

the laws also reduced competition among financial institutions and contributed to today's problems in the industry.

THE 1970s: INFLATION, HIGH INTEREST RATES, AND NEW COMPETITION

For nearly 30 years after the Great Depression, the financial sector experienced an era of relative profitability and little stress. That began to change in the late 1960s and early 1970s with *increases in the level and volatility of the rate of inflation, the advent of the electronic age and new competition, and the increasing internationalization of the world's economies.*

The average annual rate of inflation rose from less than 2 percent in 1950–65, to about 4.5 percent in 1966–73, to nearly 9.5 percent in 1974–81; in that last period the rate was also very volatile, ranging from about 6 percent to almost 14 percent. As the level and volatility of inflation increased, so did the *level and volatility of interest rates.* Faced with higher levels of inflation, lenders demanded higher interest rates, since the dollars with which they would be repaid in the future would be able to purchase less than the dollars they were lending. These higher, more volatile interest rates increased the general level of risk for all commercial and financial companies, but the S&L industry was particularly hard hit.

RISE OF MONEY MARKET FUNDS

Financial markets and institutions developed an array of new instruments to help businesses and individuals deal with the uncertainties of high and volatile interest rates. Adjustable-rate mortgages gave borrowers the option of paying lower average rates if they were willing to bear the risk that interest rates might increase. (See Box 5-1 for discussion of inflation-proof bonds and mortgages.) Interest rate swap contracts allowed a borrower to obtain a fixed rate loan indirectly by first borrowing from a bank at a variable rate and then “swapping” its variable interest rate payments with a borrower that had borrowed at a fixed interest rate. Securities exchanges issued bond futures contracts, which effectively allowed market participants to borrow or lend at specified interest rates at a future date.

Inflation and high interest rates also led to the development of a major new form of competition to banks and thrifts—the money market mutual fund. When interest rates rose in the 1970s, *interest rate ceilings on bank and savings and loan deposits were significantly below the market interest rates being paid on short-term low-risk debt instruments.* Investors looking for interest rates higher than banks and thrifts could pay turned quickly to the new money market mutual funds, which invested primarily in instruments

Box 5-1.—Inflation-Proof Bonds and Mortgages

Bonds and mortgages typically specify constant payments over their entire maturity. Their interest rates are set high enough to compensate lenders for the expected inflation-induced erosion of the purchasing power of future payments. *Inflation-proof* assets are fundamentally different: They preserve the purchasing power of interest payments and principal by changing them proportionately with a measure of the overall price level such as the consumer price index. Because inflation-proof assets eliminate the financial risks of unanticipated inflation and the need to compensate lenders for that risk, their guaranteed *real*, or inflation-adjusted, interest rates are lower than those on typical assets.

Compared to payments on a 30-year, 10-percent, fixed-interest-rate mortgage, payments on a 4-percent, real interest-rate, inflation-proof mortgage would start more than *one-third lower*. Payments would rise at the same rate as the average price of the items in household budgets and move similarly to the rent would-be homeowners pay. (Adjustable-rate mortgages help reduce borrowing costs by shifting interest rate risk to borrowers, but their payment levels are not designed to track income and price levels.) To the extent that a borrower's real income falls over time, payments on an inflation-proof mortgage would become more burdensome.

Inflation-proof bonds and mortgages are not common. These debt instruments have generally developed only in countries where inflation has been relatively high and variable. One reason is that when inflation is expected to be relatively low and stable, the cost of introducing these instruments may appear to outweigh the benefits they offer. In that case, borrowers and lenders seem to prefer the certainty of constant payments.

Recent clarifications of the regulatory and income tax status of inflation-proof bonds and mortgages have removed important obstacles to their use in the United States.

such as short-term government (Treasury bills) and corporate (commercial paper) debt securities. Low information processing costs made it profitable for money market funds to deal with even small investors. By bringing borrowers and lenders together, albeit with help from the marketplace, these funds played a role similar to the intermediary role banks and thrifts traditionally played.

The success of money market funds increased the demand for commercial paper by providing small investors with low-cost, indi-

rect means of accessing that market. Assisted by improved technology that reduced the cost of conveying information to financial markets, corporations, particularly large ones, began to bypass banks and borrow directly in financial markets by issuing commercial paper. Nonbank finance companies began to increase their lending activities at about the same time. Thus, banks were being bypassed on both the borrowing and the lending side of the business. Charts 5-1 and 5-2 illustrate these phenomena. Chart 5-1 shows the growth of money market funds relative to total commercial bank deposits. Chart 5-2 shows the increasing competition for business lending among banks, finance companies, and the commercial paper market.

The opportunity to invest savings conveniently and at low cost through mutual funds represented a substantial increase in competition for savings that had traditionally been deposited in banks and thrifts. In addition, increased information processing capabilities as well as greater sophistication on the part of business managers led to a revolution in cash management techniques, which reduced idle cash balances in business accounts. *These competitive pressures resulted in the phasing out of interest rate ceilings on bank and thrift deposits by 1986.* As banks and thrifts began to offer higher interest rates on deposits, the growth of money market funds slowed, but they remained strong competitors.

It is important to realize that while banks and thrifts struggled to meet new competition, *consumers of financial services benefited from the increased competition.* Savers were able to earn higher rates of interest, both from money market funds and, once deposit interest rate ceilings were eliminated, from banks and thrifts. Borrowers also benefited from the development of alternative sources of funds and increasing competition among lenders.

INTERNATIONALIZATION

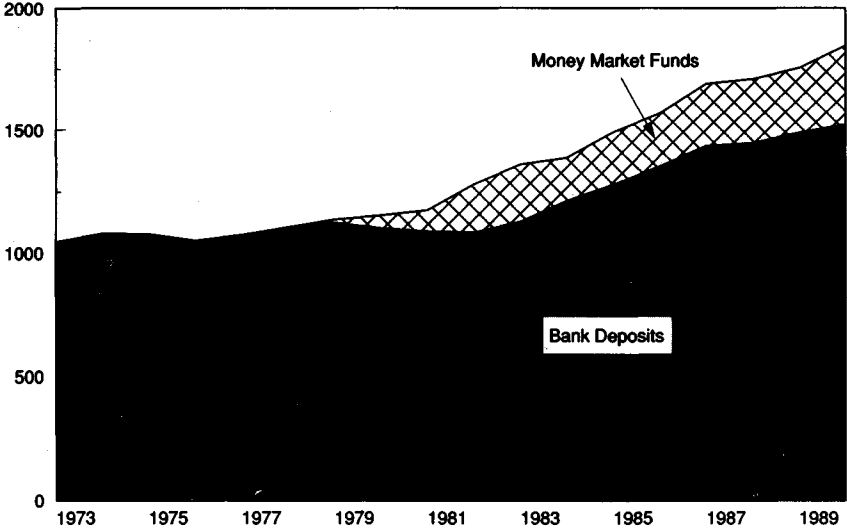
At the same time that the financial sector has experienced dramatic change on the domestic front, it has also faced new challenges internationally. Many financial institutions now operate in a global marketplace and face worldwide competition. Industrial firms increasingly need assistance with international financial transactions from their bankers, which requires banks to have a greater presence throughout the world.

In addition, U.S. banks are facing greater competition from foreign banks at home, while only a few U.S. banks are significantly increasing their business overseas. Chart 5-3 illustrates the rapid growth in the total assets of U.S. offices of foreign banks. Foreign banks and the U.S. chartered banks they own have been particularly successful in penetrating the business lending market. Their share of U.S. business loans rose from 10.4 percent in 1975 to 28.5

Chart 5-1 Deposits and Money Market Funds

Money market funds, which compete with bank deposits, have grown significantly since their introduction.

Billions of 1982 dollars



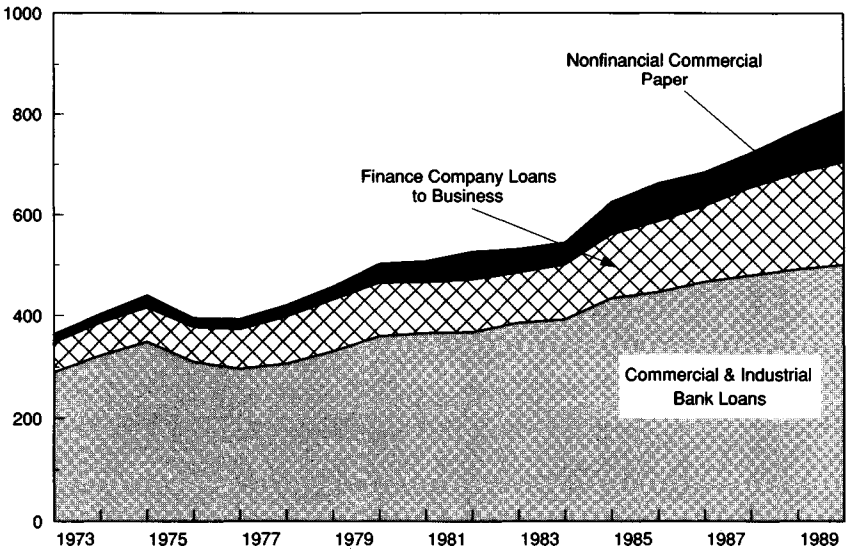
Note: Bank deposits are the sum of money stock measures of demand deposits, other checkable deposits at commercial banks, and time and savings accounts at commercial banks less deposits held by money market funds. GNP implicit price deflator is used to deflate nominal figures.

Sources: Board of Governors of the Federal Reserve System and Department of Commerce.

Chart 5-2 Composition of Loans to Businesses

Loans by finance companies and nonfinancial commercial paper have become a significant source of commercial credit.

Billions of 1982 dollars



Note: GNP implicit price deflator is used to deflate nominal figures.

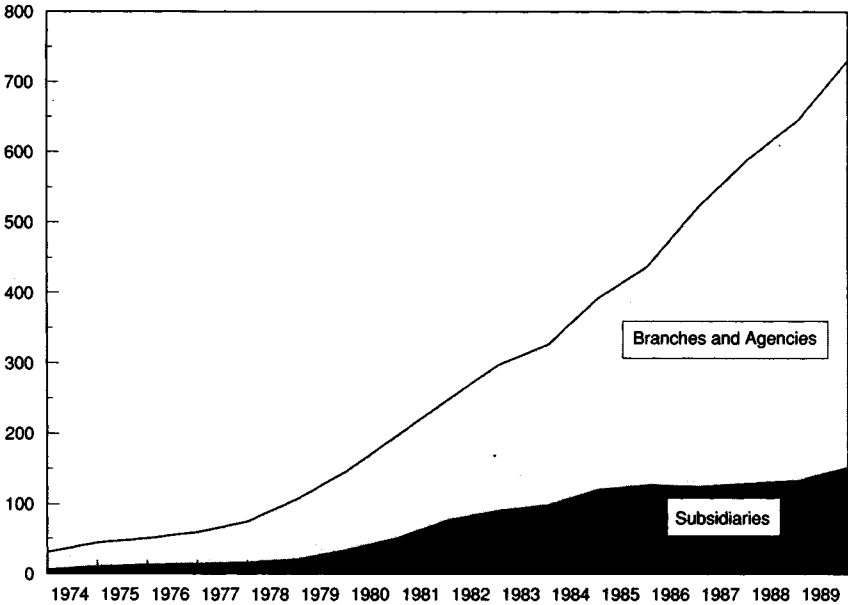
Sources: Board of Governors of the Federal Reserve System and Department of Commerce.

percent in June 1989. At the end of 1989 the foreign share of U.S. banking assets was 20.4 percent.

Chart 5-3 **Assets at U.S. Offices of Foreign Banks**

Foreign bank assets in the United States have increased rapidly since the late 1970s.

Billions of dollars



Source: Board of Governors of the Federal Reserve System.

Different countries impose different rules and regulations on their banks that affect their ability to compete with banks from other countries. In an effort to make capital requirements—the minimum amount of owner's equity required as a percentage of total bank assets—more consistent worldwide, the central bank governors of 11 industrial nations endorsed the Basle framework for measuring capital adequacy and achieving minimal levels of capital based on credit risk. The minimum capital standards associated with the Basle framework are being phased in over a 2-year period that began December 31, 1990, and will require some U.S. banks either to shrink in size or to raise additional capital during that period.

These new capital standards focus on credit risk, but need to be realigned to reflect other risks that banks may bear such as foreign exchange risk, interest rate risk, and equity position risk. Bank lending practices could continue to be distorted until capital standards are balanced to reflect these other risks. Such reorientation of the Basle framework to more accurately reflect the different types of risk is currently under active consideration.

SUMMARY

- Higher and more volatile rates of inflation in the 1970s led to higher and more volatile interest rates and increased stress in the financial sector.
- Money market mutual funds began to compete with banks and thrifts for the savings of Americans. Initially, banks and thrifts were constrained in their ability to compete by deposit interest rate ceilings, and these money market funds grew rapidly.
- The Basle framework established international capital standards based solely on credit risk. The Administration encourages efforts to realign these standards to more accurately reflect the different types of risk.

THE S&L CRISIS

The increase in interest rates in the late 1970s and early 1980s had a profound effect on the savings and loan industry. The rate increase was, as we have seen, a major factor in the emergence of money market mutual funds as major competitors to S&Ls for the funds of savers. But higher interest rates had an additional effect on S&Ls: They produced large and widespread losses on mortgage portfolios.

These interest rate increases and resulting losses proved to have far-reaching consequences. About half of all S&Ls in business in 1970 no longer existed in 1989; more than 2,700 had merged, gone out of business, or been placed under the control of government regulators. By the end of 1986 the Federal Savings and Loan Insurance Corporation itself was deemed insolvent. While the ultimate cost of the S&L crisis will reflect many factors, the Administration estimates that, including costs incurred prior to 1989, the resolution of the crisis will cost between \$130 billion and \$176 billion. The crisis has also led to fundamental changes in the way that S&Ls operate and in the regulations that guide them.

VULNERABILITY TO INTEREST RATE INCREASES

For decades S&L assets consisted predominantly of fixed-rate mortgages that typically covered a term of 20 to 30 years. At the end of 1980, for example, FSLIC-insured institutions held more than three-fourths of their assets in residential mortgages and in mortgage-backed securities, which are bonds whose values parallel those of mortgages.

Although the assets of S&Ls consisted largely of fixed-rate mortgages, their deposit liabilities were primarily short-term. When interest rates rose on other assets that households might hold, such as Treasury bills, deposit interest rates had to be increased compa-