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FINANCIAL INTERMEDIARIES

IN THE AMERICAN ECONOMY

SINCE 1900

CHAPTER I

SUMMARY OF FINDINGS

1. *Growth of Total Assets of Financial Intermediaries, 1900 to 1952*

Total assets of financial intermediaries[1] increased from $19 billion in 1900 to almost $560 billion at the end of 1952. This corresponds to an average rate of growth of 6.7 per cent a year, approximately the same as the rate of growth between 1850 and 1900, the period during which most of today's dominant types of financial intermediaries originated.

When measured in a way that takes account of the increase in population and of changes in the price level, the rate of growth for financial intermediaries is considerably lower. Assets per head of the population (in 1952 prices) increased from $820 in 1900 to slightly over $3,500 in 1952, or at an annual average rate of 2.8 per cent. The comparable rate of increase in the 1850-1900 period was approximately 4 per cent. But the growth of financial intermediaries in the twentieth century, while below the rate of the formative years, was nevertheless faster than the growth of national income or total output measured per head and in constant dollars.

2. *Variations in Rate of Growth*

The growth of financial intermediaries has shown considerable variation over the period covered by this study. Between 1900 and 1929 assets increased from $19 billion to $167 billion, a rate of 7.5 per cent a year. By 1939 assets stood at slightly over $200 billion, and the rate of growth for the decade averaged only 2 per cent a year as assets had dropped sharply during the Great Depression. During World War II assets doubled and by 1952 amounted to about $560 million, an annual growth rate after 1939 of 8 per cent. From 1929 to 1952 the increase averages 5 per cent a year, considerably below the rate of advance in the preceding thirty years.

The difference between the two periods is even more pronounced after adjustment for price and population increase. On that basis the average annual rate of growth is 1.8 per cent in the period from 1929 to 1952, compared with 3.6 per cent in the first three decades of the century.

[1] Financial intermediaries covered by this study are the banking system, personal trust departments, private and government insurance organizations, savings and loan associations, credit unions, sales and personal finance companies, land banks, investment companies, investment bankers, and government lending institutions.

3. *Differences among Institutions in Rate of Growth*

While all types of financial intermediaries increased in size over the past fifty years, differences in rate of growth were pronounced, and several important types of intermediaries made their first appearance only during this century, e.g. government and private pension funds, investment and finance companies, and land banks. The major effect of the differentials in rate of growth was a decline in the banking system's share of total assets as compared with that of insurance organizations and of miscellaneous financial intermediaries.

In 1900 and 1912 commercial banks (excluding their personal trust departments) accounted for slightly over one-half the assets of all financial intermediaries. By 1929 their share had fallen to two-fifths; by 1952, to scarcely more than one-third. The share of mutual savings banks dropped even more rapidly: from 13 per cent in 1900 to less than 5 per cent since 1945. Most of the increase in the share of insurance organizations, from 12 to 15 per cent before 1929 to 27 per cent in 1952, is due to the rise of government and private pension funds. However, the share of private life insurance companies also rose—from less than one-tenth of total assets of all financial institutions in 1900 to more than one-eighth in 1952. Among miscellaneous financial intermediaries, investment companies and government lending institutions, both of which acquired importance only during the second half of the period, showed the most marked increases in assets. The share of personal trust departments, on the other hand, declined from nearly one-sixth in 1900 to not much over one-tenth since 1945.

During the last two decades governmentally owned or controlled financial intermediaries have grown at a particularly fast rate. Assets held by this group were virtually zero in 1900 and 1912, but accounted for 4 per cent of the total for financial intermediaries in 1929, and 24 per cent in 1952, if Federal Reserve Banks are included.[2]

4. *Changes in Number of Financial Intermediaries*

The number of individual financial institutions has increased considerably during the last fifty years, but at a much slower rate than their assets. At the beginning of the twentieth century there were about 21,000 financial intermediaries in the United States. By 1952

[2] Excluding the Federal Reserve Banks, the figures are 1 per cent in 1929 and 15 per cent in 1952.

the number had increased to approximately 45,000. The peak, however, was reached in the 1920's when approximately 50,000 were in business. Thereafter, the number of financial intermediaries declined in relation to population from almost 400 per million inhabitants in 1929 to less than 300 in 1952—the ratio prevailing at the beginning of the century. Average assets per institution have increased sharply for all financial intermediaries together as well as in almost all branches, particularly during the last quarter century, rising from slightly under $1 million in 1900 to almost $3.5 million in 1929 and to $12 million in 1952.

5. *Changes in Density of Financial Intermediaries*

The "density" of financial intermediaries (the amount of assets or the number of units or offices per square mile, per thousand inhabitants, or per million dollars of income payments) varies considerably in different parts of the country, but these differences have not changed much over the last fifty years.

For all intermediaries taken together, and for most of the important types taken separately, density (in terms of population or income) is highest in the Middle Atlantic states and lowest in the South. The differences, however, are not spectacular. Regional differences in density are considerably more pronounced for time deposits and assets administered by personal trust departments than for demand deposits, shares in savings and loan associations, and premium reserves in life insurance companies.

Differences in density among regions have lessened during the last twenty years. The same tendency toward an equalization in density of financial intermediaries over the entire country was probably at work from 1900 to 1929, but the available statistics are not sufficient to document it.

6. *Changes in Structure of Assets*

The rapid expansion of the resources of financial intermediaries during the past fifty years was accompanied by substantial changes in the use of these funds. Some of these changes proved to be enduring, others were transitory, undone in part or in full within a few years; some are common to many groups of financial intermediaries, others are limited to a few of them; some are simply the results of different rates of growth of various groups of intermediaries, while others reflect broad economic tendencies. This summary must essentially be limited to the aggregate balance sheet of all financial intermediaries and must ignore most differences among groups of institutions.

The outstanding change in the use of all financial intermediaries' resources is the spectacular increase of the share absorbed by the federal government, from only a few per cent before 1912 to one-fifth in 1939 and to fully one-third in 1952, after reaching a peak of nearly one-half at the end of World War II. This increase, of course, was primarily the result of large-scale acquisitions of Treasury securities during two wars and the thirties.

Financial intermediaries made two-fifths of their total assets available to business in 1929 and only one-fourth in 1952, but the latter figure represents a substantial recovery from the low of one-sixth in 1945. Most of the decline occurred in short-term loans, but holdings of corporate bonds and long-term loans also declined, from almost one-fifth of total assets in 1933 to about one-tenth in 1952. The share of funds supplied to agriculture dropped too, and the decline was more pronounced and started earlier. The share of funds made available to nonfarm households and to state and local governments began to decline in the early thirties, but at the middle of the century was not much less than it had been fifty years earlier.

7. *Changes in Structure of Sources of Funds*

Many financial intermediaries do not operate in the form of an ordinary business corporation (e.g. mutual life insurance companies, government insurance organizations, savings and loan associations, credit unions), and for these there are some difficulties in distinguishing between equity and liabilities. For the most important corporate financial institution, commercial banks (for which this difficulty does not exist), net worth has dropped markedly, from 19 per cent of assets in 1900 to 7 per cent in 1952.

It is also difficult to draw the line, from an economic point of view, between short-term and long-term liabilities. If the reserves of insurance organizations are classed in the latter category, long-term liabilities increased more than short-term liabilities from 1900 to 1939. After a sharp reversal during World War II, reflecting large-scale expansion of bank deposits, the movement was resumed. As a result in 1952 long-term and short-term liabilities of financial intermediaries were of approximately equal size, whereas in 1900 short-term liabilities had been nearly twice as large as long-term debt.

Nonfarm households have at all times during the past fifty years furnished most of the funds raised by financial intermediaries. While comprehensive records are lacking, there is some evidence that nonfarm households in the lower and middle income and wealth groups have become more important as suppliers of funds to financial intermediaries, while households in the upper groups have become somewhat less important.

Nonfinancial business (including agriculture) furnished one-tenth of the funds of financial intermediaries in 1952, a drop from one-fifth in 1900. The decrease occurred largely because of the growth of long-term liabilities (particularly insurance reserves) in which business scarcely participates. The role of business as a source of short-term funds available to financial intermediaries apparently declined much less sharply.

8. *Concentration of Resources among Financial Intermediaries*

In most groups of financial intermediaries a small number of large institutions account for a substantial fraction of the aggregate assets of all institutions of the same type operating in the United States.[3] The degree of concentration varies considerably among types of financial intermediaries. It has generally increased over the last fifty years, but does not seem to be more pronounced than in other branches of the economy in which large enterprises play an important role.

The share of the largest institutions is relatively low among mutual savings banks, savings and loan associations, credit unions, fraternal insurance organizations and investment companies, and relatively high among life insurance companies, personal trust departments, and sales and personal finance companies. Commercial banks occupy an intermediate position, but show the highest rate of increase in concentration.

9. *Share of Financial Intermediaries in Financing the Economy*

During the first half of the twentieth century, financial intermediaries supplied slightly more than one-half of all external funds absorbed by other domestic economic groups (business, households, government). Even when account is taken of internal net saving as a source of funds, the share of financial intermediaries re-

[3] Statistical indicators underlying the discussion of concentration of assets in this study do not permit direct deductions as to the concentration of economic power or the presence or absence of monopoly or oligopoly.

mains close to three-tenths. The share of financial intermediaries in total external fund supply was considerably higher in the last twenty years than in the first three decades of the century and differed greatly in the several sectors of the economy.

10. *Share in Financing Nonfinancial Corporations*

In normal periods (i.e. from 1900 to 1929 and again after World War II) financial intermediaries have supplied approximately two-fifths of all external funds absorbed by nonfinancial corporations and approximately one-fourth of their total net financing (i.e. external financing plus internal net saving). The relative constancy of these proportions is perhaps the most significant finding of this part of the investigation.

Financial intermediaries have been most important in long-term debt financing and least important in equity financing. Since the 1930's financial intermediaries have supplied virtually all the long-term debt financing of nonfinancial corporations. Over the same period their share in the short-term financing of corporations declined, particularly the share of commercial banks in the short-term financing of large corporations.

The share of funds supplied by financial intermediaries has varied considerably for different industries, and within industries has varied for corporations of different size and different financial position. These relations are too complex, and as yet too little explored, to be summarized.

Most of the funds supplied by financial intermediaries to nonfinancial corporations took the form of purchases of corporate bonds, primarily by insurance organizations and by personal trust departments. Bank credits and mortgage loans together accounted for only about one-third of all funds supplied by financial intermediaries to nonfinancial corporations. Equity funds were small compared with those supplied by intermediaries in the form of loans and bonds, but they were substantial in relation to total external equity financing of corporations. This was the case particularly for preferred stock, of which approximately one-half was ultimately absorbed by financial intermediaries.

11. *Share in Financing Unincorporated Business Enterprises*

Financial intermediaries provided approximately one-third of all debt financing of unincorporated business enterprises for the period from 1900 to 1949, but not much more than one-tenth of their total net financing (including retained earnings and net investment by proprietors, but excluding capital consumption allowances). The share of financial intermediaries in financing unincorporated business—predominantly by commercial banks in the form of short-term loans—was higher before 1920 and after World War II than in the intervening period. Financial intermediaries, on the other hand, probably furnished an increasing proportion of the mortgage funds used by unincorporated business.[4]

12. *Share in Financing Agriculture*

Financial intermediaries have supplied an increasing proportion of the external financing of agriculture, but their share in its total financing has decreased because of the sharp rise in self-financing by means of retained income in this sector.

For the entire period from 1900 to 1949 nearly one-half of the external financing of agriculture was provided by financial intermediaries, and the ratios prevailing in the first two decades of the century and in recent years were similar. On the other hand financial intermediaries supplied over one-third of total net financing from 1900 to 1922, but only a few per cent after World War II. From 1923 to 1945 agriculture on balance did not raise any funds from financial intermediaries.

Intermediaries markedly increased their share of farm mortgages. In 1900 they held not much over three-tenths of the total amount outstanding, but since the thirties they have held more than three-fifths. The increase is attributable primarily to a rise in the proportion of farm mortgages owned by commercial banks and life insurance companies and to the appearance, beginning with the 1920's, of land banks as important mortgagees.

13. *Share in Financing Nonfarm Households*

More than one-half of total external financing of nonfarm households during the past half century has been provided by financial intermediaries—necessarily in the form of loans. The share has shown considerable short-term variations but no pronounced long-term trend.

Home mortgages have been the most important form of financing nonfarm households, and financial intermediaries have con-

[4] Because quantitative information on the finances of unincorporated business enterprises is limited in amount and poor in quality, statements in this paragraph are subject to more than the usual reservations.

sistently held from two-thirds to nine-tenths of the total outstanding. Commercial banks, savings and loan associations, and life insurance companies have supplied an increasing proportion of these funds—about one-fourth in 1900, but over two-thirds in 1952; the share of savings banks and of personal trust departments has decreased sharply.

14. *Share in Financing State and Local Governments*

Financial intermediaries have played a dominant role in the external financing of state and local governments throughout the last fifty years, though their share in total state and local net financing has been more modest—approximately one-fifth. Their share in external financing remained slightly below one-half for the first three decades of the century but has been considerably higher since, amounting to over four-fifths for the period 1946-1952. As a result, financial intermediaries held nearly four-fifths of all state and local government securities outstanding (excluding sinking funds) at the end of 1952, as compared with not much over one-half between 1912 and 1933. The marked increase in holdings of tax exempt securities by commercial banks and personal trust departments more than offset a sharp decline in the share of financing by mutual savings banks, which at the beginning of the century were the most important holders of state and local government securities.

15. *Share in Financing the Federal Government*

During the last half century the federal government has absorbed more external funds than any other sector of the economy (except financial intermediaries themselves), and has made more use of funds from financial intermediaries than any other sector. The supply of funds to the federal government by the banking system, moreover, was a decisive factor in the inflation of both World Wars and the reflation of the thirties.

Financial intermediaries provided somewhat over one-fourth of the funds borrowed by the federal government to finance World War I, two-thirds of the massive requirements of World War II, and almost the entire external financing of the federal government in the thirties. They held one-third of the federal debt in 1919, and have held more than two-thirds ever since 1933. The banking system alone supplied one-fifth of the Treasury's borrowing after World War I and nearly one-half during World War II. Since 1929 it has held from one-third to one-half of the federal debt.

16. *Financial Intermediaries as Outlets of Individuals' Funds*

Since the turn of the century financial intermediaries have become increasingly important outlets for the funds of individuals (households, including farmers and unincorporated business enterprises). About one-tenth of individuals' total assets were entrusted to financial intermediaries in 1900; after 1939 this ratio rose to one-fourth. Most of the increase is due to the growing importance, among individuals' assets, of equity in insurance and pension funds (10 per cent of total assets in 1949 as against 2 per cent in 1900), in their deposits in commercial banks (8 per cent as against 3 per cent), and in savings and loan associations.

The importance of financial intermediaries as outlets of funds decreases with increasing size of total assets or net worth of the household up to a level of possibly $100,000 of assets or net worth. The share is higher for households in the middle and upper income groups than for those nearer the bottom of the scale.

17. *Share in Personal Saving*

Individuals have been making increasing use of financial intermediaries as repositories for personal current saving. One-third of all net personal current saving was entrusted to financial intermediaries in the years 1900 to 1929. During the 1930's and 1940's this ratio increased to over one-half, even if consumer durables are included in total saving. If only intangible assets are taken into account, slightly more than two-fifths of all personal current saving was deposited with financial intermediaries in the first three decades of the century, but more than two-thirds in the 1940's and early 1950's.

18. *Share in National Assets*

The share of financial intermediaries in national assets (i.e. the aggregate tangible and intangible assets of all independent economic units in the United States, including business enterprises, households, and governments) is the most comprehensive single measure of their economic importance. It has shown a generally increasing trend over the last fifty years, continuing a similar movement observable during the nineteenth century.

In 1900 the assets of financial intermediaries represented approximately one ninth of national assets, as compared with about one-twentieth in 1860. This share rose slowly but fairly regularly to one-sixth in 1929. It advanced rapidly during the Great Depression, the 1930's, and World War II, and reached its peak at slightly above one-fourth in 1945. In 1949 and 1952 it amounted to fully one-fifth, twice the ratio at the beginning of the century, but not much different from the share of 1939. This recent rather moderate decline is due to the fact that the expansion of assets of financial intermediaries failed to keep pace with the sharp rise in the value of the stock of tangible assets after 1946, much of which reflected the delayed effect of repressed wartime inflation.

Since the assets of financial intermediaries consist almost exclusively of intangibles (claims and equity securities), their share in the total amount of intangible assets in the economy is of particular interest. It has increased almost continuously, from one-fourth in 1900 to approximately two-fifths in 1952. The most rapid increases occurred during the Great Depression and World War II.

19. *Relation to National Wealth*

The more familiar comparison between financial intermediaries' assets and national wealth (i.e. tangible assets) is less significant. The ratio of financial intermediaries' assets to national wealth is, of course, considerably above their share in national assets (which include both tangibles and intangibles), but has shown similar movements. It rose from approximately one-fifth in 1900 to almost two-fifths in 1929; reached a peak of 70 per cent in 1945; and fell back sharply to 45 per cent in 1952.

20. *The Outlook*

Consideration of the factors that have been responsible for the increasing share of financial intermediaries in total national assets over the past century suggests that this trend is likely to continue. But these considerations also suggest that intermediaries will not continue to increase their share at the same *rate*. If this rate were maintained, the intermediaries, which now hold one-fifth of national assets, would hold two-fifths within less than half a century. Even if the share of financial intermediaries in national assets should rise more slowly than before, or remain at its present level, the total assets of financial institutions are likely to increase fairly rapidly, since aggregate national assets have shown an average rate of growth of more than 5 per cent a year over the past century.