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THE FLOW OF CAPITAL FUNDS IN THE POSTWAR ECONOMY

Summary

THIS summary is arranged in two parts. The first deals with the general characteristics of the American capital market during the postwar period; the second with the flow of funds through the five main sectors of the capital market which constitute the core of the study —the markets for Treasury and state and local government securities, for corporate bonds and stocks, and for residential mortgages. Whereas the second part is limited to a brief summary of the main findings presented in Chapters 6 through 10, the first part covers some aspects that were not specifically discussed in the report, but may be helpful in understanding postwar capital market developments. Emphasis here is on the characteristics of the American capital market in the postwar period that distinguish its structure and operation from the prewar periods that were not affected by war or the Great Depression, i.e., in particular between the turn of the century and World War I and the 1920's. The report deals with the years 1946 through 1958, generally referred to as the postwar period, but the first part of the summary occasionally also takes account of developments during 1959–61, which are not covered in the tables.

General Characteristics of the Postwar Capital Markets

1. On a national scale the financing task is measured by the volume of gross capital formation, since funds equal in size to gross capital formation must be withheld from current consumption out of national product. During the postwar period gross capital formation averaged $39 billion a year under the narrowest concept, which covers only business structures (excluding residences), business equipment, and net foreign balance; $66 billion under the standard concept, which also includes residential structures and government civilian capital

formation; and $108 billion under a broader concept, which is more consistent in that it separates durable from nondurable output and therefore also embraces consumer durables and military construction and equipment. These figures amount to 12 per cent of gross national product for the narrow concept, 20 per cent for the standard concept, and 29 per cent for the broad concept, including consumer durables and government tangible assets.

2. Measured by the share of civilian gross or net capital formation, the relative size of the financing task in the postwar period was about the same as over the previous fifty years, excluding periods affected by war or the Great Depression (see Tables 16 and 19). Gross capital formation under the standard definition averaged slightly above one-fifth of gross national product for most decades since the turn of the century (and indeed since 1869)—a ratio about the same as that observed during the postwar period. If consumer durables are included, the ratio for the postwar years is even slightly above that for the earlier periods. On a net basis, the ratio of capital formation to national product in the postwar period is somewhat below the level prevailing before 1930, particularly if consumer durables are excluded. This points to a shift between internal and external financing, but does not influence the relative size of the total financing task.[1]

3. For the operation of the capital market, great importance attaches to the forms which capital formation takes and to the sectors which undertake it. While all of the three main sectors—business, households, and government—use both internal and external funds to finance their capital expenditures, the ratios of the two types of funds differ, as do the factors which affect the distribution and the total volume of capital expenditures. Similarly, the forms of external financing differ among sectors—governments and households, for instance, being unable to issue equity securities. Within sectors the forms of external financing also differ, depending on the character of capital expenditures, capital structure, the cost of funds of different types, and many other factors.

4. The sectoral distribution of capital expenditures during the postwar period showed a continuation of trends observed for more than half a century before 1930, namely, an increase in the share of households and governments and a decrease in the share of business in total national capital expenditures. During the postwar period, households

[1] See Tables 12–16 for gross capital expenditures and Tables 17–20 for net investment.

accounted for well over two-fifths of total capital formation if consumer durables are included (about one-fourth if they are excluded), business for a little less than two-fifths, and civilian government for one-tenth. This compares with shares in the last three decades of the nineteenth century and the first three decades of the twentieth century of 40 per cent for households (23 and 18 per cent excluding consumer durables), 56 and 54 per cent for business, and 3 and 6 per cent for government.[2] Within the business sector, a substantial increase took place in the share of equipment at the expense of that of structures. Thus there was a considerable increase in the share of expenditures on capital goods of relatively short life—machinery, vehicles, and consumer durables—in the private economy, partly offset in national capital formation by an increase in the share of government construction.

5. For the economy as a whole, gross capital expenditures (including military) absorbed nearly two-thirds of all capital funds used during the postwar period if the sources-and-uses-of-funds statements of the seven main sectors (nonfarm households, agriculture, unincorporated business enterprises, nonfinancial corporations, financial institutions, state and local governments, federal government) are combined. Among the acquisition of financial assets and accounting for the remaining one-third of total uses of capital funds, short-term claims were lower than long-term claims, absorbing 15 and 19 per cent of total uses of capital funds, respectively. Net purchases of equity securities by the different sectors absorbed only 2 per cent of total funds used (see Table 21). The smallness of this ratio is due partly to the breadth of the sectors used; e.g., all net purchases and sales of equity securities within the nonfarm household sector are eliminated in the consolidated figures for the sector.

6. On a national scale the distribution of capital funds among sources is necessarily closely connected with that of uses. Thus about two-thirds of total sources represented gross saving and slightly over one-third external financing. Of gross saving, in turn, about two-thirds were provided by earned depreciation allowances if the latter are calculated uniformly for all sectors on a straight-line basis and at replacement cost. The remaining one-third of total internal sources represented the net saving of the various sectors. The importance of the

[2] The figures for 1869–1929 are from unpublished worksheets underlying the R tables in Simon Kuznets, *Capital in the American Economy: Its Formation and Financing*, Princeton for NBER, 1961.

distribution of internal financing among earned depreciation allowances and net saving obviously differs among and within sectors; it also depends on how conscious the different economic units are of the distinction between gross and net saving and capital formation, and on how much this distinction influences their investment and saving decisions.

7. Substantial differences in the structure of uses and sources of capital funds are apparent between the main sectors. The share of gross capital expenditures in total funds used varied (excluding financial institutions) between two-thirds for nonfarm households and nearly 100 per cent for the federal government. Unincorporated business devoted nearly nine-tenths of the available funds to gross capital expenditures, agriculture 93 per cent, and nonfarm business 83 per cent (see Table 27).

8. The importance of external financing was largest for nonfinancial corporations, for which it accounted for more than two-fifths of all funds used (again excluding financial institutions). State and local governments and nonfarm unincorporated business enterprises were next with about one-third of total funds used, but this ratio does not have a very precise meaning for unincorporated business enterprises. External financing was relatively least important for nonfarm households for which it furnished less than one-fifth of total capital funds, for agriculture with one-eighth, and for the federal government with one-twentieth (see Table 27). Differences among sectors existed also in the structure of external financing. Examples are: first, nonfinancial corporations, which in the postwar period were by far the largest users of external funds, raised nearly one-half of total outside funds in the form of short-term liabilities, two-fifths through long-term debt, and about one-seventh through the sale of new equity securities; second, nonfarm households secured one-third of them on a short-term and two-thirds on a long-term basis, the latter in the form of home mortgages (see Table 24).

9. Possibly as important as the level and distribution of financing during the postwar period is a comparison with financing in earlier periods not affected by wars or the Great Depression. Such a comparison shows that changes in the structure of uses and sources of funds have been relatively small for the whole economy or the seven main sectors for which the statistics are available.

On a national basis, the shares of gross capital expenditures in total uses and of internal and external financing in total sources were about the same in 1901–12 and 1923–29 as in the postwar period.[8] Within external financing, however, some substantial and significant changes occurred. The share of equity financing, not more than 5 per cent of total external financing in the postwar period, was not even half as large as in the two prewar periods when it is estimated at one-seventh and one-fifth. The near equality between short- and long-term borrowing observed in the postwar years was also found in 1901–12, and in 1923–29. However, in comparison to the 1920's, the relative importance of long-term liabilities increased in the postwar period.

Similar trends are found in the financing of nonfinancial corporations. The share of external financing in total capital funds was about the same in 1901–12 and 1923–29 as in the postwar years. Recourse to the issuance of equity securities, however, was sharply lower, a ratio to total external financing of one-sixth in the postwar period compared with about one-third for 1901–12 and more than two-fifths for 1923–29. In the case of nonfarm households, financing methods in the postwar period were very similar to those observed in the 1920's, but quite different from those prevailing between the turn of the century and World War I. Both in the postwar period and the 1920's, external financing provided something more than one-sixth of total funds, and long-term borrowing accounted for over three-fifths of total external financing. From 1901 to 1912, on the other hand, external financing was responsible for only one-twelfth of total funds used and long- and short-term borrowing were of about equal importance.

10. The postwar period is characterized by a fairly steady rise in the level of interest rates, evidencing an excess demand for funds over the available supply. This rise reflects only in part the fact that until 1950 the Federal Reserve System supported the price of long-term Treasury securities, and thus kept their rates somewhat lower than they otherwise would have been and indirectly also influenced the level of other interest rates. If there are long swings of forty to fifty years' duration in the level of interest rates, as is possible though far from proven, the postwar period probably constitutes the major part of a long upswing, following the long downswing of 1920–45, and parallels the preceding long upswing from the late 1890's to 1920.

Interest rates were at historically extremely low levels at the beginning of the postwar period, but by 1958 they had reached the highest levels witnessed since the early 1930's, although not the peaks of the

[8] Kuznets, *Capital in the American Economy*, pp. 490, 558, and unpublished worksheets underlying R tables. See also Table 23 of this book.

early 1920's or the 1870's. New issues of long-term, high-grade corporate bonds ended the period at over 4 per cent compared to 2½ per cent in 1945, nearly 6 per cent at the peak of 1920, and somewhat less than 4 per cent at the trough of the 1890's. No sharp changes occurred during the postwar period in the differentials among the main types of long-term interest rates. Short-term rates, however, rose relatively more than long-term rates, Treasury bills advancing from the pegged level of less than ½ per cent in 1945 to an average of 2¼ per cent during the 1954–58 cycle. The more relevant bank rates on short-term business credits nearly doubled, rising from 2.34 per cent in 1945 to 4.34 per cent in 1958.

The second characteristic of the yield structure of the postwar period is the divergent development of the yields of fixed interest-bearing securities and of equities of the 1950's. Common stock yields (dividend-price ratios) advanced from approximately 4 per cent in 1945 to 6½ per cent in 1949–50, a movement parallel to that of bond yields. Then, however, they declined steadily to about 4 per cent in 1958, and continued downward through 1959.[4] As a result, common stock yields fell below the yields on new issues of high-grade bonds beginning in 1958, a position duplicated only in 1929.[5] These historically abnormal yields relations, however, had no pronounced effect in the 1950's on the ratio of gross or net new issues of bonds to flotations of stocks.

11. An important basic characteristic of the capital market is the extent of the participation of financial institutions, i.e., primarily the banking system, thrift institutions, and private and government insurance organizations.

Between the end of 1945 and 1958, the assets of financial institutions (excluding government lending agencies and personal trust funds administered by banks) increased from about $352 billion to $704 billion, or at a rate of slightly more than 5½ per cent per year. (During the next three years they rose by another $100 billion or about 15 per cent.) This rate of growth is considerably below the 7½ per cent a year which was observed between 1900 and 1929, and also below the average rate from 1929 to 1945.

Economically more relevant is the relation of the assets of financial institutions to either national product or all financial assets. By these

[4] *Business Statistics,* Washington, 1961, p. 102.

[5] *Historical Statistics of the United States,* Washington, 1960, p. 656, Series X-333, X-335, X-339.

tests, financial institutions during the postwar period just about kept pace with the growth of the economy. The assets of financial institutions were about 1.6 times gross national product in both 1945 and 1958. They were equal at both dates to somewhat more than one-third of all financial assets in the United States.

12. The influence of financial institutions on individual sectors of the capital market is reflected in the proportion of the main capital market instruments held by these institutions. During the postwar period financial institutions increased their share in four of the five main instruments (state and local government securities, corporate bonds and stocks, and residential mortgages), while their share in Treasury securities outstanding showed no substantial change. Throughout the period the role of financial institutions was dominant in the market for corporate bonds where their net purchases accounted for more than nine-tenths of the net increase in supply, in the market for residential mortgages where their share was almost as high, and, of course, in the market for short-term credit. Their influence was very great also in the market for state and local government securities since they absorbed about three-fifths of the net increase in supply, and in the market for Treasury securities, where statistical measurement is difficult, since net changes over the postwar period as a whole were very small in both the total amount outstanding and in the holdings of financial institutions which remained at approximately two-thirds of the total. While financial institutions held less than one-tenth of common stock outstanding at any time during the postwar period, their role in the market for stock, except the stock of investment companies and of closely held corporations, was much more substantial, and their net purchases represented a large and increasing fraction of total new issues.

13. The relatively small change in the position of financial intermediaries in the postwar capital market contrasts with the substantial advance over the preceding fifty or more years, particularly between the Great Depression and World War II. Thus the share of the financial assets of financial institutions in all financial assets outstanding in the United States was somewhat less than one-fourth in 1900 and in 1929, and increased to somewhat over one-third in 1939 and 1945.[6] Similarly, the assets of financial institutions, which had been nine-tenths of gross national product at the turn of the century, increased

[6] Raymond W. Goldsmith and Robert E. Lipsey, *Studies in the National Balance Sheet of the United States,* Princeton for NBER, 1963, Vol. II, Table Ia.

to 1.3 times GNP in 1929 and to twice GNP in 1939,[7] compared to the level of about 1.6 times GNP that prevailed throughout the postwar period. It is, therefore, possible that the importance of financial institutions in the capital market, which has been increasing since the middle of the nineteenth century, is reaching a peak, and that the share of the main types of financial institutions in capital market instruments is stabilizing, at least in the case of claims which constitute the great majority of financial assets outstanding.

14. As a result of differences in the rate of growth of assets, considerable shifts occurred during the postwar period in the distribution of the aggregate assets of all financial institutions and, correspondingly, in the role of the various groups of financial institutions in the capital market.

The outstanding change was the decline in the share of the assets of the banking system from three-fifths at the end of World War II to two-fifths in 1958 or 1961. The share of commercial banks alone fell from a little over two-fifths to not more than one-third of the assets of all financial institutions. The decline of the share of the banking system was due primarily to a reduction in the ratio of money to national product or to financial assets. The ratio of time and savings deposit departments in commercial banks to the total assets of financial institutions actually increased slightly, from 9 to 10 per cent, so that the decline of the assets of the monetary system proper (Federal Reserve System plus check deposit departments of commercial banks) was even sharper.

Among the main groups of financial institutions other than the monetary system, insurance organizations held their share between 1945 and 1958 at 48 per cent of the assets of all nonmonetary institutions. The share of miscellaneous financial institutions remained at about 17 per cent of the assets of all nonmonetary institutions, and the share of thrift institutions, including the saving departments of commercial banks, at above one-third (Table 5).

15. The shift between the monetary system and the nonmonetary institutions is partly an offset to the extraordinary increase, in absolute and relative terms, in the assets of the monetary system that occurred during World War II accompanying the repressed inflation of that period. The share of the monetary system in the total assets of financial institutions in 1958 of about one-third, however, was con-

[7] For GNP figures in 1900–29 and 1939, see Kuznets, *Capital in the American Economy*, pp. 558 and 486 (Variant III).

siderably below the proportion of 1939 of two-fifths. While it was about the same as the 1929 ratio, it was substantially below that of 1900 (see Table 5). The stability of the share of thrift institutions during the postwar period at one-third of the total assets of non-monetary institutions contrasts with the downward trend observed between 1900 and 1939. Even more significant is the stability in the share of insurance organizations in the postwar period, which contrasts sharply with the increase between 1929 and 1945, an increase due largely to the sharp rise in the assets of government insurance and social security organizations.

16. Throughout the study, figures for averages of the three cycles observed during the postwar period (1946–49, 1949–54, 1954–58) are presented, compared, and commented upon. It is not possible to summarize here the results of these comparisons, but the most important fact is that the main relationships are very similar in the second and third cycles, but are considerably different in the first cycle which was strongly influenced by the transition from a war to a peacetime economy. In the financial sphere, this change meant primarily the rapid disappearance of the overhang of liquid assets in excess of requirements which had accumulated during World War II, the end of the retirement of substantial amounts of Treasury securities and the sharp reduction of their holdings by banks and insurance companies, and the abandonment of price support for Treasury securities by the Federal Reserve System. These three developments were essentially completed during or shortly after the end of the first cycle. Other differences between the first cycle, on the one hand, and the second and third, on the other, were the increasing share of external financing, and the decrease in the relative importance of short-term credit among the sources of external financing.

17. In capital market techniques—as distinct from the size and direction of capital market flows—the changes during the postwar period, although numerous, were not far-reaching, at least not compared with the innovations during the 1920's or the 1930's. Changes in the character of capital market instruments, in the nature of the operations of the different types of financial institutions, and in the structure of the investment banking machinery were all in the same direction as during the thirty years before World War II, and sometimes even earlier.

An interesting example is the direct placement of corporate bonds, one result of the increasing predominance of large institutional investors in the market for corporate bonds and the registration provisions of the Securities Act of 1933. During the postwar period, about 48 per cent of all corporate bonds offered were placed privately. This is a very substantial proportion, but the share had already been as high as 24 per cent from 1936 to 1940.[8]

In this and other instances, techniques initially developed during the 1920's and 1930's became more commonly accepted and were in many ways refined, but there was no basic change in the developments during the postwar period.

18. There are, however, a few important features of postwar capital market techniques, the increasing use or modification of which are sufficiently pronounced that these techniques can be reasonably regarded as postwar innovations.

The first of these is the widespread use of lease-back financing, under which a financial institution acquires a building or plant and simultaneously leases it for a long term to an industrial or commercial enterprise to operate, and it becomes the property of the operator after the stipulated lease payments have been made. Lease-back transactions transform a loan into the purchase and sale of tangible property, and transfer the physical assets involved from the balance sheet of the operator and lessee to that of the owner and lessor, while leaving no trace of the lease payment obligations on the balance sheet of either lessee or lessor. (Since lease-back transactions do not give rise to the issuance or retirement of financial instruments, they are not included in the statistics on which this study is based.) No comprehensive data exist of the volume or terms of lease-back financing, but it was no doubt substantial compared to related forms of loan financing, i.e., private placements of corporate bonds and long-term loans of commercial banks.

The second innovation is embodied in the specialized credit arrangements developed for financing oil production, the construction of oil and gas pipelines, service stations, tankers, and the erection and operation of petro-chemical plants. These projects, mostly of large size and involving lease-back transactions or assignments of revenues in one form or another, were initiated largely by industrial groups and involved primarily direct financing by institutions, chiefly commercial banks, life insurance companies, and pension funds, without or with only delayed recourse to a public offering of securities.

[8] For postwar period, Table 71. For 1936–40, *25th Annual Report of the Securities and Exchange Commission*, Washington, 1959, pp. 222 and 226.

19. While it is not possible to mention minor changes in capital market techniques during the postwar period, it may be noted that most of them reflect two general tendencies. The first of these is an increasing flexibility in capital market instruments, such as repayment schedules and substitution of collateral. The motive and effect of these innovations were to tailor the contracts more and more closely to the specific requirements of certain groups of borrowers and lenders. The issuance of Treasury securities or finance company paper with maturity dates that coincide with corporate tax instalments is a simple example. Tax-exempt securities with unusually high or low initial or final coupons are a more complicated one.[9]

The second tendency is the substitution of professional for lay management of security portfolios and, more generally, of financial assets. Examples are the purchase of investment company securities or the participation in common trust funds instead of owner-management of small and medium-sized holdings; the substitution of investment advisory or trust department management of larger estates, both involving continuous supervision for a fee, instead of usually haphazard and discontinuous management by the owner or a casual adviser; or the use of Treasury bills and other more risky short-term securities in lieu of part of the large amounts of demand deposits in excess of day-to-day needs formerly held by the treasurers of large corporations.

Flow of Funds Through the Five Main Capital Market Sectors

An idea of the absolute and relative magnitude of the five sectors of the capital market with which this report deals may be gathered from the fact that, at the end of 1958, the amounts outstanding of these five generally marketable instruments amounted to $1004 billion, or almost one-half of the $2082 billion of financial assets then in existence in the United States. These five instruments showed a substantial increase in outstandings in the course of the postwar period, the annual rate of growth between 1945 and 1958 averaging 5.8 per cent. The share of the five instruments in total financial assets, however, remained unchanged at approximately one-half. Of the increase of $523 billion in the value of the five instruments outstanding, more than one-half reflected the sharp rise in stock prices during the second

[9] See Roland I. Robinson, *Postwar Market for State and Local Government Securities,* Princeton for NBER, 1960, pp. 112 ff.

part of the period. The net amount of funds raised through these five instruments amounted to only $246 billion, or nearly $20 billion a year.

TREASURY SECURITIES

The market for Treasury securities occupied a special, and particularly important, position in the American postwar capital market. Short-term Treasury securities came to constitute one of the most important forms of holding the liquid reserves of business and financial institutions, competing here primarily with demand and time deposits in commercial banks and with certain other short-term instruments. After World War II Treasury securities—primarily those of a maturity up to one year—became the balancing item in the portfolios not only of most financial institutions, but also of many large nonfinancial corporations. This means that Treasury securities are usually not the first choice of any substantial group of private investors, but are acquired when the assets in which financial institutions or nonfinancial corporations prefer to invest their funds are not available in sufficient amounts or on satisfactory terms, and that Treasury securities are liquidated when the demand for these other assets is high.

Only in the postwar period did this role of Treasury securities as the balancing item in the portfolios of most investor groups become evident, although a trend in that direction could be detected since World War I. The development, of course, was caused by the sharp increase during World War II in the volume of Treasury securities outstanding, both in absolute and relative terms.

While the amount of Treasury securities outstanding changed but little over the entire postwar period, three investor groups expanded their holdings substantially, both in absolute and relative terms: government insurance and pension funds, which absorbed $30 billion of Treasury securities, and thus increased their holdings by 125 per cent; state and local governments, whose net purchases of $6 billion enlarged their holdings by about 120 per cent; and foreigners, who tripled their holdings acquiring on balance fully $5 billion of Treasury securities. The Federal Reserve banks, although making net purchases of $2 billion, increased their holdings by only 9 per cent. Among domestic private financial institutions, only two groups added appreciably to their holdings: fire and casualty insurance companies, which increased their holdings by two-thirds by adding nearly $2¼ billion, and savings and loan associations which increased them by 60 per cent through net acquisition of less than $1½ billion of Treasury securities.

All these purchases were almost offset by the massive net sales of commercial banks, totaling more than $24 billion, or 27 per cent of their holdings, at the end of 1945; and of life insurance companies, which liquidated 65 per cent of their holdings at the beginning of the period by net sales of $13.5 billion of Treasury securities. Substantial sales, absolutely or relatively, were also made by mutual savings banks and nonfinancial corporations. The holdings of nonfarm households in 1958 were smaller by $1 billion compared to 1945, but this amounted to a relatively small decline of 2 per cent in their holdings.

The differences among investor groups were most pronounced in Cycle I when large liquidation of Treasury securities by banks and life insurance companies, totaling $18 billion and $5 billion for the full cycle, were absorbed almost exclusively by the U.S. government, either by retirement of securities or by acquisitions on behalf of its pension and insurance funds. The net sale or purchase balances of the different groups were smaller in Cycle II and still smaller in Cycle III. Government funds continued to be the main net buyers of Treasury securities, while life insurance companies and mutual savings banks were the main sellers, joined in Cycle III by commercial banks and nonfinancial corporations.

STATE AND LOCAL GOVERNMENT SECURITIES

The demand for state and local government securities during the postwar period was limited essentially to three investor groups—commercial banks, fire and casualty insurance companies, and individuals with high incomes—and depended on the funds available for investment by these groups, on interest rate differentials, and on income tax rates. The supply of tax-exempt securities, on the other hand, was mainly determined by the difference between the capital expenditures of the state and local government and their gross savings (current income minus current expenditure, excluding capital consumption allowances).

Of total net purchases of state and local government securities of $40 billion, households absorbed only 32 per cent, compared to their share in holdings of well over one-half at the beginning of the postwar period. More than 60 per cent of the net supply of state and local government securities remained to be absorbed by financial institutions. Commercial banks alone took more than 30 per cent and fire and casualty insurance companies 15 per cent; these are the two groups among financial institutions for which the tax exemption of state and local government securities is of the greatest value because their income is subject to the full corporate income tax.

Compared to the differences in the trend of holdings and net acquisitions of state and local government securities over the entire postwar period, differences in the distribution among the main holder groups from one of the three postwar cycles to another were moderate. Thus, the share of all financial institutions together in the net supply of state and local government securities in the three cycles varied only from 61 to 65 to 54 per cent. Variations were, of course, more pronounced for individual groups of financial institutions. Thus, the share of commercial banks declined from two-fifths of the total in the first cycle to only one-fifth in the third cycle, while that of fire and casualty insurance companies rose from one-twelfth in the first cycle to about one-sixth in the second and third cycles.[10]

CORPORATE BONDS

Between 1945 and 1958 the volume of corporate bonds more than tripled, from $27 to $89 billion, an average annual rate of increase of 9½ per cent; the intercyclical changes point toward an upward trend. Reflecting the substantial rate of growth of corporate bonds outstanding, the average annual increase rose from $3.6 billion in Cycle I to $4.2 billion in Cycle II and to $6.5 billion in Cycle III. The volume of new bond offerings, of course, was considerably higher because some of the new issues were used to retire outstanding issues. The ratio between net increase in bonds outstanding and bond offerings was two-thirds in 1946–49 and 1949–54 and three-fourths in 1954–58.

Of total bond offerings of about $90 billion, approximately 30 per cent each were issued by manufacturing companies and by electric and gas utilities. Communication enterprises, primarily the Bell system, accounted for 10 per cent, and the railroads for 5 per cent. The last fourth of corporate bond offerings was divided among finance companies, and real estate, trade, and miscellaneous corporations. The distribution of bond offerings among the main industries did not differ significantly from one cycle to the other.

Corporate bonds provided approximately one-tenth of total financ-

[10] State and local government securities are discussed in greater detail in Chapter 7.

ing, over one-fifth of external financing, and over one-fourth of debt financing of nonfinancial corporations. These ratios would be slightly higher if term loans by banks were included. The relative importance of corporate bonds as a means of financing was fairly stable during the three cycles, particularly if bonds are related to total net sources of funds.

The proportion of corporate bonds placed directly with institutional investors came close to one-half for the entire postwar period. It was highest, at slightly above 50 per cent, in Cycle II. Most industrial subdivisions followed the main pattern. The share of private placements, however, varied widely among industries, ranging from 3 per cent for railroads to about 90 per cent for other transportation. Of the two most important issuer groups, electric utilities had an average ratio of direct placements of about 30 per cent since many regulatory agencies prescribe offerings through competitive bidding, while direct placements accounted for almost two-thirds of the bond offerings of manufacturing corporations.

The outstanding characteristics of the distribution of net purchases of corporate bonds during the postwar period was the dominance of financial institutions. For the period as a whole, holdings of corporate bonds by financial institutions increased by $57 billion, while the total amount outstanding rose by $61 billion. Financial institutions absorbed only about three-fourths of the total increase in Cycle III after their purchases had been virtually as large as the entire increase in the supply in Cycles I and II.

Among financial institutions, the insurance sector was the predominant buyer of corporate bonds, and here again private life insurance companies were the decisive source of demand. For the entire postwar period the increase in the holdings by life insurance companies amounted to slightly more than one-half of the total increase in corporate bonds outstanding. Inclusion of private and government insurance funds brings the share to four-fifths of the total, and to about nine-tenths of the absorption of corporate bonds for all financial institutions. Net purchases by commercial banks were virtually nil, but at least part of their term loans are very similar in character to directly placed corporate bonds. If term loans with a maturity of more than five years are included, the share of commercial banks in the net issuance of corporate bonds would rise to about one-tenth of the total.[11]

[11] Corporate bonds are discussed in greater detail in Chapter 8.

COMMON STOCK

The market for common stock in the postwar period had two outstanding features. First, new common stock issues were remarkably small compared to the issuance of other capital market instruments, to the volume of internal and external finance of corporations, to the value of common stock outstanding, and to the total assets of most investor groups. Second, trading in common stock was very large, and the resulting shifts in the portfolios of the different investor groups were substantial and of considerable importance for the smooth functioning of the capital market.

Net issues of corporate stock from 1946 through 1958 amounted to nearly $34 billion (excluding $7 billion of investment company issues), of which $29 billion represented common stock. These figures include both marketable and nonmarketable issues of small and new corporations. The statistics of the Securities and Exchange Commission, which are limited to marketable issues, show stock issues of only $17 billion excluding investment companies.[12]

New issues of common stock showed a considerable upward trend throughout the postwar period, the annual average rising from $1.6 billion in Cycle I to $2.5 billion in Cycle II and $3.9 billion in Cycle III. This increase, however, was smaller than the expansion in the rate of absorption of other main capital market instruments, other than U.S. government securities, by investors. As a result, the share of common stock in the net issuance of the five main capital market instruments declined from one-fifth in Cycle I to one-ninth in Cycle II and it was one-seventh in Cycle III.

For the entire postwar period, common stocks provided 5 per cent of the total funds absorbed by all nonfinancial corporations and the ratio was approximately the same for all three cycles. In relation to total external financing, common stocks contributed about one-eighth, again without substantial changes among the three cycles. Common stocks supplied nearly three-fifths as large a volume of funds as corporate bonds did, and an even smaller proportion if bank term loans of five years' maturity or longer are included with bonds.

Stocks accounted for only 2 per cent of the aggregate financing of manufacturing and mining corporations, and 24 per cent of that of public utilities and communications, but contributed virtually nothing

[12] This does not include convertible bonds exchanged for common stock.

to the funds secured by corporations in transportation and trade. The share of stock in the external financing of these groups was similarly varied. It amounted to only 5 per cent for manufacturing and mining corporations, to 38 per cent among public utilities, and was negligible again for transportation and trade. Compared, finally, to the total of issuance of securities and long-term debt, stocks contributed 12 per cent for manufacturing and mining and 43 per cent for public utilities.

For the entire postwar period, financial institutions, other than the personal trust departments of commercial banks, had a net purchase balance of common stock of $14 billion, equal to nearly one-half of total net issues excluding that of investment companies which are rarely acquired by other financial institutions.

It may be more appropriate, however, to compare the $14 billion of net acquisition of common stock by financial institutions with the $17 billion [13] of new issues of marketable common stock (excluding investment company issues), since financial institutions acquire only relatively small amounts of the nonmarketable issues of small corporations. The share of financial institutions in the absorption of new marketable common stock issues, then, is nearly 80 per cent. Since stockholders other than financial institutions undoubtedly acquired a substantial proportion of the new marketable issues of common stock, particularly of those offered under subscription rights, other stockholders must, for the postwar period as a whole, have been net sellers to financial institutions of seasoned marketable common stock other than investment company issues.

Net purchases of common stock were concentrated in two groups of financial institutions—private pension plans and investment companies—which accounted for more than two-fifths and for nearly one-third, respectively, of all net institutional purchase of common stock.

The share of the net purchases of common stock by institutions increased very markedly over the postwar period. While net institutional purchases were equal to more than two-fifths of net new marketable common stock issues (other than those of investment companies) in Cycle I, they rose to one-half in Cycle II, and advanced further to about four-fifths in Cycle III.

The predominance of financial institutions as net buyers of marketable common stock other than investment company issues is still more dramatically illustrated by the fact that net noninstitutional

[13] This figure includes cash issue alone and not the common stock issue resulting from bond conversion.

absorption of such securities averaged only $0.6 billion a year over the postwar period, and that, contrary to most capital market measures, this absorption did not increase from cycle to cycle.

Although little is known definitely about net purchases and sales of common stock, and hence about shifts of holdings, among groups of domestic individual investors, there are some indications that investors of moderate means and in the younger age groups made net acquisitions while large and older investors had either no net purchase balance or a net sales balance. The shift involved is probably small compared to the total value of total stock outstanding and is not likely to have changed the degree of concentration of ownership of common stock substantially. Both in 1958 and in 1945 a very large proportion of all common stock was in the hands of a relatively small proportion of families.

For the period 1946–58 aggregate net purchases of common stock of all types represented 3 per cent of total nonfarm households' savings. Net purchases of marketable common stock alone were equivalent to 2 per cent of individual saving. Exclusion of investment company stock reduces the share to 1 per cent. Net purchases of common stock of whichever scope thus constituted only a minor outlet of all current saving for all individuals taken together.[14]

RESIDENTIAL MORTGAGES

The flow of capital funds in the market for residential mortgages during the postwar period is characterized by five developments: (1) the extraordinarily rapid rise of the volume of residential mortgage debt, slowed only from 1951 to 1953 because of the Korean War and government limitations on residential construction and mortgage lending; (2) a persistent rise in interest rates; (3) a marked increase in the position of financial institutions as mortgage lenders; (4) the pervasive influence of the federal government on many aspects of the market and the resulting tendency toward standardization of many aspects of the residential mortgage as a capital market instrument; (5) the development of new techniques adapted to the special environment created by government interference and institutionalization.

Between the end of 1945, when the residential mortgage debt was not higher than in the mid-1920's, and 1958, the total mortgage debt on residential real estate increased from $23 to $133 billion. The rate

[14] Common stock is discussed in greater detail in Chapter 9.

of increase of $14\frac{1}{2}$ per cent per year was one of the highest, and the absolute increase in the volume of residential mortgages of $110 billion was by far the largest, among the main capital market instruments.

Life insurance companies and mutual savings banks were the main buyers of insured home mortgages, each accounting for more than one-fourth of the total. Commercial banks and savings and loan associations followed with about one-seventh and one-fifth, respectively, and federal agencies with about one-twelfth. This left not much for all other holders. Savings and loan associations were by far the most important lenders on uninsured home mortgages, accounting for more than one-half of the total. Commercial banks and life insurance companies have followed at a great distance, holding about 15 per cent of the total each. Noninstitutional lenders are credited with one-eighth of all uninsured home mortgages, a considerable part of which was represented by junior liens. Mutual savings banks were the most important factor in the market for multifamily mortgages, absorbing over one-third of the postwar period total. Life insurance companies and noninstitutional lenders absorbed one-fifth each, and savings and loan associations supplied one-sixth of the funds to this market.

The main change in the sources of funds for residential mortgages during the postwar period is the high share of life insurance companies during the first part, particularly 1948–51, of commercial banks particularly in 1946–47, and of savings and loan associations particularly during the second part of the period. In 1948–51 life insurance companies absorbed about 30 per cent of total net residential mortgage loans, savings and loan associations less than 25 per cent, and commercial banks about 15 per cent. From 1952 through 1958, on the other hand, life insurance companies accounted for under 20 per cent of the absorption of residential mortgages, their share even declining to 10 per cent in 1957–58, while savings and loan associations increased their share to an average of over 40 per cent and to nearly one-half in 1957–58.