Changes in Financial Intermediation: The Role of Pension and Mutual Funds

By Gordon H. Sellon, Jr.

Since the late 1970s, the U.S. financial system has undergone considerable stress. Many traditional intermediaries, such as thrifts, banks, life insurance companies, and investment banks, have suffered large losses and some have failed. Most analyses of these problems have focused on the difficulties of these institutions in adapting to the inflationary environment of the 1970s and 1980s.

Some of the problems of these traditional intermediaries have deeper roots, however. Over the postwar period, the rapid growth of pension and mutual funds has increased competition for household savings. While competition has opened up new business opportunities for some traditional intermediaries, it has undermined the profitability of others. As a result, many traditional intermediaries have been forced to adapt to new roles in the financial system.

This article examines the impact of pension and mutual funds on the postwar financial system. Recognizing their influence is important both for understanding the causes of recent financial problems and for deciding what regulatory changes might be appropriate to ensure the future health of the financial system.

The first section of the article describes the growth of pension and mutual funds over the postwar period and their increasing importance in the financial system. The second section examines how their success has undermined or enhanced the fortunes of traditional intermediaries. The third section describes how pension and mutual funds have affected the overall intermediation process and examines some of the implications for financial regulation.

THE RISE OF PENSION AND MUTUAL FUNDS

By offering greater portfolio diversification and professional investment management, pension and mutual funds have dramatically altered the investment options available to the individual investor. Their success is reflected in a shift away from traditional forms of intermediation and a significant restructuring of household balance sheets.

Features of pension and mutual funds

In the early 1950s, individual investors faced very limited investment options. Most households placed their savings in deposits at banks and thrifts or in life insurance policies that combined insurance with low-interest savings. Wealthier individ-

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uals also bought corporate stocks and bonds. However, purchases of the stocks and bonds of individual companies required considerable sophistication by the investor or reliance on the research and investment advice of the investment banks providing brokerage services.

Pension and mutual funds substantially altered the investment landscape. By pooling funds from a large number of investors to purchase a diversified portfolio of assets, pension and mutual funds provide individual investors with a low-cost method of diversifying their asset portfolio. For example, pension funds combine employer and employee retirement contributions to purchase a large portfolio of stocks and bonds. Mutual funds allow individual investors to purchase shares of the fund that represent ownership interests in a large pool of assets selected by the fund. This proportional ownership allows investors with limited funds the opportunity to purchase assets that are available only in large denominations.

Another important feature of pension and mutual funds is professional management. Because the choice of individual assets in a fund is the responsibility of investment advisors or fund managers, individual investors can participate in a broad range of investments without the need for detailed knowledge of the individual companies issuing the stocks and bonds.

Despite these general similarities, pension and mutual funds have significant differences. Most importantly, pension plans have a fiduciary responsibility to deliver promised pension benefits and are subject to extensive federal and state regulation. These restrictions play a major role in guiding the investment decisions of pension plans. Moreover, because they are retirement oriented, pension plans invest almost exclusively in corporate stock and long-term corporate and government bonds.

In contrast, mutual fund investment policies are driven more by market forces than by restrictions or preferences of sponsoring organizations. Firms selling mutual funds derive their profitability mostly from the size of funds under their management. Thus, they tend to offer a wide range of investment options to maximize the amount of funds under their management. Mutual funds are also subject to fewer regulations than pension funds. Their principal regulatory requirement is that they adequately inform investors as to the risks and expenses associated with investment in specific funds.[1] Finally, unlike pension plans, most mutual funds are not retirement oriented. Thus, investment inflows and outflows are more uncertain and liquidity management is a more important part of investment decisions than in the case of pension funds.

Growth and development

Pension and mutual funds have experienced strong growth over the postwar period. Much of the increase in pension fund assets has been channeled into the stock market. In contrast, while mutual funds originally focused on stocks, much of their recent growth can be attributed to funds specializing in money market and other fixed income assets.

Pension fund growth over the postwar period has been due to increased pension coverage and increased value of contributions.[2] At the end of the Second World War, there were relatively few pension plans. Much of the increase in pension fund assets during the 1950s and 1960s resulted from the creation of new plans as retirement benefits became an important part of collective bargaining and other salary negotiations (Munnell, pp. 7-13). Indeed, the proportion of the labor force covered by private employer plans doubled from 15 percent in 1950 to 31 percent in 1970 (Kotlikoff and Smith, Woods). Since 1970, the formation of new employer plans has slowed, and recent growth in pension assets has tended to result from an increased value of contributions rather than from expanded coverage.[3]

While all types of pension plans have experienced strong growth in the postwar period, the

pattern of growth has differed according to the type of plan. During the 1950s, 1960s, and early 1970s, much of the increase in pension assets resulted from the expansion of private pension plans. Since the late 1970s, however, growth in private plans has slowed, while state and local plans and insured pension plans have accelerated (Chart 1).[4]

Federal tax policy has been a principal factor behind pension fund growth (Munnell, pp. 30-61). Federal tax law permits the deduction of employer pension contributions. In addition, neither employee contributions nor interest on pension assets are currently taxable to employees, and taxes are deferred until retirement. Thus, there are significant economic incentives for employers to pay benefits in the form of pension contributions and for individuals to save through a pension plan rather than through a taxable form of saving.

Pension plan investment policies have undergone considerable changes over the postwar period. Because of their commitments to pay retirement benefits, pension plans have concentrated their investments in long-term assets. At the beginning of the postwar period, pension plans held mostly bonds that had been acquired during the Second World War. During the 1950s and 1960s, the strong performance of the stock market offered much higher returns, and stocks became a more important part of the investment portfolio (Chart 2).[5]

This increased emphasis on stocks, coupled with strong growth in the size of pension funds, has made pension funds a sizable force in the stock market. Indeed, in 1952, pension funds held only 1 percent of corporate stock outstanding; by the end of 1991, they held 25 percent.

Mutual funds have also become more prominent in the postwar period. Initially, growth was due almost entirely to savings flowing into equity funds. Indeed, over the 1952-70 period, mutual funds held an average of 87 percent of assets in stocks. Growth was particularly strong from the late 1950s to late 1960s as a booming stock market attracted considerable investor interest. However, the enormous increase in stock transaction volume in the late 1960s led to back-office problems at brokerage firms that prevented many investors from completing stock purchases and sales. Partly as a result of these problems, individual investors abandoned the stock market, causing equity holdings by mutual funds to fall throughout the 1970s (Chart 3).[6]

The mutual fund industry responded to this decline in business by diversifying its investment offerings. The industry created money market mutual funds in the early 1970s in an attempt to capture funds moving out of the stock market. The initial modest success of money funds was followed by explosive growth in the late 1970s (Chart 3). Investors discovered that money funds were an attractive alternative, not to stocks, but to bank and thrift deposits when market interest rates rose above the regulated rates paid by banks and thrifts.

The success of money funds led to the development of additional types of fixed-income funds such as tax-exempt municipal bond funds in the late 1970s and junk bond funds in the 1980s. While equity purchases resumed as the stock market revived in the 1980s, money market and other fixed-income assets accounted for much of the growth in mutual fund assets during the 1980s (Chart 3).

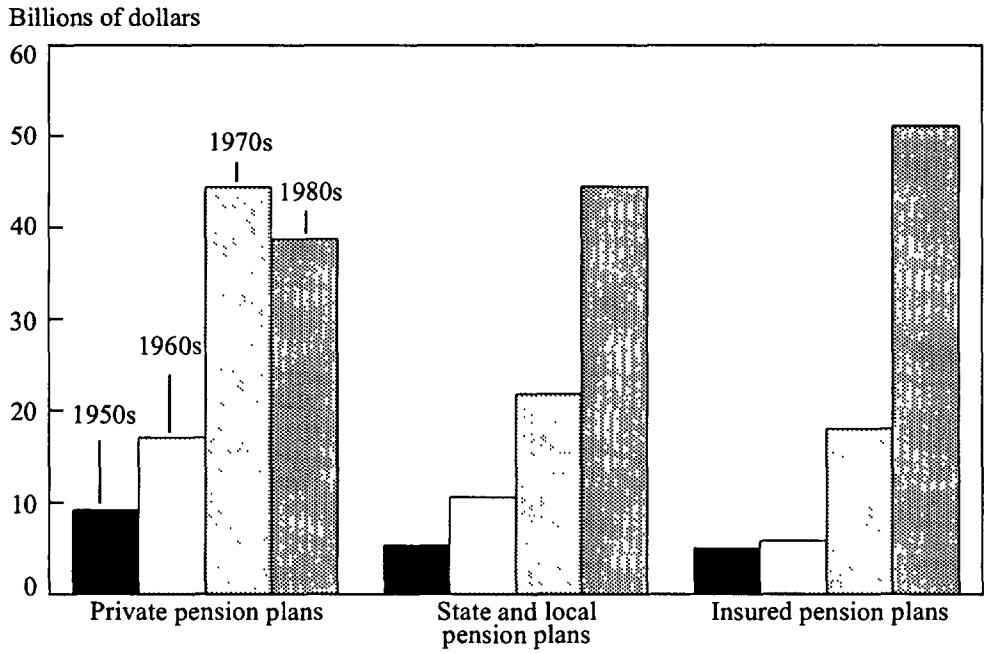
The growth of money funds and fixed-income funds has reduced the concentration of stocks in mutual funds portfolios. Thus, while stocks made up almost 90 percent of fund portfolios in 1970, the proportion had fallen to 29 percent in 1991. Still, over the entire postwar period, mutual funds, like pension funds, have become a greater force in the stock market. While mutual funds held only 2 percent of outstanding corporate stock in 1952, by 1991 this share had risen to 9 percent.

Effects on household balance sheets

The impressive growth of pension and mutual funds over the postwar period has led them to take on expanded significance in the financial system. One measure of their impact can be found by

Chart 1

Growth of Pension Plans



Note: Mean net acquistion of real financial assets by decade.
Source: Flow of Funds Accounts, Federal Reserve System.

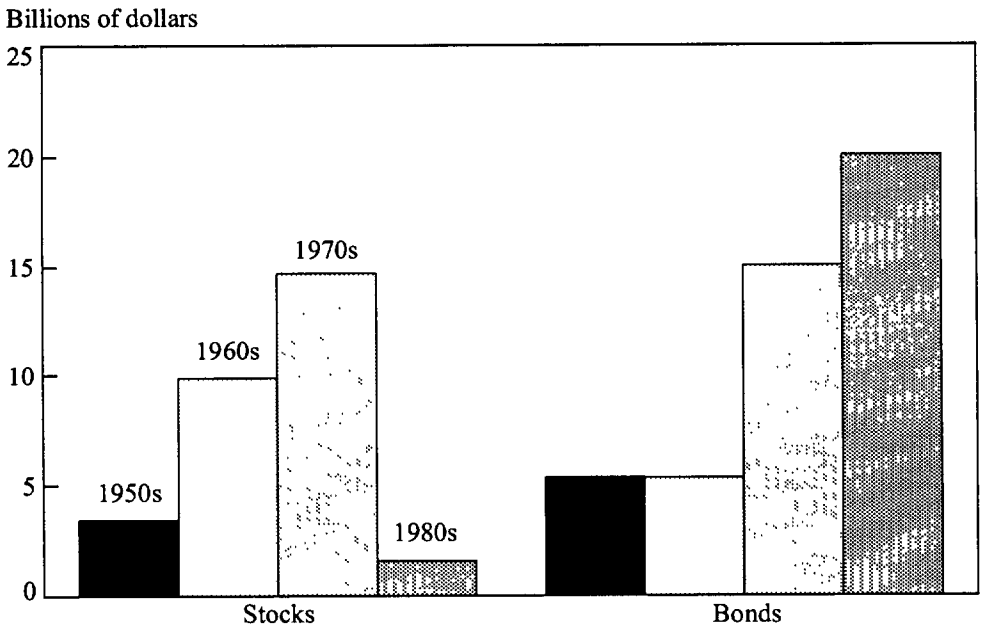
looking at the changes in household savings patterns.[7] In the early 1950s, pension and mutual funds played a relatively small role in household savings decisions. For example, in 1952, households held only 6 percent of their financial assets in pension funds and less than 1 percent in mutual funds.[8] By 1991, however, households placed 27 percent of their financial assets in pension funds and nearly 10 percent in mutual funds.

The growing share of pension and mutual funds in household assets has clearly affected other forms of saving. Broadly speaking, households have three types of savings options: direct holdings of securities (stocks and bonds), indirect holdings of securities (through pension and mutual funds), and holdings of liabilities of traditional intermediaries (banks, thrifts, and insurance companies). Over the postwar period, there has been a pronounced shift in household savings patterns away from direct holdings of securities and liabilities of traditional intermediaries toward indirect holdings of assets through pension and mutual funds (Chart 4).[9]

The gains by pension and mutual funds have come at the expense of a wide range of other financial assets (Chart 5). Over the postwar period, households have significantly reduced their direct holdings of stocks and purchases of life insurance. Thus, direct holdings of stock fell from 32 percent of household financial assets in 1952 to 18.5 percent in 1991. Similarly, life insurance declined from 12 percent of household financial assets in 1952 to only 3 percent in 1991. Households also reduced the

Chart 2

Assets of Private Pension Plans



Note: Mean net acquistion of real financial assets by decade.
Source: Flow of Funds Accounts, Federal Reserve System.

shares of bonds and bank and thrift deposits in their portfolios, by somewhat smaller amounts.

CHALLENGES TO TRADITIONAL INTERMEDIARIES

By altering the allocation of household savings, pension and mutual funds have affected the health and viability of many traditional intermediaries. Some intermediaries have been hurt by a loss of market share and reduced profitability, while others have benefited by providing financial services to pension and mutual funds. The impact has varied greatly across institutions because of functional specialization imposed by regulation and by industry practice.

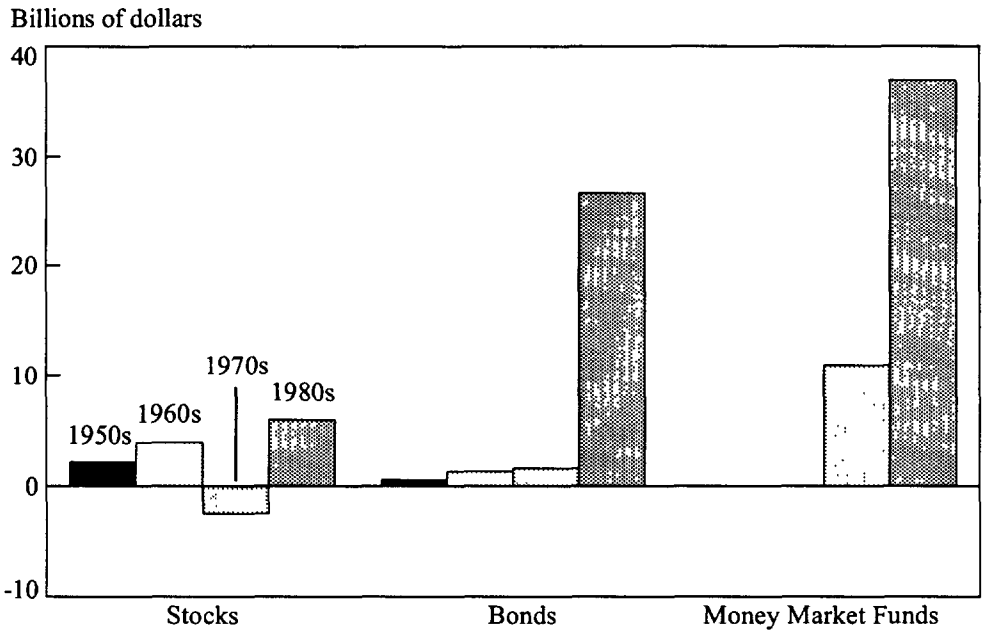
The role of specialization

The financial system of the early 1950s was highly specialized. Intermediaries performed a narrow range of functions and faced limited competition within and across industry lines. This specialization was partly due to the historical development of the financial services industry but more importantly to the financial regulatory structure set up during the 1930s. Because of this specialization, traditional intermediaries were affected very differently by the growth of pension and mutual funds.

At the beginning of the postwar period, there were four major types of financial intermediaries, each with a well-defined role in the financial system. While banks, thrifts, and life insurance com-

Chart 3

Mutual Fund Assets



Note: Mean net acquistion of real financial assets by decade.
Source: Flow of Funds Accounts, Federal Reserve System.

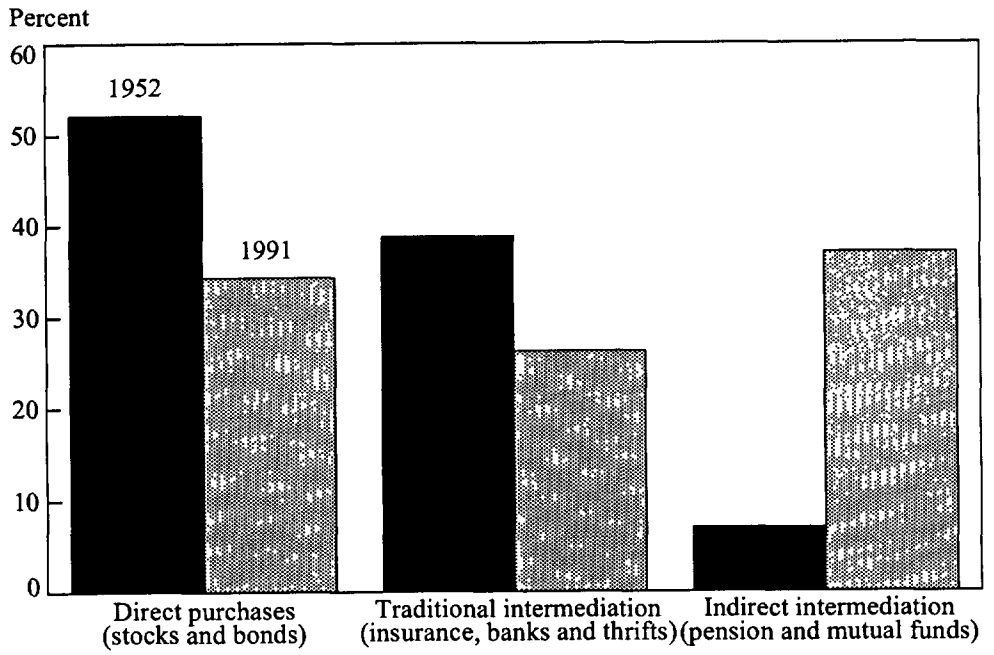
panies were very similar in the way they attracted household savings through deposits or deposit-like insurance products, they had very different investment objectives. For example, life insurance companies channeled most of their funds into long-term corporate bonds, whereas banks concentrated on short-term business lending and thrifts specialized in home mortgage lending. In contrast, investment banks played a much different role in the intermediation process. Rather than attracting household savings and investing in other sectors of the economy, investment banks handled the underwriting of new corporate stock and bond issues and the distribution of these securities to households.

This specialization was shaped both by the historical evolution of these intermediaries and by government regulation. For example, banks had traditionally focused on short-term business lending and thrifts on home mortgage lending. More significant, however, was the regulatory structure set up during the Depression. In an attempt to prevent a reoccurrence of the financial crises of the 1930s, intermediaries were locked into narrow roles and competition was greatly restricted both within industries and across industry lines (Huertas).

One of the more significant restrictions was the separation of commercial and investment banking. Prior to the 1930s, commercial banking and investment banking operations were generally performed within a single organization. Following the Depression, these functions were legally separated. Commercial banks were not permitted to underwrite or distribute corporate stock and

Chart 4

Intermediation of Household Saving



Note: The chart shows each category as a percent of household financial assets.
Source: Flow of Funds Accounts, Federal Reserve System.

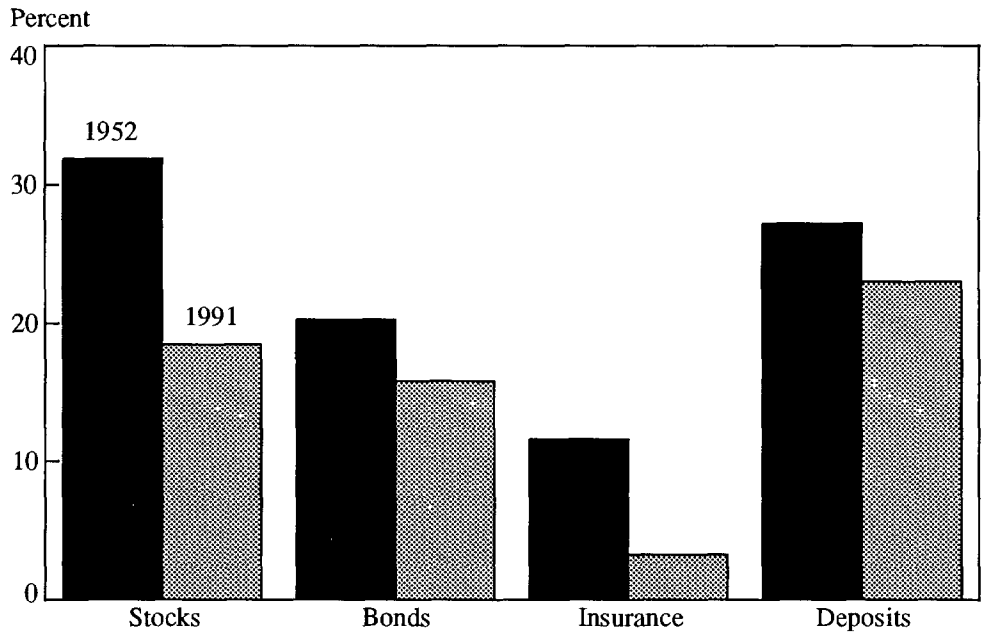
bonds and were forbidden to hold corporate stock in their investment portfolio. Investment banks, in turn, were not allowed to accept household deposits and make commercial loans. The effect of these restrictions was to artificially separate long-term and short-term corporate finance. Businesses could borrow short-term funds only from commercial banks and could obtain long-term funding only through investment banks.

Regulation also limited the activities of life insurance companies and thrift institutions. Although life insurance companies were the largest single purchaser of corporate debt, state insurance regulations prohibited significant investment in corporate equity. Thrift institutions could not make commercial or consumer loans and were forced to specialize in long-term, fixed-rate home mortgages.

Specialization was further promoted by restrictions on competition resulting from additional regulation and industry practice. For example, competition among banks and thrifts was limited by legal restrictions on branching and by deposit interest rate ceilings. In contrast, in the less-regulated investment banking industry, competition was restricted by industry practice (Hayes, Spence, and Marks). The industry consisted of a small number of "wholesale" firms that exercised tight control over the underwriting of new stock and bond issues and a much larger number of "retail" brokerage firms that distributed securities to investors through extensive branch networks. Traditional industry practice dictated that the two types of firms did not compete in each

Chart 5

Declining Shares of Household Saving



Note: The chart shows components of the categories "Direct Purchases" and "Traditional Intermediation" in Chart 4.
Source: Flow of Funds Accounts, Federal Reserve System.

other's line of business.

This specialization shaped the impact of pension and mutual funds on traditional intermediaries. For some intermediaries, pension and mutual funds posed a competitive threat that undermined the profitability of their specialized franchise. Thus, faced with a shift of household funds to pension and mutual funds, some intermediaries were forced to reduce the prices of their services or raise the rates paid on their liabilities. Profitability of some intermediaries was also threatened to the extent that businesses could sell debt directly to pension and mutual funds rather than relying on lending by traditional intermediaries.

At the same time, other traditional intermediaries benefited from the growth of pension and mutual funds. The sheer size of the funds made them an attractive market for traditional intermediaries providing investment management and advice, trading expertise, and risk-management services. Moreover, the profitability of the mutual fund industry made it an attractive target for intermediaries forced to seek new lines of business.

Impact on traditional intermediaries

The growth of pension and mutual funds has affected a wide range of traditional intermediaries. The impact on individual intermediaries has depended both on their specialization and on their ability to adapt to these changes. Generally speaking, the life insurance industry has benefited most from the success of pension and mutual funds

while banks and thrifts have been adversely affected. The impact on the investment banking industry has been mixed. Smaller retail firms have been hurt, while larger retail firms and wholesale firms have gained.

Investment banking. The growth of pension and mutual funds has had its most direct and visible effect on the investment banking industry. By affecting both the volume of stock transactions by individual investors and industry pricing practices, pension and mutual funds have undermined the profitability of the retail portion of the investment banking industry. The result has been increased consolidation among smaller retail firms and increased competition between retail and wholesale firms. At the same time, however, larger retail firms and wholesale firms have successfully adapted to these challenges by reorienting their business from the individual to the institutional investor.

The postwar period has seen a significant reduction in the participation of individual investors in the stock market (Chart 6). In 1952, for example, households held 91 percent of corporate stock outstanding, largely because of the restrictions on stock holdings by banks, thrifts, and life insurance companies cited above. By 1991, however, the share of stock held by individuals had fallen to 53 percent. In contrast, the share of stock held by pension and mutual funds rose from 3 percent in 1952 to 34 percent in 1991. Even more dramatically, households have been net sellers of stock in all but one year since 1958.

The declining role of individual investors in the stock market has reduced the profitability of brokerage firms catering to individual investors. Reduced trading volume has lowered the commission income of these retail firms, making it more difficult for them to support the large overhead costs of providing research and investment advisory services to individual investors. In contrast, wholesale firms, which are much less dependent on trading volume, have been less affected by this shift in stock buying patterns.

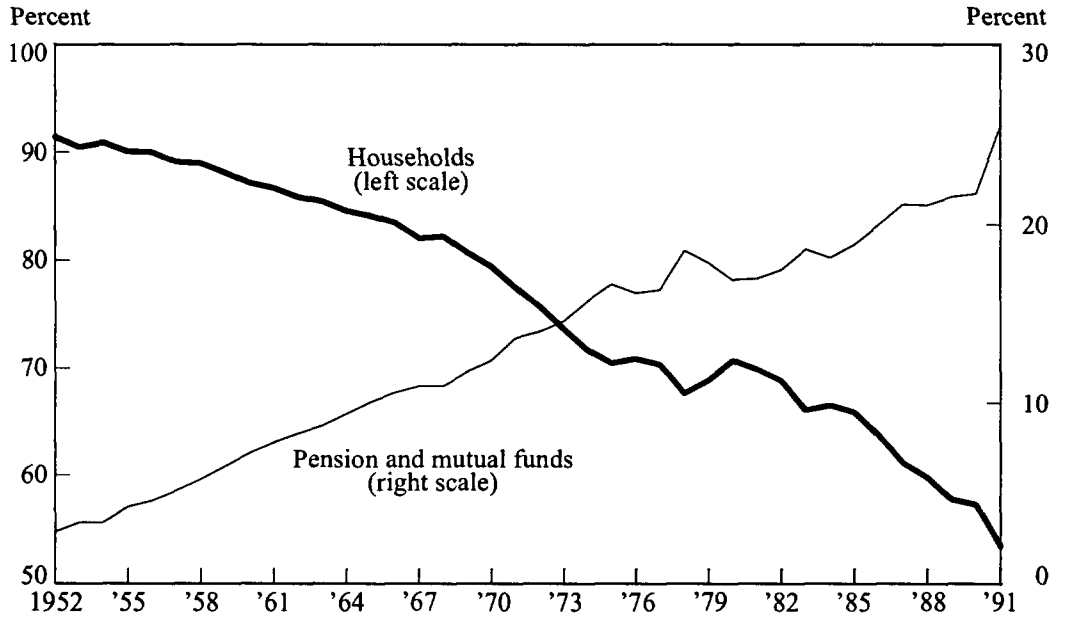
Pension and mutual funds have also altered the commission structure of the stock market (Seligman, pp. 466-86). The New York Stock Exchange (NYSE) traditionally employed a fixed-commission fee structure, with no volume discounts. But pension and mutual funds wanted lower fees based on the large volume of their transactions. In addition, these funds did not want to pay for research and investment advisory services geared toward the individual investor. Responding to pressure from pension and mutual funds that began moving their business away from the NYSE as well as political pressure to lower rates for individual investors, the SEC deregulated NYSE commissions in 1975. Pension and mutual funds as well as individual investors who used newly created discount brokerage firms benefited greatly from this change. However, many traditional retail brokerage firms with a large investment in research and investment advisory services saw their profitability erode even further.

The retail portion of the investment banking industry adjusted to these changes through consolidation and diversification (Hayes, Auerbach, and Hayes, pp. 81-107). During the 1970s, many smaller brokerage firms failed or were merged into stronger firms. Larger retail firms diversified their operations by moving into such areas as underwriting that had traditionally been reserved for wholesale firms. Still others set up mutual funds in an attempt to recapture the business of individual investors.

Reflecting the changes in household portfolios, the investment banking industry also shifted its emphasis away from the individual investor toward providing services for pension and mutual funds. Many firms discovered new profit opportunities in providing trading expertise and risk-management products and advice. Thus, the industry played an important role in the development and use of new products like swaps and options designed to control the risk exposure of pension and mutual fund portfolios (Warshawsky).

Chart 6

Holdings of Corporate Equity



Source: Flow of Funds Accounts, Federal Reserve System.

The investment banking industry has been able to adapt to these changes because of the relative absence of regulatory restrictions preventing the development of new lines of business. As the least regulated of traditional intermediaries, investment banks have been able to offer new products and services without the need for extensive changes in regulations and legislation.

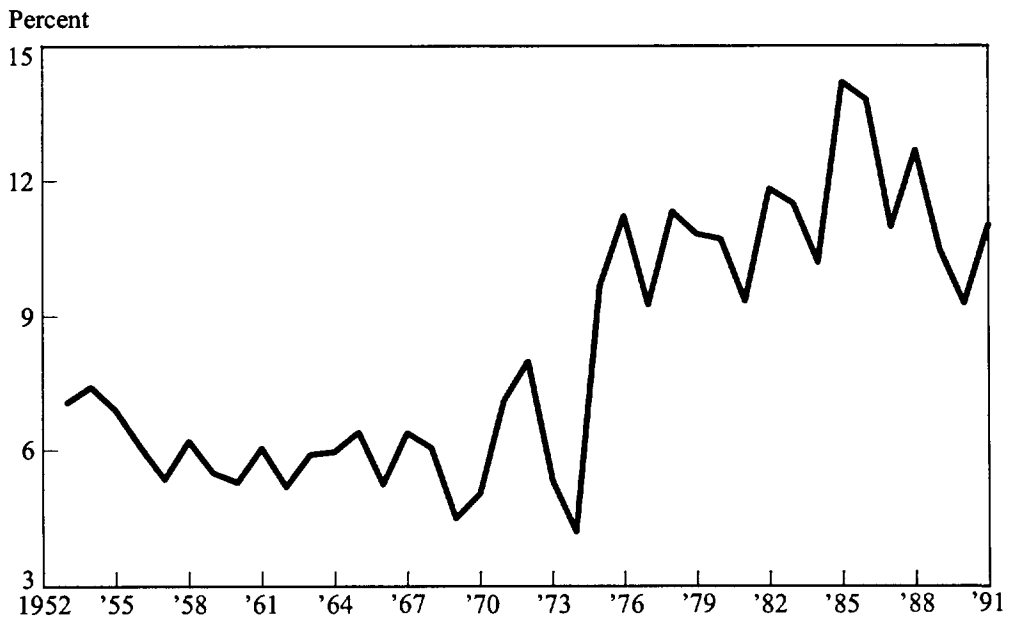
Life insurance companies. The life insurance industry has generally benefited from the growth of pension and mutual funds. By managing increasing amounts of pension fund assets, life insurance companies have been able to offset sluggish growth in household demand for traditional life insurance products. However, the ability of the life insurance industry to adapt to this new market has been slowed by continued regulatory restrictions on equity holdings.

Like stock holdings, the share of life insurance in household portfolios has declined significantly over the postwar period (Chart 5). Unlike stocks, however, the reduced share resulted from slow growth of life insurance products rather than from an outright reduction in investor holdings. This weakness reflects a consumer shift away from traditional life insurance products (insurance combined with savings) toward term insurance and investment in other higher yielding financial assets. During the 1950s and 1960s, this weak demand for life insurance products translated into very slow growth in industry assets.

Beginning in the mid-1970s, however, growth in industry assets accelerated sharply (Chart 7). Most of this increase was due to rapid growth in

Chart 7

Growth of Life Insurance Company Assets



Source: Flow of Funds Accounts, Federal Reserve System.

assets of private pension funds managed by life insurance companies. As a result, management of pension fund assets has now replaced sale of life insurance as the principal business of the life insurance industry (Chart 8).

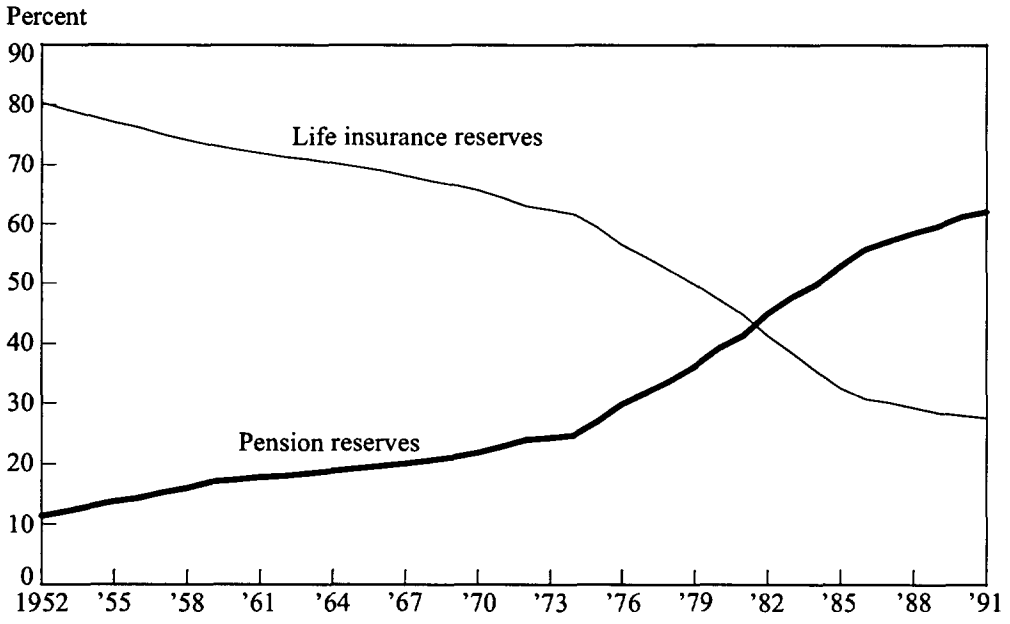
Growth in pension assets was stimulated by changes in pension and tax laws. A key factor behind this growth was a 1974 revision in pension fund laws that encouraged pension funds to turn over fund management to life insurance companies and extended pension plan eligibility to the self-employed.[10] Asset growth was also boosted during the 1980s by tax law changes which encouraged the establishment of pension plans and IRAs for the self-employed as well as the sale of tax-deferred annuities to individuals.

Thus, like the investment banking industry, the life insurance industry has adjusted to the changing demand for its traditional products by diversifying into other financial services. In addition to managing pension fund assets, many larger life insurance companies have sponsored mutual funds and some have purchased investment banking firms.

However, unlike investment banking, the ability of the life insurance industry to adapt has been slowed by a regulatory environment that has not kept pace with these changes. Most significant have been restrictions on equity holdings. As noted earlier, life insurance companies have been strictly limited in the amount of corporate stock held in their investment portfolio. Currently, a maximum of 10 percent of the portfolio can be invested in equity. Some relief has come in the

Chart 8

The Changing Emphasis of Life Insurance Companies



Note: Life insurance and pension reserves are expressed as a percentage of life insurance company liabilities.
Source: Flow of Funds Accounts, Federal Reserve System.

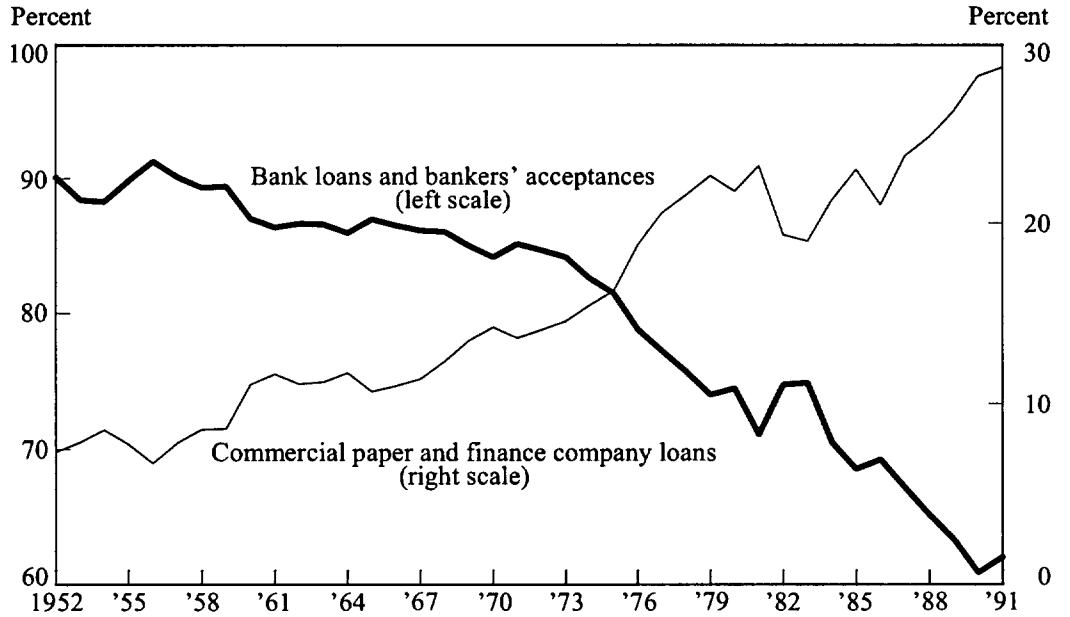
creation of "separate accounts," which allow pension fund assets to be segregated from the investment portfolio and invested exclusively in equity or other high-yield assets. Still, life insurance companies have been at a disadvantage when competing with other managers of pension fund assets, such as bank trust departments, which do not face similar portfolio restrictions.[11]

Depository institutions. In contrast to life insurance companies, banks and thrifts have been adversely affected by the growth of pension and mutual funds. Profitability has been squeezed by direct competition with money market funds. Pension and mutual funds have also supported the growth of alternatives to traditional bank and thrift lending. Moveover, as the most highly regulated intermediaries, banks and thrifts have had considerable difficulty in adjusting to these changes in the competitive environment.

The development of money market funds in the early 1970s fundamentally changed the market for consumer deposits. Prior to money market funds, deposit markets were local; that is, banks and thrifts relied on local deposits to make local loans. Competition for deposits was severely limited by branching laws and by interest rate ceilings on deposits. Money funds increased competition for deposits by attracting funds away from banks and thrifts that did not pay competitive market rates on deposits. Money funds were also the primary stimulus to the deregulation of deposit interest-rate ceilings in the early 1980s. For many depository institutions, competition with money market funds resulted in a higher cost of funding

Chart 9

Banks Declining Share of Short-Term Business Credit



Source: Flow of Funds Accounts, Federal Reserve System.

and lower profitability.

Money market funds have also undermined the profitability of banks' short-term business lending by supporting the expansion of the commercial paper market. Large corporations can issue commercial paper as an inexpensive alternative to bank lending. In addition, smaller firms can borrow from finance companies which obtain much of their short-term funding in the commercial paper market. Over the postwar period, banks' share of the market for short-term business credit has declined dramatically as businesses have increasingly turned to finance company loans and direct issuance of commercial paper (Chart 9).[12]

Since the late 1970s and early 1980s, much of the large inflow of household savings into money market funds has been channeled into the purchase of commercial paper. Indeed, money funds currently hold 36 percent of their assets in commercial paper and 34 percent of all commercial paper outstanding. By purchasing large amounts of commercial paper, money funds have supported these alternatives to bank lending.

Pension and mutual funds have also played a key role in the securitization of mortgage and consumer loans. Securitization began in the 1970s with the development of the government-sponsored market for mortgage-backed securities (Sellon and Van Nahmen). The basic idea behind mortgage securitization was to package individual, illiquid mortgage loans held by thrifts into marketable securities. These securities could then be sold to investors such as pension funds, mutual funds, and life insurance companies to increase the

flow of funds into housing. The success of mortgage-backed securities led to the securitization of consumer loans in the mid-1980s. Thus, individual consumer loans held by banks and finance companies were repackaged into marketable securities to be sold to investors.[13]

Like the expansion of the commercial paper market, the securitization of consumer and mortgage loans has put additional pressure on bank and thrift profitability. As additional funds have flowed from pension and mutual funds into housing and consumer finance, returns to these types of lending have been lowered, reducing bank and thrift profitability.[14]

Squeezed by a higher cost of funds, lower returns to lending, and declining market share, banks and thrifts have been pushed to seek new lines of business. Thrift institutions were permitted broader lending powers as part of the deregulation process in the early 1980s and began making increasing amounts of commercial and consumer loans. Banks responded to a loss of market share in short-term business lending partly by moving into other types of lending and partly by moving back into a limited range of permissible investment banking activities. Thus, banks increased their real estate lending and have attempted to offer a broader range of financial services, including underwriting and distributing securities, sponsoring mutual funds, and selling insurance products.

Strict regulation has limited the ability of banks and thrifts to adjust to these challenges. Large losses on new types of lending by thrifts led to a reversal of the deregulation process and a return to mandated specialization in mortgage lending. The ability of banks to adapt has also been slowed by loan losses and concerns over the solvency of the bank insurance fund. Indeed, when presented with a package of deposit insurance reforms and expanded bank powers in 1991, Congress approved measures to protect the deposit insurance system but declined to approve new bank powers and activities.

IMPLICATIONS FOR FINANCIAL INTERMEDIATION AND REGULATION

Beyond their impact on individual intermediaries, pension and mutual funds have been responsible for broader changes in the intermediation process. The growth of pension and mutual funds has helped expand investment and borrowing options for households and firms and has enhanced the efficiency of financial intermediation. But, by altering the roles of traditional intermediaries, pension and mutual funds have also contributed to the increased instability of financial markets in recent years. These changes in the intermediation process raise important questions about the future regulation of financial institutions.

Changes in the intermediation process

As discussed in the preceding section, the postwar financial system was highly structured and highly regulated. Enforced specialization and limited competition promoted the primary goal of financial regulation—to eliminate a repeat of the financial crises of the 1930s. The emphasis on stability had two important costs, however. First, households and firms had a narrow range of investment and borrowing options. Second, the system was inefficient because regulation prevented household savings from flowing to the best investment projects, raising the overall cost of financial intermediation.

The growth of pension and mutual funds has helped overcome both of these limitations. On the one hand, the range of investment and borrowing options has expanded. Through pension and mutual funds, individual investors have access to a wider and more diversified set of investment opportunities. Similarly, firms have a greater range of borrowing options, especially for short-term finance.

At the same time, pension and mutual funds have helped make the intermediation process more efficient. Previously, deposit and capital

markets were artificially separated by restrictions on intermediary activities and location. As a consequence, deposit and lending rates differed across regions and were not closely tied to capital market rates. Now, however, competition from the commercial paper market and the securitization of mortgage and consumer loans have tied loan rates more closely to capital market rates. And, the development of money market funds has made deposit rates more responsive to capital market rates. As a result, household savings flow more readily to the best investment opportunities, improving the efficiency of the intermediation process.

The cost of these gains, however, has been a more fragile, less stable financial system. Since the 1970s, failures of traditional intermediaries have increased sharply, and failures of thrifts and banks have been at the highest levels since the 1930s.

While it would be too simplistic to attribute these failures directly to the growth of pension and mutual funds, it would be equally naive to ignore the relationship. Increased competition spawned by the growth of pension and mutual funds has contributed to lower profitability of traditional intermediaries, making them more vulnerable to external shocks. Thus, for example, a depository institution whose capital has been eroded by competitive pressures on profits is less likely to withstand unexpected loan losses or unfavorable interest rate movements. Lower capital also increases the incentive for risk-taking by those intermediates whose liabilities are government-insured. In addition, lower profitability and loss of market share give traditional intermediaries a strong incentive to seek new lines of business. To the extent that the risks of these new activities are not recognized and managed, losses on these activities may increase the likelihood of failure.[15]

Implications for financial regulation

The recurring financial crises in recent years have led to renewed debate about the regulation of financial intermediaries. One issue is whether the deregulation process that began in the 1970s should continue or, perhaps, be reversed. A related issue is whether regulation should be harmonized across intermediaries that provide similar financial services.

Financial intermediaries have traditionally been subject to more regulations than other businesses. Some regulation stems from the fiduciary responsibilities of intermediaries entrusted with the savings of less-sophisticated investors. Other regulation comes from the disruptive effects of financial panics and crises on economic activity. Thus, where failures of ordinary businesses might be tolerated and even encouraged as part of the normal working of competitive markets, failures of financial intermediaries have been seen as more costly.

The balance between regulation and competition has changed over time. After the Depression, the pendulum swung heavily in favor of increased financial regulation. By the 1970s and early 1980s, however, there was considerable momentum to deregulate financial markets and institutions, to reverse many of the restrictions imposed during the 1930s. Two significant regulatory changes were the elimination of interest rate ceilings on bank and thrift deposits and the expansion of permissible activities for thrifts beyond home mortgage lending. Much of the stimulus for this deregulation came from recognizing the disadvantages of traditional intermediaries faced with increased competition from unregulated competitors, such as pension and mutual funds. Indeed, there was considerable concern that many traditional intermediaries would fail without deregulation.

The momentum toward deregulation clearly slowed toward the end of the 1980s as large loan losses led many thrifts and banks to fail. Thus, thrifts found their expanded powers removed and banks found it increasingly difficult to get legislative approval for expanded activities. Much of the recent emphasis in regulation has been on rebuilding capital and reducing risk-taking. In fact, most discussions of expanded powers for banks have

focused on the perceived risks of new activities and on whether banks have adequate capital to undertake these risks.

The recent retreat from deregulation may be short-sighted, however, in light of the longer run changes in the intermediation process. While there are clearly risks to further deregulation, the alternatives may be equally risky. If the franchise value of traditional intermediaries continues to be undermined by competition from pension funds, mutual funds, and other less-regulated intermediaries, traditional intermediaries may not be viable unless they are allowed to adjust to meet this competition. For example, if banks are squeezed out of their traditional market for short-term commercial lending but are not permitted new activities, it is not clear what role banks will play in the intermediation process. Thus, while some intermediaries may fail if they are allowed to undertake new activities, others may fail if they are not permitted this freedom. Indeed, the only realistic alternative to further deregulation may be consolidation of traditional intermediaries, through failure or merger.

A closely related issue is whether regulation should be harmonized across competing intermediaries. Differential regulation was possible in the early postwar financial system because of the specialization of intermediaries and absence of direct competition. In the current environment where specialization has broken down and intermediaries desire to perform a broad range of financial services, differential regulation may no longer work. In the current system, it may not be possible to regulate one intermediary that offers many of the same services as an unregulated intermediary. Continuing differential regulation may put some intermediaries at a competitive disadvantage, increasing the likelihood of failure and decreasing the stability of the financial system.

SUMMARY

The growth of pension and mutual funds over the postwar period has had profound effects on the U.S. financial system. By affecting household savings patterns, pension and mutual funds have altered the roles of traditional financial intermediaries and have changed the intermediation process.

The growth of assets in pension and mutual funds has been associated with a shift by households away from direct purchases of investment securities and with diminished use of bank deposits and life insurance. These shifts have adversely affected some traditional intermediaries but have helped others. In both cases, traditional intermediaries have been given incentive to shift into new lines of business.

The competition of pension and mutual funds with traditional intermediaries has opened up new investment and borrowing options for households and firms. This competition has also helped break down barriers to the flow of savings and investment and so has improved the efficiency of the intermediation process. At the same time, the increased financial instability of recent years may also be partly attributable to this increased competition. This instability, in turn, raises significant questions about the regulation of traditional intermediaries.

ENDNOTES

[1] Mutual funds must register with the Securities and Exchange Commission (SEC), which is the industry's primary regulator.

2 This article covers only private sector pension plans and state and local government plans. It omits any discussion of the Social Security System and federal government retirement plans.

3 Private pension coverage has actually declined somewhat in the 1980s (Bloom and Freeman). Moreover, employer contributions to private plans have fallen as well, largely as a result of changes to pension fund laws (Warshawsky).

[4] The term "insured pension plans" is somewhat misleading in that it refers merely to pension plans that are managed by life insurance companies and not to the insurance status of such plans.

[5] Most of this shift occurred in private, noninsured pension plans. Plans managed by insurance companies (insured plans)

were limited in stock holdings by restrictions on equity holdings by insurance companies (Munnell, pp. 92-99; Wright). Some state and local government plans also faced portfolio restrictions that limited equity purchases. As seen in Chart 5, pension fund acquisition of stocks slowed significantly in the 1980s, reflecting both the dramatic shift of corporate financing from equity to debt and the effects of the 1987 stock market drop.

[6] Reduced participation of individual investors during this period has been attributed to a variety of factors including back-office problems and the growing dominance of institutional investors like pension and mutual funds (Seligman, pp. 450-56). Indeed, during the 1970s, while stock holdings of individual investors and mutual funds declined, stock purchases by pension funds increased.

[7] While this article focuses on the impact of pension and mutual funds on the intermediation process, considerable research has been done on a related issue—the impact on the overall level of saving. For a discussion of this research, see Munnell and Yohn.

[8] Data are from the Flow of Funds, Board of Governors of the Federal Reserve System. In these accounts, the household sector includes households, personal trusts, and nonprofit organizations. In this article, household financial assets are defined as total financial assets of the household sector minus equity in noncorporate business. Thus, the focus of this article is on intermediation through tradeable financial assets.

[9] For a comprehensive discussion of changes in the intermediation process in the early postwar period, see Goldsmith (1965, 1968).

[10] The Employee Retirement Income Security Act of 1974 (ERISA) made fundamental changes in pension regulations aimed primarily at strengthening protection of employee benefits. However, some of these changes encouraged plan sponsors to turn over management to insurance companies. For example, an increased reporting burden raised the cost of plan administration, particularly for small plans. Also, some sponsors of "overfunded" plans terminated the plans, buying life insurance annuities to provide promised benefits and using the excess cash for other corporate purposes. For further discussion, see Munnell, pp. 130-46; and Warshawsky.

[11] For a more comprehensive discussion of life insurance companies in the postwar period, see Wright; Curry and Warshawsky.

[12] A more detailed discussion of these issues can be found in Becketti and Morris. An additional factor in the increased competition for short-term commercial lending is the role of foreign banks. Not only have banks lost market share to commercial paper and finance companies, but U.S. banks have lost significant ground to foreign banks. For additional discussion of this issue, see McCauley and Seth.

[13] Since the development of the mortgage-backed securities market in the early 1970s, the proportion of mortgages securitized has risen to 40 percent. And since 1988, over 12 percent of consumer credit has been securitized.

[14] Not all of the effects of securitization have been adverse. Indeed, some individual banks and thrifts have benefited by earning fee income from the securitization process or by improving portfolio liquidity by holding securities rather than whole loans. However, to the extent that securitization is eroding the traditional banking business of managing credit risk, the overall return to traditional intermediation is lower.

[15] As evidence, it is notable that many of the losses of thrifts, banks, insurance companies, and investment banks have occurred with new activities or new products.

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