined from 49 per cent in 1929 to 35 per cent in 1952 for all insurance organizations, but showed the opposite tendency for private life insurance companies alone, rising from 47 to 53 per cent. The different directions of the two movements reflect the increasing share of government insurance organizations, which do not substantially finance business. Within the funds supplied to corporate business considerable changes occurred which extended the trends observed during the first three decades of the century. The share of railroads continued to decrease, and at an accelerated pace. As a result railroads in 1952 accounted for about one-tenth of all funds supplied to business by insurance organizations, as compared with two-fifths in 1929. A similar decline, from less than 20 to well under 10 per cent, took place in the funds supplied as mortgages on industrial and commercial properties, most of which are ordinarily made available to the real estate industry. Public utilities increased their share from nearly one-fourth to one-third, and manufacturing and other industries raised their share even more spectacularly, from

<sup>28</sup> Even for life insurance companies alone the decrease was from 14 per cent to only 3 per cent.

## CHANGES IN USES AND SOURCES OF FUNDS

one-sixth to almost one-half. The decline in the share of railroads and real estate occurred for the most part during the thirties, whereas the increase in the share of manufacturing and other industries (except public utilities) was concentrated in the few years between the end of World War II and 1952.

Insurance organizations have always made available the bulk of their funds on a long-term basis, whether in the form of mortgages or other term loans or through the purchase of securities. Section B of Table 42 shows that formally short-term loans accounted for 10 per cent of total funds of all insurance organizations from 1900 to 1929, but declined to 2 per cent in 1952, in part a reflection of the decreasing importance of policy loans by life insurance companies. Within long-term engagements the share of mortgage loans increased slightly up to 1929 but decreased sharply in the following twenty years; the share of securities decreased slightly in the first period and advanced sharply in the second. Since insurance organizations have bought relatively few short-term securities, a shift of these securities from the category of long-term to short-term engagements would not make much difference, though in the case of the banking system it would.<sup>29</sup>

The share of nonfarm households declined sharply from more than one-fifth in 1929 to only one-sixth in 1939 and one-eighth in 1952 for all insurance organizations together, but fell only slightly (from 30 to 26 per cent) for life insurance companies alone. The decline in the latter instance was due to the substantial reduction in policy loans. The share of long-term loans to nonfarm households (i.e. of home mortgages in the assets of life insurance companies) actually was higher in 1952 (21 per cent) than in 1929 (16 per cent), after having fallen to approximately 8 per cent in 1939 and 1945. This increase, however, in its effect on the share of nonfarm households in the funds of all insurance organizations was more than offset by two factors: the declining share of life insurance companies in the aggregate assets of all insurance organizations and the precipitous decline of the share of policy loans in life insurance companies' funds (from over 15 per cent in 1929 to only 4 per cent in 1952).

### b. STRUCTURAL CHANGES IN SOURCES OF INSURANCE FUNDS

Compared to the far-reaching shifts in the uses of funds of all insurance organizations, or of private life insurance companies

<sup>29</sup> See Table 31.

## CHANGES IN USES AND SOURCES OF FUNDS

alone, the changes in the main sources of funds during the past fifty years are relatively small, usually taking the same direction as those observed for the banking system.

The first trend in sources of funds is the decline of the ratio of net worth to liabilities after 1929.<sup>30</sup> This is due in part to a reduction of the ratio in stock, life and property insurance companies, and in part to the increasing share of government and mutual insurance organizations which have been assumed to have no net worth of their own.

The bulk of the funds of insurance organizations have at all times been contributed by nonfarm households. From the estimates of Table 43, it appears that this share has increased continuously from nearly 70 per cent in 1900 to approximately 90 per cent in 1952. Both the increasing share of pension and retirement funds (whose assets are almost entirely attributable to nonfarm households) and the increasing share of private life insurance companies are responsible for this movement. The decline in the share of agriculture between 1900 and 1952—from 9 to 4 per cent for all insurance organizations, and from 10 to 7 per cent for private life insurance companies—is not unexpected in view of agriculture's lessened share in the national income. It should be remembered that these are rough estimates. There is no doubt, on the other hand, that the sharp decline in the proportion of insurance funds contributed by foreigners (from 9 per cent in 1900 to less than 1 per cent in 1952) represents a genuine trend. It is due primarily to the declining share of foreigners in the reserves of private life insurance companies, from 10 per cent at the turn of the century to 2 per cent since 1929. The share of business in life insurance funds is limited to advance premium payments and similar claims against property insurance companies. The size of these items is very difficult to estimate, but does not appear to have been significant in total insurance funds at any time (although it has of course been important for property insurance companies) or to have had a pronounced trend over the last fifty years.

<sup>30</sup> It is much harder to calculate this ratio for insurance organizations than for most other financial intermediaries because of the difficulties in making a clear-cut and consistent distinction between net worth and liabilities (funds due to the insured). The figures in Table 43 are based on the allocation to net worth of only the book value of the capital stock of stock, life and property insurance companies, thus treating any surplus in stock insurance companies as part of liabilities to policy holders, and, of course, regarding the total assets of government and private insurance and pension funds as offset by liabilities to the beneficiaries.

TABLE 43  
Main Sources of Insurance Funds  
(percentage distribution, excluding unclassified and miscellaneous liabilities)

SOURCE	ALL INSURANCE ORGANIZATIONS				PRIVATE LIFE INSURANCE COMPANIES					
	1900	1912	1929	1952	1900	1912	1929	1952		
	1. Liabilities to nonfarm households	68.8	74.0	79.4	85.2	90.4	78.6	81.0	87.3	88.5
2. Liabilities to agricultural households	9.0	9.5	8.0	6.9	4.0	10.5	10.9	9.6	9.1	6.8
3. Liabilities to foreigners	8.7	6.0	1.7	1.4	0.9	10.2	6.9	2.2	1.9	1.8
4. Net worth	13.5	10.6	11.0	6.6	4.6	0.7	1.2	0.9	0.5	0.5
5. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Appendix Tables A-7 and A-8.

## CHANGES IN USES AND SOURCES OF FUNDS

It is only for life insurance companies that we have information—rather unsatisfactory and limited to a recent date—on the source of the funds contributed by households. In early 1950 nearly one-fourth of total premium reserves seem to have been attributable to the 3 per cent of households with net worth of \$60,000 and over, while the 70 per cent of households with net worth of less than \$10,000 accounted for only a little over one-third of premium reserves, which constitute the bulk of funds available to life insurance companies.<sup>31</sup> This is in accordance with the occupational distribution of reserves. Self-employed managerial, professional, and semiprofessional households contributed approximately 40 per cent, although accounting for only about 20 per cent of all households. On the other hand, clerical, sales, and manual workers, who accounted for slightly over one-half of all households, contributed only one-third of reserves.<sup>32</sup>

The distribution is different, of course, for government and private pension and retirement funds. Though statistical data are lacking, there is little doubt that the bulk of their funds, amounting at present to almost 80 per cent of the assets of life insurance organizations, are attributable to manual and clerical workers in the lower and middle income and wealth groups, though a considerable part has been contributed by their private or public employers. It is therefore possible that the distribution of sources of funds of all insurance organizations taken together among income, wealth, and occupational groups in the population, is reasonably similar to the relative number of these groups.<sup>33</sup>

### 5. *Miscellaneous Financial Intermediaries*

The institutions grouped under the heading of miscellaneous financial institutions, namely, savings and loan associations, credit unions, land banks, investment companies, personal trust departments, finance companies, and federal government lending institutions, are so disparate in the nature of their operations and development that an aggregation of their balance sheets is of limited economic meaning. Such aggregates are dominated up to 1939 by personal trust departments, which accounted for between 60 and 90 per cent of the assets of all institutions included among miscel-

<sup>31</sup> *A Study of Saving . . .*, Vol. I, Table Z-24, and Vol. III, Table W-53.

<sup>32</sup> *A Study of Saving . . .*, Vol. III, Table W-51.

<sup>33</sup> The relationship between equity in life insurance reserves and private pension funds, and household, income, assets and occupation is discussed in Chapter VIII, section 2.

CHANGES IN USES AND SOURCES OF FUNDS

laneous financial intermediaries. From the 1930's on, however, the aggregates are increasingly influenced by government lending institutions, which in 1952 represented almost one-fourth of the group's total assets.

Notwithstanding the disparity, changes in the uses of the combined funds of miscellaneous financial intermediaries show some meaningful trends. The share of the funds made available to business has declined from approximately three-fifths in 1912 to about one-third in 1952, reflecting both a decline in the share of corporate securities in the portfolios of personal trust departments and the increased importance of government lending institutions, which since 1939 have made only a relatively small proportion of their funds available to business. The shares of nonfarm households and agriculture have declined continuously except for agriculture in the 1930's and nonfarm households in the 1940's. On the other hand, the proportion of funds made available to the federal government has risen considerably since 1929; this increase, probably the outstanding characteristic of Table 44, has been due primarily to the increasing representation of Treasury securities in the portfolios of personal trust departments. Foreign borrowers, appearing only after World War II but accounting for one-tenth of total funds in 1952, represent loans made by government lending institutions to foreign governments, and United States participation in international financial organizations.

For an understanding of changes in the uses of miscellaneous

TABLE 44

Main Uses of Funds of Miscellaneous Financial Intermediaries  
(percentage distribution, excluding cash, tangibles  
and miscellaneous assets)

Type	1900	1912	1929	1939	1952
1. Nonfarm households	31.3	23.0	24.6	19.9	24.9
2. Agriculture	13.9	8.6	6.5	8.2	5.6
3. Business	49.7	63.1	58.6	53.0	34.6
Unincorporated	5.1	2.4	1.0	0.7	0.5
Corporate	44.7	60.7	57.5	52.3	34.1
4. State and local government	5.1	5.3	7.6	9.4	6.1
5. Federal government	—	—	2.5	9.5	19.2
6. Foreign <sup>a</sup>	—	—	0.1	0	9.6

<sup>a</sup> Includes international institutions.

Source: Appendix Table A-15.

## CHANGES IN USES AND SOURCES OF FUNDS

financial intermediaries as they appear in Table 44, it is necessary to examine separately each of the four most important institutions covered—personal trust departments, savings and loan associations, finance companies, and government lending institutions. Balance sheets for these and for groups of miscellaneous financial intermediaries not specifically discussed will be found in Tables A-15 to A-27.

### a. PERSONAL TRUST DEPARTMENTS

Changes in distribution of personal trust funds under administration of trust departments of commercial banks and trust companies are of interest from two points of view. They are important, first, because personal trust departments constitute one of the largest groups of financial institutions, accounting for at least one-tenth of the assets of all intermediaries between the benchmark dates of 1900 and 1952. Second, the distributions may shed light on the investment habits of persons of wealth who constitute the main group of beneficiaries.<sup>34</sup> It is therefore regrettable that in the present state of our information all estimates of the distribution of assets of personal trust departments must be very rough, particularly for the early part of the period.

Probably the outstanding change is the decline of the share of funds used to finance real estate either by outright acquisition of rental properties or in the form of mortgage loans. At the turn of the century real estate investments are estimated to have absorbed approximately two-fifths of the funds under the administration of personal trust departments. The share declined to less than one-fifth by the early twenties and to about one-tenth in the thirties. At the present time real estate investments probably do not absorb more than a small percentage of the assets of personal trust departments.

The second major trend is the increase in the share made available to the federal government.<sup>35</sup> There is little doubt that up to the Great Depression only a very small fraction of the funds of personal trust departments was invested in United States government securities. In 1952 the share was about 30 per cent, a level reached sometime after World War II.

Notwithstanding the increasing importance of government securities, corporate business has always had the use of a larger pro-

<sup>34</sup> See Tables 87 and 88.

<sup>35</sup> As in other sections of this chapter, the share of funds made available refers, in the denominator, to total assets less cash, tangibles and miscellaneous assets.

## CHANGES IN USES AND SOURCES OF FUNDS

portion of the funds under the administration of personal trust departments than has any other group of borrowers. The proportion made available through purchase of corporate securities reached its peak in 1929 with almost three-fourths (partly a reflection of the sharp rise in stock prices in the late twenties), rarely fell below one-half, and in 1952 is estimated to have been 55 per cent. Radical changes, however, have occurred within that share as between fixed-interest-bearing securities and stocks, changes due in part to the upward trend of stock prices during the last half century, and in part to changes in investment policy. In 1900 the funds made available to corporations through personal trust departments appear to have been divided about evenly between stocks and bonds. From 1912 to 1939, however, the share of stocks was generally almost twice as large as that of bonds. Since World War II bonds have receded to a secondary role, amounting in 1952 to only one-tenth of all funds made available to corporations. As a result the proportion of stocks among assets held by personal trust departments has risen from about one-fifth in 1900 to over two-fifths in 1952.

Table A-16 shows only a moderate increase in the share of funds made available to state and local governments over the period as a whole (from 5 per cent in 1900 and 1912 to 10 per cent since 1945) and even a decline from the peak of 15 per cent in 1933. Both the decline over the last two decades and the relatively small share of state and local government securities may appear startling in view of the commonly held opinion that persons of wealth have concentrated their investments in tax exempt securities. Before interpreting these estimates as in conflict with common sense, it should be remembered that the total supply of tax exempt securities outside of sinking funds of state and local governments is small compared to the assets of personal trust departments. Even if personal trust departments in 1952 had absorbed all available state and local government securities (i.e. those outside of sinking and government trust funds), such investments would have represented only about one-half of trust fund assets. The \$6 billion which according to rough estimates were made available by personal trust departments to state and local governments in 1952 actually constituted only one-fourth of that maximum.

The funds administered by personal trust departments are by their very nature attributable in their entirety to individuals, and in practice almost exclusively to domestic nonfarm households,

## CHANGES IN USES AND SOURCES OF FUNDS

since the shares of agriculture and foreign beneficiaries are undoubtedly very small. It is also evident that such funds are largely concentrated in a relatively small number of accounts of substantial value, and are held mainly by individuals of substantial means. Among New York City institutions in 1941 (one of the very few instances for which this type of information is available) trust accounts of less than \$25,000 represented about 2 per cent of all funds administered by personal trust departments although numbering more than one-third of all accounts, whereas almost seven-eighths of total funds were in the 13 per cent of accounts with a value of over \$100,000 each. Even in New York State (outside New York City) the 64 per cent of accounts with less than \$25,000 had only 9 per cent of total personal trust funds, and the 11 per cent of accounts with over \$100,000 held 67 per cent.<sup>86</sup> Figures for the entire United States probably would lie between these two sets of ratios.<sup>87</sup>

### b. SAVINGS AND LOAN ASSOCIATIONS

Scarcely any group of financial intermediaries—certainly none of comparable size—is as simple in its structure of uses and sources of funds, or has shown as little change over the last fifty years in these two characteristics, as savings and loan associations. Although the associations' resources have increased from only \$0.5 billion in 1900 to nearly \$23 billion in 1952, the bulk of their funds, as their formerly common name of "building and loan associations" indicates, have always been made available to nonfarm households for financing the construction or acquisition of one- to four-family homes. The proportion of funds so employed has generally amounted to between 70 and 90 per cent of total resources of the associations. It was only during World War II that a substantial part of total resources was made available to a different borrowing group—specifically, the federal government. Although the absolute

<sup>86</sup> *Trust Department Earnings and Expenses*, State of New York Banking Department, 1943, p. 23.

<sup>87</sup> Rough estimates (presented in Tables 87 and 88) indicate that at the end of 1949 approximately nine-tenths of personal trust funds were held for beneficiaries with net worth of \$60,000 and more (a group accounting for only 3 per cent of spending units), and that spending units with an income of \$7,500 and over (representing 5 per cent of the total number) held approximately four-fifths of all personal trust funds. Since these ratios are derived from data covering all trust funds (i.e. include those administered by individual trustees), the concentration of trust funds administered by banks and trust companies alone may be assumed to be even more pronounced.

## CHANGES IN USES AND SOURCES OF FUNDS

amount of Treasury securities held was not much reduced after the war, the rapid increase in total resources lowered the share of funds made available to the federal government from almost 30 per cent in 1945 to less than 10 per cent in 1952. With the exception of United States government securities, all assets other than home mortgages that were held in substantial amounts were directly connected with the association's financing of residential real estate. This applies to foreclosed properties, which accounted for almost one-seventh of total assets during the 1930's, as well as to the share loans (a device enabling shareholders to acquire their shares on a type of installment plan) that were of some importance until the 1930's.

The sources of funds of savings and loan associations appear to have been similarly homogeneous. There is every indication that virtually all of the funds have been supplied by domestic nonfarm households. From the average balance per shareholder or depositor (approximately \$270 in 1900 and \$1,550 in 1952) one might also suppose that the funds were for the most part supplied in relatively small amounts by people of moderate means. There are indications, however, at least during the last decade, that larger deposits have come to account for a substantial part of the total. At the end of 1950, for instance, shareholders with a balance exceeding \$5,000 may be estimated to have had between 4 and 5 per cent of the number of accounts, and to have held approximately one-quarter of the total funds entrusted to savings and loan associations. Most of the people who keep more than \$5,000 in a single savings and loan association—the extent of multiple shareholdership by the same individual is not known—are likely to belong to the middle or upper income and wealth groups. Lacking similar data for earlier dates, we cannot be sure to what extent this is a recent movement, fostered by the insurance of deposits with savings and loan associations up to \$5,000 since 1934 and up to \$10,000 since September 1950. It is probable, however, that the share of relatively large deposits was considerably smaller before World War II, and particularly before the Great Depression. At the present time the share of deposits over \$5,000, as Table 41 shows, is still somewhat smaller for savings and loan associations than for mutual savings banks or for the savings and time deposits of commercial banks.<sup>38</sup>

<sup>38</sup> When deposits of over \$10,000 are separated, they constitute a proportion for savings and loan associations (12.3 per cent in 1952) considerably higher than that for mutual savings banks, and not far below that for savings and time de-

## CHANGES IN USES AND SOURCES OF FUNDS

### C. FINANCE COMPANIES

Sales and personal finance companies are the chief example among private financial institutions of secondary intermediaries: that is, organizations that receive most of their funds, and particularly do most of their borrowing, from other financial intermediaries rather than from households and nonfinancial business enterprises. In 1952, for example, borrowings from commercial banks and sale of debentures to banks and other financial institutions accounted for approximately two-thirds of total funds used, the figure being slightly higher for sales finance companies, but not much over one-half in the case of personal finance companies. Households and nonfinancial business enterprises participated only to a minor extent in financing these institutions, the former primarily as investors in their stock. There has been a definite upward trend in the share of commercial banks and other financial intermediaries in providing the funds with which finance companies operate—from probably not over one-half in 1929 to approximately two-thirds at the present time.

Receivables from households have at all times except during World War II absorbed the bulk of finance companies' funds. For personal finance companies the share has usually exceeded four-fifths of total assets and has not shown substantial variations. For sales finance companies it has been substantially lower, but has increased from about 45 per cent of total assets in 1929, 1933, and 1939, to over 55 per cent since World War II. The rise for household receivables has been accompanied by a substantial decrease in the share of business receivables, from nearly 40 per cent to less than 30 per cent of total assets.

### D. GOVERNMENT LENDING INSTITUTIONS

This group of financial intermediaries, which includes United States government corporations primarily engaged in financial activities, such as the Reconstruction Finance Corporation, as well as the Treasury with its direct lending activities, has become of

---

posits of commercial banks. Indeed, if allowance were made for the fact that the proportion of accounts of partnerships and corporations is probably larger among savings and time deposits of commercial banks than among the shareholdings of savings and loan associations, the difference might disappear entirely.

## CHANGES IN USES AND SOURCES OF FUNDS

substantive importance only since the Great Depression.<sup>89</sup> Their assets accounted for about 2 per cent of those of all financial intermediaries in 1933, reached a peak of 8 per cent in 1945, and dropped to about 5 per cent in 1952. However, at the last date they still accounted for \$30 billion of resources. If tangible assets, mostly war plants, are excluded a more significant total is obtained which shows a trend considerably different from that of total assets. The intangible assets of government lending institutions, then, rose from about \$2.7 billion in 1933 to \$9.3 billion in 1945, but had their greatest expansion after World War II, reaching nearly \$25.5 billion in 1952. They were thus equivalent to 2 per cent of the total assets of all financial intermediaries in 1933, still 2 per cent in 1945, but 5 per cent in 1952.

During the Great Depression most of the funds of government lending institutions, then dominated by the Reconstruction Finance Corporation, were made available to business, mostly in the form of short-term loans granted to financial intermediaries for the purpose of preserving their solvency. During the thirties institutions for refinancing home and farm mortgage debt acquired increasing importance, and in 1939 accounted for more than one-third of the intangible assets of government lending institutions. After World War II the largest share of the funds was made available to foreign governments in the form of loans (such as the Treasury loan to the British government and the loans of the Export-Import Bank to a number of foreign countries) and to international financial institutions (such as the International Bank for Reconstruction and Development and the International Monetary Fund) primarily in the form of subscription to their capital stock. Since the late thirties a small though not insignificant part of the funds of government lending institutions, generally more than one-tenth of total intangibles, has been made available to federal, state, and local governments.

<sup>89</sup> The group comprises: Farm Credit Administration; banks for cooperatives; federal intermediate credit banks; production credit corporations; Federal Farm Mortgage Corporation; Rural Electrification Administration; Commodity Credit Corporation; Farmers' Home Administration; Federal Crop Insurance Corporation; Home Loan Bank Board; federal home loan banks; Federal Savings and Loan Insurance Corporation; Public Housing Administration; Federal Housing Administration; Office of Housing and Home Finance Administrator; Federal National Mortgage Association, Other; Reconstruction Finance Corporation; Export-Import Bank; Federal Deposit Insurance Corporation; Tennessee Valley Authority; all other (classification of December 31, 1952). Federal land banks are not included because they are not owned by the Treasury at the present time.