A FINANCIAL HISTORY *of the* UNITED STATES

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Volume III

From the Age of Derivatives into the New Millennium (1970-2001)

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For Marcia, all those years

Such is the unity of all history that anyone who endeavours to tell a piece of it must feel that his first sentence tears a seamless web.

—Frederic Wm. Maitland, 1898

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Preface

This is the third and final volume of this history of finance. The first volume covered the period from the "discovery" of America to the end of the nineteenth century. The second volume traced the growth of finance through the first seven decades of the twentieth century. The present volume focuses on the growth of derivatives, the savings and loan crisis, the merger mania of the 1980s, the accompanying insider trading scandals, and the battle with inflation. This history then reviews the market run-up in the 1990s and the rebirth of finance that was being strongly pushed by the Internet economy as the third millennium began.

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Introduction

The last three decades of the twentieth century were perhaps the most innovative years of American finance. Mergers, acquisitions, the growth of the derivative markets, and the creation of new financial tools and concepts all kept America in the forefront of the financial world. The financial instruments that compose our modern economy increased greatly in numbers and complexity during this period. CMOs, repos, junk bonds, swaps, and financial futures contracts, to name a few, can baffle all but the initiated. Even more daunting are the over-the-counter derivative instruments that left a graveyard of financial losses in the 1990s and carried such titles as “inverse floaters,” “exploding options,” “death-backed” and “heaven-and-hell” bonds, and “limbos.”

The world of finance continued to evolve and to consolidate. The banks were in a merger frenzy as the century closed. The combination of NationsBank and BankAmerica and the joining of Travelers Group and Citibank created two financial behemoths. Finance was becoming more global, as demonstrated by the merger of Bankers Trust with the Deutsche Bank. Financial systems around the world were becoming intertwined in other ways. A financial crisis in Latin America, Asia, or Russia now has inevitable effects here. Recognizing that fact, the United States used the International Monetary Fund as a global 911 rescue unit for faltering economies around the world at the end of the century. Globalization was creating other challenges, as witnessed by the formation of a central bank in the European Union that would be administering a single currency, the “euro.” Even though it has encountered difficulties, that currency will pose a threat to the primacy of the dollar.

Another undercurrent causing concern at the end of the century was the blending together of the banking, insurance, derivatives, and securities industries. That combination occurred despite the prohibitions contained in legislation passed after the stock market crash of 1929 that sought to separate financial services into separate units that could be intensively regulated. Today, that regulatory structure is being dismantled. Recognizing the inevitable, Congress repealed the Glass-Steagall Act in the closing days of the millennium. That New Deal legislation had divided commercial banking from investment banking for over sixty-five years. Now, customers are increasingly able to buy most of their financial services from a single provider. This will have broad effects on the growth and regulation of financial service firms and will create a host of new issues involving competition and consumer protection.

Of course, homage must be paid to the Internet. Like many other aspects of life, the World Wide Web is changing finance. Customers are purchasing stocks and banking online, as well as buying their books and music. Amateur electronic day traders are competing with professionals for profits. Electronic communication networks (ECNs) are threatening the stock exchanges. Smart cards and other electronic money are being developed, and that currency is already passing through "cyber" banks. Consumers are paying their bills and receiving their salaries through electronic transfers. They can buy their groceries without using a check or cash, and they can obtain a loan or gain access to investment advice through the Internet. Cash, checks, and even the bank teller may someday be anachronisms.

The soaring stock market in the last decade of the century has only underscored the financial prosperity of America and its dominant role in the world. Even so, the periodic market reverses, and a number of other financial crises during our history, remind everyone that prosperity is not a permanent condition. Fraud continues to plague the financial markets, and the Internet has expanded the opportunities for criminal activities. This volume will examine those setbacks, as well as the many advances in our financial structure. Let us begin with the challenges facing the world of finance as the 1970s began.

Chapter 1

Financial Turmoil

1 Interest Rates and Other Concerns

Inflation

One of the country's longest economic expansions occurred during the 1960s. It lasted from February of 1961 until December of 1969. That growth came with a high price tag. The inflation that began in 1963 would depreciate the currency by almost 700 percent over the next seven years. Keynesian economics had dominated government policy since the 1930s, and economists continued to argue that fiscal policy should be used to control the economy and prevent recessions. Congress, therefore, cut taxes in 1964 in order to "put juice into a stagnating economy."[1] Additional inflationary pressures were added by President Lyndon Johnson's "Great Society" programs and the war in Vietnam. Indeed, government spending grew by 60 percent between 1965 and 1968. These inflationary measures led to conflict between the Federal Reserve Board (the Fed) and the Johnson administration. On December 6, 1965, the Fed increased its discount rate from 4 to 4.5 percent in order to curb inflation. President Johnson responded to that action with a demand for low interest rates. William McChesney Martin, the Fed chairman, refused to comply with that request. Martin was then summoned to Johnson's ranch in Texas to be pressured by the president to cut rates. Martin refused and went so far as to advise Congress that the nation, like an individual, could not "spend yourself prosperous." On another occasion, Martin asserted that his job was to "take away the punch bowl just when the party gets going." This firm discipline did not make Martin a popular figure. By taking such an independent position, Martin was said to have turned "the Fed into essentially the fourth branch of American government."[2] Yet, after a credit crunch in 1966, the Fed reduced its efforts to limit inflation. Instead, the Fed began expanding the money supply, which further encouraged the rising inflation.

In 1965, the Johnson administration sought to set wage and price settlement guidelines of 3.2 percent, which was the estimated growth rate for workforce productivity. That effort failed. Labor negotiations resulted in wage increases that exceeded those guidelines substantially. By 1966, consumer prices were increasing at more than 5 percent a year. That was the highest rate of inflation in ten years. A "crisis of confidence" occurred in the economy in 1966 because of rising interest rates and a stock market drop.[3] Still, unemployment was at a thirteen-year low and corporate profits and farm incomes were at record highs. In June of 1967, the economy was booming even more strongly as government spending increased with the war in Vietnam. Inflation continued to grow. A 6 percent surcharge on income taxes was enacted in 1968 and was quickly increased to 10 percent. The tax surcharge helped deal with a budget deficit, but it did not curb inflation.

Recession

The economy was battered by a recession that began in December of 1969. Thereafter, the country was faced with a series of booms and busts that continued through the early 1980s. The Fed's Regulation Q continued to set maximum interest rates that banks could pay on depositor funds. The banks found it difficult to attract deposits at the artificially low interest rates set by the Fed under that regulation. This resulted in a shortage of funds for the banks to carry out their lending activities. That shortage led to periodic credit crunches. One such crunch occurred in 1966, when loan demand outstripped available funds at the banks. The banks turned to federal funds, commercial paper, and dollars from foreign lenders (euro dollars) as a source of funds for lending. The banks had to pay more for these short-term funds as interest rates increased, but they did not receive additional income from their outstanding long-term loans to offset those increases. This made lending activities less profitable, as did an interest rate war that broke out between the commercial banks and the savings and loan associations (S&Ls, or thrifts) when they found themselves competing with each other for the same deposit dollars. The Interest Rate Control Act of 1966 sought to curb that competition. It imposed ceilings on interest rates that thrifts could pay on deposits for the first time. The thrifts were allowed to pay a slightly higher rate than the commercial banks.

The Fed increased available credit in March of 1967 by reducing bank reserve requirements. The Fed had previously asked the commercial banks, in September of 1966, to limit their corporate loans in order to ease inflationary pressures. This was not a solution that was favored by the banks, and it did little to halt inflation. The prime rate reached 7 percent by March of 1969, up from 6 percent in 1966. Short-term commercial paper was paying 8.375 percent interest, and the Treasury Department was issuing seven-year notes with a 6.5 percent coupon rate, "the highest in more than 100 years."[4] On April 3, 1969, the Fed raised its discount rate and increased reserve requirements for banks in an effort to slow the inflationary spiral.

Finance in an Inflationary Environment

The First National City Bank's foreign deposits increased by over $7 billion between 1968 and 1970. Its total deposits were over $12 billion. The euro dollar market in Europe remained active, ballooning to about $14 billion in 1965 and growing rapidly thereafter. A euro dollar certificate of deposit (CD) was created in 1966 by the First National City Bank. In 1968, Morgan Guaranty started Euroclear, a clearing and settlement system for the purchase and sale of eurobonds. In January of 1969, interest rates in the market had risen above the Fed's legal limits for CDs. This increased the use of euro dollars as a source of funds for loans. The first euro dollar syndicated loan was made to the Shah of Iran in 1969 for $80 million. A euro dollar syndicated loan of $200 million was made to Italy. Euro bond offerings would total some $3 billion by 1970. The first euro commercial paper offering was made in 1970 by Hoechst.

Corporations in America were borrowing large amounts of money in May of 1970 through the commercial paper market. Outstanding commercial paper rose from $17.5 billion to $38 billion between April of 1968 and April of 1970. That increase raised concerns that there would not be sufficient cash on hand to redeem the paper when it came due and that a liquidity crisis could occur. This was not idle speculation. The Penn Central Transportation Company, the largest nonfinancial company in the United States, had large amounts of commercial paper outstanding when it ran into financial difficulty in 1970. An effort was made to save the company by guaranteeing its loans through the federal government. That was a nonstarter, and the company filed for bankruptcy on June 21, 1970. This was the largest bankruptcy ever up to that date. In addition to its other debts, Penn Central defaulted on over $80 million of commercial paper. The company had been able to issue large amounts of commercial paper at low rates because it was given a prime rating by Dunn & Bradstreet. At one point, Penn Central had some $200 million in outstanding commercial paper.

The Penn Central default sent a shock wave through the commercial paper market. Commercial paper was unsecured, but its short-term nature, and the creditworthiness of its issuers, had given rise to the belief that commercial paper was a nearly riskless investment. The Penn Central default disabused purchasers of that notion, and the amount of commercial paper outstanding decreased by about $3 billion as the market shrank. The commercial paper market received another setback when the W.T. Grant Co., which operated a chain of variety stores across the country, incurred large losses in 1974. It had outstanding bank loans of over $600 million at the time it ran into difficulty. The company was unable to sell its commercial paper to obtain further financing. The banks had to provide additional funds in order to keep the company afloat and to protect their credit position. This led to a liquidity crisis. The Fed stepped in to alleviate that problem by raising the legal limit on interest rates that the banks could pay on their certificates of deposit. The Fed loaned the banks $1 billion to provide liquidity to the corporations that could not roll over their commercial paper. The Fed advised banks that its discount window would be open to allow the banks to make extensive loans and provide lines of credit to firms that could not issue commercial paper as a result of the Penn Central crisis.

Goldman Sachs & Co. was a defendant in forty-five lawsuits as a result of the Penn Central debacle. One court held that the firm had acted unreasonably in representing that Penn Central remained creditworthy while it was selling commercial paper. Goldman Sachs was further stung by a jury verdict of $3 million for selling Penn Central commercial paper while the railroad was insolvent. Another crisis soon loomed. Lockheed Aircraft Corporation, one of the largest industrial companies in the United States and a major supplier for the Department of Defense, was facing bankruptcy in 1970. Lockheed was hurt when the C5A, a military cargo plane, experienced cost overruns of $2 billion. The company sought financial aid from the government to save it from failure when matters worsened in 1971. After much acrimonious debate, Congress authorized a $250 million loan guarantee for Lockheed. This corporate bailout was highly controversial, and the necessary legislation barely passed in the Senate. Critics called this "corporate welfare." Nevertheless, the loan guarantee prevented a collapse at Lockheed, which recovered and became a leader in the aircraft and defense industry.

Money Market Funds Appear

An even darker cloud, at least for the banks, appeared on the horizon. Henry B.R. Brown and Bruce R. Bent invented the money market fund in 1971 in order to avoid the restrictions in Regulation Q that limited interest rates on bank deposits. The creation and success of the money market funds were "exclusively due to the binding interest rate ceilings imposed on depository institutions at times when open market rates" were above Regulation Q ceiling rates.[5] The money market funds were simply mutual funds that invested investor assets in short-term instruments such as commercial paper, Treasury bills, and negotiable CDs. Money market funds were liquid, which allowed investors to have their money market shares redeemed quickly for cash. This meant that small investors could obtain money market rates on their short-term cash instead of leaving it in a bank where they received little or no interest. The Reserve Fund was the first of the money market funds. Within a short time, it had accumulated assets of over $100 million. Other mutual funds, including Fidelity and Dreyfus, began establishing their own money market funds. One of the faster growing money market funds was the Dreyfus Liquid Assets Fund, which was started in 1974 by Howard Stein. The Merrill Lynch Ready Assets Trust was another popular money market fund. It was started in 1975 and required a minimum investment of $5,000. This fund grew in one year by $40 billion. By 1979, over 1 million Merrill Lynch customers had some $70 billion of their funds invested in the firm's money market accounts.

The money market funds provided other conveniences, such as allowing consumers to make direct deposits of their payroll checks and to pay bills automatically. An especially popular mechanism was the Merrill Lynch Cash Management Account (CMA), which was introduced in 1977. It linked customers' securities accounts with a Merrill Lynch money market fund and allowed check-writing on credit balances. As was the case at the turn of the century, brokers could once again hold customer funds, "subject to check," and pay interest on those funds. Withdrawals and payments from the CMA account could also be made by a "debit" card. This instrument looked like a typical credit card, but it did not extend credit for purchases. Instead, the customer's account was debited directly for purchases and cash withdrawals. The linkage of the money market account to the investors' securities accounts was convenient for record keeping. It also allowed margin loans through the CMA account that could be used much like a line of credit. There were some drawbacks. CMA accounts required a $20,000 minimum balance, and Merrill Lynch charged a $28 annual fee for this account.

By June of 1976, money market funds held $3 billion in customer assets. Those holdings would increase to $80 billion in 1980. By 1981, money market funds were the most popular investment in the United States. In December of 1982, over $230 billion was being held in money market funds. The funds that went into the money market accounts were largely drawn from checking and savings accounts at the banks. This transfer of funds was referred to as "disintermediation," which meant that funds were drained from deposit institutions such as banks and S&Ls and invested in other investments that paid higher rates. The money market funds accelerated disintermediation. The banks could not pay interest on their checking accounts, and Regulation Q ceilings kept time deposit rates below those available from money market funds. Further, there were no penalties for early withdrawals from money market accounts, unlike deposits invested in bank certificates of deposit.

Structural Reviews

In 1970, President Richard Nixon created a Commission on Financial Structure and Regulation to study and make recommendations on the bank regulatory structure. Reed O. Hunt was the chairman of this commission. It focused on financial intermediaries, which included commercial banks, savings and loan associations, mutual savings banks, credit unions, life insurance companies, and pension funds. The Hunt Commission recommended that the prohibition against the payment of interest on demand deposits be retained but that limits on interest rates on deposits should be abolished for accounts of more than $100,000. The Hunt Commission further recommended that S&Ls be given broader investment powers, including the power to make construction loans and to invest in equity securities up to 10 percent of the S&L's assets. The Hunt Commission thought that the Office of the Comptroller of the Currency should be converted into an Office of the National Bank Administrator, which would act as an independent agency separate from the Treasury Department.[6]

The Hunt Commission recommendations had no immediate effect, but they set off a debate that would last several years. The House Committee on Banking, Currency and Housing began a study in 1975 entitled *Financial Institutions and the Nation's Economy* (FINE) that sought to provide a basis for restructuring the regulation of banking and other deposit institutions. The FINE study asserted that "artificial ceilings on interest rates paid to depositors reduce the incentive for Americans to save, discriminate against small savers, and have not succeeded in preventing disintermediation."[7] The FINE study proposed that a Federal Depository Institutions Commission be created and that all Regulation Q limits on interest rates be eliminated, along with the prohibition against paying interest on demand deposits. That relief would be slow in coming, and the lack of coordinated regulation would result in disaster in the 1980s. In the meantime, given the choice, consumers opted to move their liquid funds out of the banks and into the money market funds where they could receive higher rates of return. The banks fought back by claiming that the money market accounts were actually bank accounts that could not be legally offered by a broker-dealer or a mutual fund. The Colorado State Banking Board even brought an action against Merrill Lynch's programs, charging that Merrill Lynch was illegally acting as a bank. That effort failed, and the growth of the money market funds continued.

NOW Accounts

The banks sought to compete with the money market instruments through "sweep accounts," which swept idle cash into accounts that could be invested in instruments that paid interest. On May 16, 1973, the Fed suspended interest rate ceilings on large certificates of deposit with maturities of more than ninety days. Previously, in June of 1970, interest rate ceilings had been lifted on CDs with maturities of less than ninety days. This furthered the ability of the banks to compete with money market instruments, but the smaller CDs continued to be illiquid. Those CDs were subject to minimum holding periods with penalties for early withdrawal. The Consumer Savings Bank in Worcester, Massachusetts, created the negotiable order of withdrawal (NOW) account in 1972. A NOW account was essentially a checking account that paid interest, but the depository institution had the right to require prior notice of withdrawal. NOW accounts had a slight advantage over money market funds. NOW account investors continued to be bank depositors who would receive the protections of federal deposit insurance. In contrast, insurance provided by the Securities Investors Protection Corporation (SIPC) protected money market investors only from losses caused by the bankruptcy of their broker-dealer, not investment losses from a money market fund. The banks had the additional advantage of the status quo—that is, depositors were inclined to keep their funds in the safety of a bank. Nevertheless, the banks had lost the initiative to the money market funds, and the Regulation Q interest rate ceilings were still limiting the banks' ability to compete for funds.

Legislation was needed to allow the NOW accounts to operate effectively, because interest rate ceilings and prohibitions on interest payments for funds held in checking accounts inhibited the immediate operation of NOW accounts in most states. The bank regulators provided some relief, but it was slow in coming. NOW accounts were authorized for use in Massachusetts and New Hampshire in 1973 and in Connecticut, Maine, Rhode Island, and Vermont in 1976. New York did not authorize such accounts until 1978. Congress would wait until 1980 to enact the Depository Institutions Deregulation and Monetary Control Act, which allowed national banks to offer NOW accounts, as well as permitting S&Ls to make consumer loans and to issue credit cards. That act removed interest rate ceilings on NOW accounts and small savings accounts with maturities of more than thirty-one days. That legislation further provided for a six-year phaseout of interest rate ceilings on time and savings deposits. A Depository Institutions Deregulation Committee was created to manage that phaseout process.

Congress sought to handicap the money market funds by requiring them to establish cash reserves of 15 percent that could not be invested in money market instruments. Congress provided more relief to the banks through the Garn-St. Germain Act of 1982. This legislation authorized money market deposit accounts by depository institutions, but minimum investment requirements were imposed. It was all too little and too late. The money market funds were firmly in place, and they appeared to be winning the battle for depositor funds as inflation continued its upward course.

The separation of functions between commercial banks and investment banks began to break down during the 1970s. The banks were trying to reenter the securities business, even as the money market funds were drawing bank deposits into the brokerage firms. Banks were allowing checking account customers to buy stocks from a selected list. The customers paid for the stocks by automatic deductions from their checking accounts. The banks were increasing their roles as investment advisers and money managers. By 1975, bank trust departments were managing assets valued at some $400 billion. In 1971, First National City Bank's Trust Department was responsible for managing over $15 billion for over 10,000 accounts. About half of that amount was for pension funds. In total, bank trust departments managed over 70 percent of private pension funds. Wright Patman, the chairman of the House Banking Committee, had his congressional staff conduct a study that he claimed evidenced the existence of a new money monopoly. The staff report found startling concentrations of economic power in bank trust departments through voting control of stocks held in trust funds, pension fund management, board memberships, and other links with corporate management.

Banking and Securities

Banks were introducing securities-related transactions in their lending. "Equity kickers," in the form of warrants and other instruments, were being incorporated into bank loans in 1971 to provide additional compensation to the bank for lending money by allowing the bank to profit from increases in the borrower's stock prices. Equity kickers were popular in merger and acquisition financing. At the time the bank were pressing for those incentives, the banks were prohibited from owning corporate stock.

The securities industry fought the incursion of the banks into securities-related activities. The Securities Industry Association (SIA) and other industry groups used the Glass-Steagall Act and other restrictive banking legislation to thwart the banks' efforts to expand their services into the securities industry. The SIA brought suits to enjoin bank activities that competed with the brokerage firms. In one such case, *Securities Industry Association v. Board of Governors of the Federal Reserve System*, the Supreme Court held that Bankers Trust could not market commercial paper for its corporate customers because such activities by banks were proscribed by the Glass-Steagall Act.[8] The securities industry was sometimes aided in its efforts to curb bank expansion by bank regulators. Chase Manhattan announced in 1973 that it was acquiring the Dial Financial Corporation, a consumer finance company located in Iowa. The Fed refused permission for that acquisition.

Chase Manhattan Bank misplaced some $15 million in Treasury bills in 1973, but most were later found. The bank was not always so lucky. In October of 1974, it overvalued bonds held in its bond-dealing operations by some $34 million. The banks had other problems. They found themselves caught between the government and some of their less savory clients. The Bank Secrecy Act that was enacted by Congress in 1970 was something of a misnomer. Although it provided for the confidentiality of bank records, the legislation required financial institutions to report currency transactions of amounts in excess of $10,000 to the Internal Revenue Service. This was actually an extension of similar requirements imposed administratively after World War II. The Bank Secrecy Act was the result of testimony from government regulators that secret foreign bank accounts and foreign financial institutions allowed the proliferation of white-collar crime and served as the financial underpinning of organized crime operations in the United States. Foreign financial institutions were used by Americans to evade income taxes, to conceal assets illegally, to purchase gold, to evade securities regulations, and to deposit proceeds from black market operations in Vietnam. Congress estimated that hundreds of millions of dollars of tax revenues were being lost. Switzerland was particularly popular as a place for secret accounts used to evade taxes and to launder money. More money laundering statutes would flow from Congress in future years. They would become a significant weapon in the war on drugs. The banks would then find themselves acting as unofficial policemen in monitoring the banking activities of their clients.

Consumer Legislation

The banks were receiving a buffeting from consumer groups. Seeking to raise the specter of a renewed money trust, a study by Ralph Nader, the consumer activist and future presidential candidate, in 1971 asserted that the First National City Bank had interlocking directors with forty of the 300 largest industrial corporations in America. This included six of the fifteen largest insurance companies. Nader had other criticisms. Although more than 50 percent of employees at the First National City Bank were women in 1971, Nader accused the bank of excluding women and minorities from upper-echelon management. The concern that a "glass ceiling" prevented women from obtaining high-level executive positions on Wall Street would grow in future years.

Congress was becoming more concerned with consumer protection in banking transactions. The Truth in Lending Act that was passed in 1968 sought to assure disclosure of credit terms to consumers in a meaningful manner. This legislation established a uniform method for disclosing the rate of interest or charges on consumer loans and consumer sales. Those disclosures were intended to allow a comparison of costs and to provide a full explanation of the costs of a credit transaction. Regulation under this statute proved so burdensome, however, that Congress was forced several years later to adopt the Truth in Lending Simplification and Reform Act. Congress also enacted the Fair Credit Reporting Act, designed to reduce abuses in the use of credit reports that were relied upon widely by firms that extended consumer credit. The legislation allowed consumers to examine the contents of their files and correct any inaccuracies. The Fair Credit Billing Act, passed in 1974, provided a mechanism for resolving billing disputes in connection with consumer credit. Creditors were required to investigate claims of billing errors and advise the consumer whether there was in fact an error. The Fair Debt Collection Practices Act, passed in 1977, was designed to prevent harassment and abusive practices in collecting debts.

The Equal Credit Opportunity Act was adopted in 1974. It prohibited discrimination in extending credit on the basis of sex or marital status and was later broadened to prohibit discrimination on the basis of race, religion, and national origin. In one early case under the Equal Credit Opportunity Act, *Markham v. Colonial Mortgage Service Co.*, a federal appeals court in Washington, D.C., held that a creditor could not discriminate against an unmarried couple in extending credit.[9] This meant that the incomes of unmarried persons jointly applying for credit had to be combined for credit extension purposes if the creditor combined the income of married couples in determining their creditworthiness. The Home Mortgage Disclosure Act of 1975 required depository institutions in metropolitan areas to disclose their mortgage loans by classification and geographic locations. This legislation was directed at "redlining"—that is, the banks illegal practice of restricting or prohibiting loans within redlined areas on maps where minorities were clustered. The Community Reinvestment Act, adopted in 1977, required banks to meet the credit needs of minorities in their communities. This legislation was passed after charges were made that banks were refusing to provide credit to minority neighborhoods. The act was strengthened in 1989.

The Right to Financial Privacy Act of 1978 limited the power of federal government agencies to obtain access to individual financial records. Banks were required to notify their customers if the government was seeking information concerning their accounts. The SEC was found to have violated this statute when it improperly obtained the bank records of wealthy members of the Hunt family of Dallas, Texas, who were under investigation for attempting to manipulate the silver market. This legislation was later considerably weakened by money laundering legislation that limited the banks' ability to inform customers that the government was examining their accounts. At the state level, the National Conference of Commissioners on Uniform State Laws proposed a Uniform Consumer Credit Code (UCC) in 1966. A competing proposal was the National Consumer Act. The UCC was promoted by creditors, while the National Consumer Act was promoted by consumer advocates. Several states adopted the Uniform Consumer Credit Code.

Banks were becoming more consumer oriented. They provided drive-up windows and even walk-up windows for customers. The First National City Bank created credit line loans providing customers with a standby line of credit that could be drawn upon as needed. The bank allowed customers to overdraw their accounts through programs called "Checking Plus," but customers were charged 12 percent interest on those overdrafts in 1971. Automatic payroll deposits were used to speed depositors' salaries into the banks.

Ford Motor Company announced the "Ford Frequent Purchase Plan" in 1973. Under this program, an automobile purchaser placed as little as five dollars down with a Ford dealer who deposited it in the purchaser's name in a bank where it drew interest. Thereafter, the customer made weekly payments to the dealer, who deposited them in the bank account. When enough money was accumulated, the car would be delivered. The Ford plan proved to be a failure. Chevrolet offered an alternative plan in which consumers paid in installments for a portion of their automobile and then paid off the rest after it was delivered.

Credit Cards

American Express held 80 percent of the traveler's check market in the 1960s. In the middle of the 1960s, some $500 million of American Express traveler's checks circulated. The average traveler's check was not cashed for thirty days, which maintained the large "float" that American Express invested. The returns from that investment provided a substantial portion of American Express revenues. American Express had begun using magnetic ink as an identifying mechanism in order to speed the processing of its traveler's checks in 1960. About 1 million people held American Express cards. American Express began its gold card program in 1966 and a black card service in 1984, which became the platinum card in 1985. These cards were intended for high income individuals and sought to increase the prestige of the cardholders and provide additional services in recognition of the holders' creditworthiness, all for additional fees. National and regional credit cards were popular in the 1960s, becoming a substitute for cash and installment loans. They were referred to as "plastic money." Credit cards usually limited the amount of credit that would be extended, typically no more than $5,000. The principal credit card companies were American Express, Diners Club, and Hilton Credit Corporation, which issued the Carte Blanche card. Banks issued their own cards that allowed installment credit purchases. The Federal Savings & Loan in Lincoln, Nebraska, allowed customers at grocery stores to pay for their groceries with credit cards in 1974.

Credit card holders paid 18 percent interest on unpaid balances on their BankAmericard in its early years. The Bank of America began franchising the BankAmericard to other banks in 1967. Three years later, Bank of America spun off its credit card operation into a separate company, BankAmericard, Inc., which operated as a cooperative of participating banks. BankAmericard changed its name to Visa in 1977. Master Charge, later called MasterCard, was started in 1966 by the Marine Midland Bank in New York. They were designed to compete with the BankAmericard and were licensed to other banks. First National City Bank introduced an "everything" card in 1967. It was not successful. The bank then purchased a one-half interest in the Carte Blanche card but was forced to sell that holding by the Antitrust Division of the Justice Department. The First National City Bank began using Master Charge and later MasterCard, which was then issued by Interbank, a consortium of banks formed to market the card originated by Marine Midland Bank. The licensing of credit cards would continue to evolve. By the middle of the 1990s, Visa would have outstanding almost 400 million credit cards that were recognized by 12 million businesses.

Competition for potential credit card holders became heated at times. Rebates were used to induce individuals to sign up for credit. Sound credit practices in deciding who could receive a card were often forsaken in the rush to expand credit card programs. The First National City Bank was soliciting potential credit card holders through telemarketing campaigns in which the names of potential cardholders were gathered from telephone books. This did not appear to be a completely dependable method for determining the creditworthiness of cardholders. In 1969, First National City Bank filed over 10,000 lawsuits to collect amounts owing from credit card and other debtors. Another way to gather credit card customers was to send them a card in the mail, even when they did not request it. This practice encouraged the undisciplined use of credit cards and engendered so much criticism that New York prohibited banks from mailing unsolicited credit cards to consumers in 1970. Between 1950 and 1960, consumer credit obligations increased from about $21 billion to $56 billion. By 1971, the amount of consumer credit obligations increased to over $120 billion. Congressman James Abourezk of South Dakota was astonished to learn in May of 1970 that he could not rent a car at the Sioux Falls airport with cash. Instead, he was required to use a credit card. The congressman protested to the House Banking and Currency Committee that credit cards were replacing cash as legal tender.

Checks and Wires

Credit card use was growing, but the check was still king. Over 90 percent of monetary transactions were conducted by checks. The New York Clearing House continued to handle much of the bank clearing in New York, and the Fed facilitated the clearance of checks nationwide. The First National City Bank used computerized coding machines that processed some 2,000 to 3,000 checks a minute. The clearing process, nevertheless, continued to be inefficient. Checks written by individuals had to be cleared through an average of 2.6 banks and were handled ten times by machines. The use of electronic payments was growing. A National Commission on Electronic Funds Transfers was created to study this phenomenon. In 1975, the Social Security Administration began allowing direct payment electronically to bank accounts for retirement benefits. This was expanded to other government benefit programs.

International payment systems used the Society for Worldwide Interbank Financial Telecommunications (SWIFT) for fund transfers. SWIFT, a nonprofit cooperative headquartered in Brussels, Belgium, began operations in 1977. It was used as a financial messaging system that facilitated interbank transfers of information. It did not effect payments. SWIFT grew to be the largest international electronic transfer network, serving banks in almost 100 countries in the 1990s. The Clearing House Interbank Payments System (CHIPS) was used by New York and correspondent banks to handle the settlement and clearing of their transactions. CHIPS was owned and operated by the New York Clearing House Association. The Federal Reserve Bank of San Francisco began using an electronic payment system with its Los Angeles branch in 1972. This network was expanded to all Federal Reserve banks by 1978. Wire transfers were made through the Fedwire, a real-time payment system operated by the Fed for banks that have reserve or clearing accounts with a Federal Reserve bank. It was used to transfer funds and to transfer government agency and Treasury securities by book entry.

Monetary Policy and Capital Markets

In 1971, the Fed relied on the money supply aggregates M1, M2, and M3 as measures of the nation's money supply and its effect on the economy. M1 was the amount of currency in circulation plus demand deposits in commercial banks. M2 was M1 plus time and savings deposits, other than large certificates of deposit at commercial banks. M3 included M2 plus deposits at non-bank thrift institutions. In 1975, the Fed added more money figures, including M4 and M5. They too sought to identify liquidity. The concept of a "prime" rate for bank loans came under attack in the early 1970s as inflation increased. The prime rate had become a barometer of economic conditions, as well as a benchmark for interest rates. The government was jawboning the banks to discourage them from adjusting the prime rate upward to reflect market conditions. The government was trying to keep the prime rate at artificially low levels. The prime rate then began losing its primacy. The banks started using other measures for loan rates. By 1979, the London Interbank Offered Rate (LIBOR) was a popular index for international interest rates. The continuing increases in interest rates also gave rise to floating rate loans that were adjusted periodically to reflect changes in interest rates. The First National City Bank wanted to drop the prime rate and have its interest rates float freely, so that it would not be subject to criticism and political pressure to keep it artificially low. Floating rate notes were first used in 1974 by that bank.

Banks were tapping the capital markets for equity. Clark, Dodge & Co. was among the underwriters for a $30 million offering of 5 percent convertible subordinated debentures for the United Virginia Bankshares Corporation in 1969. The number of bank mergers increased. This included larger banks that sought interstate acquisitions, such as Wells Fargo and the Wachovia Bank and Trust Company in North Carolina. The Bank Merger Act of 1960 authorized mergers of competing banks where failure of one of the merging banks was imminent. Competitive factors were to be considered in other instances. This act encouraged bank mergers.

Mergers and Holding Companies

Between 1960 and 1966, over 1,000 bank merger applications were approved and only thirty-four were denied by banking authorities. These mergers raised concerns that another money trust was forming, and the Bank Merger Act was amended in 1966 to further restrict bank concentration. The legislation provided for governmental review of the competitive effects of bank mergers. The Comptroller of the Currency, the Federal Reserve Board (Fed), the Federal Deposit Insurance Corporation (FDIC), and the Antitrust Division of the Justice Department were all variously involved in this review process. Despite this legislation, bank mergers grew apace. This was due at least in part to more liberal views of the Comptroller of the Currency, who sought to allow expanded banking activity. The Justice Department continued to attack bank mergers under the Clayton and Sherman Acts even after the Bank Merger Act of 1960. The Justice Department brought civil and criminal charges against banks in the Minneapolis area in the 1960s. Eighteen commercial banks and one bank holding company and a clearinghouse in Minnesota were accused of conspiring to fix interest rates, loan terms, and payments for originating and servicing loans and service charges.

The Bank Holding Company Act of 1956 restricted the ability of bank holding companies to enter into nonbanking lines of business or to purchase other banks. Such activities required government approval, which was not always forthcoming. A loophole existed in this legislation, however: the act did not apply to one-bank holding companies. This meant that restrictions in the National Banking Act, which required national banks to limit their activities to those incidental to banking, did not apply to nonbanking corporations in a one-bank holding company structure. One-bank holding companies were also able to sell commercial paper that was not subject to Regulation Q and D ceilings. The first effort to create a one-bank holding company as a means to avoid Fed regulation involved the Union Bank of Los Angeles. It was followed by banks in North Carolina and then "[a] veritable stampede toward this type of organization quickly developed."[10]

The number of one-bank holding companies grew by over 200 between 1966 and 1969. Over 800 such entities had been created by 1966. They held about one-third of total bank deposits. Chase Manhattan Bank was among those forming a one-bank holding company. First National City Bank also formed a one-bank holding company. This was Citicorp. Numerous conglomerates were acquiring or creating one-bank holding companies, including Montgomery Ward, Baldwin Piano, and S&H GreenStamps. Leasco Data Processing Equipment Corporation even tried to acquire the Chemical Bank in New York through a one-bank holding company arrangement. The number of one-bank holding companies began to skyrocket in 1969. This raised concerns that these entities would become concentrated and control large portions of the nation's economy while operating largely outside the regulatory net thrown over other banks.

The government first turned to the antitrust laws to curb the amalgamation of banks and nonbank businesses. Citicorp, for example, was blocked by the Justice Department in 1969 from acquiring Chubb Corporation, a large insurance company. Congress then entered the debate over one-bank holding companies by adopting the Bank Holding Company Act Amendments of 1970, which subjected one-bank holding companies to the Bank Holding Company Act of 1956. This legislation was an effort to assure that one-bank holding companies did not undercut the separation of commercial banking from other activities. The Fed was directed to determine what activities of a one-bank holding company were "so closely related to banking or managing or controlling banks as to be a proper incidence" to banking. Several loopholes remained even after the 1970 legislation. The standard for the activities of affiliated bank holding companies was stated to be activities that were "closely related to banking," which provided great flexibility and room for interpretation. This legislation, in any event, failed to stop the overall growth of bank holding companies. By 1975, some 1,700 bank holding companies were controlling 4,700 commercial banks.

Credit Unions

The credit union industry was a rapidly growing segment of the financial system in the middle of the 1970s. More than 23,000 credit unions were operating in that period. The National Credit Union Administration was created in 1970 to charter and regulate federal credit unions. Previously, the Farm Credit Administration had engaged in such regulation, and then that regulatory authority was shifted to the FDIC and then to the Department of Health, Education and Welfare. A National Credit Union Share Insurance Fund was established to protect deposits in federal credit unions, while the states continued to regulate the state credit unions they chartered. The credit unions held assets of over $21 billion in 1972, but that figure was dwarfed by the over $170 billion in deposits held in S&Ls. By 1977, the S&Ls had assets of over $450 billion. Several states authorized checking accounts for savings banks during the 1970s.

Commercial Banks and REITs

Commercial banks held over $540 billion in deposits in 1972, up from $140 billion in 1946. All but about 200 of the 14,000 or so banks in the United States were insured by the FDIC. About 10,000 of the commercial banks had only one office in 1972. Even so, the number of banks with branches had doubled since 1960. The number of branch offices for banks increased by about 15,000 between 1950 and 1970. By 1975, the banks were operating over 30,000 branches. Florida amended its laws to allow branch banking in 1976, and Barnett Banks soon became a large operation in Florida with numerous branches. New York banks were allowed to branch statewide in 1976. New York allowed holding companies to own banks throughout the state and expanded the ability of New York City banks to have branches in adjoining areas. New York reduced the size of the towns whose home banks would be protected from branches of other banks.

Chase Manhattan Bank had over 250 branch offices just in the New York metropolitan area in the 1970s. It established loan production offices across the United States. These offices did not accept deposits and, therefore, escaped regulation as branches. Other banks exploited that loophole. Citicorp had over 280 nonbank offices in 35 states, as well as some 300 branches in

New York and 650 offices abroad. The Bank America Corp. had over 1,000 branch offices in California, 336 nonbank offices in 32 states, and 110 offices abroad. Another field opened up for the banks with the growth of the real estate investment trusts (REITs) that were financing office buildings, shopping centers, and other commercial projects. Between 1969 and 1973, REITs grew particularly fast, holding about $20 billion in assets by 1974. Commercial banks provided loans to the REITs. In the second quarter of 1974, REITs had outstanding loans of some $9.6 billion from banks. The First National City Bank and the First Chicago Bank had each loaned some $750 million to the REITs. Chase Manhattan became the first bank to form its own REIT in 1970. The Chase Manhattan Mortgage and Realty Trust held some $1 billion in assets. Several other banks also formed REITs.

A popular book for investors in the 1960s was *How I Turned $1,000 into a Million in Real Estate in My Spare Time*, by William Nickerson. Real estate prices began dropping, however, as interest rates rose. This caused a sharp drop in REIT earnings and asset values. A REIT crisis began in December of 1973 when Walter J. Kassuba, a developer in Palm Beach, filed for bankruptcy after defaulting on loans that had been made by several REITs. That failure was followed by a prolonged recession in the building and real estate markets in 1974 and 1975. The banks were adversely affected by this downturn. Most of the REITs were using their bank loans for construction and development, which was considered the riskiest area in real estate investment. That proved to be an accurate assessment. In 1975, the value of REIT holdings dropped some 80 percent. The assets held by the REITs plunged in value from about $420 billion in 1974 to $13 billion in 1978. Several REITs defaulted on their loans. Chase Manhattan's REIT suffered large losses. Chase lost over $160 million from its real estate loans, and it became a large operator of real estate property as the result of foreclosures on property securing defaulted loans. The First National City Bank had to write off some 10 percent of the loans in its REIT portfolio. Bankers Trust Company was hard hit by the REIT downturn. Other effects of the downturn in real estate were felt by banks. The Beverly Hills Bank Corporation could not meet its commercial paper obligations because of the failure by a large borrower to repay a real estate loan. This resulted in a run on its assets.

Bank Problems

In 1970, there were about 250 bank frauds that resulted in $32.7 million in losses to banks. Some $12.6 million was stolen in burglaries and holdups. The Sharpstown State Bank in Houston failed in 1971. Among other things, the bank had made loans that were used to buy the stock of a life insurance company controlled by the bank's executive officer, Frank W. Sharp. In 1972, the National Bank of Eatontown in New Jersey was the victim of a scheme by one of its officials in which he used some $10 million of the bank's money to trade $200 million of securities. This individual had been kiting checks to cover margin loans. Four stockbrokers, as well as the bank executive, were charged with crimes in connection with this operation. The brokers had received personal loans from the bank.

Other banks were having difficulties. A small minority-owned institution, the Unity Bank of Boston, had to be bailed out by the FDIC in 1971. Although that bank was able to remain in business for several years after that rescue, it eventually failed. Another bank that was bailed out by the FDIC was the Bank of the Commonwealth in Detroit, which had some $1.5 billion in assets and was the forty-seventh largest bank in the country when it ran into trouble in 1972. The FDIC was concerned that a group of banks headed by Donald Parsons would pose statewide problems in Michigan—hence, the rescue. Although the Bank of the Commonwealth was saved, it was still having difficulties in the 1990s. The United States National Bank of San Diego, which had almost $1 billion in deposits, failed in December of 1973—one of the largest bank failures in United States history. Another bank experiencing trouble was the North Carolina National Bank (NCNB). It had difficulty selling its commercial paper and had to obtain a $25 million line of credit from the First National City Bank to assure liquidity. NCNB survived and went on to prosperity. In 1975, NCNB had 122 nonbank offices in seven states and over 160 branches in North Carolina.

Franklin National Bank

A bigger problem was brewing at the Franklin National Bank, a regional bank on Long Island that was expanding rapidly. Michele Sindona, who was rumored to have ties to organized crime, had purchased a controlling interest in the Franklin New York Corporation, which was the bank's holding company. The bank, seeking to expand rapidly, was financing that growth through the issuance of jumbo CDs, federal funds, euro dollars, and interbank borrowings. The bank's rapid growth soon made it the twentieth largest bank in the United States. In its rush to expand, the Franklin National made a number of bad loans and was speculating in the foreign exchange markets, where it experienced further losses. On May 10, 1974, the SEC suspended trading of the stock of the Franklin National Bank, at the bank's request. The bank had lost over $60 million in the first month of 1974. About $47 million of that amount was due to losses from foreign exchange trading. The bank's troubles set off a run by its depositors. Some $800 million was withdrawn from the bank in less than four days. The Comptroller of the Currency then persuaded the New York Clearing House banks to set up a loan arrangement of $600 million in order to keep the Franklin National Bank afloat. The bank borrowed another $1.7 billion from the federal government.

A large amount of the funds in the Franklin National Bank were foreign funds or funds held abroad that were not insured. The FDIC and the Federal

Reserve Board kept Franklin National afloat long enough to allow those depositors to withdraw their funds. This provided at least informal insurance to these otherwise uninsured depositors. The effect was to increase the loss at Franklin National, which the FDIC and the Fed assumed. Sindona fled to Switzerland but was later arrested and tried and convicted of fraud. He committed suicide in jail in Italy in 1986. The Franklin National Bank was sold to the European American Banking Corporation, a consortium of foreign banks. The Franklin's demise was, at that time, the largest bank failure in American history.

Herstatt

The Bankhaus Herstatt in Germany created a crisis in the payments system in 1974. This institution had been started in 1727 by Johann David Herstatt in Cologne, Germany, as a silk mill and trading firm. Herstatt was clearing over $600 million of foreign exchange trades when it failed on June 28, 1974. Herstatt had suffered losses of some $200 million from foreign exchange speculations before it collapsed. Herstatt had liabilities of $840 million and assets of $380 million. Herstatt's failure occurred in the middle of the problems with the Franklin National Bank. This aroused concerns that a devastating banking crisis might be under way. Banks refused to send further funds through CHIPS because they were concerned that they might pay but not get paid, if other banks failed. Herstatt's failure also raised concern with open foreign exchange positions that were exposed in America. The question arose whether they could be netted against the German positions. The shutdown of the bank in Germany had stopped further payments from that bank to America, but (because of time differences) the American banks had already made their payments before the bank was closed on the day of its failure. The Chase Manhattan Bank froze the Herstatt account as soon as it learned of the Herstatt closing. The debtors of the Herstatt Bank then began claiming that the more than $150 million frozen in the Herstatt Bank account at Chase was to be shared with other creditors in the bankruptcy proceeding. This put CHIPS into gridlock as the banks all waited for each other to pay. Finally, the First National City Bank began making payments through CHIPS, which led the other banks to resume their payments. Had the First National City Bank not stepped up, the banking system could have broken down completely.

In order to prevent Herstatt-style concerns in the future, CHIPS went to same-day settlement. Seven years passed, however, before that system could be fully implemented. In the meantime, in 1975, the Basel Committee on Banking Supervision was formed by the central banks of the Group of Ten countries. It was to consider steps that could be taken by banks and their regulators on a multinational level to prevent Herstatt-style crises in the future. The Basel Committee drew up a supervising agreement for international banks, the Concordant, which spelled out some steps for dealing with such problems. The Basel Committee's most important contributions would, however, have to await future banking crises.

2 Commissions and Scandals

The Dow Jones Industrial Average reached 985 in late 1968 and rose above 1,000 in 1969. It then began falling. Between the beginning of 1969 and May of 1970, stocks listed on the NYSE dropped in value by about 50 percent as trading volume slowed. The United States economy was in recession, and the NYSE daily volume fell to 12 million shares from the 15 million in the prior year. This pause allowed Wall Street back offices to catch up on their paperwork. That was good news, but falling volume caused a decrease in commission revenues for broker-dealers. Many of those firms were still recovering from a paperwork crisis and had just invested large sums in upgrading their back offices. The decline in commission revenue and increased overhead expenses resulted in a profit squeeze on the broker-dealers.

Market Volatility

The Fed had been trying to dampen speculation by keeping stock margins at about 80 percent. After the market began falling, the Fed reduced margin requirements to 65 percent, but that change had little effect. The market experienced an especially sharp drop on April 22, 1970. That break caused the stock of Electronic Data Systems to fall fifty points on a single day, reducing the value of H. Ross Perot's holdings by $445 million, which would probably ruin even a billionaire's day. As the market kept falling, concern arose that there might be a chain reaction of failures among brokerage houses; the failure of even a single firm could result in a panic. President Nixon tried to rally the market by telling a visitor, "Frankly, if I had any money, I'd be buying stocks right now." This Rockefeller-like statement from an earlier era caused a thirteen-point rise in the market.

Stock market prices fell again after the invasion into Cambodia that was led by U.S. forces in the spring of 1970 to flush out North Vietnam troops from sanctuaries there, and the Dow Jones Industrial Average fell another twenty points after the shooting at Kent State by national guardsman of students protesting the Vietnam War. The Dow was down to 621 in May of 1970.

David Rockefeller, the head of Chase Manhattan Bank, and John Kenneth Galbraith, a Harvard economist, then issued warnings of a possible financial collapse. Nixon called forty-five top business and financial leaders to the White House to assure them that the Fed would be supporting the market. Another sharp drop occurred on May 25, 1970. The market rallied a few days later, on May 27, when the Dow increased by over thirty-two points, setting a new record for a one-day increase. The price of a share of IBM had declined by $7 on a single day in May of 1970, causing an overall loss in the value of about $800 million. IBM had other problems. The largest antitrust case to that date was filed against that company in 1969. It would not be tried until 1975. At that time, IBM stock was worth more than the stock of all of the companies listed on the New York Stock Exchange. The company would prevail in the antitrust litigation, but the litigation weakened the firm, and the revolution in personal computers would nearly destroy it. Some other high-flying companies would crash. They included Ling-Temco-Vought (LTV) and Resorts International. In June of 1969, LTV stock dropped from $169 to $25, and Litton Industries' stock fell by 70 percent.

Securities Scandals

Four Seasons Nursing Centers saw its stock plummet from $91 to $32. That company was embroiled in a scandal involving an offering of 450,000 shares of its stock on an "all or nothing" basis. Principals of the firm engaged in several illegal maneuvers to make sure that the entire offering was sold. Among other things, an individual at a brokerage firm was given a loan and shares of stock as an incentive to market the offering. The company "sold" additional shares in the "all or nothing" offering to individuals who had no intention of actually buying the shares. Their checks for $2.5 million bounced. These phony purchases were made to stimulate and complete the offering. Trading in Four Seasons was suspended by the SEC in May of 1970, and the company declared bankruptcy. Criminal charges were brought against several individuals involved in this debacle, including Four Seasons' chairman and Steve Walston, a Walston & Co. executive, whose firm had been pushing Four Seasons' stock. Dunn & Bradstreet was among those embarrassed by this failure. It had given a prime rating to Four Seasons' commercial paper, as well as to King Resources, which was encountering financial difficulties.

National Student Marketing Corporation (NSMC) was another highflier that crashed. This company was created by Cortes Wesley Randell, who was still in his thirties when he built NSMC into a multimillion dollar enterprise that sold products to college students. Randell owned a castle in Virginia and flew in his own private jet. NSMC sold over 11 million shares of its stock. Their price increased from $6 to $30 in a little over two months after the company went public. One of the investors was the Harvard Endowment Fund. NSMC stock rose to $140 in December of 1969, but it plunged to $3.50 in July of 1970. The SEC charged that the price of the NSMC stock had been artificially inflated by false and misleading financial statements. This inflated valuation allowed NSMC to acquire twenty-five companies in exchange for its stock. Randell pleaded guilty to stock fraud and was sentenced to eighteen months in prison. Marion J. Epley III, a partner at White & Case, a large New York law firm, was charged by the SEC with fraud in connection with the activities of the NSMC. This set off a storm of controversy over the role of lawyers in advising clients on federal securities law requirements.

In another action, the SEC sued Glenn W. Turner Enterprises and a related company, Koscot Interplanetary Enterprises. The pyramid sales schemes of those companies were found to be securities that had to be registered with the SEC. High-pressure sales tactics were used to convince unsophisticated individuals to buy various motivational programs. Purchasers paid from $300 to $1,000 to attend promotional sessions where they received tapes, records, and other materials designed to motivate them and improve their sales ability. Participants could sell courses to others and receive part of the purchase price as commission. At the seminars, prospects were treated to high-pressure sales tactics to convince them to become salesmen of Dare to Be Great programs. The salesmen at these meetings stood on chairs, shouted, and engaged in "money humming," that is, extolling the virtues of making money. The salesmen displayed large sums of cash and drove new and expensive automobiles. The rags-to-riches story of Glenn W. Turner, the owner and founder of Dare to Be Great, was described at length by trainers to new prospects at sales meetings. This operation was shut down by the SEC's action.

In 1972, a federal court of appeals held that John Nuveen & Co. had been illegally selling commercial paper to public investors. The federal securities laws exempted commercial paper from registration with the SEC if the paper had a maturity of less than nine months and if the paper is not ordinarily purchased by the general public. The sale of that paper to the public by John Nuveen & Co., however, forfeited that exemption and required registration with the SEC. An institutional "payola" scandal arose in the mutual funds industry. William Langfield, a trader at Investors Diversified Services, was charged by the SEC with receiving special treatment for his personal trades.

A bigger scandal was brewing. The SEC discovered in 1972 that large corporations had been making improper political contributions and bribing foreign government officials through off-the-books payments from corporate slush funds. The SEC found these practices so widespread that it would have been impossible to prosecute all of the companies involved. There was also some doubt whether such payments were illegal under American law because there was no express prohibition against bribing foreign officials. The SEC created a voluntary disclosure program as an alternative to the litigation of the legality of these "questionable" payments. This allowed corporations to confess their sins and avoid an SEC enforcement action. The firms making confession were required to conduct an internal investigation to determine the extent of such practices and to take steps to prevent such conduct in the future. These confessions revealed that the amounts paid to foreign agents by American corporations totaled hundreds of millions of dollars. A significant amount of that cash was used to bribe foreign officials in order to obtain business. Lockheed admitted to paying over $200 million in foreign consulting fees and commissions between 1970 and 1975. Over $30 million of that amount was used for bribes or questionable payments, which Lockheed made in Japan, Germany, the Netherlands, Indonesia, Italy, Saudi Arabia, and numerous other countries. Other firms making questionable payments were Exxon, Gulf, Mobil, United Fruit, Boeing, and McDonnell-Douglas. Congress reacted to these disclosures by adopting the Foreign Corrupt Practices Act, which prohibited payments by American companies to foreign government officials in order to obtain business. It excepted "grease" payments from this proscription—that is, small bribes to customs officials and others were permitted. This legislation had the further effect of prohibiting off-the-books slush funds.

Scandal arrived on the SEC's own doorstep. G. Bradford Cook, the agency's general counsel, became SEC chairman in 1973, replacing William Casey, who later became the director of the CIA. Casey was under fire when he left the SEC for refusing to turn over Dita Beard's papers to Congress. Those papers, belonging to Washington lobbyist Beard, were at the center of a scandal over efforts by the International Telephone & Telegraph Company (ITT) to settle a government antitrust action on favorable terms by making a $400,000 contribution to the Republican national convention in 1972. Cook, too, quickly found himself in trouble. He resigned after it was discovered that he had altered a complaint issued by the SEC against Robert Vesco, a fugitive financier, removing allegations involving a campaign contribution to the Republicans in order to spare them embarrassment.

The Securities Business Evolves

The NYSE was incorporated in 1971. That action was taken in response to a recommendation by William McChesney Martin, who had just left his job as chairman of the Fed and was commissioned by the NYSE to conduct a study of its operations. The Pujo Committee had sought such action earlier in the century, but it was only when members faced potential liabilities during the paperwork crisis that incorporation became a significant issue for the NYSE. Martin also made some other observations: "In recent years, the old familiar patterns in the securities industry have been disrupted by the appearance of two new forces: institutional investors and computers." Martin predicted that computers, "because of the communication systems they make possible, offer the means to improve radically the way markets operate."[11] Recognizing that the markets were becoming more integrated, he thought that the NYSE, the

AMEX, and the regional exchanges should be linked.

Broker-dealers continued to incorporate. They sought limited liability, and they wanted to tap public markets for capital through stock offerings. The broker-dealers had been hampered in their efforts to raise capital as partnerships because NYSE rules precluded them from selling their shares to the public. The NYSE had allowed broker-dealers to incorporate in the 1950s and agreed in 1970 to allow them to sell their shares to the public. Donaldson, Lufkin & Jenrette (DLJ) became the first brokerage firm to publicly market its own shares. The firm offered 800,000 shares of common stock at $15 a share, but obtained only half the capital it sought. American Express sought to expand its financial services by buying 25 percent of Donaldson, Lufkin & Jenrette. DLJ's stock dropped in value, however, and American Express subsequently distributed the DLJ stock to its shareholders. DLJ would be acquired by the Equitable Life Assurance Society in 1985. Paine Webber, Jackson & Curtis, which had been a partnership since 1879, incorporated in 1970 and began selling its stock to the public. Merrill Lynch, Pierce, Fenner & Smith Inc., which had also incorporated, made a public offering of 4 million shares of its stock in June of 1971. Those shares were offered at a price of $28 and were listed on the NYSE. Merrill Lynch was the first member of the NYSE to be so listed. Another large brokerage firm, Bache & Co., went public in 1971 with a $40 million offering.

Brokerage firm advertisements included the Merrill Lynch bull; the slogan that Merrill Lynch was "bullish on America" was introduced in 1971. It would provide the firm with an enduring market image. Merrill Lynch changed this theme in 1980 to "A Breed Apart," and commercials showed a bull in a china shop. Merrill Lynch began using "A Tradition of Trust" in 1988, and in 1993 it claimed that "the difference is Merrill Lynch." The company's successful advertising campaigns spurred promotional programs by other brokers. The actor John Houseman, a former commodity trader, was hired to act as spokesman for Smith Barney, assuring the public that Smith Barney earned money the "old-fashioned way." E.F. Hutton claimed, "When E.F. Hutton talks, people listen." Another brokerage firm portrayed its customers in advertisements in which they said, "Thank You, Paine Webber."

Brokerage firms began offering shareholders an opportunity to build their investment accounts through small investment programs and by dividend reinvestments. Merrill Lynch used a "Sharebuilder Program," which was quite popular. Merrill Lynch then employed 20,000 individuals and had almost 250 offices. Allen & Co., which had been hurt badly by the stock market crash of 1929, had recovered and was in the top ten largest firms on Wall Street in the 1970s. Other large brokerage firms were Bache & Co.; E.F. Hutton Group; Dean Witter & Co.; Paine Webber, Jackson & Curtis; Loeb, Rhoades & Co.; and Shearson, Hayden, Stone.

Investment banking was a lucrative business. Partners at Morgan Stanley were making $150,000 to $500,000 per year. Starting salaries for new investment bankers in the 1970s were $20,000 or more. Merrill Lynch created an international bank in London in 1975 and acquired White Weld & Co. in 1978, which further strengthened Merrill Lynch's investment banking abilities. Investment banking was tightly concentrated in a small number of firms: Ten firms managed some 87 percent of underwriting. Salomon Brothers & Hutzler became simply Salomon Brothers in 1970. It was expanding its position in the elite levels of investment banking. By 1979, Salomon Brothers would be the underwriter for more than $17 billion in corporate bonds and notes. Salomon Brothers employed 1,000 workers and stood second only to Merrill Lynch in size of capital.

Some 10,000 stocks were being traded in the over-the-counter market in 1970, as compared to the 1,300 stocks listed on the NYSE. The Nasdaq Stock Market, which was owned by the National Association of Security Dealers (NASD), began operations in 1971. It "was the world's first electronic stock market."[12] Actually, only price quotations were provided electronically. Order executions had to be negotiated by telephone. By 1972, daily trading volume through Nasdaq was about 8 million shares. Even so, the stock market was in the midst of an overall decline. A leading Wall Street historian stated in 1972 that "if the institutional structure of securities capitalism has failed to eliminate corruption, at least it has succeeded in the far more important task of ending panics and major crashes."[13] As it turned out, this claim was not entirely accurate. The Dow Jones Industrial Average hit 1,000 on November 14, 1972, but then began a long decline that reached 577 by December of 1974. In a twenty-one-month period ending in September of 1974, Standard & Poor's (S&P) index of 500 stocks dropped by over 40 percent. The bear market that ended in October of 1974 was the worst since the 1929 crash. The market fall between 1973 and 1974 has been largely ignored by historians, "yet it was truly epochal, and on a par with the 1930s."[14] It was accompanied by a recession.

Hedge funds returned to obscurity, at least for a while. Closed-end investment companies were also declining. "They were often trading substantially below their net asset values, usually over 25 percent."[15] On October 1, 1974, the NYSE extended its trading hours to 4:00 P.M. as a way of increasing business. The stock market rallied in 1975, increasing by over 37 percent. Another rally began in the spring of 1976. It would still require several years before the Dow would reach 1,100. One thing was evident: Market prediction was still not a science. James Dines, a market analyst, proclaimed in 1974 that the market would continue to plunge. The Dow Jones Industrial Average then rose by 400 points. Dines further predicted that gold would move up substantially. Gold prices then dropped by half.

Change was in the air. The railroads were being removed from the center of finance. Amtrak was created in 1970 to provide nationwide passenger rail service. As a government-owned railroad, it was given monopoly status. Over a period of twenty-eight years, the federal government provided more than

$20 billion to Amtrak. It was not a financial success, but Amtrak did continue passenger service. A megamerger occurred in 1976 after Mobil Oil bought Montgomery Ward and changed its name to Marcor, Inc. The purchase price was $900 million. A study sponsored by the Treasury Department concluded in 1974 that New York had lost ground to London as an international financial center, principally because of the interest equalization tax and capital restrictions. New York City imposed a 25 percent surcharge on its stock transfer tax in 1975. This caused some brokerage firms to move to New Jersey. New York City then decided not to impose the tax, fearing a loss of this key industry.

The NYSE faced additional competitive pressures. Third market volume was about 8.5 percent of trading on the NYSE in 1972 and totaled about $10 billion in the following year. Trading in the third market in some stocks was over 25 percent of volume by 1973. Donald E. Weeden's firm was the leader of the third market traders. Weeden & Co. was not a member of the NYSE and was accounting for about a third of the third market business. This firm was taken over in 1978 by Mosley, Hallgarten & Estabrook. Carl Marks & Co., M.A. Shapiro and Allen & Co. were other third market firms. First Boston Corp. was a third market maker. Instinet, an institutional market, was growing only slowly and experiencing difficulties with its trading system and computers.

Securities Market Structure

Several investor information services, such as United Business Service, Babson's Reports, Value Line, and Argus Research, were available on Wall Street in the 1970s. The NYSE was stepping up efforts to automate its own information services. In 1973, the Securities Industry Automation Corporation (SIAC) created the NYSE Designated Order Turnaround System (DOT), which allowed the automatic execution of small orders at currently posted prices. The Pacific Stock Exchange introduced a similar system called Securities Communication Order Routing and Execution System (SCOREX). A consolidated last-sale reporting system was created by SIAC for stocks traded on the NYSE and the AMEX. The Consolidated Tape Association was organized to consolidate reporting of sale prices. SIAC was the central trade price processor for this service. The composite tape printed transactions on NYSE-listed stocks wherever traded, including the third market. NYSE specialists reported about 80 percent of those executions.

The SEC endorsed the concept of a "central market system" in its 1971 study on the role of institutional investors in the market. The SEC envisioned this system as encompassing a network of broker-dealers linked together by electronic communications. The SEC wanted a centralized system of communications for executions of securities on the exchanges and in the over-the-counter market. A year later, the SEC issued a statement on the future structure of the securities markets that again pressed for a central market system. The SEC contended that a central market would better assure that customers received the best executions in any market—the NYSE, the over-the-counter market, or the third market. The central market system was a somewhat amorphous and uncertain concept. The SEC did pressure the exchanges to develop the composite last-sale price reporting system as a step in the development of a central market. An SEC commissioner, James Needham, proposed the creation of a United States Stock Exchange that would combine the exchanges with the Nasdaq market. That idea got nowhere.

The SEC would lose interest in the central market system concept later in the 1970s. It did propose a "universal message switch" that would have required the exchanges to create a system whereby customer orders would be automatically routed to the market with the best quotation price. This was objected to by the industry. The alternative developed by the exchanges was the Intermarket Trading System, which allowed orders to be executed by specialists at the best price available on any exchange. The Intermarket Trading System was an electronic link among the NYSE, the AMEX, and the regional exchanges. The Intermarket Trading System did not require an order to be executed on the market quoting the best price. Instead, the specialist receiving an order could execute the order as long as the execution was done at the best quoted price on any exchange.

Louis Loss, a Harvard law professor, sought to convince Congress in the 1970s to rewrite the federal securities laws and codify court decisions that had interpreted those statutes. That effort failed. A 700–page bill was prepared but never approved by Congress. Congress did conduct an extensive examination of the securities markets in the 1970s. The result was the Securities Exchange Act Amendments of 1975, which sought to facilitate the SEC's efforts to create a national market system. This was to include, among other things, the development of more centralized clearing systems and information processing.

Institutional Trading

By 1974, critics both inside and outside the government expressed concern about the effects of institutional trading on the capital markets. Such trading was affecting the liquidity of the markets and increasing price volatility. Pension plans were growing in size and increasing their common stock holdings. "Political irony in the development of pension funds is hard to miss: the capital workers now fueled Wall Street."[16] This development, however, may have been consistent with Karl Marx's contention that labor was destined to gain control over capital. The Employee Retirement Income Security Act of 1974 (ERISA) allowed individuals to create their own individual retirement accounts (IRAs), provided there was no private pension plan maintained by their employer. Later, in 1991, coverage was extended to individuals with employer pension plans, and contribution limits were increased. This furthered capital ownership by employees, as well as encouraging savings. By 1981, there would be $400 billion held in IRA accounts.

ERISA additionally sought to protect the beneficiaries of corporate pension funds. That legislation followed the failure of the Studebaker plant in South Bend, Indiana. Studebaker had neglected to fund the pension benefits of the employees in that plant adequately. Many retired workers received little despite many years of service and vested rights. ERISA sought to prevent such tragedies by requiring defined benefit plans to be fully funded for "vested" benefits. The Pension Benefit Guaranty Corporation was created to provide insurance for defined benefit plans. It was authorized to borrow up to $100 million from the Treasury to cover losses from underfunded benefit plans.

ERISA required pension funds to be managed for the exclusive benefit of plan participants and beneficiaries. It established fiduciary investment standards for pension fund managers. The "prudent man" rule was still used by forty states in the 1970s for investments by trustees and other fiduciaries. Legal lists in several states were used to restrict investments by fiduciaries. ERISA adopted a "prudent man" standard requiring investments to be made with "the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."[17] This standard was interpreted broadly enough to allow common stock investments. Another standard for trustee investments would gradually shunt these restrictions aside. Something called "modern portfolio theory" sought to diversify investments across a wide spectrum. Modern portfolio theory allowed the introduction of risk into the portfolio as a part of that diversification. This permitted even speculative investments for a portion of the portfolio. The Department of Labor was among those adopting prudential investment standards for pension fund managers that allowed implementation of modern portfolio theory. This meant that investments of the portfolio manager would be judged in the context of the overall portfolio and not just on whether a particular investment was a risky one.

Securities Commissions

The fixed commission rate structure that had been the basis for the creation of the NYSE in 1792 was faltering. The minimum commissions required by NYSE rules were being undercut by institutional traders in the third market. "Soft" dollars were being used to avoid fixed commission charges. These arrangements involved "free" services given by a broker in the form of research or other work in exchange for order flow. Those services had value and effectively acted as a discount on fixed commissions. The brokerage firms used "give up" arrangements as another means to, in effect, negotiate commissions. In these arrangements, commissions on trades were split between the broker accepting an order and other broker-dealers who provided services to the institutions. This allowed the nonexecuting firm to be compensated and imposed a discount on the firm executing the orders. Such a discount was not otherwise permitted under the fixed commission rate rules. Such practices were restricted in 1969, but there were so many other exceptions to the fixed commission rule that it remained a mystery to all but the involved firms.

The NYSE increased its nonmember commission rates five times between 1934 and 1965. Those increases were generally routinely approved by the SEC. Starting in the middle of the 1960s, however, the SEC began pressuring the NYSE to limit increases. The SEC also began whittling away at the fixed commission rate structure. Initially, it eliminated fixed rates on odd-lot transactions. In 1968, the government began questioning the entire concept of fixed commissions in the securities industry. The Department of Justice submitted a statement to the SEC questioning the anticompetitive effect of NYSE-fixed commission rates. The Justice Department asked the SEC to investigate whether fixed rates were justified. The courts provided another forum in which to attack fixed commission rates. A federal court of appeals ruled in 1970 that the NYSE was required to justify its prohibition on commission rebates.

In April of 1970, in order to relieve profit pressures on broker-dealers during the paperwork crisis, the SEC approved a $15 commission surcharge for stock transactions of 1,000 shares or less. The SEC, thereafter, gradually began pushing the industry toward eliminating fixed commission rates. In November of 1970, Robert Haack, the president of the NYSE, made a speech before the Economic Club of New York in which he advocated the dropping of fixed commissions. This surprised and shocked Wall Street. In 1971, the SEC ruled that commissions on transactions in excess of $500,000 would be negotiated. Further, the level at which commissions would be negotiated would be gradually lowered. Finally, the SEC unfixed all commissions in May of 1975. This event became known as “May Day” in the industry. It would have some dramatic effects. Institutions had enormous bargaining power and could negotiate lower rates. Those lower rates encouraged trading by the institutions in larger volume. Small investors continued to be charged higher commissions by the brokerage firms, but so-called discount brokers were started that offered few services but low commissions to retail investors.

SEC Regulation

Regulation was becoming more pervasive. Broker-dealers were required to maintain a broad array of records concerning their business activities, subject to SEC inspection. The records required by the SEC included ledgers reflecting assets, liabilities, income, expenses and capital, purchases, sales and deliveries of securities and commodities, and debits and credits in margin accounts. Ledgers had to be maintained for debt interest, securities and money borrowed on loans, collateral for loans, securities failed to receive and failed to deliver, short securities differences, and repo agreements. In 1976, the SEC, after intensive study, adopted a uniform financial operation report for broker-dealers. These Financial and Operational Combined Uniform Single Reports

(FOCUS reports) had to be filed monthly. SEC rules required broker-dealers to supply additional annual reports on their financial condition prepared by certified public accountants.

The SEC announced in 1975 that it would seek to eliminate Rule 390 of the NYSE, which prohibited the sale of NYSE-listed stocks in the over-the-counter market. That proposal was withdrawn in 1979. Instead, the SEC agreed to allow the NYSE to grandfather existing listed stocks under Rule 390. Stocks listed on the NYSE after April 26, 1979, would not be subject to that rule and could be traded over-the-counter. There was a very small market in new listings for several years. Nevertheless, third market volume dropped substantially after the unfixing of commissions. Third market volume was less than 3 percent of NYSE volume in 1978. The NYSE was given greater protection from the antitrust laws by the Supreme Court in 1975. In *Gordon v. New York Stock Exchange*, *Inc.*, the Supreme Court found that the fixing of commission rates by brokerage firms fell within the purview of the SEC.[18] Therefore, the antitrust laws were preempted because the SEC had been actively and aggressively exercising its power in that area. In *United States v. National Association of Securities Dealers*, the Supreme Court held that there was an implied repeal of the antitrust laws for activities of the self-regulatory organizations, in this case the NASD, in areas where the securities laws imposed a pervasive regulatory scheme.[19]

The value of a NYSE seat dropped from over $500,000 in 1968 to $75,000 in 1973. A NYSE seat sold for $40,000 in November of 1976. But the exchange was far from dead. The NYSE created an automated bond system in 1976 that soon accounted for most of its bond trading activity.[20] Over 7 billion shares traded on the NYSE in 1977. The Dow Jones Industrial Average was inching higher, trading at about 900 in 1979, the level that it had traded at a decade earlier. Global trading volume approached $150 billion a day. Inflation was a major market focus in the 1970s. Investors were concerned with the “real interest rate”—that is, the current interest rate minus the inflation rate. Safety was another concern. In the early 1970s, investment managers were concentrating their funds in a group of large companies called the “Nifty Fifty.” These were blue chip stocks that were considered to be investments that would not cause losses for investors. These securities were outperforming other securities and were trading at eighty times earnings. In 1973, however, Nifty Fifty stock prices began to fall. The Nifty Fifty declined more sharply than the rest of the market during the 1974–75 recession. During that same period, the Dow Jones Industrial Average fell back through 1,000.

Insurance Problems

Investment company assets rose to almost $60 billion in 1972 but then declined to $50 billion by 1979, exclusive of money market funds. Broker-dealers engaged in equity funding programs in the 1970s. These were sales of mutual funds that were combined with insurance programs. In April of 1973, a massive fraud was uncovered at the Equity Funding Corporation of America, which was headquartered in California. That company had over 4,500 salespersons employed in 135 offices in 35 states. Its investment program was based on the so-called British life funding concept, in which money was borrowed on mutual fund shares to purchase life insurance. Equity Funding sold customers the mutual fund shares and arranged loans against those shares to pay for life insurance. Equity Funding claimed assets of more than $1 billion in 1973. In fact, its assets and sales were grossly overstated, and an elaborate fraud was perpetrated on the company's shareholders. Its officials held "Project Z" meetings to cover up the fraud from company auditors. The company was put into bankruptcy when this fraud was revealed. Twenty-two individuals were indicted. Stanley Goldblum, the president of Equity Funding, was among those jailed. The Equity Funding scandal also gave rise to claims of insider trading. Raymond Dirks, a financial analyst at the firm of Delafield Childs, Inc., was tipped on the fraud and advised his institutional clients to dump their Equity Funding stock before the fraud at the company was made public. Dirks was charged with insider trading by the SEC. The Supreme Court would dismiss that claim. Equity Funding was reorganized and became Orion Capital Corp.

The insurance industry created what was called a "Guaranteed Interest Annuity." These new contracts were designed to provide high interest returns, safety of principal, and tax deferment as annuities. In *SEC v. United Benefit Life Insurance*, the Supreme Court again held that an annuity contract that provided a market-based return was subject to the federal securities laws.[21] The insurer involved in that case had tried to avoid SEC regulation by assuming some of the investment risks in the contract through a guarantee of a minimum return after the accumulation phase of the contract. Nevertheless, returns to the investor were subject to market performance. The Supreme Court held that this was sufficient to make the contract a security. This ruling meant that insurance companies were subject to dual state insurance and state and federal securities regulations. Insurance companies were required to separate their variable products from their traditional insurance products. Reserves to support traditional products were kept in the insurance company's general account. So-called separate accounts had to be set up for their securities products.

The National Association of Insurance Commissioners continued its efforts to promote uniform state regulations. It created uniform financial reports, reciprocity among states for recognizing each other's insurance companies, uniform rules for valuing securities held by the insurance companies, standard mortality tables, and model laws. By the 1970s, most states required agents and brokers to be licensed. An insurance agent could become a Chartered Life Underwriter by passing ten examinations given by the American College of Life Underwriters. Most states prohibited unfair trade practices such as false advertising, the payment of rebates, and improper claim settlement procedures.

The independent insurance agent was under attack in the 1970s. The cost of business was increasing while premiums were decreasing. Group insurance programs were bleeding off business. The sales of various insurance products were conducted through financial advisers rather than agents. One continuing abuse by agents in the insurance industry in the 1960s was replacement insurance. Policyholders were induced to replace their existing life insurance, but the reason for replacement was simply to increase commission to sales agents, and such replacements were often not to the benefit of the policyholder. Most state insurance regulations in the 1970s sought to prevent insurance companies from controlling companies in which they were investing. State regulations set eligibility requirements regarding the quality of investments by insurance companies and set limits on eligible securities. Bonds were still the most common type of investment by life insurance companies, and many corporations were placing debt through private placements with insurance companies. Indeed, insurance companies accounted for about 75 percent of all direct placements, and direct placements accounted for as much as one-half of total long-term corporate financing. Prudential Insurance Company, during the 1960s and 1970s, had a sales force dedicated to calling on companies in order to lend them money.

Life insurance and annuities were the basic products of many insurance companies. They serve different purposes. Life insurance attempts to create an estate at death, while an annuity seeks to liquidate an estate in a way that assures that the recipient will not outlive his or her income. The ordinary whole life policy assumes that premiums will be paid at a level rate throughout the lifetime of the insured. However, the policy can be surrendered at an earlier date or may be used as the basis for the purchase of a retirement annuity using the loan value of the whole life policy. The level premium whole life policy charges a premium in the earlier years of the policy that is larger than necessary to cover the mortality risk. The idea is to accumulate a fund sufficient to pay for the cost of insurance in later years of life when the risk of mortality is higher. This accumulated fund inures to the benefit of the policyholder and can be used to borrow against, or, if the policy is surrendered, the accumulated value is returned to the policyholder.

At the end of the 1960s, ordinary whole life insurance was under intense competition from group life insurance and other programs. Providing competition with annuities were pension plans. The insurance companies continued to lose market share in the 1970s to the mutual funds, even with the creation of the variable annuity. Sales of whole life insurance policies began declining in the 1970s because of reduced investment returns. The traditional whole life policies had very low rates of return, and the high interest rates available elsewhere caused an abandonment of the whole life policies that had long been popular as a savings program. Although the Equity Funding fraud had put a damper on that particular product, competitors were urging consumers to buy term insurance and invest the difference between the cost of term insurance and a whole life policy into mutual funds. This spurred the insurance companies to create competing programs. One innovation was the adjustable life insurance policy, which was introduced in 1971. These policies allowed the owners to set their own premium payment levels, which determined the cash surrender value of the policy. Universal insurance was another change that allowed greater flexibility in premium payments and death benefits. The first of those policies was issued in 1977. Even more important was the creation of the variable life insurance policy, which had been sold abroad before being introduced to the United States in 1976. In a variable life insurance policy, the benefit was based on the investment experience of a separate pool of assets. It provided for level premium payments and combined a death benefit with a savings feature. The savings or surrender value of the variable life policy was determined on the market performance of premium payments held in a separate account. Returns on this investment were tax-deferred until withdrawal.

A further step was the creation of variable universal life insurance. These policies allowed the holder to have the advantages of both an adjustable and a variable policy. Universal life insurance allowed the policyholder to change the amount and timing of premium payments. Premiums were invested in assets that provided a return based on market performance and that could be used to determine the cash surrender value of the policy. If premiums were not paid, the death benefit charge was deducted from the accumulated cash value for the policy in order to avoid forfeiture. Another innovation was index-linked life insurance, in which benefits were tied to the performance of an index such as the S&P 500 or the consumer price index. The reserves for the index funds were held in a general account of an insurance company, but variable life reserves were required to be held in a separate account.

The insurance industry experienced a severe down cycle in 1974 and 1975. The Government Employees Insurance Corporation (GEICO), a casualty insurer, was among those facing financial difficulties. The company had a loss of $126 million in 1975. GEICO's stock dropped from $42 to under $5. The company had to be rescued by the District of Columbia insurance commissioner. He arranged the purchase of new stock by other insurance companies, which gave GEICO much needed cash. Warren Buffett, a future billionaire, began investing in GEICO after its financial difficulties. The stock price soon rose to over $8. In the 1970s, the fastest growing branch of life insurance was group insurance. More than 132 million persons were covered by group insurance in 1979. The Servicemen's Group Life Insurance Act was the basis for group life insurance for servicemen that was issued by private insurers. Health insurance was another growth area. There were seventy Blue Cross plans and seventy Blue Shield insurance plans in the United States in 1978 that provided health insurance for employees of participating businesses.

The Federal Trade Commission (FTC) conducted a study of the insurance industry and published a highly critical report called the *Task Force Insurance Report*. The FTC found that the rate of return on a whole life insurance policy for the policyholder was somewhere between 1.2 and 1.85 percent. The FTC also charged that effective price competition did not exist in the life insurance business and that most consumers bought life insurance policies without being given information adequate to allow them to understand the costs of the policy. This report caused a downswing in the purchase of permanent life insurance. In 1980, Congress prohibited the FTC from studying or investigating the business of insurance unless specifically requested by the House or Senate Commerce Committees. Between 1969 and 1980, state guaranty funds made assessments for property and casualty insurance of about $200 million. Sixty-seven insurance companies failed during that period. All of the states had property-casualty insurance guaranty funds. Those funds were small, however, and could not handle a major default.

3 New Economic Policy and New York City

Gold Problems Accelerate

The gross national product in the United States nearly doubled during the 1960s, but the economy was in trouble. Increased government spending created strong inflationary pressures that eroded incomes, as well as destabilizing the dollar in world markets. The Great Society and Vietnam War costs continued to add to the deficit. The Vietnam conflict was costing 50 percent more than the United States had spent during World War I. The 10 percent surtax imposed by Congress in 1968 and the Fed's increased reserve requirements and discount rates all failed to slow inflationary pressures. The prime rate reached 8.5 percent in 1969. This was only the beginning. Government spending continued to increase, and the federal deficit ballooned, reaching $23 billion in 1970. International financial concerns were affecting America. In November of 1967, the British pound was devalued by over 14 percent, from $2.08 to $2.40. Other currencies followed. The fixed price of gold at $35 an ounce created problems for the United States because the gold stored at Fort Knox was being cashed in for dollars held abroad. Between 1958 and 1960, United States gold reserves dropped from $22 billion to $17 billion.

By 1964, dollar holdings of foreign central banks exceeded the value of the gold at Fort Knox. Federal gold stocks rose in March of 1967, but that was only a short respite. Large offerings had to be made by the London gold pool of industrialized nations in order to meet speculative demand. Hundreds of millions of dollars in gold was sold by the gold pool in 1967 in order to stabilize gold prices and to protect the dollar. It was not enough. Some $45 million in gold was removed from the United States in June of 1967 in the wake of the Arab-Israeli War. U.S. gold stocks then stood at $13 billion. President Lyndon Johnson restricted United States dollar investments in Europe in 1968 as a remedy for America's balance of payment problems. That did not stop the drain of gold.

By 1968, U.S. gold reserves had dropped to $12.4 billion, which was the lowest since 1937. Gold buying increased. On March 13, 1968, a massive gold purchase in London reduced America's gold supply by almost $400 million in a single day. The seven nations in the gold pool then set up a two-tiered system in which "monetary" gold was separated from gold being bought and sold in the open market by speculators. Gold trading in London was stopped for two weeks during this transition period. But this stopgap measure failed to staunch the flow of gold from the United States. The gold pool itself fell apart in 1968 when France demanded the return of its gold reserves that were being held at Fort Knox.

NEP

Some efforts were made to stabilize international finance. Special Drawing Rights (SDRs) were created by the Group of Ten in 1968. These were reserves that countries could keep or draw down from the International Monetary Fund, according to their quotas. The SDRs could be called upon when a country needed to bolster its reserves or needed hard currency. In another international action, the Council of Ministers for the European Economic Community declared in 1969 that the community should move toward a complete economic and monetary union. None of this stopped the flow of gold from the United States. Adding to the economic uncertainty was the public unrest caused by the Vietnam War, which forced President Johnson from office. He was replaced by Richard Nixon, who everyone believed would be a fiscal conservative. In fact, Nixon was a politician who viewed the economy in purely political terms that did not always square with traditional conservative views.

Nixon had blamed his loss of the presidential race in 1960 on the tight money policies of William McChesney Martin Jr., the chairman of the Federal Reserve Board. Nixon never forgot or forgave a grudge. After becoming president in 1969, he removed Martin as chairman of the Fed and replaced him with a sometimes more compliant Arthur Burns. That ended a long reign, since Martin had been chairman from 1951 to 1970, serving under five presidents. Martin had asserted that inflation was a threat to America equal to communism. Apparently, he was swayed by the events in Germany after World War I but forgot the effects of deflation here during the Great Depression. The Nixon administration had to struggle with the twin demons of inflation and diminishing gold stocks that were undermining the dollar and destabilizing the international economy. A death blow to the gold standard was delivered in early August of 1971 when the British ambassador asked the United States Treasury to convert $3 billion into gold at the Bretton Woods set rate of $35 an ounce. This exchange would have depleted the stocks at Fort Knox below the minimum of $10 billion that were required to be held as government reserves. France was additionally demanding large amounts of gold in exchange for its dollars, and the United States was concerned that other nations would begin making similar demands.

President Nixon sought to deal with international monetary problems and rising inflation in the United States by a single bold stroke. He announced a "New Economic Policy" (NEP) on August 15, 1971. This was a strange choice of words for a Cold War warrior like Nixon. It was the same name that Lenin had given to his economic program after the Russian civil war. Perhaps even more strangely, Nixon turned the Democrats' liberal economic policies into his own. The Democrats had enacted a provision into law that allowed the president to impose mandatory controls on wages and prices. That had been a political ploy. No one actually expected that Nixon would use that authority, but he did. Nixon announced that he was imposing a ninety-day wage and price freeze and creating a Cost of Living Council to achieve wage and price stability. This was the first time in the history of the federal government that price controls were imposed when the country was not officially at war. After the ninety-day freeze, controls were to be continued in phases. "Phase II" wage and price controls allowed price increases of no more than 2.5 percent. Those controls were followed by "Phase III" controls in January of 1973.

Another aspect of NEP concerned the gold outflow and the payments deficit. Nixon announced a 10 percent surcharge on imports as a means to relieve that deficit. He further charged that speculators had been waging war on the dollar. To counter those villains, President Nixon announced that the United States would no longer honor the Bretton Woods agreement that had sought to stabilize exchange rates by pegging participating currencies to a dollar that was valued at $35 per ounce of gold. The United States then closed its gold window. Although this was said to be "probably the most severe shock to the international monetary system since World War II,"[22] the Dow Jones Industrial Average jumped 32 points after the president's announcement, a new one-day record.

Floating Exchange Rates

Nixon's action in taking the United States off the gold standard eventually resulted in a scrapping of the fixed exchange rates that had been reached under the Bretton Woods agreement, which dated back to World War II. Japan, whose exports were hurting United States markets by 1970, pursued mercantilism by promoting exports and limiting imports. The Japanese began allowing the yen to shift upward in August of 1971, but only gradually, under limits imposed by the government. This was called a "dirty float." Currencies in other advanced nations would, in the future, have floating exchange rates, but competitive floating would take some time to be effective. Initially, floating was achieved by more official devaluations. The Smithsonian Conference of the Group of Ten industrialized nations, held in Washington in December of 1971, led to a devaluation of the dollar by 8 percent. This was accomplished by raising the price of gold from $35 to $38 an ounce. The United

States agreed to drop its import surcharge after that action. Other countries adjusted their currencies accordingly.

The Smithsonian agreement appeared to return the United States to the gold standard by pricing gold at $38 an ounce, but that was only an interim step. A Committee of Twenty, appointed after the United States went off the gold standard, was to provide a form of monetary system but failed to do so. Britain began floating its currency in 1972. Switzerland and other countries followed. The result was effectively to float the dollar against those currencies. A more official devaluation of 10 percent of the dollar was negotiated in 1973 when the United States set the price of gold at $42.22 an ounce. Speculators resumed their sale of dollars. By March of 1973, various central banks had spent $3.5 billion to support the dollar, but they then stopped their official currency operations. On March 8, 1973, the United States government agreed with the European governments that they would no longer depend on fixed parities for currencies but would allow the price to be set in the foreign exchange market. This essentially was floating.

The dollar continued to fall. On July 7, 1973, the United States engaged in a swap in which it bought dollars by exchanging them for foreign currency with the central banks. This stabilized the dollar. Members of the European Economic Community allowed their currencies to float against each other within specified ranges or bands. This became known as the "snake in the tunnel" because exchange rates fluctuated but only within specified limits. It was thought that these limited fluctuations would allow flexibility to meet changing economic conditions without destabilizing the world's economy. In fact, government policy toward stabilizing exchange rates generally became one of "benign neglect."[23] The fixed rate system was "formally buried in favor of generally floating rates in 1973."[24]

Inflation

Inflation resumed. On February 23, 1973, the price of gold rose to $89 an ounce on world markets. In August of 1975, the Group of Ten countries announced that they would do nothing to fix the price of gold. Its price continued to rise and to fluctuate rapidly in response to international events. The price of gold would eventually reach $875 an ounce in January of 1979, before declining. This was twenty-five times the Bretton Woods price of $35 an ounce. The gold crisis had its lighter moments. A group from Congress and the press were allowed to inspect America's remaining gold reserves at Fort Knox in 1974 after a book claimed that Nixon had transferred all of the gold there to some Arab sheiks. This was one of the few occasions on which the public was allowed to peek into this storehouse. The congressional visitors found that some 367,000 bars of gold remained in the vault at Fort Knox.

Richard Nixon's NEP was a bold stroke, but the federal budget continued to grow, stimulating the economy. Money growth was increased under Nixon in order to reduce politically unpopular jobless rates. The Nixon administration failed to put price ceilings on raw agricultural commodities, and inflation continued. Speculators began purchasing precious metals and engaging in speculations in commodities in order to profit from the price "bubble" that resulted from inflation. One congressman noted that the great increases in food prices were attributable, to a significant degree, to commodity futures speculation. Actually, the Nixon administration was equally to blame. It had fueled inflation. Among other things, Nixon was encouraging exports of grain to Russia and China, which resulted in massive price increases in grain prices as buying pressure was felt from those countries.

The Department of Agriculture had encouraged the reduction of grain stocks in the United States in the 1960s. By 1970, those stocks had fallen to a "dangerously low level."[25] Corn yields were high in 1971, however, and corn prices fell to a dollar a bushel in mid-1971, which hardly covered the cost of production. The government then tried to further decrease corn production in order to move prices back up. This resulted in a drop in stocks even while global grain production was falling. El Niño was also disrupting the anchovy harvest in Peru, which was a major source for animal feed protein. This increased demand on grain prices. On June 11, 1971, President Nixon announced that grain sales to the Soviet Union and to the People's Republic of China would no longer be restricted under the Export Control Act. He rescinded the American flag shipping requirement on United States grain exports. That provision, imposed by President Kennedy, had required that 50 percent of United States grain exports to the Soviet Union be transported on United States merchant marine ships, whose rates were 30 percent above world rates. This had curbed the grain trade with the Soviet Union.

The Grain Robbery

The Soviet Union purchased 3 million tons of United States feed grains in November of 1971. This constituted about 25 percent of the United States wheat crop and caused large price increases. It was initially thought that the Soviets were planning to buy only $150 million worth of grain. In July of 1972, however, the United States government signed a three-year agreement with the Soviet Union under which the Soviets agreed to purchase large amounts of grain from the United States. The Soviets made additional grain purchases from grain exporters. The Soviets used $750 million of credit supplied by the United States, plus $500 million of their own hard currency, to purchase corn, wheat, and soybeans. The Soviets bought when prices were still low. Prices exploded when the Soviet grain sales were announced.

This episode was called the "Great Grain Robbery" of 1972. It "was one of those economic events . . . that . . . can truly be said to have changed the world."[26] The Soviet's buying drove grain prices to unheard-of levels. Those purchases were not announced publicly for some months. That secrecy allowed grain firms, and others who had knowledge of those sales, to hedge their grain positions and to achieve large profits by speculation when prices jumped. "This brought charges, never proved and probably untrue, of insider trading and other scandals."[27] It was claimed that the Soviets were secretly buying large future positions in order to obtain profits that would offset the costs of their purchases. The Senate found no evidence to support the allegation that the Russians had deliberately engaged in market manipulation. The result for consumers was, in any event, higher prices for their grain products. The increased agriculture export subsidies that occurred as a result of the Soviet grain sales cost taxpayers another $300 million.

A bull market in commodities was raging between 1972 and 1973. Grain prices reached a 125-year high in Chicago. Soybean prices increased by $8 a bushel in a period of five months in 1973. In a period of little over one month, soybean prices on the Chicago Board of Trade reached $12.90 per bushel. Ten months earlier, soybeans had been selling for $3.31 a bushel. President Nixon imposed export controls on soybeans to slow further soybean price increases. This partial embargo engendered much criticism from abroad because U.S. contracts were being abrogated. A cotton crisis arose in 1973 and 1974 after cotton prices nearly doubled in a six-month period. Some 500 lawsuits were filed over cotton contracts that had been based on lower prices. Corn prices were increasing. In total, world food prices rose some 50 percent in the first six months of 1973. Food prices exploded again in 1974.

Commodity Prices Soar

A uranium cartel that was formed in 1972 pushed uranium prices from $6 a pound to $41. Oil prices skyrocketed. The Arab nations announced a 50 percent increase in crude oil prices after the Yom Kippur War in 1973. The Organization of the Petroleum Exporting Countries (OPEC) restricted oil shipments to the United States, causing an oil shock that resulted in a sharp drop in stock market prices. The OPEC oil embargo had dramatic effects in the United States. By 1974, oil prices had increased by over 400 percent, and gas lines were appearing. The embargo resulted in a fifty-five mile an hour speed limit in the United States, and it gave impetus to approval for the building of the Alaskan pipeline. Inflation rose to more than 12 percent in 1974. Consumer costs increased to such an extent that there was near panic.

Phase II price controls were implemented in October of 1971. A price commission was set up to control prices and a pay board was established to control wages. The price controls were complex. Two weeks after the price commission was established, it received 400,000 requests for clarification. Phase III controls were implemented but were replaced by Freeze II on June 13, 1973. Freeze II was a sixty-day freeze on prices, but agricultural products were exempted. This was strange since they were causing most of the inflation. In March of 1973, the government announced that the consumer price index for February had risen at a rate higher than that in any period since 1951. Wheat prices had increased at a 75 percent annual rate. On March 29, 1973, Nixon announced a freeze on wholesale prices for meat after housewives began boycotting that product. Meat prices then dropped. In May of 1973, soybean prices rose by 45 percent and wheat by 22 percent. Corn prices rose by 30 percent. On August 6, 1973, wheat prices hit $4 a bushel, its highest price in history. Corn reached a record price on August 7, 1973, when it sold for $3.11 a bushel. Wheat prices continued to rise and reached $5 a bushel on August 15, 1973. Many of the commodity exchanges were trading at "limit up" prices for weeks at a time.

Housing starts dropped by an astonishing amount, from an annual rate of 2.4 million in June of 1973 to 1.4 million in December. The economy was sputtering in other sectors. Richard Nixon was driven from office in the midst of this economic turmoil by the Watergate scandal. Among the other crimes of the Nixon era was a charge that Assistant Secretary of the Treasury Edward Morgan had helped Nixon evade some $500,000 in income taxes. The new president, Gerald Ford, tried to impose stricter monetary policy in 1974 and 1975. By then, it was clear that wage and price controls were not working, and they were removed. Phase IV controls ended in April of 1974.[28] Following the lifting of controls, inflation accelerated once again. Critics charged that the price controls had pent up demand. In January of 1974, "the stock market was in the midst of a crash as severe as the one that began in 1929."[29]

The prime rate increased from 8.75 percent in March of 1974 to 10.25 percent in April. In July of 1974, the prime rate hit 12 percent. The economy was suffering inflation and recession at the same time. Economists were calling the conflicting appearance of inflation and recession "stagflation." The consumer price index rose at a rate of 14 percent in the last quarter of 1974. President Ford sought to stop inflation through a public relations campaign called "Whip Inflation Now," which was carried out by having his supporters wear a lapel button marked with the letters "WIN." The WIN buttons did not stop inflation or the recession that occurred in 1974 and 1975. That recession "turned out to be the deepest since the 1930s."[30] In January of 1975, unemployment reached 7.9 percent. A study of the recession concluded that over 45,000 people died from causes such as heart attacks, cirrhosis of the liver, and suicide that were directly related to recessionary pressures. However, inflation fell from 12 percent to 6 percent in the winter of 1975. The economy began a recovery in the spring of 1976.

Commodity Futures Trading

The explosion in commodity prices caused by America's inflated economy had broad effects in the futures market, where new products were introduced to deal with the rising speculative interest in commodity prices. Speculation had begun in silver in 1967 when the Treasury stopped the outflow of silver from its reserves and lifted the ban on melting silver coins. The New York Mercantile Exchange then began trading futures contracts on U.S. silver dollars. That exchange began trading futures contracts on gold in 1974, after restrictions on private ownership of gold that had been imposed in 1933 were lifted. The price of gold was at $174.50 per ounce in January of 1975. It fell to $140 per ounce in the fall of that year, but climbed again when inflation resumed. Foreign currencies were attracting speculative interest. Milton Friedman, the Chicago economist, had tried to sell £300,000 British sterling short in 1967 in the belief that Great Britain would be devaluing its currency. His bank refused the order because only wealthy individuals and large institutions were allowed to trade in the interbank currency market. Great Britain did devalue, and Friedman lost an opportunity to profit from the speculation. This angered the economist, and he eagerly assisted the Chicago Mercantile Exchange in organizing a futures exchange for foreign currencies. This exchange, the International Monetary Market, began operations in May of 1972. It allowed small, as well as large, traders to speculate in currency prices, which were fluctuating after the Bretton Woods agreement fell apart. In 1970, the International Commerce Exchange in New York, the successor to the old Produce Exchange, made an unsuccessful effort to establish a futures market in currency contracts. The New York Mercantile Exchange began trading futures contracts on foreign currency in 1974 with a little more success.

The inflation experienced during the 1970s was a boon to futures trading. In 1973, a New York Stock Exchange seat sold for $95,000, while a seat on the Chicago Mercantile Exchange sold for $112,500. Volume increased from 13.6 million futures contracts in 1970 to more than 33 million contracts in 1976. The futures market was even receiving attention from Hollywood. In 1974, Barbra Streisand starred in a movie entitled *For Pete's Sake*. It involved a scheme to make money by trading in pork belly futures.

Commodity Options

The Commodity Exchange Act, as adopted in 1936, prohibited commodity options trading on designated "regulated" commodities. This created a gap in the regulatory structure because commodity options could be traded on commodities not so designated. Those unregulated commodities included silver, and later gold, as well as foreign currencies and so-called world commodities, such as coffee and sugar, which were reacting sharply to inflationary pressures. Commodity options provided an ideal medium for speculation in the dramatic price increases of the unregulated commodities. Commodity options required only a limited investment—that is, the premium paid for the option. Commodity options provided a great deal of leverage to speculators. Harold Goldstein, a young commodity futures trader living in California, discovered this loophole in the Commodity Exchange Act in 1971. He started a commodity options firm, Goldstein, Samuelson, Inc., that sold such options to the public. Goldstein was the brains behind this operation: no Samuelson was ever found. Goldstein's capital consisted of $800 and an American Express card, but his idea quickly proved a success. In less than eighteen months, Goldstein, Samuelson had over 100 branch offices and some 1,800 brokers. The firm grossed $45 million in one year. Its revenues exceeded Merrill Lynch's commodity-related revenues.

Goldstein used high-pressure sales techniques to sell his options to thousands of unsophisticated investors. Then disaster struck. Rising prices resulted in large profits for even unsophisticated customers. Goldstein, Samuelson, however, failed to hedge its positions and could not perform on its options. The firm declared bankruptcy after the SEC charged that Goldstein, Samuelson's "naked" options were securities that had to be registered under the federal securities laws before being sold to the public. The Oklahoma and California state securities commissions brought additional actions against Goldstein and his firm. Goldstein was jailed, but he would engage in other frauds after his release. Goldstein, Samuelson's failure resulted in millions of dollars of customer losses. Numerous other commodity firms had tried to imitate Goldstein, Samuelson. The SEC and state securities administrators attacked those firms and shut down their sale of commodity options, but only after public customers had experienced further losses.

The "leverage" contract was another problem confronting regulators. This product was created to allow speculation on rising prices in precious metals. Leverage contracts were basically installment sales contracts for precious metals and coins. The SEC brought a fraud action against the largest of the firms selling these contracts. It was a California firm called the Pacific Coast Coin Exchange, which later became Monex International.

CFTC Act of 1974

The inability of the Commodity Exchange Authority (CEA) to deal with the commodity option and leverage contract problems, and the enormous price explosion in the early 1970s in commodity prices, caused public attention to focus on that agency. A series of articles in the *Des Moines Register* charged that the CEA was ineffective and that it had allowed numerous manipulative activities to continue on the floors of the exchanges. Those articles led to congressional hearings in which new legislation was proposed to regulate commodity futures trading. Congress concluded from those hearings that the CEA did not have resources adequate to police the futures industry and that the exchanges were not enforcing their rules.

According to congressional reports, the inspector general of the Department of Agriculture had found that noncompetitive trading practices were common on the floors of the exchanges. The inspector general discovered evidence that customer orders were being bucketed and that numerous other trading abuses were occurring. One congressman noted that unsophisticated investors were being fleeced of their savings. "Such events can only occur because of the inadequacy of regulatory activity over a market now twice the size, in dollar volume of trading, of the securities market, which is regulated by a much larger and more effective regulatory body, the S.E.C."[31]

Numerous commodity futures contracts, including silver, gold, coffee, sugar, cocoa, plywood, and foreign currencies, were unregulated. Plans were under way to expand futures trading on such things as home mortgages, which would be also be unregulated, unless the Commodity Exchange Act was amended. To cure these and other shortcomings in existing regulation, the Commodity Futures Trading Commission Act was adopted in 1974. It created a new regulatory agency, the Commodity Futures Trading Commission (CFTC) that was to operate in a manner similar to the SEC. This legislation subjected all commodities, of whatever kind, to regulation under the Commodity Exchange Act, thereby ending the concern that futures trading would be added piecemeal and be unregulated. The CFTC was given exclusive jurisdiction over commodity futures and commodity options trading on all commodities, except that the ban on futures trading in onions was continued. The ban on trading in options for previously regulated commodities was continued by the CFTC act. Congress further determined that the CFTC would be given exclusive jurisdiction over the regulation of options on other commodities. Accordingly, the act preempted the application of state and federal securities laws to commodity options. The CFTC was given authority to impose civil monetary penalties of up to $100,000 for violations of the Commodity Exchange Act. A new claims procedure was created that allowed persons who were injured by violations of the Commodity Exchange Act to apply to the CFTC for an award of damages from the person who caused the injury. This "reparations" procedure was limited to claims against persons registered with the CFTC.

An issue that arose during the hearings that led to the creation of the CFTC was whether traders on the floor of the exchanges should be allowed both to trade for their own accounts and to execute customer orders. This practice of "dual" trading had been allowed historically because it contributed to liquidity in the market. The concern was that traders would trade for their own account while executing customer orders in a manner that would allow them to profit at the customer's expense. The debate on this subject resulted in a stalemate. The CFTC was authorized to study the practice and determine whether it should be permitted. The CFTC's subsequent study concluded that dual trading should be permitted as long as it was properly supervised. The CFTC would devote the next several years to efforts to increase the so-called audit trail that would allow it to better supervise these practices and to detect whether abusive practices were occurring. The CFTC sought to have orders time-stamped on the floor upon their entry into an execution in order to create an effective audit trail. The high volume in some pits made that task difficult, and the CFTC would spend years of frustrated efforts to achieve that goal.

Still another concern in the 1974 hearings on the legislation that led to the creation of the CFTC were the low margin requirements available for futures. It was charged that gamblers were using futures trading to speculate on commodity prices. The exchanges successfully argued that margin was not for the purpose of controlling speculation or even protecting individual investors. Rather, futures margins were designed for one purpose and that was to protect the broker and the clearinghouse against defaults. Congress agreed with that view and denied the CFTC authority to regulate margins on futures contracts.

International Finance

International trade was increasing in prominence. There had been six rounds of GATT negotiations by 1970. They included a Geneva round in 1947 and a Kennedy round that began in 1964 and was concluded in 1967. The Tokyo round negotiations lasted from 1973 to 1979.[32] The Geneva round and the Kennedy rounds were the two most important rounds of GATT negotiations until the Uruguay round, which would be concluded in the 1990s.

Municipal Finance

Municipal financing was expanding, and the demand for additional local revenues was growing. Sales, property, and income taxes were the principal sources of revenue. More were needed. In 1963, New Hampshire was the first state to renew the use of lotteries as a way to raise revenues. It was soon mimicked by many other states. Sometimes, the search for a new revenue source went too far. In 1971, a Rhode Island legislator, Bernard Gladstone, sought to impose a $2 tax on every act of sexual intercourse in the state. "By some inscrutable formula, Gladstone announced that for every male Rhode Islander, his tax would bring in $2 a week. Before long the outcry against Gladstone's 'bad taste' was loud enough to force him to withdraw his modest proposal."[33] Municipal securities offerings in the 1970s included tax anticipation notes (TANs). These were notes issued in anticipation of revenues to be received from taxes or other sources. Industrial development bonds were also popular. They were designed to finance private industries that would help develop the economy of a municipality. But these were not obligations of the municipalities. Moral obligation bonds were introduced by Governor Nelson Rockefeller of New York in the 1960s. This idea had originated with John Mitchell, later to become Attorney General in the Nixon administration. Mitchell's idea was that public corporations could be created that would issue housing or other bonds backed by income from the projects being financed, rather than from the state's taxes or other revenues. This avoided the necessity of obtaining voter approval of the bonds. Most states required voters to approve bond obligations, but since the industrial development bonds were not state obligations, approval was not required.[34] This also meant that the state had no legal requirement to issue and repay these bonds, it was only a moral obligation. New York was also engaging in other innovative financing techniques. It was selling RANs (revenue anticipation notes) and BANs (bond anticipation notes), all of which were based on borrowing funds that were to be repaid from future anticipated revenue.

The banks were called upon to rescue New York City in 1966, after it experienced one of its periodic financial crises. This did not slow down the city's spending. New York City's budget more than tripled. Spending increased from $3.3 billion to $11 billion between 1965 and 1975, when the city began encountering problems in financing further spending. The city had some supporters who were willing to blame its problems on others. A study by Ralph Nader claimed that New York City had been given an unfair credit rating by the credit agencies. Nader charged that this credit rating increased the city's financing costs and reduced the marketability of its bonds. Nader argued that New York City was a good credit risk and that real estate taxes alone were twice the size of the city's total debt service obligation. At that time, New York was borrowing over $30 million through BANs, TANs, and RANs.

New York City Crisis

A crisis began in 1974 when the banks underwriting New York City's bonds were unable to sell $50 million of one issue. The banks had to take the balance of that offering themselves. After that experience, the banks advised the city that they could no longer underwrite an unlimited amount of bonds. Although New York City was able to borrow over $13 billion in early 1975, its credit was running out. In May of 1975, Mayor Abraham D. Beame and Governor Hugh Carey sought federal assistance for the city. An offering of tax anticipation notes in the amount of $260 million by the city had to be canceled because the city's comptroller could not determine whether the city had sufficient uncollected property taxes to redeem the issue. The city made an offering of $900 million in bonds in 1975, but only half that amount could be sold.

New York City was facing bankruptcy. Mayor Beame lost his reelection bid after the Securities and Exchange Commission charged, thirteen days before the election, that Beame had misled investors in the city's bonds by failing to disclose the financial problems faced by the city. A Municipal Assistance Corporation, called "Big Mac," was created by New York State to save the city. Big Mac issued new bonds for the city that were to be guaranteed by city taxes and administered by the State of New York. Felix Rohatyn was put in charge of Big Mac. He was a partner at Lazard Frères and had chaired the NYSE committee that dealt with the paperwork crisis in the securities industry. New York City's credit standing was so bad that even the Big Mac bonds proved to be a tough sell. This new entity had difficulty trying to raise $3 billion to refinance the city's short-term debt by long-term bonds.

The State of New York then adopted legislation that created an Emergency Financial Control Board. It was given authority to direct New York City to correct its budget problems. This helped the city raise sufficient funds to continue operating,[35] but the issue was still in doubt. New York City had another $1 billion of debt coming due that had to be refinanced.

New York City was able to delay default in October of 1975 through a contribution of $150 million from the New York City teachers' pension fund. More was needed. The city approached the federal government for aid in October of 1975, but the Ford administration turned the request aside after criticizing the city's spending habits. The New York *Daily News* then published its pithy headline: "Ford to City: Drop Dead." President Ford gave in after that blast, asking Congress to approve a short-term loan of $2.3 billion for New York City. This put the city back on its feet, and its debts were then restructured. On November 15, 1975, New York passed the Emergency Moratorium Act, which froze principal payments on $1.6 billion of the city's short-term paper for a period of three years. The New York State government put together a $6.8 billion rescue package that included purchases of notes by state pension funds.

By 1975, New York City's problems had spread to the State government. The state of New York was as extravagant in its spending as the city. Governor Nelson Rockefeller had, among other things, built a multibillion-dollar monument to government in the form of a massive government complex in Albany. That profligacy increased taxes and would eventually cripple the economy of New York. The state began experiencing difficulty in marketing its bonds after the financial crisis in New York City began. Several outstanding issues of various state agencies were in danger of default. The New York State Urban Development Corp., which had been created by Governor Rockefeller to help finance the building of low-income housing projects, defaulted on some of its debt in February of 1975. A rescue operation put that entity back on its feet, but other state agencies had to be propped up with emergency funding. New York was able to avoid further defaults, but its financial condition was far from sound. New York continued to spend and to tax its citizens. At the end of the century, the state's taxes were 63 percent higher than the average for the rest of the states. New Yorkers were fleeing by the thousands in search of a more hospitable environment. Of course, this was not a new problem. Wealthy New Yorkers were leaving the state in the nineteenth century to escape its high taxes. Wheeler Peckham, the prosecutor of the Tweed political ring in New York, fled the state for that reason. Theodore Roosevelt was embarrassed while running for New York governor by revelations that he had claimed residence in Washington, D.C., in order to avoid New York taxes.

Municipal Securities Regulation

Municipal governments in other states were increasing their spending. Municipal bond underwritings had grown from about $7 billion in 1959 to over

$22 billion in 1974. Some 900 firms were engaged in the municipal bond business in 1970. This was an area in which banks could act as underwriters because the Glass-Steagall prohibitions on securities activities by banks did not apply to many municipal securities. The increased number of municipal underwritings gave rise to a large secondary market in those securities. About 125 firms dominated the underwriting and dealing in municipal bonds. The municipal securities firms were largely unregulated because the federal securities laws exempted municipal securities from their registration provisions. Consequently, banks and other institutions could sell municipal securities without registration with the SEC. The SEC, however, still claimed jurisdiction to stop fraud in connection with municipal securities. From 1970 to 1975, the SEC brought numerous cases charging fraud in municipal securities transactions. The SEC found unconscionable markups, churning of customer accounts by engaging in transactions designed to generate commissions without regard for the customer's interests, misrepresentations, and high-pressure sales techniques. Many firms sold municipal securities through boiler room operations in which high-pressure sales campaigns were used to sell municipal securities to unsophisticated customers.

To stop those abuses, in 1975 Congress amended the Securities Exchange Act of 1934 to require registration of municipal securities dealers. A self-regulatory Municipal Securities Rulemaking Board (MSRB) was established, composed of members who represented securities firms, banks, and the public. The MSRB was given the authority to enact rules for the regulation of the sale of municipal securities and their trading. The SEC was given the authority to enforce those rules and to pass on those rules before they were declared effective. The NASD and the banking authorities were also given jurisdiction over the enforcement of the trading of municipal securities. Despite these reforms, municipal finance continued to encounter problems, some of which were structural. In California in 1978, Proposition 13 was passed as the result of a taxpayer revolt led by Howard Jarvis, an irate taxpayer. It required a 57 percent cut in property taxes, which would pinch government spending there in future years and lead to a financial debacle in Orange County. Cleveland defaulted on debts of over $14 million in December of 1978.

U.S. Government Securities

The United States government securities market was another growth area that was being driven by increased borrowing. Treasury bills with maturities of less than one year were still issued at a discount. Treasury "notes" were issued as coupon bonds with maturities of more than one year, but less than ten years. Treasury "bonds" were issued as coupon bonds, but they had longer maturities. Starting in 1977, the Treasury began issuing bonds with a maturity of thirty years. The Treasury Department continued to use auctions to sell government securities. Several government dealers would bid on Treasury issues. The lowest bid was the price that was then set for all certificates in that issue.

Other agencies of the United States government issued bonds and notes. They included the Commodity Credit Corporation, the Export-Import Bank, the Farmers Home Administration, the Merchant Marine Authority, and the Tennessee Valley Authority. Federal Land Banks, which were first organized in 1917, issued bonds in order to obtain funds to provide mortgages to farmers and ranchers. The twelve Federal Intermediate Credit Banks made loans and discounted paper for credit associations and certain other financial institutions and term loans to farmers. These banks issued bonds with denominations of \$5,000 to \$500,000. Bank cooperatives operating under the Farm Credit Administration Act issued bonds in like denominations.

The Federal National Mortgage Association (known as Fannie Mae), which had been created in 1938, issued debentures and short-term discount notes in order to finance mortgages insured by the Federal Housing Administration (FHA) and guaranteed by the Veterans Administration (VA). Fannie Mae became a shareholder-owned company in 1968. The Government National Mortgage Association (GNMA) was spun off from Fannie Mae in 1968. GNMA became a separate part of the Department of Housing and Urban Development (HUD), and FNMA became a government-sponsored private corporation. GNMA issued certificates that represented an interest in a pool of mortgages guaranteed by the federal government. The mortgages in the pool were generated by the FHA, the VA, and the Farm Housing Administration. GNMA certificates were sold to investors who received the monthly interest and principal payments from the mortgages covered by the GNMA certificate. The sale of mortgages through GNMA pass-through certificates allowed the government to generate funds that could be used for additional mortgages. GNMA certificates were a popular investment by 1975. The Home Loan Bank Board created the Federal Mortgage Corporation in 1970 (Freddie Mac). It sold pass-through certificates that represented interests in conventional mortgages. Fannie Mae had been created in 1938 in order to develop a nationwide secondary market for residential mortgages issued by S&Ls. Fannie Mae was converted into a private company in 1968. Freddie Mac would become privately owned in 1989, but continued to be subject to the regulatory authority of HUD. "Sallie Mae," the Student Loan Marketing Association, was created in 1973. Stock in Sallie Mae was sold to universities and financial institutions. Sallie Mae bought government-guaranteed student loans from banks. Those loans were pooled and sold to investors in order to generate more funds for additional loans.

4 Derivatives Expand

CBOE

The Chicago Board Options Exchange, Inc. (CBOE) began operations in 1973. It was the product of a committee created by the Board of Trade to study the feasibility of applying commodity futures trading principles to options on securities. The committee concluded that standardized option contracts on stocks could be traded on an exchange in a manner similar to that used for futures contracts. This was to be accomplished by creating a clearinghouse that would intercede as the buyer and seller of every options contract traded on the exchange. The intercession of the clearinghouse, and the fungibility of the contracts being traded, permitted the development of a secondary market in options that allowed option holders to hedge a stock position or to speculate on prices. The buyer or seller of the option could simply liquidate the contract and experience a gain or loss on the differences in price changes in the value of the option, as determined by market movements in the underlying securities and any decay in the time value of the option.

Stock options had had a troubled regulatory history before the creation of the CBOE. Congress had found in the investigations that followed the stock market crash of 1929 that "the granting of options to pool syndicates had been . . . at the bottom of most manipulative operations, because the granting of these options permits large-scale manipulations to be conducted with a minimum of financial risk to the manipulator."[36] The Securities Exchange Act of 1934, as initially drafted, banned all stock options contracts. The Committee of Put and Call Brokers and Dealers in the City of New York urged Congress not to take such a drastic step because stock options had been used successfully for over 200 years. Stock options were said to have had a stabilizing effect on the markets and served as insurance for investors. As a result of this testimony, Congress decided not to ban options trading. Instead, the Securities Exchange Act of 1934 gave the SEC authority to regulate their trading.

Before the creation of the CBOE, a small amount of stock options trading occurred in the over-the-counter market. In the 1960s, much of that business was conducted by the twenty-five members of the Put and Call Brokers and Dealers Association, a group that had been organized in 1934. It was a small market and had escaped regulatory attention, but the SEC decided to act when faced with the CBOE proposal. Since options were deemed by the SEC to be securities, the CBOE Clearing Corporation, later renamed the Options Clearing Corporation (OCC), was required to registered the options it issued under the Securities Act of 1933. This required the OCC to provide a prospectus that described the mechanics of options trading and the risks associated with such instruments. The SEC imposed other regulatory restrictions. It allowed the CBOE to go forward only as a "pilot" program, and the CBOE agreed to limit the number of stocks on which it would initially trade options to sixteen. The CBOE further agreed that the stocks underlying its options would be listed on a stock exchange to assure that the underlying security had a broad market that could not be manipulated to the advantage of option traders.

Instead of the specialist system used on securities exchanges, a "market maker" system was implemented by the CBOE. This involved several members trading for their own account in a futures-style pit where orders would be executed by public outcry in a competitive auction market. Unlike the futures exchanges, market makers on the CBOE assumed affirmative obligations to maintain a continuous two-sided market. Unlike the securities exchanges, the CBOE would have no specialist's book of limit orders. Instead, a public limit order book in each option was to be maintained by a "board broker" who did not trade for his own account. These board brokers were later called order book officials, and they became exchange employees instead of members. These officials performed the agency functions of the exchange specialist. "Floor brokers" on the CBOE were allowed to execute customer orders. Unlike the futures exchanges, floor brokers on the CBOE could not trade for their own account while executing customer orders. Later, in some option classes where there was little trading activity, the exchange used a designated primary market maker who functioned as a market maker, floor broker, and order book official—that is, much like a specialist.

The CBOE began trading on April 26, 1973. On its first day, it traded just over 900 options contracts, but volume grew quickly. A total of over 1 million option contracts was traded in 1973. Within ten years, daily volume would reach over 500,000 contracts. The CBOE's success quickly brought competition. The American Stock Exchange (AMEX) announced that it planned to trade options on its floor in 1974, but the SEC was then in the midst of its efforts to create a central market system. It refused to allow the AMEX to start options trading and prevented the CBOE from expanding further until the two exchanges agreed on steps that would lead to a central market in exchange traded options. The SEC wanted a common clearing system for options and a common price-reporting system. The AMEX and the CBOE agreed to use the OCC as a common clearing agency that would be jointly owned by the exchanges that traded options. The CBOE and AMEX agreed to a common price-reporting system managed by a jointly owned Options Price Reporting Authority (OPRA). Options trading was then allowed to expand.

More competition appeared. The Philadelphia and Pacific Stock Exchanges started trading options. These exchanges, and the AMEX, used their specialist systems to trade options, rather than the hybrid futures/securities system used by the CBOE. The Philadelphia Stock Exchange introduced currency options to the markets, which would become its principal product in future years. The NYSE did not begin trading listed options until 1985, because it was skeptical of the value of this new product. Later, after it realized that these options were posing a competitive threat, the NYSE tried to enter the market. But regulatory concerns were then raised about "side-by-side" trading of stocks and options on the same exchange. The SEC later conducted a study of side-by-side trading of options. In 1985, it allowed the NYSE to conduct options trading, but required that stocks and options be traded on separate floors. This did not prove to be a success for the NYSE. The SEC deferred a decision on whether options on the same security should be allowed to be traded on more than one exchange and whether standardized over-the-counter options trading should be permitted. Multiple listings were later required by the SEC. Over-the-counter options were also eventually standardized and began offering increased competition to the CBOE in later years. Even so, the CBOE dominated stock options trading. It was responsible for some 60 percent of stock option volume in 1990.

Options Trading Issues

Stock options trading on the exchanges raised concerns about speculation and customer protection. Options were ripe for abuse because of the enormous leverage they offered in exchange for a relatively low premium payment. After receiving several complaints, the SEC announced on July 18, 1977, that it was conducting a comprehensive investigation of exchange-traded options. The SEC suspended the expansion of options trading until that study was completed. This *Special Study of the Options Markets* lasted for over a year and found a number of problems. One abuse was "chumming," which involved fictitious trading conducted in new option contracts in order to pump up volume and give the appearance of liquidity. This mirage was designed to encourage investors into a new market. The options study found attempts to manipulate the price of stocks underlying options, such as "front-running," in which options positions were taken in advance of large block trades that would have a market effect on the options.

The SEC's options study found numerous sales practice abuses. Unsophisticated customers were solicited to engage in options trading although they were unprepared for the risks associated with such contracts. Misleading claims of profitability were used to induce customers to invest in options, and many recommendations for options trading had no reasonable basis in fact. A practice of "touting the expert" was employed in which salesmen claimed that an options expert of a firm could assure profitability. Other high-pressure sales tactics included "churning," which was excessive trading of customer accounts in order to generate commissions. The SEC was additionally concerned with trading in "away-from-the-money" or "deep-out-of-the-money" options. These were options with strike prices far from the market value of the underlying securities, which meant that they were unlikely to be profitable. Such options had very low premiums, however, which made them desirable for speculation because the profits were enormous if the price of the underlying securities jumped sharply.

The options exchanges agreed to a temporary moratorium on expansion until they could curb the abuses uncovered in the SEC's study. Among other things, the AMEX and CBOE adopted rules that limited transactions in out-of-the-money options. The options exchanges were then allowed to expand their listings, and trading interest grew rapidly. Within a few years, exchange-traded options were an important part of the securities markets.

Commodity Options

In the meantime, the newly created Commodity Futures Trading Commission (CFTC) was encountering problems with commodity options. The boiler rooms that had been stopped by the SEC and state securities administrators were free to resume business once the CFTC's jurisdiction preempted application of securities regulation to commodity options. The "naked" commodity options sold by Harold Goldstein had given commodity options a bad name, but the option firms came up with a new twist they called "London" commodity options. These were options on commodities that were sold in the London markets. Some of these options were allegedly guaranteed by the International Commodity Clearing House (ICCH) in London. Other London options were purchased on the London Metal Exchange. Those contracts were not guaranteed by a clearinghouse, but there had been few defaults on that exchange. The sales pitch for the London options sold in America was that they relieved investors of concerns about another Goldstein, Samuelson debacle because a clearinghouse in London or a member of the London Metal Exchange would assure performance. In reality, the guarantees on London options did not extend to individual customers in America, only to the dealers in London. Moreover, the London options being sold in America were, in many cases, never actually purchased or sold in London. They were simply bucketed by the American dealer. The option firms enjoyed amazing success with London options as commodity prices increased. Sales were aided by a vast amount of fraud and high-pressure sales tactics that took advantage of unsophisticated customers. The CFTC sought to deal with these firms, initially, by passing an antifraud rule. Later, the CFTC required persons selling commodity options to register with the CFTC and to meet certain net capital requirements. Those requirements were delayed by court battles. When the rules did become effective, they were simply ignored by the commodity option dealers, who were not intimidated by this new and very small agency of the federal government. One of the first companies to emerge from the ashes of the old commodity options firms that had been curbed by the SEC was the American Options Corporation in Salt Lake City, Utah. It had been closely regulated by the state securities commission in Utah before the CFTC preempted its jurisdiction. The American Options Corporation then began selling options nationwide. It was stopped by the CFTC in the first injunctive action brought by the agency. Another injunctive action was brought by the CFTC against the American-Overseas Trading Corporation. It too was put out of business. A CFTC action against J.S. Love & Associates, a firm operating out of New York, resulted in the termination of its operations, which were liberally laced with fraud. Other cases followed.

One commodity options firm was started with a $2,000 investment by brokers who had been barred from the securities industry. It soon became a $50–million-a-year business. The firm's telephone bills were running $150,000 a month as salesmen cold-called potential customers with canned, high-pressure sales pitches. Another London options firm became particularly famous for fraud. Lloyd, Carr & Co., like Goldstein, Samuelson, had quickly become one of the largest brokerage firms in the United States through the use of high-pressure boiler room sales operations. At one Lloyd, Carr office, an office manager dressed up in a gorilla suit and roamed the trading floor in order to excite the sales force. Another office manager wore a Superman costume. Still another manager stalked the salesroom with a car antenna. If he saw a salesman doing something other than cold-calling customers, the manager would shuffle his feet on the carpet and hit the salesman with a jolt of static electricity. When sales were made, bells were rung, creating a circus-like atmosphere.

In February of 1977, the CFTC brought an injunctive action in Boston to stop the Lloyd, Carr firm from doing business because it had not registered with the CFTC. A district court judge denied the injunction, and Lloyd, Carr appealed a CFTC decision to deny the firm's registration. Lloyd, Carr also challenged the CFTC's option regulations in court. This stymied the CFTC, but it eventually obtained an antifraud injunction against the firm from a federal judge in Michigan. Lloyd, Carr ignored the court's order and continued its fraudulent activities. The owner of the firm was then arrested for contempt, but he was released under a $100,000 cash bond and disappeared before his fingerprints could be identified as those of one Alan Abrahams, a felon escaped from a New Jersey prison. Abrahams had previously been convicted for forging checks, and he was wanted for federal parole violations and passport fraud. After fleeing from arrest in Michigan, Abrahams transferred

$3 million out of the country and dyed his hair to change his identity. He was apprehended by the FBI in Florida, where he was hiding under another assumed name. Abrahams retained F. Lee Bailey, a well-known criminal defense attorney, to conduct his defense, but even that lawyer's skills could not prevent Abrahams from being returned to prison. After this affair, applicants for CFTC registration were required by Congress to submit to fingerprinting. This requirement was designed to stop any more Lloyd, Carr scandals.

By 1978, London options sales were approaching $1 billion per year. Much of that volume was due to fraudulent sales operations that the CFTC did not have the resources to police. In fact, the CFTC was being overwhelmed by options fraud. The CFTC received some 600 options-related cases in 1977 from customers seeking damages from fraudulent commodity options operations. The CFTC had opened over 200 investigations of option firms and spent over fifty years of staff time on options-related concerns by 1978. In June of that year, the CFTC threw up its hands and imposed a moratorium on the trading of commodity options. This meant that all commodity options trading was suspended, with the exception of "commercial" options and certain "dealer" options. "Commercial" options were used by businesses for commercial purposes. "Dealer" options were options sold by large firms that were heavily capitalized and which provided some assurance of performance to customers. The dealer option firms were so heavily regulated by the CFTC, however, that they soon disappeared from the scene.

Deferred Delivery Contracts

Subsequent legislation confirmed the CFTC's ban on options trading. Nevertheless, the CFTC continued to encounter problems with over-the-counter options and similar instruments. The commodity option firms that were put out of business by the CFTC's trading suspension began trading what they called "forward" or "deferred delivery" contracts that were exempt from regulation under the Commodity Exchange Act. In reality, these forward contracts were merely options sold under a new name by the same fraudulent sales techniques. The CFTC filed enforcement actions against sixty companies and over 100 individuals for selling the so-called deferred delivery contracts. Most of these firms were located in southern California and Florida. Numerous boiler room operations were clustered in one particular area of Miami that regulators began calling "Maggot Mile." Those boiler rooms were no small operations. A failure by the International Gold Bullion Exchange in Florida resulted in $75 million in losses to some 25,000 customers. Another failure involved the Bullion Reserve of North America, with more millions of dollars of losses. Its assets were found to consist of some wooden bars painted gold.

One of the deferred delivery firms attacked by the CFTC after the options suspension was guided by an old hand at the business. Shortly after being released from prison for his naked options adventure, Harold Goldstein became involved in another fraud involving "gold concentrate." He was returned to prison. After being released again, Goldstein began a company called CoPetro Marketing Group in Los Angeles. Goldstein claimed to be selling "cash forward" contracts that were not subject to the CFTC's jurisdiction. These contracts allegedly involved the actual delivery of gasoline, but were being sold to small investors who did not have the ability to take delivery. The investment was a hit because of rising gas prices. The CFTC then sued, charging that the contracts were in fact futures contracts or options. The CFTC was upheld in that claim by a federal court of appeals in California. Undaunted, Harold Goldstein continued his life of crime. He was the mastermind of several other scams, including one that involved the creation of an offshore bank. Goldstein offered loans in which investors would put up money in advance and be given a loan with low interest. Goldstein received the deposit on the loan and then issued a cashier's check from his phony bank to the individual. Goldstein's checks inevitably bounced. He was captured by the authorities in 1981 aboard a stolen yacht that was carrying firearms, as well as the wife of a Los Angeles businessman.

Despite all the problems created by Goldstein and his ilk, it was clear to the futures industry that options were attractive to investors and provided advantages that futures could not replicate. Among other things, commodity options limited losses on the part of option purchasers to the amount of their premium and commission charges. The industry concluded that options could be sold with integrity by prohibiting naked options and by regulating sales practices. Like futures and securities options, commodity options could be sold through a clearinghouse that could guarantee their performance. Sales practices for options could be regulated through exchange member firms that were financially responsible and subject to exchange oversight and by the National Futures Association (NFA), the futures industry counterpart of the NASD, which was created in 1978. The CFTC agreed with that thinking and authorized the futures exchanges to conduct a three-year pilot program for commodity options, beginning in 1981. The CFTC adopted a number of regulatory requirements to assure that the pilot program was effective. Those rules included specified risk disclosures that had to be given to customers and restrictions on the use and disposition of customer funds. The pilot program was eventually made permanent. Today, commodity options form a substantial portion of the business of the commodity exchanges.

Leverage contracts were another problem confronting the CFTC. These contracts operated like a layaway plan under which precious metals were paid for by investors in installments. Monex International, the leader in the marketing of this concept, developed into a $1 billion operation in the 1970s. Monex had been the subject of an antifraud action by the SEC before the creation of the CFTC. In the middle of that case, Congress gave the CFTC exclusive jurisdiction over leverage contracts. The CFTC and the SEC settled that action, and the CFTC began an extended effort to regulate leverage contracts.

Those contracts were generating abuses, and the CFTC imposed a moratorium in 1984 on the expansion of their trading. The CFTC, thereafter, concluded that leverage contracts should be regulated like futures contracts. This action met with disapproval in Congress, and the CFTC was required to adopt a regulatory scheme in which leverage transactions would not be treated like futures contracts that would have to be traded on an exchange. The CFTC subsequently issued rules regulating leverage contracts. The rules were so restrictive that no substantial trading developed in those contracts, and the market died.

Futures Trading

The futures business was changing. The Chicago Mercantile Exchange allowed a woman clerk on its floor in 1966, and many more quickly joined her. The Department of Justice brought antitrust actions against the futures industry's fixed commission schedules. Thereafter, commissions in the futures industry were unfixed in settlements with the Department of Justice. Trading volumes soared. Some 13 million contracts were traded in 1970 and over 90 million by 1980. But futures contracts were not without problems during the 1970s. Eyebrows were raised when it was reported in the press that a potential Supreme Court nominee made $500,000 from commodity futures speculations. A more spectacular crisis arose as a result of a manipulation in the Maine potato futures contract on the New York Mercantile Exchange. That contract had previously encountered problems. The Commodity Exchange Authority had charged P.J. Taggares Co. with manipulating potato futures in May 1971. Earlier, there were charges of manipulation of the May 1957 potato futures contract by Murlas Brothers Commodities. A short manipulation in the May 1955 potato futures contract was undertaken by Winn & Lovett Grocery.

Trading activity in the Maine potato futures contract on the New York Mercantile Exchange was especially heavy during the 1970s. The CFTC discovered that several large traders were holding positions in the May 1976 contract as it approached delivery. This was unusual because most futures contracts were liquidated before delivery date. To make matters worse, on the last trading day, one individual raised his long position by 2,500 contracts to a total of over 4,000. The deliverable supply of Maine potatoes proved inadequate to provide for delivery on these positions. As a result, the shorts could not deliver on their contracts. A default occurred on some 1,000 contracts that covered 50 million pounds of potatoes. This was the largest default in the history of commodity futures trading, and it shocked the markets.

The CFTC conducted a massive investigation and filed manipulation charges against several firms and individuals involved in the potato default. Peter J. Taggares and John R. Simplot, two western "potato barons," were found to be at the center of this debacle. Simplot was processing 50 percent of all Idaho potato products sold in the United States. Taggares, who accounted for approximately 30 percent of all Washington potatoes, was a partner with Simplot in a large potato farm in Washington. The CFTC charged that Simplot and Taggares had sought to depress the price of the May contract. Simplot had put up $1 million for this trading and shipped a large quantity of Idaho potatoes to Maine in order to depress prices. Several long traders in New York thought that they could bring Taggares and Simplot to their knees by driving prices upward. Among other things, the long traders tied up deliveries of Maine potatoes by leasing all the railcars of the Bangor & Aroostook Railroad. This was the only railroad able to deliver potatoes for the May potato futures contract. The fight between the shorts and longs turned into a game of "chicken." The result was that some 1.5 million pounds of potatoes rotted in Maine because there were no facilities to ship them to New York.

Simplot, Taggares, and other traders were barred by the CFTC from trading on contract markets for various periods of time. Private lawsuits were brought by individuals damaged by the default, litigation that eventually reached the Supreme Court. The Court held that the Commodity Exchange Act allowed traders injured by violations to sue for damages in federal court.[37] The default had other effects. Trading volume in the potatoes futures contract on the New York Mercantile Exchange fell by 43 percent. Seat prices dropped from $47,000 to $5,000. Another market disruption occurred in 1979, when 90 percent of the potatoes tendered for delivery did not meet contract requirements. Traders eventually lost interest in Maine potatoes, and the contract was terminated. The New York Mercantile Exchange had other problems. In 1980, it was fined $200,000 by the CFTC for failing to monitor and enforce its rules on futures trading in silver coins and gold. But there was a positive development. The sharp rise in petroleum prices during the 1970s presented an opportunity for the futures markets. The New York Mercantile Exchange began trading a futures contract on No. 2 heating oil, and it later became a leading exchange for energy-related futures.

Soybeans

Two rich traders from Dallas, Texas, were at the center of another futures market contretemps involving soybeans. The price of that commodity increased from about $6 to over $10 per bushel in the spring of 1977. The CFTC then discovered that Nelson Bunker Hunt and W. Herbert Hunt controlled some 4,500 soybean futures contracts through the accounts of family members and a family corporation. Bunker and Herbert were the sons of H.L. Hunt, the eccentric oil billionaire and former futures speculator. The Hunts held futures contracts for May delivery that covered 8 million bushels of soybeans. At that time, there were only some 10 million bushels of soybeans available for delivery in Chicago. The CFTC brought an action in federal court in Chicago charging that the Hunts were in violation of speculative limits on the amount of soybeans that individual traders could hold singly or collectively when operating together.

The Hunts resisted the CFTC's action, contending that they were acting separately. The CFTC, however, found common trading patterns in which one family member would reach the individual speculative limit and a new family member would then enter the market and begin trading. Several accounts were held in the names of the children of Bunker Hunt. Their claims of independent trading were not believable. It was shown that these children had never traded soybeans before. One daughter was living in a sorority house at the University of Alabama. Bunker's son was a freshman at the University of Tulsa, where he was purportedly trading millions of bushels of soybeans from a pay telephone at his fraternity house. An employee for the Hunt family was also combining the family's positions, which evidenced that the Hunts were themselves viewing their trading on an aggregate basis. The Hunts were enjoined from further violations of soybean speculative limits, and they agreed to pay the CFTC a civil monetary penalty of $500,000. The court of appeals found that the violations were systematic and carefully preconceived. Cook Industries, a large grain firm, had a position in the soybean market opposite to the Hunts during the soybean affair. The company suffered enormous losses and was destroyed.

Other Problems in the Futures Markets

Coffee prices rose sharply in 1977 after frost damaged the coffee crop in Brazil. Prices were further affected by floods in Columbia, an earthquake in Guatemala, and the war in Angola. Coffee prices rose from fifty-five cents a pound in July of 1975 to $3.55 in April of 1977. The CFTC later charged that a group of coffee growers in Colombia, Mexico, and Brazil were artificially supporting coffee prices through an entity called Compania Salvadorena de Café. A *New York Times* article asserted that agents of Brazil and El Salvador were inflating coffee prices through a $100 million commitment from their governments. This scheme was called "Operation Central Park." The *Times* reported that the life of a federal official had been threatened in connection with the CFTC's investigation. Prices in the wheat futures contracts rose sharply on the Chicago Board of Trade (CBOT) in March of 1979. A small group of floor traders held 80 percent of the long positions in the March contract, which constituted three times the available delivery supplies of wheat. The CFTC declared a market emergency and ordered the CBOT to suspend all trading in the contract on the following day. The CFTC was concerned with a shortage of transportation and warehouse facilities and with the fact that the combined long positions of a small number of speculative traders threatened a manipulation. The CBOT prohibited the creation of new positions, but allowed liquidation of outstanding contracts to continue. The CFTC then directed the CBOT to stop all trading for the remaining three days of the life of the contract. The

CBOT responded by obtaining an injunction from a federal district court that stayed the CFTC's order. The Seventh Circuit, on appeal, ruled that the CFTC was correct in its actions and dissolved the injunction. By that time, the contract had already expired.

During the 1970s, inflation reached an all-time high of 13 percent. "In the hinterlands, there was a new species of snake-oil salesman, the doomsday profiteer. He peddled gold, diamonds, art, real estate, rare metals, freeze-dried foods, jojoba beans, and advice on surviving the next depression. His message was: 'get out of paper.'"[38] The inflationary spiral of the 1970s spawned a "cult of doomsday books and articles" that "spewed forth from the presses, cautioning Americans about the coming collapse of the dollar and prescribing what steps the reader should take to protect himself."[39] These recommendations usually involved investments in commodities, precious metals, diamonds, art works, or other things that would inflate in value. Inflation-related investment was encouraged by various indexes such as Sotheby's Art Index, which increased from 100 in 1975 to 253 in 1980. The cost of a one-carat diamond rose from $1,200 in 1970 to $65,000 in 1980. Gold was a particularly popular inflation hedge. Its price peaked at $960 an ounce in January of 1980. Gold prices had been at $400 an ounce three months earlier.

Silver Crisis

Harry Browne, a future Libertarian candidate for president, wrote a book entitled *How You Can Profit from the Coming Devaluation*. This and other books recommended investments in precious metals and strong currencies, such as Swiss francs. Investors shared his views, and precious metal prices soared. Silver prices increased from less than $10.61 an ounce in August of 1979 to a peak of $52 an ounce in January of 1980. This price rise was spurred by worldwide inflation. Prices were also affected by Herbert and Nelson Bunker Hunt, who were buying silver in unheard-of amounts. The Hunts had previously attempted to squeeze the silver markets in 1973, with little effect, but their trading in 1979 would shake the entire financial community. On August 1, 1979, Bunker Hunt owned almost 21 million ounces of silver bullion and coin and over 9,000 silver futures contracts that covered another 46 million ounces of that metal. Herbert Hunt, Bunker's brother, owned another 21 million ounces of silver and over 4,000 futures contracts on silver. The Hunts formed the International Metals Investment Co. to buy even more silver. It had accumulated over 8,400 silver futures contracts by August of 1979. The other owners of that company were two rich Saudi Arabian sheikhs, Sheikh Ali bin Mussalam and Sheikh Mohammed Aboud al-Amoudi. Another group of traders in Europe was operating in parallel with the Hunts. Naji Nahas, a Brazilian citizen, was the leader of that group. He had traded as a boy in Egypt in cotton futures on the Cairo market and made a fortune speculating in coffee futures. The Nahas group conducted their trading through the Banque

Walter Wriston. As head of Citibank, Wriston faced many crises at a time when American financial supremacy seemed to be lost. (Courtesy of Archive Photos.)

Populaire Suisse, a Swiss bank that refused to reveal their identity to the CFTC on the grounds that Swiss law prohibited such disclosure.

The Hunts were billionaires when they began their silver buying in 1979. Nelson Bunker Hunt was said to be worth almost $3 billion. Herbert Hunt was worth another $1.38 billion. That wealth was substantially increased when the value of the Hunts' silver positions rose to almost $10 billion. Despite their wealth, the Hunts used mostly borrowed money to acquire their silver. The Hunts' brokers provided several hundred million dollars in financing to the Hunts in connection with their silver trading. Although the new Fed chairman, Paul Volcker, asked the banks in 1979 not to finance speculation in the commodity markets, several banks also loaned the Hunts over $650 million to fund their silver purchases. The chairman of Citibank, Walter Wriston, announced in October of 1979 that it was not making speculative loans. In fact, it had loaned over $100 million to Bunker and Herbert Hunt for silver speculation. First National of Chicago loaned the Hunts another $70 million and First National of Dallas loaned them $35 million. First National of Dallas and a consortium of twenty-nine other banks loaned the Hunt oil company an additional $450 million, which was then loaned by the oil company to the Hunts for their silver trading.

An important source of financing for the Hunts was Bache & Co., which had fallen from the second largest brokerage firm to the seventh in the 1970s. Gerald Tsai, the mutual fund manager, had tried unsuccessfully to take over Bache in 1978. Tsai and his fellow investors were bought out by Bache with profits of over a million dollars. Another takeover effort was mounted by Samuel Belzberg, a corporate raider in Canada. Belzberg had been investing in Bache for years and was critical of the firm's management. To protect themselves from Belzberg, Bache officials sought the help of Bunker and Herbert Hunt. The Hunts purchased a large amount of Bache stock to help Bache in its fight against Belzberg. In return, the Hunts were allowed to take on huge silver futures positions at Bache. Bache additionally provided the Hunts with loans of over $230 million to aid their silver purchases. Bache borrowed that money from banks, including the First National Bank of Chicago, which had also made loans directly to the Hunts.

The silver markets were disrupted as prices shot up rapidly. Precious metal firms were receiving large quantities of silver from individuals who were selling family heirlooms and other silver articles in response to high prices. On November 30, 1979, silver was trading at just under $19. By January 3, 1980, its price had risen to over $38 an ounce. Silver prices peaked at over $50 an ounce on January 18, 1980. Under pressure from the CFTC, the Commodity Exchange, Inc. (COMEX), the primary futures market for silver trading, announced on January 21 that it would allow trading for liquidation only. This meant that no new buying interests would be permitted in the market. The exchanges increased margin levels to 100 percent, which further dried up the liquidity in the market. Prices plunged after the exchanges took those actions. In one twenty-four-hour period, silver prices dropped from $39.50 to $10.80 an ounce. This generated massive margin calls on the Hunts' positions. Margin calls had to be met in cash, and this strained even the enormous resources of the Hunts. They failed to meet $135 million in margin calls at Bache on March 26, 1980. Shortly thereafter, on March 28, 1980, the Hunts advised their brokers that they could not meet further margin calls in cash. That announcement threatened the financial stability of several large brokerage firms that had held Hunt positions, resulting in the "Silver Crisis."

The SEC suspended trading in the stock of some large brokers, including Bache & Co. The SEC was concerned that their stock prices would drop because of rumors that they were suffering large losses as a result of the Hunts' failure to meet margin calls. There was a basis for that alarm. The Hunts owed Merrill Lynch almost $500 million for loans and margin on their positions. Bache asked that the silver markets be closed. Bache feared that, if it had to liquidate the Hunts' holdings, prices would drop further, and Bache would be bankrupted. The request to close the market was refused. The crisis deepened when it was disclosed that the Hunts owed Engelhard Minerals and Chemicals Corporation some $665 million for a silver transaction that had been agreed to earlier in the year. In that deal, the Hunts agreed to buy 19 million ounces of silver at $35 an ounce from Engelhard and to offset 3,800 of Engelhard's short contracts that were generating large margin calls. This transaction was to be completed on March 31, 1980.

Concern arose that these problems could cause a national financial collapse. An SEC report on the Silver Crisis later stated that "for six days late in March, 1980, it appeared to government officials, Wall Street and the public at large that a default by a single family on its obligations in the fomenting silver market might seriously disrupt the U.S. financial system."[40] The chairman of the CFTC advised Congress that during this crisis the "financial fabric" of the United States was in danger. The SEC report noted that broker-dealers that were carrying the Hunt accounts were among some of the largest firms in the securities industry. Those firms faced the possibility of large losses if the Hunts ultimately failed to meet their obligations. The SEC stated that the failure of even one of those firms could have caused a financial chain reaction that would have jeopardized the entire securities industry.

The crisis was alleviated when thirteen banks agreed to loan $1.1 billion to the Hunts in order to cover their silver positions. That loan was made after receiving the blessing of the Fed chairman, Paul Volcker. The Hunts reached a settlement with Engelhard Metals in which they gave up their oil rights in the Beaufort Sea. This bailed the Hunts out of their problems with their immediate creditors, but the Hunts were later subject to a number of lawsuits. The CFTC was among those pursuing the Hunt brothers. The Hunts eventually agreed to a permanent bar from trading on all commodity exchanges, and they were assessed with a $10 million civil penalty by the CFTC. The Hunts were the subject of numerous private actions in which large judgments were returned. They then filed for bankruptcy. Two large commodity futures firms were badly crippled by this affair. ContiCommodity Services, a futures commission merchant owned by the Continental Grain Company, incurred large losses during the silver debacle as the result of customer defaults by the Nahas-led group of traders. The firm continued to have problems and was eventually sold to Refco Inc., which became one of the largest futures commission merchants. ACLI International Commodity Services suffered a similar fate. It had been founded years before by the Israel family in New Orleans but was moved to New York. ACLI suffered millions of dollars in losses when a group of traders controlled by Nahas defaulted on their silver futures contracts. ACLI was bought by Donaldson, Lufkin & Jenrette.

5 Interest Rates Again

International banking received a boost from the floating currency rates engendered by the abrogation of the gold standard. Changes in exchange rates resulted in an increase in the exchange trading operations of banks. The First National City Bank, which changed its name to Citibank in 1976, was the leading foreign exchange dealer. It had foreign exchange earnings of over $100 million in 1978. A highly publicized SEC investigation found that Citibank had shifted over $45 million in trading profits during the 1970s from countries with higher taxes to those with lower taxes. Citibank particularly favored its Bahamas office as a place to "park" profits in order to avoid United States taxes. The SEC investigated to determine whether there was a violation of the federal securities laws by Citicorp in failing to disclose this questionable activity to its shareholders. In the end, the SEC decided not to bring an enforcement action against Citibank. That decision caused much controversy because it was thought that the bank was receiving special treatment not available to less powerful and less wealthy targets of SEC investigations.

European Finance

The nations that were members of the European Economic Community (now the European Union) were beginning work on a unified monetary system. Germany and France proposed the adoption of a single European currency in 1979. This led to the creation of the European Currency Union, which sought to keep exchange rates within agreed-upon limits or bands. A common currency, the European Currency Unit, was created. The acronym for this currency (ECU) was also the name of an old French coin, the *écu*. The ECU was not actually a coin or bill that could be spent. Rather, it was a basket of eight currencies that were weighted according to the economic importance of the issuing country. The Bank for International Settlements was becoming more involved in private banking in the 1970s. International lending was growing faster than domestic lending for many large American banks. Secretary of the Treasury

George Shultz contributed to that growth when he announced in 1974 that controls established ten years before on credit extensions by banks outside of the United States were being abolished. Globalization was raising a new set of concerns. Citibank was subjected to criticism for its lending practices in South Africa, where apartheid was still prevalent. American banks were faced with a crisis in Indonesia in 1974, when loan defaults rose sharply. The central bank in Indonesia rescued one company that had received large loans from American banks. This situation stabilized, but the event presaged problems that American banks would face in future years.

OPEC

A second oil crisis occurred in 1979. The Iranian Revolution cut oil exports from the Middle East, and oil prices rose from $14.85 to $22 a barrel. This resulted in "the Great Panic." Over 50 percent of American gas stations shut down in the summer of 1979. On July 4, 1979, 90 percent of the gas stations in the New York City area were closed due to the shortage of gas. Oil-importing countries like the United States were already incurring huge deficits in their balance of payments as OPEC, a group of oil producing and exporting countries, pushed oil prices to unheard-of levels. This generated a vast accumulation of funds in the Arab countries. The dollars that were being generated in the OPEC countries were called "petrodollars." Saudi Arabia and Kuwait received "an extra $37 billion a year, enough over twenty-five years to buy all the major companies on all the world's stock exchanges."[41] It became necessary to finance the importing countries' deficits and to invest the OPEC surpluses; otherwise the financial system would have broken down. This process was called "recycling" and involved the investment of OPEC surpluses outside those countries. Commercial banks in the United States became heavily involved in this recycling process, which often involved the making of large loans in Latin America.

Banking Operations

Citibank was a leader in the expansion of international banking, but it was not alone. Bankers Trust Company had representation in more than thirty countries and a correspondent network of banks totaling more than 1,200 in over 120 countries. International banking was a two-way street. Some sixty foreign banks had offices in the United States in 1973. Within five years, that number increased to 122. Foreign banks were growing in size. By the middle of the 1970s, only four of the top twenty banks in the world were American. That number was reduced to three in 1979. America was outnumbered in the top twenty category by Germany, Japan, and France. England had two banks in that elite group. The large American banks were, nonetheless, financial giants. Sixteen banks in the United States had deposits of more than $10 billion in 1979. Eight of those banks were located in New York, and five were in California. About 150 banks held deposits of more than $1 billion. The largest bank in America in 1979 was the Bank of America. It held about $16 billion more in deposits than did Citibank.

Monetary instruments were expanding in number. The total number of checks written in the United States in 1978 was over 37 billion. Those checks were worth about $33 trillion and were written on over 100 million checking accounts. Citibank was charging a fee of fifteen cents per check, plus seventy-five cents monthly. Customers who kept $3,000 on deposit did not have to pay those fees. On another front, the Susan B. Anthony dollar coin that was struck in 1979 would become "probably the most despised coin ever struck in this country." It too closely resembled the quarter.[42]

Deposits were becoming a smaller factor in banking. As banking expanded and regulatory limits on interest payments squeezed out deposits, "[b]orrowed money, rather than demand deposits" was used to provide the fuel for bank growth. "Eventually, almost 85 percent of Chase's usable funds flowed from such sources."[43] The banks continued their efforts to avoid interest rate ceilings with euro dollar offerings. In 1978, banking regulators authorized the issuance of six-month money market certificates by depository institutions. These certificates required a minimum investment of $10,000, and their maximum interest rates varied with the rate on Treasury bills. This allowed large investors to receive a market interest rate. Disintermediation continued as interest rates and inflation increased during the 1970s. Consumers were realizing in increasing numbers that they could earn more on their deposits through money market accounts. Citibank ran into trouble with the Federal Reserve Board in 1980 when it gave away toasters and appliances in order to attract deposits. The Federal Reserve Board had limited such gifts to amounts between $10 and $50, based on the amount of the deposit, in order to prevent the banks from evading Regulation Q interest rate ceilings. Citibank's "gifts" were actually higher in value. Citibank was fined $350,000 for this conduct.

The banks were becoming heavily dependent on floating rate loans as a source of funds. Citicorp, for example, issued $650 million in floating rate notes in 1974 to raise funds. Such loans increased the risk exposure of the banks to their own fixed loan portfolios, as interest rates continued to rise. To offset that risk, the banks began making loans at floating rates, rather than at a fixed rate, as was traditional. Nevertheless, the banks continued to face interest rate risks because they often borrowed short term and lent long term. Changes in the yield curve could cause large losses in such circumstances. The banks began creating internal committees to manage the "gap" between their short-term borrowing rates and their longer-term loans. The quality of bank loans was deteriorating. In 1975, nonperforming loans at Chase Manhattan Bank were over $1.8 billion. That amount increased by another $400 million in 1976.

Losses at banks were mounting. The *Washington Post* nearly triggered a banking panic in January of 1976 when it carried a front-page headline stating that Citibank and Chase Manhattan were on a "problem list" of banks maintained by the Comptroller of the Currency. In fact, the comptroller had some 150 banks on its watch list, including those two large banks. To quell a panic, the comptroller made a reassuring announcement about the stability of those two banks. It was discovered that the *Post* report was based on a leaked examination of Citibank and Chase Manhattan. The banks, however, had already taken corrective action. The comptroller advised the press of that fact and denied that the banks were in trouble.

Banks were expanding their business mix. Bankers Trust Corporation established a subsidiary in Palm Beach, Florida, to provide investment management services. The Florida legislature passed a statute to block that business, but the Supreme Court held that Florida did not have the power to contravene the regulations of the Comptroller of the Currency. Chain banks were still operating in the United States. These were banks that were controlled by the same individual, but not through a corporation. Satellite banking was employed to control a bank through a minority ownership interest. Branch banking seemed to be slowing. The banks were even closing branches as the 1970s ended.

ATMs

The automated teller machine (ATM) was introduced in 1971. It was the idea of a bank in Burbank, California, and was manufactured by the National Cash Register Company. In 1975, the First National City Bank in New York installed six cash machines as independent ATMs. The Comptroller of the Currency ruled that these ATMs were not branches, but a federal court held that ATMs were branches, which would have sharply restricted their use. The Comptroller of the Currency eased that problem by allowing "shared" ATMs to avoid branch limitations, and the courts approved the use of that loophole. Shared ATMs were owned by an independent organization that shared the ATM with the banks. In the year 2000, television advertisements offered individual investors the opportunity to own their own ATM. Although the shared use concept allowed the rapid expansion of ATMs, their use raised new problems. ATM access cards were being lost and stolen in large numbers, and the courts were asked to sort out issues of liability between the bank and the depositors when ATM cards were used improperly. Robberies at ATMs raised additional security concerns. New York eventually adopted an ATM security law, but crimes connected with the ATMs continued.

Another device known as customer activated terminals (CATs) allowed customers to access their accounts by computer terminals in branch offices of banks. Technology also made other inroads. In 1970, S&Ls and banks were allowed to make preauthorized transfers from savings accounts for household payments. In 1975, telephone transfers were allowed for savings balances at commercial banks. Banks and thrifts were using automatic transfer services for savings balances in 1978. Credit unions used share drafts for withdrawals. Electronics were changing finance in other ways. In June of 1974, checkout scanners were introduced into stores. The first purchase using that device was a pack of Wrigley's gum in Troy, Ohio. Scanners started a massive change in the way that sales were tabulated in stores and would lead to electronic payments for goods. By 1992, scanners were so common that President George Bush was accused of being out of touch with day-to-day American life after he expressed surprise at the use of such a device in a supermarket.

Old-fashioned crimes were still in vogue. A robbery of Chase Manhattan Bank netted more than $2 million in 1979. The thieves escaped. Financial thefts were not limited to banks. In December of 1978, a gang of seven men robbed the Lufthansa air cargo terminal in Kennedy Airport of $8 million in cash and valuables.

Traditional financing continued. Conventional factoring involved the sale of account receivables to the factor without recourse. The factor paid cash monthly on a hypothetical monthly average maturity date for the receivables. This accelerated cash flow. Finance companies had assets of over $240 billion by the end of the 1970s and were providing strong competition to the commercial banks. They included the American Express Credit Corp., Transamerica Finance Group, Household Financial Corporation, Beneficial Corporation, G.E. Capital Corporation, General Motors Acceptance Corporation (GMAC), Ford Motor Credit Company, and Chrysler Financial Corporation. GMAC would become the largest consumer finance company in the United States, but the Ford Motor Credit Company was not far behind. It conducted automobile and nonauto consumer lending and established affiliations with the First Nationwide Financial Corp., a large S&L, and with the Associates Corporation of North America, which was the fourth largest finance company in the United States.

Economic Problems

"Stagflation" continued to plague the economy—that is, inflation increased even while the economy was in a state of decline. The Fed was accused of having pumped up the economy in order to assure Richard Nixon's reelection victory in 1972. The price for that expediency was paid by Gerald Ford, who was beset by one of the country's worst recessions between 1973 and 1974. His successor, Jimmy Carter, accelerated government spending and the money supply in order to beef up the economy. When President Carter took office, the federal deficit was more than $66 billion. Inflation had dropped from 12 percent in 1974 to 6 percent in 1976, but Carter then began priming the pump. The economy grew by 5.2 percent in the first quarter of 1977, and inflation returned. Increasing rapidly between 1976 and 1980, the inflation rate reached a level of over 12 percent in 1979.

In October of 1977, the Federal Reserve Board raised the discount rate to 6 percent despite the opposition of President Carter. The stock market was also voting against the president. The market dropped 25 percent between the time Carter took office and November of 1977. The country's trade deficit grew dramatically from $8 billion to $31 billion by 1978. In early 1978, GNP was growing at a rate of 7 percent, unemployment was below 6 percent, but inflation was 11.3 percent. The inflation rate at the end of 1978 was down to 9 percent, but wholesale prices jumped by 14.1 percent during the first quarter of 1979. The discount rate was pushed up to 9.5 percent by the Fed in order to counteract inflation.

Financial crises occurred in 1978, 1979, and 1980 during President Carter's term in office. Carter seemed powerless to deal with the country's finances. He announced voluntary wage and price guidelines in October of 1978. Carter appointed Robert Strauss to be his "anti-inflation chief," but he too failed to stop the inflationary spiral, which continued its upward course. The nadir of the Carter administration was reached after the president withdrew to Camp David for ten days in July of 1979 to contemplate economic conditions. After that retreat, Carter made a public address that expressed pessimism about the American spirit in general and economic conditions in particular. This "malaise" speech only made matters worse.[44] Carter fired W. Michael Blumenthal, his Secretary of the Treasury. Blumenthal was replaced by G. William Miller, who had been the Fed chairman. Paul Volcker was appointed by Carter to replace Miller at the Fed.

Carter's inability to deal with the troubled economy, and his bungling of the hostage crisis in Iran, cost him the next election. In the meantime, the dollar dropped sharply in value. "Concerted efforts were made to support the dollar, including $6.4 billion of treasury foreign currency borrowing ('Carter bonds'), International Monetary Fund ('IMF') drawings, and swap arrangements with foreign central banks."[45] The Fed tried to counteract speculation against the dollar by raising discount rates and intervening in the exchange markets through dollar purchases with foreign currency. The Treasury gave further support to the dollar by selling gold stocks and Treasury securities denominated in foreign currencies.

Banking Legislation

More banking legislation was enacted. Congress passed the Financial Institutions Regulatory and Interest Rate Control Act in 1978. This legislation imposed controls on management abuses in banks and interlocking directorates and increased the enforcement powers of regulators. The Electronic Funds Transfer Act of 1978 required customers to be provided with documentation of electronic fund transfers, and their liability was limited where a breach of security in an electronic funds transfer resulted in losses.

The Depository Institution Deregulation and Monetary Control Act of 1980 allowed the use of electronic payments among institutions that were in the Federal Reserve System.

The International Banking Act of 1978 applied the Glass-Steagall Act and provisions of the Bank Holding Company Act of 1956 to foreign banks and bank holding companies with branches or agencies in the United States. Large banks with securities affiliates in the United States were grandfathered under this legislation. Foreign banks were allowed to elect whether they would be subject to state or federal regulation. The International Banking Act sought to assure competitive equality between domestic banks and international banks operating in the United States. The Comptroller of the Currency had to approve all new branches or agencies for foreign banks. Offices of a foreign bank branch were not regulated if they were only "representative" offices. Restrictions on a foreign bank could be avoided if it was found by the Fed to be a qualified foreign banking organization. To qualify as such an organization, more than half its worldwide business had to be banking and more than half its business had to be outside the United States.

Monetary Policy

The Nobel Prize for economics was first awarded in 1969. Milton Friedman was the winner of that prize in 1976. He was a strong believer in money supply as a determining factor in economic growth. His theories and research touched off widespread interest in monetary policy in the United States. The Full Employment and Balanced Growth Act of 1978 was passed by Congress in an effort to stop inflation. It required reporting by the Fed on monetary objectives and predicted monetary growth rates. Later, in 1982, the Fed announced that it was dropping the money supply measure (M1) as a policy target because that figure was an unreliable indicator of economic growth and inflation. The Fed's Open Market Committee continued to regulate the money supply. Its decisions were made by the governors of the Federal Reserve System, who had seven votes, and the presidents of the Reserve banks, who had five votes. In November of 1978, the discount rate reached the highest level in forty-five years.

Carter's appointment of Paul Volcker as chairman of the Federal Reserve Board would raise rates even further. Volcker decided to stop inflation rates by raising interest rates to "stratospheric levels."[46] Volcker initially announced in October of 1979 that interest rates would be allowed to float and that the Federal Reserve Board would no longer seek to keep rates down. This "historic decision . . . threw the financial markets into chaos" because of the risk exposure that it occasioned. This action was referred to as the "Saturday Night Special," and bond rates jumped thirty basis points over the weekend.[47] Volcker drove home the point by raising the discount rate from 11 to 12 percent. At that time, gold prices were increasing dramatically, and silver prices had jumped by 50 percent in one month.

This economic turmoil was having an effect on the stock market. "The 1970s represented the worst decade for stocks since 1929."[48] The period between 1969 and 1979 was the worst performance for the stock market for any ten-year period during the century. In August of 1979, *Business Week* ran a cover proclaiming "The Death of Equities." The magazine claimed that people would be investing in money markets and other investments rather than stocks. There was a basis for that prediction. In December of 1979, the Dow Jones Industrial Average was in the mid-800s, which was the lowest level since 1969. In contrast, the Fed funds rate had risen to 18 percent in March of 1980, and the prime rate was at 16 percent. At one point, the prime rate for short-term loans hit 20 percent, and interest rates would not peak until they exceeded 21 percent. There was some hope still left in the stock market. The Dow Jones Industrial Average rose some ten points after the announcement of Paul Volcker's appointment as Fed chairman.

Paul Volcker. The strong medicine he administered as chairman of the Federal Reserve Board curbed inflation and restored American finance. (Portrait by Julian Allen, courtesy of the National Portrait Gallery, Smithsonian Institution.)

On March 4, 1980, the Fed began to impose credit restrictions under the Credit Control Act of 1969. The Fed imposed an 8 percent reserve requirement on large short-term certificates of deposit, euro dollar borrowings, and other liabilities. This increased the cost of money to banks, and that cost was passed on to borrowers. The Fed required a special deposit of 15 percent on all consumer credit extended through credit cards and unsecured personal loans, as well as on certain other credit. In addition, money market funds were required to maintain special deposits equal to 15 percent of the net increase in their assets after March 14, 1980. The Fed imposed a voluntary credit restraint program in which banks were to restrict the growth of their lending to borrowers to somewhere between 6 and 9 percent. Banks were asked to refrain from making loans for speculative activities. The combination of the second oil shock in 1979, the Fed's tightened monetary policy, and increased interest rates had their effect in 1980. "In the United States, real GNP fell at an annual rate of more than 10 percent in the second quarter."[49] Even so, inflation was running at the rate of 14 percent.

The War on Inflation

Stress fractures were appearing. The Ford Motor Company was among the many corporations that were having problems. Its market share dropped from 23.5 percent in 1978 to 16.6 percent in 1981. In 1982, Ford Motor Company lost $1.7 billion. Ford's stock price dropped from $30 in 1979 to below $12 in 1982. The Chrysler Corporation lost $120 million in the first quarter of 1978 and over $200 million in the second. Its financial condition continued to decline in the following year.[50] Chrysler sought financial assistance from the federal government in order to stave off bankruptcy. That petition set off another political debate over whether the government should provide financial aid to private corporations. In the end, a Loan Guaranty Board was created and authorized to provide up to $1.5 billion in loan guarantees over a two-year period for Chrysler. The company was forced to put up all its assets as collateral. The banks assisted by exchanging $1.3 billion of debt for Chrysler preferred stock, and $2.5 billion was contributed or given up by other creditors. Canada provided $657 million in loans or grants. The United Auto Workers accepted a $622 million wage cut and additional pension deferrals. Chrysler was able to repay its debts, but it continued to have problems and was late in making payments to suppliers in 1981. The company recovered after the introduction of its new class of K-cars designed for the middle class and the minivan. Chrysler became profitable in 1982.

Paul Volcker continued his fight against inflation. Although the economy appeared to be recovering in 1981, continued high interest rates pushed the country into recession. The so-called Volcker recession was in full force in 1982. It was a bad one. Unemployment reached 10.7 percent. The high interest rates occasioned by the Fed were causing other problems, including a sharp decline in bond prices. The increased interest rates were bumping into usury ceilings imposed under state laws. The states were sometimes reluctant to raise those ceilings. Arkansas voters refused to repeal a state constitutional provision setting the usury limit at 10 percent. The result was that no home mortgages or auto loans were available in the state. But there were ways around some of these restrictions. The Supreme Court held in 1978 that national banks could charge interest rates to out-of-state credit card customers at the highest interest rate allowed by the bank's home state. That rate could be charged even if the rate was higher than allowed in the state where a credit card holder resided.[51]

A phenomenon observed in the 1970s was that homeowners were often the beneficiaries of inflation. A home with a fixed interest rate appreciated greatly in value within a few years. Inflation accelerated salaries, but under a fixed mortgage the mortgage payment remained the same. The mortgage payment, often the family's largest monthly expense, therefore shrank in relative size as inflation increased. The inflation of the 1970s did not have a similar favorable effect on S&Ls and other thrifts. Their mortgages and loans were fixed at

8 or 9 percent, but the thrifts were limited in the amount of interest they could pay on deposits. Disintermediation struck the S&Ls hard, as depositors withdrew their money in order to obtain higher rates from other investments. The S&Ls could not raise their rates because of interest rate ceilings. Regulators provided some relief to the thrifts in 1978 by allowing them to sell money market certificates. The S&Ls could pay higher rates for funds under those certificates. Nevertheless, short-term rates continued to rise, while income from fixed rate mortgages issued at lower rates were inadequate to cover costs. The mismatch between long-term assets and short-term liabilities resulted in the thrifts paying more to attract funds than they were earning on their mortgage portfolios.

Deregulation

The Depository Institutions Deregulation and Monetary Control Act of 1980 authorized depository institutions, including thrifts and credit unions, to offer interest-bearing negotiable order of withdrawal (NOW) accounts. This legislation sought to phase out interest rate caps on bank and thrift deposits. Federal deposit insurance coverage for all types of deposits was increased to $100,000. In addition, all depository institutions were subjected to Fed reserve requirements and granted access to the Fed's discount window. These provisions were designed to stem the flow of banks who were opting out of Fed regulation. The Depository Institutions Deregulation and Monetary Control Act began the process of dismantling controls on interest rates for deposits. This was a necessary step if deposit institutions were to compete for funds with other financial intermediaries. The process would be a long and painful one, particularly for S&Ls and other thrifts. The phaseout of interest rate ceilings on time and savings deposits that began in 1980 was not completed until 1987. The thrifts had previously enjoyed an advantage under Regulation Q because they could pay higher rates than banks on time and savings deposits. After enactment of the Depository Institutions Deregulation and Monetary Control Act, the thrifts had to compete for funds on an equal basis with the banks. The result was that thrifts paid an average of 11 percent for their funds in 1981, while their mortgage portfolios yielded only 10 percent. Some relief for this situation was provided in 1981 when federally chartered thrifts were allowed to issue adjustable rate mortgages. It took some time for consumers to accept these new devices, but by 1983, adjustable rate mortgages were quite popular. More help, however, was needed. Most thrifts were losing money—a total of $4.6 billion by 1981 and an additional $4.3 billion in 1982. Eighty-one thrifts failed in 1981 and over 250 went down the following year. The Federal Home Loan Bank Board began encouraging mergers between S&Ls that were running into financial difficulty. Over 700 such mergers occurred between 1981 and 1982, but this did not stop the decline in the industry. The financial difficulties of the S&Ls continued to mount, raising concern that the Federal Savings and Loan Insurance Corporation (FSLIC) would not have sufficient funds to pay insured deposits. In March of 1982, Congress passed a joint resolution supporting FSLIC. The resolution stated that the full faith and credit of the United States would stand behind FSLIC and the FDIC. This set the federal government up for a financial disaster of unbelievable dimensions.

Bank Failures

Commercial bank failures and financial misconduct in banking were growing problems. The Comptroller of the Currency charged Bert Lance, the director of the Office of Management and Budget and a close confidant of ex-President Jimmy Carter, with check kiting and other banking violations in 1985. Lance paid a fine of $50,000 and was barred from working for any federally insured bank. Lance was indicted for banking law violations, but he was acquitted of those charges. The SEC also filed suit against Lance and others in connection with trading in bank stocks. A consent agreement was entered into by Lance with the SEC. Problems were arising elsewhere. Hamilton National Bank in Chattanooga, Tennessee, failed in February of 1976. It was a part of a bank holding company structure that suffered large losses as the result of bad real estate loans purchased from an affiliated mortgage company. The American Bank & Trust Co., a New York bank, failed in 1976 after large loans were made to insiders in order to allow them to acquire control of the bank from the majority owner, which was Continental Trade Bank, a Swiss bank.

A. Robert Abboud became the chief executive officer of the First National Bank of Chicago in 1975. He was a strong-willed executive whose methods caused many bank officers to leave. Abboud began a program of fixed rate loans and arbitrage of euro dollars. The result was large losses. First Pennsylvania Bank, the oldest bank in the United States, was faltering. The bank had maintained a conservative business philosophy until John Bunting was made its chief executive officer in 1968. He added risk to the bank's portfolio and vastly increased its size. The recession that hit in 1974 and 1975 crippled the bank, as bad loans increased. The bank continued in business, but floundered again in 1980 as interest rates increased. The bank had put one-third of its portfolio into long-term bonds. This resulted in a mismatch in maturities. The spread between the long-term rates received on assets held in the bank's portfolio and the short-term rates paid for funds the bank was itself borrowing was 3 percent and rising. In order to rescue the First Pennsylvania Bank, a group of banks agreed to loan it $500 million and to extend a credit line of another $1 billion. The federal government provided $325 million through the FDIC to help in this rescue. The bank recovered, but it was not until 1986 that the First Pennsylvania Bank was back on its feet. It was taken over by CoreStates Financial Corporation in 1989.

The prime rate was at 16.75 percent in February of 1982. Unemployment was at 8.4 percent, and GNP was shrinking. The recession that was occurring in the first half of 1982 was affecting the oil and gas industry. Nucorp Energy, a large firm in the oil business, declared bankruptcy. Nucorp had borrowed $300 million from its banks. Of that amount, over $170 million was owed to the Continental Illinois Bank and Trust. The Good Hope Refinery was another spectacular failure. It had liabilities in excess of $1.4 billion. Texas was especially hard hit by the oil patch recession. The office vacancy rate in Houston reached 28 percent by 1984.

Abilene National failed after rumors circulated that it was having trouble with its energy loan portfolio. Some $50 million of deposits were pulled out of the bank by institutions, and the bank was closed in August of 1982. The First Midland Bank of Texas became insolvent in October of 1983. It had lost $121 million in an eight-month period. This was the second largest bank insolvency after the Franklin National Bank. First Oklahoma Bancorp was in trouble in 1983. It lost $58 million in the third quarter. The Interfirst Bank in Texas lost $194 million in the third quarter of 1983. Crocker National Bank lost $120 million in the first quarter of 1984. The Midland Bank rescued Crocker, but Crocker lost a total of $324 million in 1984.

Penn Square

More startling was the failure of the Penn Square Bank in Oklahoma on July 5, 1982. That institution had started in a shopping center and grown rapidly through sales of participations in loans made to oil businesses. The oil embargo had made energy lending a popular field, and Penn Square was able to sell over $2.5 billion in energy loan participations to other banks. Penn Square was a colorful operation. Its chairman was Billy Paul "beep" Jennings, "an unindicted co-conspirator in the Four Seasons Nursing Home scandal" described earlier.[52] William G. Patterson, an officer at Penn Square, made many of the bad loans. He was "a flamboyant figure who liked to drink liquor out of his cowboy boots and wear Mickey Mouse beanies to work."[53] Continental Illinois, a large Chicago bank, had purchased over $1 billion in Penn Square loan participations. Chase Manhattan Bank purchased another $275 million, First National Bank ("seafirst"), a Seattle bank, purchased several hundred million dollars, Michigan National Bank had about $200 million, and Northern Trust Company of Chicago had another $125 million of those participations.

Penn Square was closed by the banking regulators when it became clear that its portfolio of loans was largely uncollectible. The FDIC announced that only deposits of up to $100,000 would be protected by the government. This was the first time that the FDIC had not rescued a failing institution and protected all of the depositors and creditors, regardless of deposit size or insurance limits. Some 140 credit unions, forty-eight savings and loans, and forty-seven commercial banks had substantial unsecured deposits at the Penn Square Bank when it was closed. Many of those deposits had been placed at

Penn Square by deposit brokers who were investing client funds at financial institutions paying the highest CD rate. Penn Square's failure had a ripple effect. Many of the participations purchased by the banks from Penn Square turned out to virtually worthless. Seafirst was hit particularly hard and had to be merged with the Bank of America. A run began on the deposits at Continental Illinois, and concerns were raised about Manufacturers Hanover Bank, where another run began. A group of banks under pressure from the Fed extended a $5.5 billion line of credit to Continental Illinois to ease this dangerous situation. The Treasury chipped in another $2 billion.

Continental Illinois

Continental Illinois had problems that extended beyond Penn Square. Continental had launched a program in 1976 to make itself one of the top three banks in the country within five years. The bank then began to grow rapidly, until the Penn Square failure. After that debacle, Continental Illinois experienced more problems. The bank had some $1.9 billion of nonperforming loans at the end of 1983. It had made large loans to International Harvester, Grupo Industrial, Alfa of Mexico, and Braniff Airlines, all of which were in or approaching bankruptcy. Continental's own financial condition raised concerns in the money market, and the bank began to have difficulty raising money for its operations. Continental was paying as much as 1 percent over other lenders in order to sell its large certificates of deposit.

A run began on the Continental Illinois Bank on May 9, 1984. On a single day, $1 billion in funds from Asia were withdrawn from the bank. A rescue of Continental Illinois Bank was led by Morgan Guaranty. Morgan and several other banks made $4.5 billion available to Continental in order to restore confidence in its viability and avoid a financial crisis. More was needed. Continental was then the seventh largest bank in the country, and the government could not let it fail, lest confidence in the entire financial system be undermined. Such a failure, it was feared, would drag down at least sixty other banks. The Fed loaned Continental Illinois $8 billion and announced that all depositors would be paid, regardless of their deposit size. This was discrimination on the Fed's part. At that time, smaller banks were failing, and coverage was not given to large deposits above the FDIC maximum.

Federal regulators provided $2 billion in capital to Continental Illinois. The total amount of support given to Continental Illinois exceeded $12 billion. The run continued on the Continental Illinois Bank even with that backing. An effort to merge Continental with other large banks including Citicorp, failed. The FDIC then effectively nationalized Continental by taking an 80 percent equity stake, which could rise to 100 percent if eventual losses were too great. The regulators required management to be removed. Stability was then restored, and Continental Illinois was later sold to Bank of America. Even so, Continental's problems exposed a new danger in the financial system. The bank had only about $4 billion of insured deposits when it ran into financial difficulties. An additional $36 billion in deposits at the bank was not insured. Those funds were largely owned by large institutional investors. Withdrawals by those institutions could quickly impair the liquidity of even the largest bank. The institutions were aware of the danger to their uninsured deposits and began a run on Continental when its problems became known. That bank run was different from those experienced early in the century. Instead of small lines of depositors forming at teller windows, modern institutions could be drained of funds almost instantly, as banks and other institutions withdrew funds by wire transfers.

Thrift Concerns

Another run occurred on the deposits of the American Savings & Loan Association, which was headed by Charles Knapp. It had grown rapidly through the use of large denomination CDs that were obtained by brokers. Knapp acquired the First Charter Financial Corporation, which doubled the assets of the parent company of the American Savings & Loan Association. Its assets increased from $10 to $20 billion. Another institution was experiencing regulatory problems. The SEC required the Financial Corporation of America to restate its earnings in the second quarter of 1984. This S&L's claimed profit turned into a loss of $170 million. The Federal Home Loan Bank Board stepped in to rescue the S&L. This would be only the beginning of a nightmare of S&L failures.

Chapter 2

Markets Merge

1 Derivatives Continue Their Growth

The notional dollar value of commodity futures contracts in 1976 was more than three times the value of the stocks traded on the New York Stock Exchange (NYSE) and the American Stock Exchange (AMEX) combined. By 1978, the value of futures contracts traded on commodity exchanges reached $1.5 trillion. The Chicago Board of Trade (CBOT) continued its innovations in applying futures trading principles to securities products. The CBOT began trading futures contracts on Government National Mortgage Association certificates (GNMAs) in 1975. These contracts allowed institutions to hedge against changes in interest rates, which was a problem for many firms in that inflationary era. That contract touched off a dispute between the Commodity Futures Trading Commission (CFTC) and the Securities and Exchange Commission (SEC) over their respective jurisdiction. The SEC objected to the CFTC's approval of the GNMA futures contract because the underlying certificates were securities. The CFTC rejected that protest on the ground that Congress had given it exclusive jurisdiction over all futures trading on any commodity, even where the commodity was a security. The CFTC also approved the trading of futures contracts on Treasury bill futures contracts on the Chicago Mercantile Exchange in 1976. That contract quickly became popular.

CFTC Issues

The SEC responded in kind to the CFTC intrusions into the securities field. The SEC spotted an opportunity to grab jurisdiction when the CFTC began its reauthorization hearings in Congress in 1978. The SEC seized upon the CFTC's embarrassments over the commodity options scandals as grounds for arguing that the latter agency was overextended and that its jurisdiction should be curbed. The SEC noted that commodities and securities were becoming interrelated, resulting in confusion regarding their regulation. Pointing to the similarity of futures and options traded on the Chicago Board Options Exchange (CBOE), the SEC contended that it should regulate all such contracts when the underlying commodity is a security. The Treasury Department too perceived an opening and sought regulatory authority over futures contracts on government securities. The CFTC and the futures industry resisted those efforts. The allocation of authority over futures to the agricultural committees in Congress assured the CFTC victory. Those committees were not about to surrender their jurisdiction to the banking and securities committees, which would be the result of the SEC and Treasury proposals. Congress continued the CFTC's exclusive jurisdiction over futures contracts. Congress did require the CFTC to maintain communications with the SEC, Treasury, and the Fed where there was overlapping jurisdiction.

In November of 1976, as directed by Congress, the CFTC published a report on whether legislation was needed to create insurance for the owners of commodity futures accounts in the same manner as SIPC in the securities industry. The CFTC concluded that such insurance was not needed. Historically, very few futures commission merchants had failed. The CFTC had reason to reconsider that position a few years later, however, when two futures commission merchants went bankrupt. They were Incomco, Inc., and Chicago Discount Commodity Brokers. The failure of the latter firm resulted in a loss of $3 million to customers. Later, in 1985, another futures commission merchant, Volume Investors, defaulted on its contracts as the result of concentrated positions in uncovered short gold options. That firm went into bankruptcy, but these failures proved to be relatively small and isolated, and no action was taken by Congress.

Tax Straddles

The CFTC encountered a storm of other problems as it began to impose regulation on the futures industry. One early concern involved "tax straddles," which were conducted on the futures exchanges in Chicago and New York. These were transactions in which a trader bought and sold futures contracts on the same commodity but with different delivery months. The buy and sell contracts in these straddle positions usually moved in tandem with price changes in the commodity. In such a case, there would be a loss in one "leg" of the transaction (say the sell side, if prices went up) and an offsetting gain in the other (the buy side). The loss leg would be liquidated before year-end and a tax deduction obtained. An offsetting leg would then be established to protect the profit in the other leg, and that gain would be realized in the next year when the entire position was liquidated. The net effect was no economic loss in the overall transaction, but a large tax deduction was created in the year in which the loss leg was liquidated. This process would be repeated each year in increasingly larger amounts to offset gains from prior years, as well as gains from the current year.

Tax straddles were not a recent innovation. The commodity futures markets had long been used for such transactions. It was rumored that some traders, by using such devices, had never paid income taxes. The Commodity Exchange Authority (CEA) had brought cases involving illegal wash sales that were used to conduct tax straddles as early as 1948. But the CEA had not been effective in stopping such practices. The Internal Revenue Service (IRS) seemed oblivious even though billions of dollars of taxes were being evaded or avoided through this mechanism. However, these transactions became so widespread in the 1970s that they could no longer escape the attention of the regulatory authorities and the IRS. The Commodity Exchange in New York (Comex) even had special trading sessions to allow tax straddle trading to occur at prices convenient to the traders.

After its creation in 1975, the CFTC became concerned with tax straddles because they were often executed in a noncompetitive manner in order to assure that there would be no actual economic losses to the participants. The CFTC then brought an action against the Siegel Trading Company, Joseph Siegel, and others. They were charged with improperly sheltering some $500,000 in taxes through a 1,000-contract "butterfly" straddle in Mexican peso futures for one of their customers, Harold Brady, a large holder of the stock of Bache, the securities firm. It was apparent from the Siegel case that tax straddles were being used to avoid or evade large amounts of taxes. The Office of the United States Attorney in Chicago convened a grand jury to investigate that trading. Joseph Siegel and Alvin C. Winograd were later indicted and convicted of criminal violations for conducting tax straddle transactions. In June of 1977, Richard C. Groover and four other traders in Chicago were indicted for engaging in fraudulent transactions on the floor of the CBOT. One of these traders, Robert N. Meyer Jr., was legally blind. His Seeing Eye dog had stood in the pit with him while he traded and during his sentencing in federal court.

Another grand jury was convened in New York to investigate tax straddle abuses in that city. One individual was convicted of creating over $1.3 billion in tax losses from tax straddle transactions. Norman Turkish, the sales manager for commodities at Bear Stearns & Co. in New York, was indicted and convicted of engaging in illegal tax straddles in gold and oil futures for a number of customers on the New York Mercantile Exchange. Turkish and others had fraudulently manipulated the crude oil futures market so that they could assure tax losses. Tax straddles were also being used in the stock options markets. The SEC staff investigated the Philadelphia Stock Exchange (PHLX) and the CBOE in 1982 and found that traders were engaging in fictitious transactions designed to establish tax losses. The transactions were in such large volume that they distorted volume figures.

The IRS began challenging tax straddles and denying deductions for such transactions on the ground that these devices were fictitious and presented no real risk of an economic loss. Country-western singer Willie Nelson was among those who had engaged in the tax straddles that were challenged by the IRS. He was forced to sell most of his assets in order to pay his taxes. In one case, a customer who had his tax straddle disallowed by the IRS sued Merrill Lynch because it had recommended and executed the transaction. Merrill Lynch tried to settle the matter by paying the customer's taxes, but the IRS objected. This resulted in a lot of publicity when the firm's chairman, Donald Regan, was nominated as Secretary of the Treasury. The IRS was in no position to gloat after it received an unfavorable opinion in that case on its burden of proof in disallowing tax straddles. Nevertheless, the IRS was able to recover some \$3.5 billion in unpaid taxes that had been evaded by wealthy individuals engaging in tax straddles in the 1980s. The Economic Recovery Tax Act of 1981 relieved the situation by changing the way in which commodity futures transactions were taxed. The changes removed much of the incentive to engage in tax straddles.

Other Abuses

The CFTC continued its efforts to stop noncompetitive transactions on the exchanges. Criminal and civil charges were brought for trading in tax avoidance schemes on the New York Cotton Exchange. Civil penalties totaling \$500,000 were imposed on traders there. The CFTC brought charges against forty-three floor brokers and brokerage firms for engaging in noncompetitive trading in gold and silver futures contracts on the New York Mercantile Exchange. The exchange itself was fined \$200,000. Illegal trading practices were the subject of a CFTC proceeding involving Treasury bill futures in Chicago. The CFTC brought disciplinary proceedings against the MidAmerica Commodity Exchange in 1977 for failing to enforce its rules against improper trading on the floor. In a case involving the American International Trading Company, the CFTC charged that the defendants engaged in wash sales to generate commissions and that fictitious trades were created in order to transfer funds among customer accounts. This was accomplished through Jack Savage, a convicted felon who was acting as a floor trader on the MidAmerica Commodity Exchange.

The CFTC encountered numerous scams. In one case involving the Citadel Trading Company of St. Louis, the CFTC charged that the firm used the author of a book entitled *A License to Steal* to promote its trading program. The customer funds obtained from this promotion were traded repeatedly by Citadel so that most of the funds were expended on commissions. Those commissions were shared with the author of the book and were paid into an offshore account for him called "ALTS," which stood for the initial letters of his book title. In another case, the CFTC discovered that over \$80 million had been defrauded from customers of Chilcott Portfolio Management, a commodity pool. This company was involved in the Penn Square Bank debacle. The CFTC found that an individual, Bernard Striar, had obtained several million dollars in funds from investors in southern California. After he absconded with the money, it was discovered that Striar had been using several aliases and had families in several cities. He was caught and jailed. Another CFTC investigation discovered that Barbara Skorupakas had obtained $3 million from members of the Polish community in Detroit for investment in commodity futures. The CFTC brought an action against her for fraudulent sales activities. While that action was pending, Skorupakas formed even more commodity pools and obtained an additional $700,000 from customers. In still another CFTC case, Larry Pinckney was found to have used a commodity pool, the Big Red Commodity Corporation, to steal about $200,000 in customer funds. He was jailed for that conduct.

On January 4, 1980, President Jimmy Carter imposed an embargo on grain that was to be exported to the Soviet Union after the Soviets invaded Afghanistan. The CFTC declared a market emergency and suspended trading in futures contracts on wheat, corn, oats, soybeans, soybean meal, and soybean oil for two days in order to avoid disruptions in the market. The embargo proved to be unpopular with farmers. President Carter then announced that the government would spend over $2 billion to purchase the embargoed grain. His successor, Ronald Reagan, subsequently lifted the embargo and entered into an agreement for further sales of grain to the Russians. Congress also acted to restrict the ability of the president to embargo grain. Congress allowed the president to embargo grain only prospectively, unless there was a war or other national emergency.

Options Exchanges

The options exchanges regulated by the SEC continued their growth. The CBOE began trading put options in 1977. The option exchanges initially traded "American" style options, which were options that could be exercised at any time up to their expiration date. Later, "European" options were being traded. These were options that could be exercised only upon expiration or some other limited period. The PHLX, which was becoming a center for options on foreign currency, traded options on the stocks of over 200 companies. The AMEX proposed to trade put and call options in the 1980s on bullion value demand promissory notes, but the program never took off. In 1980, the SEC began awarding the listing of options on a lottery basis to the various options exchanges. Later, in 1989, the SEC decided to allow options to be multiply traded. This meant that the exchanges could compete with each other for options on securities. Pricing theory for options and capital in general was becoming more sophisticated and was bringing fame to some economists, including Myron Scholes and Fischer Black.

Another form of derivative security was the "phantom" stock and "stock appreciation rights" that for a number of years had been given to executives as compensation. Phantom stock provided bonuses to managers based on the performance of the company's stock. In some cases, the phantom stock was used to track the performance of a subsidiary of a company. Stock appreciation rights were similar in that the executives received the amount of the increase in the price of the stock over a given period of time, but they did not receive dividends.

Index Futures

More clashes between the SEC and CFTC were underway. The National Produce Exchange had proposed in 1968 to trade futures on the Dow Jones Industrial Average. The SEC refused permission for such trading. The creation of the CFTC, however, preempted any jurisdiction the SEC may have had over the futures exchanges. The Kansas City Board of Trade then obtained permission from the CFTC to trade futures on the Value Line Average Stock Index. These contracts, which began trading in 1982, were based on price changes in the 1,700 stocks that composed the Value Line Average stock index, most of which were NYSE-listed securities. Stock index futures differed from traditional agricultural futures in that delivery of the commodity was not called for under the contract. Differences were settled in cash. As a practical matter this did not mean much, since most futures contracts were liquidated before delivery actually occurred. One concern that arose with the cash-settled futures contract was that the gambling laws enacted by the states to stop bucket shops in early years might apply to make these contracts voidable. Congress exempted contracts regulated by the CFTC from those laws.

The Kansas City Value Line contract was soon exceeded in popularity by the Standard & Poor's (S&P) 500 index futures contract, which was traded on the Chicago Mercantile Exchange. The CBOT tried to trade a futures contract on the Dow Jones Industrial Average. Dow Jones, however, sued the exchange over the right to control the use of its name. The CBOT was barred by the Illinois Supreme Court from using the Dow Jones name without the permission of that corporation. That permission was not given until the late 1990s. Standard & Poor's sought to stop the Comex in New York from using its index for futures trading because it had been licensed to trade on the Chicago Mercantile Exchange. Futures on indexes were clearly a securities industry product, but they now belonged to the futures industry. By 1983, the CFTC had approved five stock index contracts for trading. At that time, there were some 15,000 stock index futures contracts being traded per day on the futures exchanges. The notional dollar volume of index futures trading quickly exceeded that of the stock being traded on the NYSE. The CBOT began trading options on T-bond futures in August of 1983. The NYSE formed the New York Futures Exchange, as a subsidiary, to trade commodity futures. It began trading futures on a New York Stock Exchange Composite Index of stock prices. The securities industry also tried to fight back through the options exchanges. The CBOE announced that it planned to trade options on GNMA contracts, which placed it in direct competition with the GNMA futures contracts traded on the CBOT. In a surprising twist, the CBOT was successful in convincing a federal court of appeals in Chicago that the CBOE should not be permitted to trade those contracts because they were within the exclusive jurisdiction of the CFTC, which had not approved their trading.

Shad-Johnson Accords

Recognizing that he was on the losing side of the jurisdictional fight with the CFTC, the chairman of the SEC sat down with the chairman of the CFTC and worked out an agreement over their respective jurisdictions. In brief, this agreement—the Shad-Johnson Accords—gave the CFTC exclusive jurisdiction over all futures trading and commodity options trading on securities or other commodities. The SEC was given exclusive jurisdiction over options on individual securities and options on currency when the options were traded on a national securities exchange. The Shad-Johnson Accords prohibited futures trading on individual securities, a restriction that would not be lifted until December 2000. The Shad-Johnson Accords addressed another area of concern between the two agencies—that is, jurisdiction over stock indexes. The SEC was given exclusive authority over options on stock indexes that were traded on a national securities exchange. The CFTC was, in turn, given exclusive jurisdiction over futures and options on futures on stock index contracts.

Congress subsequently enacted the Shad-Johnson Accords into law. Congress did tilt a little toward the SEC by giving that agency what amounted to a veto power over the CFTC's approval of additional stock index futures contracts. To no one's surprise, a dispute soon broke out between the two agencies over the SEC's use of its authority to prevent additional index trading. The SEC objected to mini-stock index contracts proposed by the Chicago Mercantile Exchange in 1983, but another agreement was reached between the SEC and the CFTC on approval standards for subindexes. This agreement set forth minimum criteria for CFTC approval of a subindex contract. This quieted things for a time, but another quarrel broke out at the end of the century over another subindex that the CBOT sought to trade after Dow Jones decided in 1997 to license its indexes for trading options and futures. The SEC then approved options trading for securities exchanges on the Dow Jones Industrial Average and on the Dow Jones Transportation and Utilities indexes. The SEC vetoed futures trading on the commodity exchanges for the latter two indexes. The CBOT sued, and the court of appeals in Chicago reversed the SEC's decision in August of 1999. The SEC continued to raise objections to the intrusion of the CFTC into the securities arena. Among other things, the SEC questioned whether the futures exchanges should retain the ability to determine what margins should be charged on index futures contracts. The SEC was concerned that speculators were being encouraged by low futures margins and that their trading was adding volatility to stock market prices. The SEC wanted the Fed to set margins on those instruments in order to curb speculation, just as the Fed did for securities contracts. The SEC's concerns with futures margins illustrated one of several differences between the regulatory approaches of the SEC and the CFTC. In the futures industry, margins were set by the exchanges, not the federal government. Futures margins were, and are, viewed as tools to assure performance, rather than a means to discourage speculation. In the securities industry, margins set by the Fed and enforced by the SEC were designed to dampen speculation and to control the amount of credit devoted to speculative securities trading. In the futures industry, Congress had repeatedly rejected efforts to allow the federal government to regulate margins. After the Hunt silver debacle in 1980, Congress had again considered whether the CFTC should be given authority to regulate margins on futures contracts. Congress granted the CFTC only limited authority over futures margins during emergencies, and the CFTC declared no such emergencies. The Fed examined stock index futures contracts in 1980 to determine whether it should seek to impose margin requirements on that trading. The Fed concluded that this would be inappropriate. The SEC remained unswayed. It wanted to increase futures margins.

Other differences between SEC and CFTC regulations widened the gap between these two agencies. The SEC had long promoted the concept of suitability in the securities industry. This doctrine prohibits a broker-dealer from making recommendations for securities that are not appropriate for the customer in light of the customer's investment objectives and financial situation. The CFTC rejected such a concept for futures trading. Instead, it required customers to be given a single-page disclosure statement that identified the significant risks of futures trading and warned customers to themselves consider whether, in light of those risks, futures trading was consistent with the customers' objectives. The suitability decision was thus left up to the customer in the futures industry.

The SEC prohibits "churning"—excessive trading by brokers to generate commissions in accounts over which they exercise control. The CFTC imposes a similar prohibition but allows a much higher velocity of trading because futures contracts have a limited life and are often used as a part of strategies that require heavy trading. The trading systems for futures and securities differ substantially. The CFTC requires futures contracts to be executed in an auction-style format. The securities industry abandoned that system in 1792 when the Buttonwood Agreement was signed. The SEC allows block trading, in which large orders are prearranged before execution. Such block trades are deemed to be desirable in the securities industry because they avoid the destabilization that would occur if such large trades were simply thrown on the market. In contrast, the CFTC views block positioning as a felony when futures contracts are involved. The CFTC wants all orders, regardless of their size, to be subjected only to an open auction in the trading pits on the exchanges. An effort has made by the futures industry and the CFTC to allow "sunshine" trading that would permit some prior discussions for large block trades.

Treasury Amendment

The creation of the CFTC resulted in other regulatory and jurisdictional problems. The so-called Treasury amendment that was added to the Commodity Exchange Act in 1974 exempted certain financial instruments from the CFTC's jurisdiction. The exempted transactions included foreign currency, securities warrants, security rights, repurchase options, government securities, mortgages, and mortgage commitments unless those transactions involved a sale for future delivery on a "board of trade." The CFTC would argue for years that this amendment exempted only transactions in which corporate institutions were counterparties. That argument was not widely accepted. Small investors had been excluded from the interbank currency market by the banks, but wealthy individuals could participate. The CFTC sought to narrow the interbank market by excluding even wealthy individuals. The agency issued a statutory interpretation of the Treasury amendment in 1985, stating that transactions in financial instruments concerning foreign currency were exempt from CFTC regulation only when those transactions were entered into between banks and other institutions.

The CFTC interpretation set off a storm of controversy in the financial community. Critics pointed out that wealthy individuals had been involved in the off-exchange currency market since at least the early 1800s. Wealthy individuals were participating in the off-exchange currency markets at the time the Treasury amendment was adopted. The Fed and the Department of the Treasury were among those protesting the CFTC's interpretation. The CFTC then retreated, stating that it would reexamine the issue. Several years of litigation followed in which the CFTC sought to further interpret the Treasury amendment's application to currency trading. Although the CFTC eventually withdrew from its position that even wealthy individuals were outside the Treasury amendment's exemption, it did so grudgingly. An issue remained over whether over-the-counter transactions involving small customers were exempt. The Supreme Court ruled many years later in *Dunn v. CFTC* that the Treasury amendment exempted all off-exchange currency transactions, unless they were traded on a "board of trade."[1] The CFTC, nevertheless, continued the battle, claiming that anyone selling options in the over-the-counter market was a "board of trade."

Financial Futures

Integration of the futures and securities industries continued. Livestock and frozen meat futures accounted for over 85 percent of the volume on the Chicago Mercantile Exchange in 1969. Five years later, financial futures contracts accounted for almost 40 percent of the futures trading volume on United States exchanges. Those percentages would continue to change until futures and options on financial instruments were dominating the industry. This change was due to the fact that banks, S&Ls, and other financial institutions began to involve themselves in the futures markets. The Comptroller of the Currency announced in 1976 that national banks could engage in commodity futures trading on GNMA and Treasury bill futures, provided that the transactions were used to hedge or reduce the risk of interest rate fluctuations. Bank trust departments engaged in such trading for their customers. The comptroller issued a circular that restricted such trading to hedging or nonspeculative transactions. S&Ls were another group entering the field as their interest rate exposures increased. They were allowed to engage in futures trading to hedge their risks by the Federal Home Loan Bank Board and the Federal Savings and Loan Insurance Corporation.

The growth of futures trading by banks led the Department of the Treasury and the Federal Reserve Board to conduct a study in 1978 to determine whether such trading was useful. This study found that futures were widely used by banking institutions and their clients. Advantages were found in these contracts. Their trading was determined to be efficient and allowed hedging of interest rate risks. The study concluded that futures markets provided benefits by reallocating risk and aggregating information. Additional regulation was needed but, on balance, futures trading was a positive benefit to banking. The study even discovered a benefit in the speculation that was widespread in the futures markets. Such trading was found to provide liquidity for hedgers. Speculators also provided information to the market and thereby assured more efficient pricing.

Other institutions were entering the futures markets, including insurance companies and mutual funds. They used these markets to hedge interest rate and other risks. In September of 1982, the Department of Labor, which administers the Employee Retirement Income Security Act (ERISA), issued an opinion that fiduciaries for pension plans could use commodity futures contracts as part of a plan for an overall investment strategy. In the following year, the Fed noted that, while futures contracts were viewed traditionally as speculative, under modern portfolio theory their use had received broad acceptance by institutional money managers. The Fed concluded that financial futures contracts could properly be used to reduce overall portfolio risk or to increase portfolio yield without subjecting the account to unwarranted risk.

Another joint study by the CFTC, the SEC, the Fed, and the Department of the Treasury was ordered by Congress. Completed in 1984, this study found no evidence that futures trading on Treasury securities was destabilizing their prices or that the futures markets were having any negative effects on the formation of capital. This joint study asserted that financial futures were actually enhancing liquidity in some markets. The study did express concern with price aberrations in arbitrage trading in index options and securities indexes.

Insider Trading and Other Concerns

The CFTC published a report on its study of insider trading in the futures industry. The CFTC rejected the application of insider trading principles that were receiving wide publicity in the securities industry. The CFTC found that most information in the futures industry was "market" information, rather than "inside" information such as that used in trading corporate stocks. The CFTC asserted that someone with superior knowledge about matters that affect market prices should not be prevented from trading. To the contrary, such persons should be rewarded because they will be bringing that information to the market through their buy or sell orders. This makes the pricing of commodities more efficient.[2] The CFTC did suggest that government officials and employees of the exchanges might have insider information that should not be used to trade. The CFTC, thereafter, adopted rules to regulate such trading.

The CFTC insider trading report dismissed, as inconsequential, an incident involving Henry Kaufman, the chief economist for Salomon Brothers. Kaufman announced in August of 1982 that interest rates would fall. His predictions were closely followed, and they generally had a market effect on bond prices. Indeed, Kaufman was "arguably the most influential financial forecaster in the world" in the 1980s. He was called "Dr. Doom" for some of his predictions concerning increasing interest rates.[3] Prior to his August 1982 prediction, Salomon Brothers purchased several million dollars of futures contracts in financial instruments that allowed it to profit once Kaufman's announcement was made. The CFTC could find no connection between the announcement and the purchase of the contracts.

In 1982, the CFTC proposed a user fee on transactions of commodity futures contracts that would be used to pay for the regulation of the futures industry. That proposal met strong industry opposition and was defeated. Congress did allow the CFTC to regulate introducing brokers. These were firms that were introducing orders to futures commission merchants for customers. Congress also authorized a three-year pilot program for exchange-traded agricultural options. That program was successful. Another provision added to the Commodity Exchange Act governed private rights of action for violations of that statute. Those rights had already been recognized by the Supreme Court, but Congress narrowed the scope of that right by the amendments.

The regulation of "dual" traders (i.e., individuals operating on an exchange floor who trade for their own accounts and execute customer orders as well) was a long simmering issue that the CFTC tried to address with little success. Dual trading provided an opportunity for fraud when brokers could take advantage of price fluctuations to cheat the customer by an execution at an unfavorable price, particularly in volatile markets. The CFTC wanted to prohibit dual trading on the exchanges, which did not require time-stamped executions. There was strong industry opposition to that position, and the CFTC backed off. Instead, it required a bracketing system under which order tickets were coded to allow a determination of the execution time within one-half hour. This still left much room for abuse. The CFTC tried to impose time-stamping requirements in 1984 and again met resistance. Two years later, it announced that exchanges would be required to time executions within one minute. Again it encountered opposition, and this requirement was delayed several times. The dangers of a lack of an audit trail would be exposed a few years later in a massive FBI sting operation.

Numerous other problems were occurring in the futures markets. The CFTC had to maintain special surveillance over futures trading in lumber, ninety-day Treasury bill futures, gold futures, feeder cattle, pork bellies, and other agricultural commodities. In 1982, there were price disruptions in corn futures and pork bellies; in 1985, cocoa, stock index futures, and various grain contracts experienced volatility. In 1986, price aberrations occurred in cattle, stock index futures, and cotton. A drought caused price volatility in the grain markets, and congestion occurred in orange juice and copper. The CFTC encountered problems with unauthorized trading in futures contracts, principally because futures trading orders were entered to the broker by telephone, which often led to misunderstandings, as well as laying the groundwork for fraud. Numerous cases were brought against brokers that traded without proper authorization from customers.

Scandals

Over-the-counter operations by fly-by-night operators continued to plague the CFTC. A scandal arose in San Diego in 1983 when J. David & Co. was found to have engaged in a Ponzi scheme involving supposed foreign currency exchange contracts sold to public investors. The owner of that firm, J. David Dominelli, was claimed to have defrauded investors in California of over $100 million. He fled to the island of Montserrat, but was extradited and sent to jail in California. Millions of dollars were lost by investors in gold transactions through dealers who did not have gold to sell. Some of those transactions involved so-called London Loco gold that involved complicated gold transactions in the London market. Another commodity scandal involved the Billionaire Boys Club, an investment pool run by a group of young men in California. Losses and intrigue led to the murder of the wealthy father of one of the club members while he was being held for a ransom that was to be used to cover trading losses. Two club members were convicted of murder, but were being retried at the end of the century because of a procedural error in their trial.

In another scandal, Marc Rich, one of the largest commodity traders in the world, was indicted on several counts of federal tax violations. Rich refused to supply documents that had been subpoenaed by the government, claiming that they were subject to Swiss secrecy laws. A federal district court fined Rich $50,000 a day as long as he failed to comply with the order to produce those documents. In the midst of this fight, the United States Attorney's Office was tipped off that Rich was smuggling documents out of the country. The government stopped a Swissair flight and seized two steamer trunks full of documents that were supposed to have been delivered to the federal court. Rich and his business partner, Pincus Green, then fled America and took up residence in Zug, Switzerland, in order to avoid prosecution. The Swiss government refused to extradite the fugitives. Rich was able to spirit millions of dollars out of the United States, and he continued his trading operations from Switzerland. Rich was pardoned by President Bill Clinton in the closing days of his administration, touching off a scandal because of large political contributions made by Rich's ex-wife.

Exchange Expansion

The New York futures exchanges consolidated their operations in 1977 into the World Trade Center. The New York Mercantile Exchange began expanding its offerings of futures contracts on energy products to include leaded gasoline and crude oil and later unleaded gasoline. That exchange was used as the location for filming the movie *Trading Places*, a spoof on the futures markets. The New York Mercantile Exchange denied the Maidenform Company the opportunity to photograph a model in a bra on the floor with the caption "I dreamt I was trading in my Maidenform bra."

The CFTC approved a linkage with the Singapore International Monetary Exchange (SIMEX) and the Chicago Mercantile Exchange (CME) for euro dollar and foreign currency contracts. This link allowed a customer in the United States to execute an order after the CME closed. An order could be entered through a United States broker after hours and executed on the SIMEX. The position could be closed on either SIMEX or the CME. Computerized trading was appearing. Eugene Grummer led the development of the International Futures Exchange (INTEX) in Bermuda, which was designed to allow computerized trading. Transactions on INTEX were cleared by the International Commodities Clearing House in London. INTEX began trading a gold contract and a "dry bulk index" that was based on an index of dry bulk charters. Both subsequently stopped trading for lack of interest. The World Energy Exchange failed as a computer-based commodity exchange. Another automated exchange was developed in Hong Kong, but it too failed.

Futures trading became popular in London and spread to other countries. This raised regulatory concerns in the United States when those transactions involved customers located in this country. Foreign exchanges would pose a competitive threat to the American futures exchanges in future years. Another concern raised by the increasing internationalization of the futures markets was trading by foreigners on United States exchanges. The CFTC began making what were known as "special calls" on foreign traders with large positions that were threatening a manipulation or price distortion. Those traders often refused to supply the information, claiming that the bank or commercial secrecy laws of their host country prohibited its disclosure. The CFTC brought actions against several of these firms, including various Swiss entities, such as the Banque Populaire Suisse, and Ralli Brothers (Bankers), S.A. In one case, the CFTC attempted to find out on whose behalf Wiscope, S.A. was trading, but the company refused to provide that information, contending that it was confidential under Swiss law. The CFTC imposed sanctions against the firm for refusing to disclose on whose behalf it was trading. A federal circuit court in New York reversed that decision because the CFTC had not used proper procedures for issuing the demand.[4] Another action was brought against an English coffee merchant, Alan J. Ridge & Co.

2 Hostages, Repos, and Other Matters

The seizure of the United States embassy in 1979 by revolutionaries in Iran who had overthrown the government of Shah Muhammad Reza Pahlavi resulted in a freeze of Iranian assets in the United States. The U.S. government seemed helpless in dealing with this crisis, but lawyers for Citibank and Chase Manhattan began negotiating with Iran to settle their commercial claims. The agreement to release sixty-six Americans seized with the American embassy and held as hostages was the direct result of those negotiations, as was the claims procedure that was created to resolve the massive number of claims filed against Iran by American firms. The timing of the release of the hostages came too late to save the Carter presidency, which was already suffering a terminal case of inability to deal with a worsening economic situation.

The Reagan Administration

In the 1980 presidential election, Ronald Reagan defeated Carter on a campaign platform of supply-side economics, which claimed that tax reductions would result in increased economic activity. This concept was apparently borrowed from Andrew Mellon, who had been Treasury Secretary during the presidency of Calvin Coolidge. The goal of supply-side economics was to reduce taxes so that more funds could be channeled into the economy for investment and increased productivity. This theory was not universally acknowledged. Reagan's program was called "voodoo economics" by George Bush, the former CIA head and future president, while he was campaigning against Reagan in the primaries.

By 1980, thirty-one states had approved a petition to add a balanced budget amendment to the Constitution. Only three more states were needed to enact the amendment, but the required number was never obtained. Without the amendment, the federal deficit exploded under "Reaganomics." President Reagan tripled the federal deficit as a share of GNP, from 2 to 6 percent. Defense spending increased sharply. Farm subsidy programs were costing

$20 billion by 1983, an increase of 500 percent from 1981. A "payment-in-kind" program increased subsidies by $10 billion. This program allowed farmers to leave their fields fallow while they received a subsidy in the form of grain from government stocks. The deficit between government expenditures and revenues was widened further by large tax cuts. The Economic Recovery and Tax Act of 1981 allowed tax deductions for retirement savings, liberalized existing exemptions, reduced estate and gift taxes, and raised the levels at which estates would be taxed. The maximum rate for unearned income was reduced from 70 percent to 50 percent.

The Organization of the Petroleum Exporting Countries (OPEC) oil prices were $32 a barrel in 1980, up from $13 in 1978. An announcement by the Treasury Department that it was suspending government gold auctions caused a sharp rise in the price of that metal. Gold prices reached $850 an ounce on January 21, 1981, but then plunged as inflation cooled. Gold was trading at $300 an ounce before year-end. In 1981, the Treasury Department created a commission to study the role of gold in government finances. The commission could not agree on any particular structural role for gold, except that it urged the government to maintain its gold stocks.

The Volcker era at the Fed during the Reagan administration focused national attention on the role of the Fed in the economy. Volcker's strong medicine worked to conquer inflation, which dropped to 4 percent by October of 1981. Treasury bills were quoted at 13.32 percent in June of 1982, but dropped to 8.66 percent in August of that year. A high price was paid for that success. The country was thrown into one of the worst recessions since the Great Depression in the 1930s. Housing starts fell and new car sales plunged. Unemployment in Detroit was almost 25 percent in 1980. Unemployment exceeded 10 percent of the workforce nationwide by 1982. Over 65,000 commercial firms went bankrupt in 1982, a number that had not been seen since 1932. The steel industry had losses for five straight years between 1982 and 1986 that totaled over $11 billion. The recession raised concern with the Fed's independence because it refused to respond to political pressures to ease monetary policy in order to lessen the effects of the recession.

Deregulation

Another debate arose in the 1980s over regulation of the financial services industries. Many people thought that too much government regulation was imposing unnecessary costs on businesses, impairing their competitiveness. Proponents of deregulation focused on "knocking down the walls that had separated financial functions and reorganizing the regulatory framework to provide more appropriate and effective regulation."[5] Critics of deregulation were concerned that removing regulatory barriers would allow banks and other large financial institutions to become more concentrated, to increase their fees and drive smaller banks out of business, to the detriment of their communities and small investors. Most of the participants in this debate did not advocate elimination of the banking or securities regulators. "Neither the public nor the majority of financial institutions themselves are willing to return to the days of wildcat banking and wholesale stock manipulation."[6]

The Task Group on Regulation of Financial Services, which was chaired by Vice President George Bush, addressed these issues. The task group included Donald T. Regan, the Secretary of the Treasury; the Attorney General; the director of the Office of Management and Budget; and the chairman of the Fed, as well as the heads of several other agencies regulating financial services. The task group issued its report on September 24, 1984. It concluded that "the American financial market is the central nervous system of the economy"[7] and that there was, indeed, too much regulation. Seven federal financial agencies regulated financial services, and they had over 38,000 full-time employees intruding into virtually every aspect of finance. The Bush task group recommended reducing the number of federal bank regulators from three to two, creating a new Federal Banking Agency in the Treasury Department, reallocating regulatory authority under the Bank Holding Company Act, and restricting the FDIC to administering the deposit insurance system. The task group recommended that antitrust and securities matters be handled by a single entity rather than by five different agencies.

Investors in America

About 12.5 percent of the population in the United States was living below the poverty line in 1976. By 1980, 10 percent of American families owned 86 percent of the nation's net financial worth. Fifty-five percent of American families then had either a zero or negative net worth. Even so, thirty million Americans were shareholders as the 1980s began. Small investors were being provided with some new investment opportunities. Chase Manhattan Bank was offering a Market Index that allowed depositors to receive a rate of return that was based on increases in the S&P 500 stock index. The number of women shareholders was growing, but only 13 percent of that group were active investors. Women were receiving more protection in their finances. In *Arizona v. Norris*, the Supreme Court ruled that retirement benefits based on contributions made after 1983 must be calculated without regard to sex.[8] The Court held that a pension plan that paid lower benefits to women than for men violated Title VII of the Civil Rights Act.

Most brokerage firms required their customers to sign arbitration agreements in which the customers agreed to submit disputes over their accounts to arbitration before an industry-appointed panel. This precluded the customer from suing the broker in court. Although the Supreme Court initially rejected the use of arbitration for securities-related claims, it later reversed itself and gave broad support to arbitration. Brokerage firms offered dividend reinvestment plans that allowed clients holding stock to receive dividends in the form of additional stock at a discount to market directly from the issuer. Stock loans were still a part of the business of broker-dealers for more sophisticated customers. Over $8 billion in securities were on loan at the end of 1982. Stock loans were usually conducted through master agreements under which broker-dealers borrowed or loaned stocks. The stock loans were often protected by standby letters of credit to assure performance.

The SEC adopted an integrated disclosure system in 1982 that combined the disclosures required under the Securities Act of 1933 with the periodic reporting requirements required by the Securities Exchange Act of 1934 for publicly owned companies. SEC Rule 415 was adopted to allow "shelf" registrations, by which a company could file a single registration statement that could be used to issue securities at any time over a two-year period. This process avoided the necessity of extensive and time-consuming registration filings with the SEC. A shelf offering could be made with as little as twenty-four-hours notice to the SEC. Shelf registrations reduced the number of firms involved in underwriting, which reduced underwriting costs.

By 1981, some 30,000 government and corporate issues were being traded in the over-the-counter market. Institutions were responsible for over 70 percent of NYSE volume. Institutions were often exempted by the SEC from disclosure and other requirements under the federal securities laws. "It was understood, even before the enactment of the Securities Act of 1933, that institutional investors did not need the mandatory disclosure system of that Act to protect themselves when acquiring securities. These investors could 'fend for themselves.'"[9] By 1985, institutional investors owned 30 percent of outstanding corporate stocks, almost 80 percent of corporate bonds, and over 40 percent of outstanding Treasury debt. As the 1980s began, the amount of the assets held by institutional investors broke down as follows: commercial banks held about $1.3 trillion, savings and loan associations about $580 billion, and life insurance companies and retirement funds each held over $400 billion. Mutual funds were another growing institutional investor. Their holdings increased from about $1 billion to more than $20 billion between 1955 and 1961.

Pension plans were the fastest growing institutional investors between 1960 and 1990. In 1982, twenty-five banks, insurance companies, and investment advisers were managing half of the $569 billion in assets held in private pension plans. Bankers Trust Company had over $21 billion of employee pension plan assets under its management. Pension funds alone owned about 20 percent of outstanding equity securities in the United States. Pension plan managers were active traders. In 1985, average turnover was almost 70 percent for pension plan portfolios. Pension fund management was not always successful. The Pension Benefit Guaranty Corporation (PBGC) was facing a deficit of $1.3 billion. This was due in large measure to the almost $500 million in losses caused by shortfalls in the pension plan of Wheeling-Pittsburgh Steel in 1985. By 1990, the financial exposure of the PBGC was about $8 billion.

Two billion dollars of that amount was the result of losses from pension plans of the LTV Corporation, which filed for bankruptcy in 1986. The PBGC strengthened its procedures and curbed its exposures. At the same time, defined benefit plans were decreasing while contribution plans were growing rapidly.

Consolidation

The financial services industries were consolidating. Thirty-seven institutional investors managed half of all assets of beneficiaries and controlled about $1.2 trillion of assets. The ten largest securities firms in 1984 conducted more than 50 percent of underwriting and received about one-third of brokerage commission revenue. Twelve securities firms accounted for more than 50 percent of total industry resources. In 1986, five managing underwriters accounted for almost 95 percent of corporate debt offerings and substantial percentages of other offerings. Mergers were furthering that consolidation. Blyth, Eastman, Dillon & Co. merged with Paine Webber in October of 1979. That merger nearly caused both firms to fail because of differences in their record-keeping systems, but that problem was eventually solved. Bache had been nearly destroyed during the silver crisis in 1980 when the Hunt family of Dallas, Texas, defaulted on their silver holdings. The Hunts had held a stock position in Bache but then sold that stock to the Belzbergs who had been seeking to take over Bache. Bache then found a white knight in the form of Prudential Insurance Corporation of America. Prudential formally acquired Bache in 1981. The firm then became Prudential-Bache Securities. Bache tried to acquire Bateman Eichler Hill Richards, a West coast firm, but lost out to Kemper Insurance in that acquisition.

American Express, which had started as an unincorporated joint stock association in 1850 that made express deliveries, acquired investment banking and brokerage firms, including Shearson, Loeb, Rhoades, the second largest brokerage firm on Wall Street. In a further expansion of its financial services, American Express acquired Lehman Brothers, the New York investment banking house, and Robinson-Humphrey, an Atlanta firm. The American Express International Bank was supplemented by the acquisition of the Trade Development Bank in Geneva, which was owned by Edmond Safra. American Express owned Fireman's Fund Insurance Company, and it acquired Investors Diversified Services, which was owned by the Alleghany Corporation. James D. Robinson III, the chairman of the American Express Company, led this expansion into financial services, but it was a costly experiment. American Express put $4 billion into Shearson, but that did not prove to be a profitable investment, and American Express's core credit card business was eroding. Sandy Weill became the president of American Express in 1983, but was soon replaced by Louis Gerstner Jr.

The Equitable Life Insurance Company acquired Donaldson, Lufkin & Jenrette (DLJ), the large brokerage firm that had been the first securities firm to go public. By 1989, DLJ and Alliance Capital (a money manager that was another acquisition) were responsible for over half of Equitable's earnings. Sears Roebuck & Co. announced in October of 1981 that it was buying Coldwell Banker, the largest real estate firm in the United States. Three days later, Sears agreed to buy Dean Witter, Reynolds, the fifth largest securities broker. It was Sears' strategy to become the largest financial services company in the United States. This was the signal for an effort for firms to become "financial supermarkets." Sears was now selling "stocks and socks," but it was not entirely new to the financial services industry. It already owned Allstate insurance and a thrift and had provided large amounts of customer credit in its retail operations. Sears wanted to create a financial center in its retail stores, but the marriage with Dean Witter would not last. J.C. Penney & Co. was also exploring opportunities in the financial services industry, as was the Kroger grocery store chain.

The merger of Philipp Brothers (Phibro), a $200 million metals trading firm, with Engelhard Industries, a mining firm, proved to be short-lived. Phibro split from Engelhard Industries in 1981 and was acquired by Salomon Brothers. The holding company for these firms was called Phibro-Salomon. Michael Bloomberg, a Salomon partner, was fired after this merger. Bloomberg was given $10 million as severance pay. He would make good use of it in creating a massive financial information service that would include a television network as well as vast data banks. In 1981, Bechtel Corporation, a worldwide construction firm, took a majority interest in Dillon Read, but that relationship soon fell apart. A year later, Mercantile House Holdings in London, a currency dealer, acquired Oppenheimer & Co., a large American brokerage firm based in New York. The price for that acquisition was $162.5 million. Kidder, Peabody was acquired by General Electric (GE) Company in 1986, as GE began to expand its financial services business.

Goldman Sachs & Co. had been led by Gustave ("Gus") Levy between 1969 and 1976. He was a dynamic leader who became a legend on Wall Street.[10] Levy positioned the firm to become a leading force in finance in the last quarter of the century. In 1981, Goldman acquired J. Aron Company, a large commodities firm that had been founded as a coffeehouse in 1898 in New Orleans. Merrill Lynch, DLJ, and E.F. Hutton formed holding companies in order to allow them to diversify the activities of their firms.

Merrill Lynch

Merrill Lynch was particularly aggressive in its efforts to diversify and become a financial supermarket. Trying to "wrap ourselves around the customer," the firm acquired a wide array of financial services firms. In June of 1974, Merrill Lynch acquired the Family Life Insurance Company, which was licensed to sell insurance in forty states and the District of Columbia. Merrill Lynch believed that this would give it broad access to the insurance market. It bought Tricor Relocation Management Co., which was a home transfer service. Merrill Lynch's acquisition of White Weld Holdings strengthened its investment banking and corporate financial business. In October of 1978, Merrill Lynch bought AMIC Corp., a Raleigh, North Carolina, holding company that owned the American Mortgage Insurance Company. AMIC provided insurance for first mortgage loans on residences. However, this was a short-lived marriage. AMIC was sold back to a group of its executives in 1981. By then, Merrill Lynch had acquired twenty-one real estate agency firms.

In 1982, Merrill Lynch bought a twenty-five percent ownership interest in Sun Hung Kai & Co., a large securities broker-dealer in Hong Kong. In April of 1983, Merrill Lynch announced that it was buying a New Jersey S&L. A year later, Merrill Lynch announced that it was forming its own bank and trust company in New Jersey and that it was buying Becker Paribas. Becker, which had been acquired by the French Banque Paribas and S.G. Warburg & Co., had suffered losses totaling over $60 million. At that time, Becker was the sixteenth largest brokerage firm in the United States. Merrill Lynch placed some constraints on its acquisition program. It dropped plans to purchase the Chicago White Sox in August of 1980.

Merrill Lynch had over 1 million Cash Management Accounts in 1985. It began selling annuities in a joint venture with the Equitable Life Assurance Society that year. Merrill Lynch took over that operation entirely a few years later. Although Merrill's total revenues had increased to more than $7 billion by 1985, the percentage of revenues from commissions was dropping. Between 1972 and 1988, commissions fell from 53 percent of total revenues to 15 percent. Revenues from brokerage commissions and margin interest were declining for other broker-dealers, but that revenue source was supplemented by revenue from proprietary trading activities. Between 1972 and 1979, proprietary trading revenue of broker-dealers increased from about $900 to $2.5 billion.

Market Problems

The SEC criticized broker-dealers in 1980 for using remote checking accounts in order to extend the time in which they could hold customer funds and earn interest on the float. Undeterred by that warning, E.F. Hutton & Co., one of the nation's larger broker-dealers, had to plead guilty to a 2,000-count charge of mail and wire fraud in 1985 and was fined $2 million. The firm's illegal activities were the result of an overly aggressive cash management program that involved an elaborate check kiting scheme to obtain interest income by depositing checks in interest-earning accounts. The checks that were deposited were drawn on accounts in which funds were not deposited until the checks were cleared. This allowed the firm to earn overnight interest on the unsecured checks. The criminal charges staggered the firm.

Henry Kaufman, "Dr. Doom" at Phibro-Salomon, changed his outlook and announced on August 17, 1982, that he expected interest rates to fall. This sparked a market rally of over 38 points, which was then "the biggest one day rise in its history."[11] Joe Granville was another market analyst of some notoriety. In 1982, he opined that the Dow Jones Industrial Average would be plunging and that people holding stocks should sell. He urged them to go short as well. The Dow Jones Industrial Average then increased by about 500 points. In the mutual funds arena, Ned Johnson continued as the head of Fidelity Investments. It was managing almost 100 mutual funds, including the Fidelity Fund, which had been started in 1930. By 1986, Fidelity Funds held some $65 billion of investor funds.

New issues in the stock markets increased to $12.7 billion in 1980, which was a record. Initial public offerings rose from less than $1 billion in 1979 to $3.2 billion in 1981 and then exploded to $13 billion in 1983. These new issues were largely high-tech and biotech industries. Genetech went public on October 14, 1980, at a price of $35. Its stock immediately jumped to $89. The stock market began to revive in 1982 when the Fed lowered interest rates. The market had been lagging since 1973. In August of 1982, the Dow Jones Industrial Average was at 777, which was the level it had reached fifteen years earlier. The stock market then began a long period of growth that was encouraged by low inflation, falling interest rates, and increased corporate earnings. The stock market grew an average of 17.5 percent each year during the 1980s.

The securities markets were more volatile during the 1980s. In February of 1980, the Dow Jones Industrial Average dropped about 140 points. From 1955 to 1982, there were only two days when stock market prices fell more than four percent. Between 1982 and 1990, there were ten such occurrences. Daily trading volume on the NYSE increased from 12 to 45 million shares between 1970 and 1980. On August 18, 1982, NYSE daily volume exceeded 100 million shares for the first time. The record was not just broken: it was shattered. On that day, over 130 million shares were traded. On October 7, 1982, the New York Stock Exchange set a new daily trading volume record of more than 147 million shares. The NYSE had a 200 million share day in 1984. By 1985, daily trading volume on the NYSE was continually in excess of 100 million shares. The price of a NYSE seat reflected the value of increased volume. A seat sold for $135,000 in 1960. Twelve years later, a seat sold for $340,000. By 1987, NYSE seat prices were ranging from $605,000 to $1.15 million.

Clearing, Settlement, and Information

Since 1976, the NYSE had been operating a high-speed data line that transmitted up to 36,000 characters a minute to report market activity. The Designated Order Turnaround (DOT) System on the New York Stock Exchange, which allowed the automatic execution of small customer orders, was followed by the Super DOT trading system in 1984. The Super DOT system allowed orders of up to 2,000 shares to be electronically routed to the specialist's desk for execution. The NYSE Intermarket Trading System began in 1978. It linked the exchanges for the trading of securities listed on more than one exchange. AutEx and Instinet were still available for fourth market transactions by institutions trading with each other. The NYSE spent some $80 million between 1980 and 1983 to improve its processing systems. It continued, thereafter, to invest large sums in automating its operations to handle further increases in volume.

The nation's securities industry had nearly broken down in 1969 on volume of 16 million shares a day. The National Securities Clearing Corporation, which was created in 1977 by the NYSE, the AMEX, and the National Association of Securities Dealers (NASD), was now facilitating clearing and settlement of volumes many times that amount. This and other advances were allowing the market to absorb increased volume at levels of 200 million or more shares a day without difficulty. The NYSE created an automated bond system that provided current quotation and trade information on listed bonds. It validated, stored, and matched orders for execution and submitted compared trades into the clearance and settlement process.

Dow Jones's most important product was the *Wall Street Journal*, but it also owned the Telerate quotation system. Telerate was an electronic bulletin board for government securities price quotations. Those prices were supplied by about three dozen brokerage firms that dealt with the Federal Reserve Bank of New York. Their prices were posted by Cantor Fitzgerald & Co., which acted as the middleman for the securities firms. Knight Ridder was another leader in business information. McGraw-Hill substantially increased its revenue from financial and economic information services from $52 million dollars in 1979 to $132 million in 1984. By 1985, most equity traders had a computer terminal at their desk that carried the Dow Jones News Service, which provided quotations for the United States securities markets. Many of these terminals were provided by Quotron, one of the larger vendors of quotations in the nation. As the decade wore on, brokers would be flooded with data bases and quotation systems. By 1990, brokers often had several monitors available to them to supply data on markets across the world. Commodity market information was being disseminated by satellite.

Individual brokers working for firms had been called customer's men, stockbrokers, and, after creation of the SEC, registered representatives. The brokers then morphed into "account executives." By the 1980s, they were being called "financial consultants." That last name change was a reflection of their expanded role in finance and the increased scope of the firms' products. The brokerage firms acted much like banks and offered insurance in addition to traditional securities. In 1985, some 8,000 Merrill Lynch financial consultants were cross-licensed to sell insurance, as well as securities.

Repos

The United States government securities market had outgrown its competitors. By the 1980s, it was the largest securities market in the world, exceeding

$1 trillion in 1985. This market became the subject of speculation in the early 1980s as the number of Treasury securities available for investment rose and volatile interest rates increased profit opportunities. Treasury securities were largely distributed through thirty-six "prime" dealers who were authorized to trade with the Fed's Open Market Desk. The primary dealers were only loosely regulated by the Fed. The number of primary dealers increased to forty-four by 1990. Sixteen of those dealers were banks or bank affiliates. A leading prime dealer was Salomon Brothers, whose net worth increased from $256 million in 1980 to $1.5 billion in 1984 as interest in trading government securities grew. Salomon Brothers' inventory for government securities went from $3 billion dollars in 1978 to $38 billion in 1984.

Supplementing the primary dealers were several hundred secondary dealers in government securities. Unfortunately, some of those secondary dealers were financially unstable. Failures by government bond dealers resulted in losses of almost $1 billion between 1977 and 1985. A large portion of those losses was due to repurchase agreements that were popularly referred to as "repos" or "reverse repos." Those transactions involved agreements to sell and buy back government securities. Repos usually called for the sale and repurchase of United States Treasury bills, which had been issued exclusively in book entry form since 1977. Mortgage-backed securities, such as GNMAs, Fannie Maes, and Freddie Macs, and municipal securities were also used for repo transactions. Repos were not new. They had been used in the Federal Reserve System since 1917 and became popular among Federal Reserve Banks after World War II. Repurchase agreements were used by the banks for federal fund transfers in the mid-1960s, and their use increased after the Fed exempted such transactions from its reserve requirements in 1969. The popularity of repos ballooned in the 1980s when it was discovered that they could be used as a short-term financing tool that supposedly had few investment risks. The value of repos grew from about $14.8 billion in 1977 to almost $200 billion in 1986. They "soon became the most important financing vehicle for the broker-dealer industry."[12]

Repos were thought to carry little risk because one party transferred cash and the other received the securities, which acted as collateral for the repurchase. For administrative convenience, the securities were in many cases not actually transferred to the purchaser, who would only have to return them after a short period of time. Instead, the seller would hold the securities. Sometimes margin was required to secure the transaction. Repos conducted without adequate collateral or margin raised some dangers. For example, a firm could repo out securities it did not own and default on the repurchase. Those dangers were not merely of academic concern. Between 1977 and 1985, failures by government bond dealers dealing in repo transactions resulted in losses of almost $1 billion.

A run by depositors on state-insured thrift associations in Ohio began in March of 1985 as the result of one such failure. That panic was triggered by losses caused by repos between the Home State Savings Bank in Cincinnati and ESM Government Securities, in Fort Lauderdale, Florida. Home State had engaged in more than $700 million in repo transactions with ESM, which had been pledging the same collateral to more than one lender in its repo transactions. Total losses at Home State were in excess of $150 million, which exceeded the amount held in the State of Ohio's thrift insurance fund. This set off a run on other S&Ls in Ohio that continued even after legislation provided another $90 million of insurance for state S&Ls. On March 15, 1985, the governor of Ohio suspended the operations of the state's thrifts until they obtained federal deposit insurance. Seventy Ohio thrift institutions had to be closed in the wake of that disaster. ESM had also been dealing with the American Savings and Loan Association in Miami, Florida. That S&L lost $55.3 million when ESM failed. The city of Beaumont, Texas, lost another $20 million. Total losses from ESM dealings were over $300 million dollars.

Customers of Lion Capital Group lost $40 million when that repo dealer failed. Lion's clearing firm claimed that the securities held by Lion were collateral for its loans to Lion and were not being held on behalf of customers. Another repo dealer that failed was Bevill, Bresler and Schulman Asset Management Corporation in New Jersey, whose losses totaled $235 million. Bevill, Bresler had entered into repurchase agreements without proper collateralization in order to cover trading losses of an affiliated company. Other repo firms that failed were the Financial Corp. of Kansas City, Winters Government Securities, Lombard-Wall, Comark Securities, and Hibbard & O'Connor Government Securities. Losses at Lombard-Wall totaled over $250 million.

Drysdale Government Securities was one of the more spectacular repo dealer failures. The president of Drysdale Government Securities was Richard Taaffe, a former bond salesman. The head trader for Drysdale Securities was David Heuwetter, who was said to have worked for twenty-three years without a holiday. Drysdale Securities collapsed three months after it began operations. The firm was then holding positions worth as much as $5 billion that were supported by less than $21 million in equity. It defaulted on $279 million in accrued interest payments on borrowed securities. Those securities had been repoed through Chase Manhattan Bank. Chase was acting as a "blind broker" between Drysdale and other companies that were engaging in repurchase transactions. Willard Butcher, the president of Chase Manhattan, claimed that his bank was merely acting as an agent and was not liable for the accrued interest owed by Drysdale. The securities firms that had loaned their securities to Drysdale through Chase thought otherwise. After pressure from the Fed, Chase agreed to cover losses of some $160 million. Arthur Andersen & Co. eventually paid $50 million to Chase Manhattan and $17 million to Manufacturers Hanover Trust for improperly certifying the statements of Drysdale. The SEC brought an action against an Arthur Andersen partner who had worked on the Drysdale account. He was also indicted on criminal charges. Two Drysdale officials pleaded guilty to criminal violations in 1984. Among other things, they had bribed a supervisor at the Depository Trust to falsely credit Drysdale with securities deliveries. The trader for Drysdale Securities Corporation was sent to jail for three years.

Other firms experienced losses in the treasury market. The Bank of America lost $10 million in trading Treasury securities in the second quarter of 1983. Merrill Lynch had a large loss in Treasury and mortgage-backed securities in the second quarter of 1984. The United States government securities market was only loosely regulated at the time of the repo dealer failures. Many of the broker-dealers operating in that market were registered with the SEC or subject to banking regulation, but some 25 percent of the participants in that market were not registered with anyone. Those firms were often the ones defaulting on their obligations and abusing collateral given in repo transactions. Other forms of regulation were lacking because government securities were exempt from most provisions of the federal securities laws. This encouraged boiler room sales operations in such places as Little Rock, Arkansas, by firms run by so-called bond daddies. The Fed did not impose margin requirements on the repo dealers. The defaults by the repo firms caused Congress to reconsider the need for regulation of government securities dealers. It enacted the Government Securities Act of 1986 that required dealers in government securities to be either registered with the SEC or to be regulated by the banking or thrift authorities. The Secretary of the Treasury was given authority to adopt rules governing financial responsibility, custody, and proper use of government securities owned by customers of these firms. The SEC adopted changes to its net capital rules to reduce the amount of leverage in repo transactions for broker-dealers.

Salomon Brothers became the largest writer of repurchase agreements for S&Ls in the 1980s, and it was the nation's largest underwriter of municipal bonds. Municipal securities continued to pose problems despite increased regulation. A report by the SEC found that numerous defaults were occurring in municipal securities. In fact, the municipal default rate was not too much better than the corporate debt default rate. Over 300 municipal securities issuers defaulted between 1983 and 1988. The Washington Public Power Supply System (WPPSS) was involved in the largest nonpayment default in the history of municipal financing. WPPSS was a joint operating agency that included nineteen public utility districts and four cities in the State of Washington. It was given the authority to issue revenue bonds payable from the revenues of utility projects. WPPSS issued $2.25 billion in bonds to finance two nuclear power generating plants, but construction was halted in January of 1982 because of enormous cost overruns, and WPPSS defaulted on its bonds. The total proposed cost for the entire project had been reached when construction was only 16 percent complete at one plant and 24 percent at another. This default set off tremors in the financial world. The rating agencies, including Moody's Investor Services and Standard & Poor's Corporation, had rated the WPPSS securities as A1 and A+ despite growing problems with the projects. There were also concerns whether the bonds were properly authorized under state law. Numerous lawsuits were brought against the underwriters of these bonds. That litigation was eventually settled.

The Insurance Business

Life insurance purchases exceeded $1 trillion in 1983. By then, 86 percent of Americans owned life insurance. Some 2,000 life insurance companies were managing about $700 billion in assets in the middle of the decade. Life insurance companies in New York were still subject to a 10 percent limitation on their holdings in common stock. For tax reasons, many large insurance companies formed offshore insurance companies to insure themselves. Later, the Internal Revenue Service required at least 50 percent of an insurance affiliate's business to be with unaffiliated companies before such tax benefits would be available. The largest insurance companies in 1984 were Prudential Insurance Company of America, the Metropolitan Life Insurance Company, the Equitable Life Assurance Society, Aetna Life Insurance Company, and the New York Life Insurance Company. Other giants were Northwestern Mutual Life Insurance Company and John Hancock Mutual Life Insurance Company. The life insurance industry continued to experience difficulties. Rising interest rates had devalued its bond portfolios. The insurance companies were reluctant to sell those bonds because they would have to realize a loss. Increased interest rates made it more difficult to sell whole-life policies, which provided low rates of return to policyholders. Instead, policyholders were choosing term insurance, which was relatively cheap in the early years of the insured's life. This change reduced the premium income of the life insurance companies. In addition, whole-life holders were borrowed on their existing policies at below market interest rates, which further undercut the insurance companies returns. Insurance companies became heavily involved in the commercial paper and euro dollar markets as interest rates soared in the 1970s.

Guaranteed investment contracts were also having difficulties. These contracts were similar to annuity contracts and were used to fund pension plans or to terminate coverage of benefit plans. Equitable was among the companies offering guaranteed interest contracts. By 1990, those contracts were causing huge losses for Equitable. Annuity liabilities for insurance companies increased to about 65 percent of total liabilities by 1989.

A new insurance product appeared—the single premium deferred annuity. This policy required the initial premium to be paid in one lump sum. In exchange, the owner of the policy received a guaranteed fixed rate of return from payments that would commence at a specified date in the future. This arrangement allowed the policy holder to receive a tax-free buildup on the eventual rate of return. Baldwin-United Corp. was the largest purveyor of these annuities. The company had sold pianos and organs for almost one hundred years but then turned itself into a single premium deferred annuity company. It sold these securities through brokers. This product became so popular that, by 1981, annual premiums were $1.5 billion. Baldwin-United ran into trouble because the annuity required it to pay above market rates after interest rates began to decline. The company could not achieve the necessary return to meet its guaranteed payout, and the company defaulted on these annuities in 1983. The failure of Baldwin-United raised the issue of whether the single premium deferred annuity was insurance or a securities product. Suits were brought against broker-dealers that had sold these instruments. Twelve of the thirty-five broker-dealers that had sold the Baldwin-United annuities settled a class-action suit for $135 million. Insurance companies contributed another $50 million. The Charter Company had also sold $4 billion in single premium deferred annuities. It declared bankruptcy in 1984 as a result of redemption requests.

Property and casualty companies also were experiencing difficulties. Between 1981 and 1990, 120 property and casualty insurance companies failed. This required assessments by insurance regulators of over $3 billion dollars to cover those losses. Between 1983 and 1989, another $465 million in assessments was made by state guaranty funds to cover failures of life and health insurance companies. New York used a preassessment guaranty fund for its insurance companies. Other states used a postassessment system. At the end of the 1980s, more insurance companies failed. They included the Executive Life Companies, Mutual Benefit Life, and First Capital. Those failures were expected to result in losses to state guaranty funds in excess of $1 billion. Marsh & McLennan, a large insurance broker, suffered $165 million in losses in 1984 after interest rates rose sharply. The company claimed that trading in United States government securities that caused the losses was unauthorized.

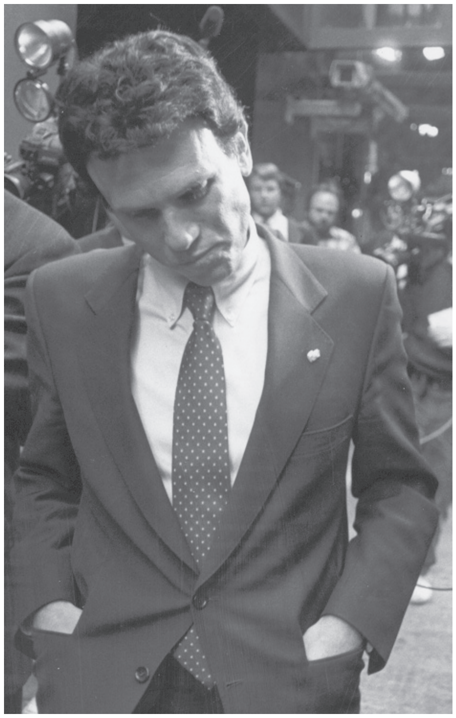
3 Mergers and Insider Trading

Shell Oil acquired Belridge Oil in 1979 in what was then the largest takeover in history. At that point, most mergers were small affairs. Seventy-five percent of mergers in 1980 were for amounts of less than $25 million. The size of mergers then began to increase substantially. For example, Du Pont bought Conoco for $7.8 billion in 1981. Ross Perot sold Electronic Data Systems to General Motors for $2.55 billion in 1984. General Electric bought Employers Reinsurance Corporation for over $1 billion. General Electric later acquired RCA for $6.28 billion. In 1984, Chevron bought Gulf Oil for $13.3 billion; Texaco bought Getty Oil for $10.1 billion; Mobil Oil bought Superior Oil for $5.7 billion; Champion International bought St. Regis Corp. for $1.8 billion; Dunn & Bradstreet bought A.C. Nielsen for $1.3 billion; and American Stores bought Jewel for $1.2 billion. Twenty-four mergers were valued at over $1 billion each in 1985. In just one month during that year, Lorimar offered $1 billion for Multimedia; Sir James Goldsmith, an English businessman, sought to acquire Crown Zellerbach for over $1 billion; Golden Nugget bid $1.8 billion for Hilton Hotels; and Farley Industries bid $1.4 billion for Northwest Industries. Carl Icahn acquired Trans World Airlines and Rupert Murdoch purchased Metromedia for large sums. Wells Fargo Bank acquired Crocker National Bank for over $1 billion in 1986.

In total, more than 10,000 mergers occurred in the United States between 1982 and 1988. The capitalization of the companies involved in those transactions was estimated to be $1 trillion. The size of mergers would get even bigger. A merger in 1989 of Beecham and Smith-Kline created a $16 billion corporation. The merger of Bristol-Meyers and Squibb was valued at $12.3 billion. In 1998, SmithKline Beecham would merge with Glaxo Wellcome to create an even bigger pharmaceutical company.

Junk Bonds

This merger activity was often guided by investment banking firms that came from obscurity to national fame during the merger mania. They included



Michael Milken. The success of Milken, the king of junk bonds, made him a target of the government, and he was sent to jail on the basis of some highly dubious charges. (Photograph by Mark Peterson, Reuters, courtesy of Archive Photos.)

Forstmann Little & Co., and First Boston Corp. Led by Joseph Perella and Bruce Wasserstein, First Boston Corp., which was formed after the adoption of the Glass-Steagall Act, became a major player as an investment banker in merger and acquisition work in the 1980s. First Boston handled mergers valued at over $75 billion in 1988. Even closer to the center was Drexel Burnham Lambert, which had a somewhat convoluted history. The Drexel name had been sold by the J.P. Morgan firm in 1940 to investment bankers in Philadelphia. That firm merged with Harriman Ripley & Co. in 1966, but it had to be rescued during the paperwork crisis by the Firestone Tire and Rubber Company. The firm did business as Drexel Firestone until 1973, when it combined with Burnham & Co., which was controlled by I.W. "Tubby" Burnham II, a grandson of the founder of the I.W. Harper distillery. Still later, in 1976, another merger occurred with the Compagnie Bruxelles Lambert, a Belgian investment banker. The firm then became Drexel Burnham Lambert. That firm would dominate the merger and acquisition business during the 1980s.

Drexel Burnham's star trader, Michael Milken, thrust the firm into the forefront of merger and acquisition activity by his innovative use of "junk bonds." These were simply corporate bonds that paid a high interest rate because of the weak financial position of the issuer. Milken did not invent junk bonds. The use of such securities had become popular at the beginning of 1977 when Lehman Brothers was acting as underwriters for bond offerings by LTV, Pan Am, Zapata Corporation, and Fuqua Industries. Milken became a latter-day J.P. Morgan on the strength of his prophecy that junk bonds were paying interest rates in excess of their actual default risk. "Junk bond" was a derisive term. Supporters of these instruments preferred to call them "high-yield" securities. As one securities lawyer, Arthur Liman, argued, it was unfair to call high-yield securities junk bonds because those securities must be paid before the common stock shareholders in the event of bankruptcy. Mr. Liman noted that no one calls common stock "junk stock."[13]

Some junk bonds were "fallen angels." These were bonds that had been issued as investment grade but had fallen in the ratings because of problems at the issuer. Other junk bonds were issued in connection with mergers as a means for financing a buyout. Milken's theory encouraged investors to purchase junk bonds as investments, and these high-yield securities became popular with institutional investors including pension funds, insurance companies, mutual funds, and S&Ls. By 1984, twenty-six mutual funds were dedicated to investing in junk bonds. They were sponsored by investment managers that included Cigna, Federated Funds, Fidelity Investments, Kemper, Keystone, Lord Abbett, Mass Financial, Putnam Funds, United Funds, and Vanguard Funds, as well as several broker-dealers. Numerous insurance companies, including the Prudential Life Insurance Company, CNA Insurance, American Financial, and Presidential Life, bought junk bonds.

Drexel Burnham Lambert acted as an underwriter for junk bonds, and it created a secondary market for these securities, which made them liquid. Milken, who operated out of Drexel Burnham's Beverly Hills office, became the high priest of finance, at least for a while. His annual "Predators' Ball," a conference on junk bonds in Beverly Hills, was attended by hundreds of institutional investors and individuals involved in mergers and acquisitions.[14] They liked what they heard. Milken's customers for junk bonds included Larry Tisch of Lowe's Corporation, Saul Steinberg of Reliance Insurance, and Carl Lindner of American Financial Corp. Illustrative of some of Drexel's financings was the $400 million raised for MGM/UA Entertainment Company through junk bonds in April of 1983. In July of that year, Drexel raised another $1 billion for MCI Communications. In 1985, Drexel raised almost $600 million to finance an acquisition of National Can. Michael Milken's junk bonds also helped finance the creation of the Cable News Network and McGraw Cellular. The total amount of junk bonds sold by Drexel Burnham increased from $5 billion in 1981 to $40 billion by 1986. The junk bond market grew from about $6 billion in 1970, when Michael Milken began work at Drexel Burnham, to $210 billion when he left the securities business in 1989. Milken was well compensated for his efforts in expanding the use of junk bonds. He was paid over $120 million in salary and bonus in 1984. That figure increased to $550 million in 1987. Milken would become a victim of the insider trading scandals that plagued Wall Street as the 1980s ended.

Investment Banking

A significant source of fees for investment banking firms in the 1980s was for advisory activities in mergers. Investment bankers were investing their own funds in leveraged buyouts and other acquisitions. Investment bankers frequently took equity positions in targets as compensation for providing financing. First Boston invested $100 million in such ventures in 1984. That figure paled in comparison to the over $1 billion invested by Merrill Lynch. The merger advice given by investment advisers was often critical to the success of an acquisition, especially in hotly contested takeovers. Illustrative was the 1982 battle that began when Bendix Corporation tried to take over Martin Marietta with an offer of $1.5 billion. Martin Marietta responded with a "Pac-Man" defense in which it turned the tables by offering to take over Bendix. Martin Marietta was advised in that campaign by Martin A. Siegel, an investment banker at Kidder, Peabody & Co. Bendix ended up buying about 70 percent of Martin Marietta, and Martin Marietta bought about 50 percent of Bendix. Bendix then sold itself and its Martin Marietta shares to Allied Corporation, which had been making a competing offer, as had United Technologies. Martin Marietta was later acquired by Lockheed.

Investment bankers and commercial banks were issuing "bridge loans" that were used in takeover battles as interim financing until more permanent loans could be put into place. Moving from their traditional conservative lending business, banks became aggressive participants in merger transactions. Robert Campeau, a Canadian real estate developer, for example, borrowed $3.25 billion from twelve banks and another $2.1 billion from three brokerage firms as bridge loans for the purchase of Federated Department Stores. Citibank was among the banks providing Campeau credit to finance his acquisitions, which included Brooks Brothers, Bonwitt Teller, Bloomingdales, and Abraham & Straus. Citibank also provided loans to Donald Trump, who began building of a real estate empire after he renovated the Commodore Hotel and turned it into the Grand Hyatt at Grand Central Station in New York. Trump, billed as the man who "mastered the art of the deal," later began developing the Taj Mahal casino in Atlantic City, which would nearly bankrupt him. Another Citibank customer was Olympia & York, which was owned by the Reichmann family in Canada. It would founder on a $7 billion office development in London called Canary Wharf. Like Trump, the Reichmanns perservered, and that property would prove to be a valuable investment at the end of the century.

Another way for the investment bankers to make money from mergers and acquisitions was through "risk arbitrage." Classic arbitrage, in which an object is bought in one market and sold in another market at a higher price, was considered to be relatively riskless. Risk arbitrage, in contrast, did involve substantial risk. Varying in complexity, this activity included trading in stocks of corporations that were possible acquisition targets. Many Wall Street firms created risk arbitrage departments that took positions in anticipation of mergers. The traders in those departments speculated on rumors of an acquisition and tried to put companies into "play" so that trading profits could be made if the company was taken over. Another aspect of risk arbitrage involved purchasing stock that was already the subject of a tender offer. Shareholders were offered large premiums for their stock in many merger transactions, and they were frequently willing to sell their shares to risk arbitrageurs at a price less than the tender offer in order to avoid the risk that the merger would fall through—that is, if the merger was not consummated, the offer for the stock would be withdrawn. The risk arbitrageurs would make large profits if the tender offer was completed, but losses could be staggering when the bid fell through.

Another aspect of the merger mania in the 1980s was the "leveraged buyout," which used borrowed funds to finance a takeover. That debt, hopefully, would be repaid by the acquired company's own cash flow. This in effect allowed the purchasers to have the company pay for itself. A sharp increase in earnings by the company was often required in order to service the large debt that resulted from a leveraged buyout. Costs had to be slashed by laying off employees and ridding the company of unprofitable operations. Almost 2,400 leveraged buyouts were conducted in the 1980s. Their total value was $245 billion. A leader in leveraged buyouts was an investment group called Kohlberg, Kravis, Roberts & Co. (KKR), a company formed in 1976 by three individuals who had previously worked at Bear, Stearns & Co. KKR was formed with initial capital of $120,000. The partners would later acquire firms worth billions of dollars. KKR invested pools of investor funds in leveraged buyouts. One of KKR's first purchases was L.B. Foster Co. for $106 million. KKR made the first leveraged buyout of a publicly held company, Houdaille, Inc., in 1979.

Between 1976 and 1992, KKR engaged in thirty-eight buyouts valued at over $60 billion. KKR drew funds in early operations from insurance companies that were looking for high returns. Additional financing for those acquisitions was provided by Drexel Burnham through the sale of junk bonds. This included Storer Communications for $2.5 billion, Motel 6 for $881 million, Safeway Stores for $4.2 billion, Jim Walter Corporation for $2.4 billion, Duracell for $1.8 billion, and K-III Holdings, a publishing firm, for $1.2 billion. KKR was able to raise over $6 billion to purchase Beatrice Foods, which owned Avis, Tropicana, Samsonite, and other companies. Beatrice Foods was broken up and sold off in pieces, resulting in profits to KKR of as much as $3.5 billion.

Money was to be made by other firms conducting leveraged buyouts. One highly publicized undertaking involved Gibson Greeting, Inc. It was purchased by Wesray Corp., an investment partnership owned by a former Secretary of the Treasury, William E. Simon, and Ray Chambers, a money manager. Wesray invested $330,000 in this transaction and borrowed the rest of the $80 million purchase price. Within two years, Wesray was able to sell Gibson Greeting for a profit of $250 million.

Corporate Raiders

One way to take over a company was to remove its management through a proxy fight. In 1979, thirteen of twenty-five proxy contests were won by dissidents seeking to change management. However, stock acquisitions became the weapon of choice for most corporate raiders. T. Boone Pickens Jr. was once such latter-day robber baron who particularly relished the thrust and parry of a hostile takeover. He had started his career as a geologist at Phillips Petroleum. In 1966, Pickens started his own company with $2,500 in cash. He quickly became a formidable force on Wall Street. As a corporate raider, Pickens claimed to be the enemy of entrenched corporate management, and his notoriety was such that he appeared on the cover of *Time* magazine. Pickens was the chairman of Mesa Petroleum Co., which he used as his base to conduct raids on other corporations. They were not always successful. He was repulsed by Unocal in one bitter fight.

Ivan Boesky. The caricature of evil on Wall Street, Boesky was an advocate of greed, and he freely indulged through several insider trading schemes. (Photograph by Robert A. Cumins, from *Time* magazine, courtesy of the National Portrait Gallery, Smithsonian Institution.)

In a hostile tender offer made for Cities Service in 1982, Pickens was met by an opposing bid from Gulf Oil. It was acting as a "white knight" for Cities Service. Ivan Boesky, a soon-to-be infamous speculator-cum-arbitrageur, had taken a large position in Cities Service stock in the hopes that the bidding war between Pickens and Gulf would drive prices even higher. Unfortunately for Boesky, Gulf Oil withdrew from the contest, and Cities Service stock dropped sharply. Boesky lost $24 million, but he would continue as a player in the takeover wars of the eighties. Boesky had started at Edwards & Hanly but began his own firm, Boesky & Co., in 1975. His role as an unscrupulous speculator was confirmed for many when he told students at the University of California in 1985, "Greed is all right." T. Boone Pickens did not forget Gulf's efforts to frustrate his takeover of Cities Services. In 1984, he tried to take over Gulf itself. Michael Milken obtained commitments of over $2 billion in junk bond financing for Pickens. Gulf Oil then sought its own white knight and was sold in March of 1984 to Chevron Corporation for $13.3 billion. This was no staggering defeat for Pickens. He made over $700 million dollars in the transaction. Drexel was able to profit by $300 million.

Sir James Goldsmith was another corporate raider of some fame. In addition to Crown Zellerbach, he made a run at Goodyear Tire and BAT Industries, a tobacco concern that was the third largest industrial company in Great Britain. Sir James took over Diamond International after a three-year fight, and he was involved in a raid on the Continental Group. There were other raiders. The Belzberg brothers, who had sought control of Bache and who controlled First City Financial in Vancouver, were often involved in takeover efforts. Rupert Murdoch, an Australian who headed the News Corporation, netted $40 million in a fight involving Warner Communications. He made nearly that much in another raid launched against the St. Regis Corporation. David Murdock, a real estate mogul, was involved in various takeover efforts, including Occidental, Cities Service, and Cannon Mills. Murdock, a high school dropout, made $79 million when Iowa Beef Processors was bought by Occidental Petroleum. He made another $40 million in a run at Zapata Corp. Carl Lindner, another corporate raider, earned $46.5 million through American Financial when it acquired Combined Communications. Irwin Jacobs was a particularly cold-blooded raider. He was dubbed "Irv the Liquidator" for his willingness to break up companies. Jacobs made profits of over $125 million from his raids. The list of raiders also included Carl Lindner, Saul Steinberg, William Agee, Oscar Wyatt, and Harold Simmons. The Dart Group, which was managed by Herbert and Robert Haft from Baltimore, received $159 million in greenmail in a hostile raid on Safeway Stores.

The Bass brothers started with a mere $4.1 billion as a result of the oil holdings of their uncle, Sid Bass. The brothers made $160 million from purchases of Marathon Oil securities. They made another $400 million from acquisitions that involved Sperry & Hutchins, Marathon, Amfac, Suburban Propane, Blue Bell, and Texaco. The Bass brothers purchased control of Walt Disney for $500 million. Their stock interests in that company rose in value quickly to $950 million. The attack on Disney was actually begun by Saul Steinberg, who was then operating through the Reliance Insurance Company. Irwin Jacobs was buying Disney stock, but he sold his position to the Bass brothers. Carl Icahn, a former medical student, option salesman, and arbitrageur, was another entrepreneur who achieved fame as a corporate raider. He began as an options trader in over-the-counter (OTC) options in the 1950s. Icahn formed his own company around 1968. He specialized in greenmail that was paid to him by a company targeted for a takeover to get rid of him. In 1980, Icahn made $2.5 million in greenmail when Saxon Industries bought its stock back from him. Of course, Icahn was not the only one enjoying greenmail. Saul Steinberg earned over $10 million when Penn Central bought back the stock he had purchased. Harold Simmons made $5 million in greenmail from PSA, Inc. The Belzbergs were earning substantial greenmail profits.

One of Icahn's early acquisitions was Tappan Stoves, which he later resold, making a profit of $3 million. Another Icahn raid occurred in 1982 when he sought control of Marshall Field's, the department store in Chicago. Marshall Field's entered into a merger with another company, but Icahn received a large profit. Icahn sought to take over Phillips Petroleum in 1985. At that time, Milken at Drexel Burnham was issuing what were known as "highly confident" letters, stating that Drexel was highly confident that it could obtain funds sufficient to complete a takeover through junk bonds or other financing. This letter gave the corporate raiders legitimacy and provided them with much leverage in their negotiations for an acquisition. It became a popular tool in the merger and acquisition battles of the 1980s. Icahn bid $8.1 billion for Phillips of which over $4 billion was to be raised under a Drexel Burnham highly confident letter. Icahn was not able to acquire Phillips, but he accepted greenmail worth over $50 million, as well as expenses of $25 million. Icahn also failed in an effort to take over U.S. Steel. Another of Icahn's targets was Trans World Airlines, which he took over in 1985.

Ronald Perelman was another corporate raider of some fame. He took McAndrews & Forbes Holdings private in 1984 and acquired control of Pantry Pride, a supermarket chain, in 1985. Citibank financed an unsuccessful effort by Perelman to acquire Gillette. Perelman tried to take over Revlon, a cosmetics firm with over $2 billion in assets. His offer was rejected by Revlon and a drawn-out battle ensued. Perelman used the services of Dennis Levine, a young investment banker at Drexel Burnham, to assist him in this fight. Felix Rohatyn, another investment banker, was representing Revlon. Perelman offered $42 a share, but increased the bid to $53 after Revlon made an offer for its own shares. Revlon then announced that it had reached an agreement with the investment banking firm of Forstmann Little & Co. to sell the company at a price of $56 a share. The Forstmann Little victory was short-lived. The Supreme Court of Delaware held that the Revlon board of directors had breached their fiduciary duty by not auctioning the company off fairly.[15] The Delaware court held that, once it was clear that a company was being sold, the board of directors must act as auctioneers. The responsibility of the board of directors was to acquire the highest price for shareholders and not to prefer one bidder over the other. The Delaware court concluded that Revlon's arrangement with Forstmann Little was improper because of a "lockup" that had been given to that firm. The lockup was the right to buy certain very valuable assets (the company's "crown jewels") at below market prices if Revlon was acquired by another bidder before the sale was completed.

Perelman continued his financial acquisitions. He was at the center of a fight with Carl Icahn over Marvel Entertainment, a publisher of comic books, that would nearly destroy that company. It ended up in bankruptcy, but Perelman made $50 million. Perelman was acquiring television stations and was seeking control of the Golden State Bancorp in 1998. It was the third largest S&L in the country. Perelman was estimated to have a net worth of $4.2 billion as the century closed.

Merger Battles in Court

As demonstrated by the Revlon fight, takeover battles were sometimes decided by litigation. In *Smith v. Van Gorkom*, the Delaware Supreme Court ruled that a board of directors had acted improperly in approving a merger on short notice and without adequate consideration.[16] The court held that this breached the fiduciary duties of a board of directors. The court's ruling was something of a surprise since the members of the board of directors were prominent members of the business community and collectively had centuries of business experience. They had also been discussing the possibility of a merger for some time and were fully aware of the value of the company's stock. The Delaware Supreme Court, nevertheless, held that corporate decision making, at least in a merger context, should be conducted in a very formal and ritualistic manner, something akin to the way a court would render a judicial decision. This overlooked the realities of the business world, and the Delaware legislature was quick to respond by allowing corporations to change their charters to eliminate such duties. Many corporations accepted that invitation.

Defending against hostile takeovers became an art form. Martin Lipton of the law firm of Wachtell, Lipton, Rosen & Katz and Joseph Flom of Skadden, Arps, Slate, Meagher and Flom became famous for their ability to employ a broad range of legal maneuvers to either defeat or further a hostile takeover. Takeover targets began adopting "poison pills" to frustrate hostile offers. Management could, for example, issue large amounts of debt and purchase shares of the company in order to make it an unattractive takeover candidate. Defensive measures sometimes included provisions for selling off the company's crown jewels to a friendly party in the event of a hostile takeover. Another form of poison pill provided shareholder rights to corporate stock, funds, or assets in a manner that would make the company unattractive to those seeking to take it over. These poison pills would only kick in when the persons seeking a hostile takeover acquired specific amounts of stock and posed a real threat. The "golden parachute" was another defensive mechanism. These were expensive compensation packages for executives that were triggered by a hostile takeover. Such payments had the effect of allowing the company's most valuable executives to leave with millions of dollars from the company's treasury. This made the company less attractive as a takeover target.

Imaginative financing was being used to frustrate takeovers. Employee stock option plans (ESOPs) were often used to protect companies in takeover raids. The plans were used to buy the company's stock to fend off raiders. This occurred in raids on Polaroid and Macmillan Publishing Company. A buyout of the Avis Corporation was funded by the company's ESOP. New forms of securities were created for use in leveraged takeovers. One such instrument was the increasing rate note (IRN), which meant that the longer that interest rate payments were deferred, the higher the interest rate would be when paid. Another takeover-motivated security was a payment-in-kind (PIK) security. These were convertible debentures or preferred stock that paid interest and dividends in securities of the same kind rather than cash.

In *Unocal Corp. v. Mesa Petroleum Co.*, the Delaware Supreme Court held that use of defensive tactics by a company that was subject to a takeover bid was permissible as long as they were not designed to entrench management and were reasonable in relation to the threat posed to the corporation by the takeover.[17] The court permitted Unocal to use such measures to frustrate a takeover bid by T. Boone Pickens. In *Moran v. Household International*, *Inc.*, the Delaware Supreme Court held that a corporation could adopt a "poison pill" as a defensive measure in response to a takeover attempt even if its effect was to reduce the value of the company's stock.[18] Fairness in merger fights was not always a consideration. Carter Hawley Hale won a takeover battle when the Bank of America, acting as trustee for the employee stock savings plan of the company, refused to tender those shares. The employee stock plan held some 40 percent of the stock of the company. The Bank of America refused to tender even though the price being offered was the highest ever for that stock. The chairman of Carter Hawley Hale was on the board of directors at the Bank of America.

Even where fairness was required, evil would sometimes triumph. Robert M. Bass, the corporate raider from Texas, began an effort to acquire Macmillan, Inc., the large publishing company, in May of 1988. The Bass group sought 90.9 percent of the Macmillan stock in a tender offer at $64 a share. Competition for the company arose, and the Bass group increased its offer to $73 and then to $75. Robert Maxwell, a London newspaper magnate and charlatan, made an $80 cash offer for Macmillan on behalf of Maxwell Communications, which he controlled. Maxwell's reputation was, to say the least, unsavory. He had previously tried to take over Harcourt Brace Jovanovich but was repelled. Macmillan sought to save itself from Maxwell's clutches by seeking a leveraged buyout with KKR for $85 per share. Maxwell raised his bid to $89, and KKR increased its bid to $89.50. Maxwell increased his bid again, but Macmillan accepted the offer from KKR. The Delaware Supreme Court ruled that the auction of the company had been improper. This allowed Maxwell to assume control of the company. He would later be exposed as a fraud and a looter who did not shrink from stealing from company pension plans.

Those who did not play fairly sometimes found themselves paying a substantial penalty. Pennzoil and Texaco became embroiled in a bitter fight over Getty Oil. This battle was triggered when Gordon Getty, a grandson of the founder, began feuding with the company's board. An agreement was reached between Pennzoil and Getty Oil and was approved by the board of directors at Getty Oil. Texaco, nevertheless, made a bid for Getty Oil, and Texaco gained control. Numerous lawsuits were filed and a lengthy trial was held over the tactics employed by Texaco to win the battle. A jury awarded over $10 billion in damages to Pennzoil. Although that verdict was later reduced to $9.1 billion, Texaco had to file bankruptcy in order to extricate itself from that mess. The matter was eventually settled for $3 billion. In another action, Chevron Corporation agreed to pay a claim brought against Gulf Oil for terminating an agreement to merge with Cities Service in 1982. Chevron later acquired Gulf and was liable for the judgment. The amount to be paid was $775 million.

RJR-Nabisco and Other Battles

One of the largest leveraged buyouts involved RJR-Nabisco Corp., a large company formed by the merger of R.J. Reynolds (a tobacco company that made Camel and Winston cigarettes) and Nabisco (the National Biscuit Company that was formed in 1898 to sell the "Uneeda" biscuit). This acquisition required $25 billion in financing and resulted in a veritable war memorialized in a book and a movie called *Barbarians at the Gate*. This fight started in October of 1988 when F. Ross Johnson, the chief executive officer at RJR-Nabisco, sought to conduct a $17 billion leveraged buyout of his company at $75 a share. RJR-Nabisco's stock was then trading at $55. This triggered a bidding war with KKR, which responded with an offer of $90 per share. Other bidders joined the fray, and the price eventually went over $100 per share. KKR won the contest, but it had to borrow immense sums in order to finance the buyout. Banks supplied about $15 billion in senior debt. Several other layers of debt and securities were required to finance the balance. RJR-Nabisco used reset PIKs in which the interest rate would keep rising to keep the price of the PIK always at par. This security was also called a "death spiral" because it would eat the company alive if it ran into difficulty. The RJR deal included five layers of bank debt, six layers of longer term debt, such as subordinated discount debentures and subordinated extendable reset debentures, and two layers of reset PIKs. The RJR-Nabisco deal proved to be a headache for KKR. KKR had to inject $1.7 billion in additional funds into the company, which was more than its initial investment. RJR was brought public again in 1991 as a means to reduce its debt. It was listed on the NYSE and would be the subject of an attack by Carl Icahn as the century closed.

Another massive takeover battle occurred over Time, Inc., the publisher of *Time* magazine. In 1989, Time, Inc., announced that it was merging with Warner Communications through an exchange of securities that was intended to be a "merger of equals." However, Paramount Communications, formerly Gulf & Western, offered $175 per share in cash for Time, Inc. This valued the company at almost $11 billion. Time, Inc., and Warner then withdrew their prior agreement, and Time agreed to purchase half of Warner's shares for $70 per share. Time planned to merge Warner into Time after it acquired the rest of the Warner shares. Paramount responded by raising its offer to $200 for each Time share. That offer was rebuffed by Time's management. Oddly, the Delaware courts held that Time, Inc., could properly enter into the merger agreement with Warner even though a higher price could have been obtained by selling the company to Paramount. The court found that Time's strategy of long-term growth justified the merger. The result was that Time shareholders were not even given a vote on this issue and also lost the opportunity for a 100 percent profit. The Delaware court took the opposite tack in another case. The court blocked Paramount Communications from adopting defensive measures that were designed to assure a strategic alliance with Viacom, Inc., and to frustrate a takeover by QVC Network.

Merger activity raised questions whether pooling or purchase accounting methods should be used to determine how to account for a business being acquired. The accounting method chosen affected the profitability of the surviving entity after the transaction because of the way earnings were computed. The pooling method treated the two entities as if they had never been separate. Prior accounting reports were effectively restated. The purchase accounting method assumed that the combination began from the point of the acquisition. The assets of the acquired entity were marked to market and added to those of the acquiring company. Goodwill was created where the marked-to-market acquisition was less than the acquisition price. This goodwill had to be depreciated over time by charging an expense against earnings.

Financial Abuses Increase

Greed was becoming a concern on Wall Street. The huge fees received by the investment bankers, and the large premiums being paid to take over companies, were engendering criticism. The massive amounts of debt carried by companies involved in acquisitions were endangering their survival. The reality of that danger was underscored by the bankruptcy of the LTV Corporation in July of 1986. The largest bankruptcy ever, it was a shock to the junk bond market. The large amount of debt incurred in the leveraged buyouts was raising concerns as to the viability of the firms purchasing those securities, which included S&Ls, insurance companies, and others. Fred Carr's First Executive Corp. in Los Angeles held $4.8 billion of junk bonds in 1984. Carr had been a mutual funds manager at the Enterprise Fund in the 1960s but left after it was closed down by the SEC. He then went to First Executive Corp. and built it up by selling high-yield single premium deferred annuities through E. F. Hutton, Dean Witter Reynolds, and Shearson/American Express.

Columbia Savings & Loan in California, which was headed by Tom Spiegel, was making large investments in junk bonds. Spiegel increased Columbia's assets from $373 million in 1981 to $10 billion in 1986. A large portion of its assets was invested in junk bonds. Gibraltar Savings & Loan held $532 million in junk bonds in 1984. Imperial Savings & Loan held $142 million in junk bonds. Centrust Savings Bank in Miami, headed by David Paul, held $626 million in junk bonds by 1985. Charles Keating's Lincoln Savings & Loan held $183 million worth of junk bonds. These S&Ls would be at the center of a financial crisis in the thrift sector.

Layoffs and the dismantling of unprofitable industries that followed many mergers were raising animosity against the financiers. "Downsizing" became an unpopular term in the 1980s. This was a reference to the massive layoffs of employees that resulted from mergers and acquisitions and the efforts to make American businesses more competitive by reducing costs. Between 1981 and

1986, over 10 million Americans lost their jobs because of downsizing and restructuring. Layoffs totaled 3 million people a year after 1991. Proponents of downsizing argued that it made businesses more efficient. Opponents contended that companies owed allegiance to their workers and their communities and not just to the bottom line. Executive compensation was also drawing criticism. Some executives were receiving enormous salaries, as well as other benefits, even while thousands of employees were being laid off. The amount of executive compensation sometimes seemed to increase in inverse proportion to the company's performance. The concern over executive compensation had been given a boost in the 1970s when Henry Ford II was accused of using the Ford Motor Company as a private candy store. He was said to have used corporate aircraft to transport his wine and to fly his mother's cats and dogs to various destinations. Ford was being paid almost $1 million a year even while the company was picking up a large portion of his personal living expenses, which were considerable. The often huge golden parachutes given to executives when their company was taken over were another target of criticism. For example, Ross Johnson, the chief executive and the loser in the battle over RJR-Nabisco, received a golden parachute worth $53 million.

There were some odd characters operating in the markets in the 1980s. Jeff ("Mad Dog") Beck at Drexel Burnham claimed to be a former CIA agent and war hero. Beck was involved in the RJR-Nabisco takeover and played a role in the movie *Wall Street*, which was an attack on the morals of Wall Street and the corporate raiders. In that movie, Michael Douglas played the role of Gordon Gekko, a Wall Street villain with the memorable lines, "Greed is good. Greed is right. Greed works. Greed cuts through, clarifies and captures the essence of the evolutionary spirit." In real life, Jeff Beck was said to be a "compulsive big screen liar."[19] William J. Stoecker, a Wall Street scam artist, was able to borrow $400 million on the basis of fraudulent net worth claims. Some corporate raiders found themselves at the center of government investigations. Victor Posner was one especially ripe target. He had been buying companies since 1966 and had rightfully acquired a reputation for sharp dealings. One hard fought battle, over Sharon Steel, occurred in 1969, well before such things were popular. In 1979, Posner took over U.V. Industries using junk bonds and imaginative financing. Posner bought Royal Crown for $206 million in 1984, with the assistance of Drexel Burnham and Michael Milken.

Posner obtained control of Fischbach Corp. through some shady dealings. He bought over 10 percent of the stock of that company, which led it to seek a standstill agreement with Posner and his son. This agreement restricted the Posners from acquiring more than 24.9 percent of the company's stock. In order to evade that agreement, Posner began parking stock with Michael Milken and Ivan Boesky. The Posners then obtained control of Fischbach and began looting the corporation. Although his companies were experiencing financial difficulties in the 1980s, Posner continued to pay himself millions of dollars in compensation. At the same time, he evaded payment of his taxes. Posner was convicted of federal income tax violations in July of 1986, having inflated the value of land donated to a bible college. His conviction was set aside, but he later pleaded guilty and had to pay $4 million in fines and spend $3 million on the homeless as a form of community service. Posner and his son were also found liable for the effects of their Fischbach Corp. parking scheme involving Milken and Boesky. The Posners were ordered to disgorge some $4 million of the funds they had looted from the company.

Insider Trading

Another troublesome side effect of the merger mania of the 1980s was a series of insider trading scandals. In one instance, large amounts of options were bought through the Pacific Stock Exchange on the stock of Santa Fe International just before the public announcement that Santa Fe was being purchased by the Kuwait Petroleum Corporation. Most of those options were purchased through Crédit Suisse. St. Joe Minerals Corporation had been the target of heavy trading in stock and options just before the announcement that Joseph E. Seagram & Co. would be making a tender offer for the company's stock. That trading was conducted through foreign accounts, mostly in Switzerland. The SEC pursued the trail in both instances and after much effort was able to pierce the secrecy of the Swiss bank secrecy laws. The traders eventually had to disgorge much of their profits, including some $8 million made on the St. Joe deal.

Insider trading was not always stopped. A federal district court found that Barry Switzer, the head football coach at the University of Oklahoma, had not violated the federal securities laws when he traded on information that he had overheard in a conversation between an executive and his wife. Switzer was sunbathing on a row of seats behind this executive while awaiting the start of a university track meet. The court held that Switzer did not owe fiduciary duties to the company's shareholders in whose stock he traded that would preclude him from acting on this information. In *Chiarella v. United States*, the Supreme Court considered the case of a financial printer who traded on confidential information about forthcoming tender offers obtained from proxy materials that he was printing.[20] The Supreme Court held that his taking of that information did not constitute a violation of rule 10b-5, the antifraud rule that the SEC used to prosecute inside trading. The Court concluded that a duty to disclose under rule 10b-5 did not arise simply from the mere possession of nonpublic information. Rather, there must be a fiduciary relationship between the trader and the source of information. The Court rejected the government's claim that, if there was not equal access to information, then an individual having such information would have to refrain from trading or disclose that information.

Later, in *Dirks v. SEC*, the Supreme Court held that an investment adviser did not violate rule 10b-5 when he had been given inside information about the fraud being carried out by Equity Funding.[21] The investment adviser had used that information to tip his clients, who then sold several millions of dollars of stock, avoiding enormous losses when the scandal became public. The Supreme Court again rejected a claim that the SEC's antifraud rule required equal access to information or equal opportunity for traders. The Supreme Court held that the mere possession of nonpublic information about a corporation would not result in a violation of rule 10b-5. In *Carpenter v. United States*, the Supreme Court found itself evenly divided on the issue of whether a reporter for the *Wall Street Journal* violated SEC rule 10b-5 when he misappropriated nonpublic information that would appear in the newspaper's columns and that would have a market effect.[22] The *Wall Street Journal* reporter had used information reported in the "Heard on the Street" column to trade in advance of its publication. The Supreme Court did uphold unanimously mail and wire fraud convictions for that conduct. The Court's split in *Carpenter* on the application of rule 10b-5 still left open the issue of whether "misappropriation" was a basis for a violation of the securities laws. That issue was not resolved until 1997, when the Supreme Court held in *United States v. O'Hagan* that an attorney who had obtained confidential information about a client's activities could not trade on the basis of that information even though he was not an insider of the issuing company.[23] The Court concluded then that misappropriation of the information did constitute a violation of rule 10b-5.

In *United States v. Chestman*, the federal court of appeals in New York held that rule 10b-5 did not prevent family members, and their broker, from trading on information concerning an upcoming acquisition.[24] That information had been received in confidence from a family member with access to the inside information. The court, however, upheld convictions under other SEC rules that prohibited trading on confidential information about tender offers and under the mail and wire fraud statutes. The Supreme Court held in *Basic*, *Inc.*, *v. Levinson* that a company could be held liable for a false press release concerning merger activity.[25] That decision was based on a "fraud on the market" theory of liability. This theory posited that the market was efficient and that false information injected into the market would result in a drop in prices. The Court held that a rebuttable presumption would arise that investors who traded in the market were relying on information provided by the company when they traded.

The Insider Trading Sanctions Act of 1984 gave the SEC additional enforcement powers against inside traders. The Insider Trading and Securities Fraud Enforcement Act of 1988 added even more authority to the SEC's arsenal. Among other things, the SEC was allowed to seek civil penalties of up to three times the insider's profit. A bounty of up to 10 percent was authorized for persons who turned in insider traders. The SEC also entered into several Memorandum of Understandings (MOU) with foreign countries pursuant to which the SEC and the foreign regulators agreed that they would provide access to the SEC for its investigations of foreign individuals trading in United States markets. Nevertheless, insider trading scandals continued and would reach monumental proportions on Wall Street. The doctrine of unintended consequences would play a large role in uncovering that wrongdoing.

Insider Trading Scandals Mount

After the election of Ronald Reagan as president, efforts were made to curb the power of the SEC because of concerns that it was overregulating the securities industry. Stanley Sporkin, the aggressive head of the SEC's Division of Enforcement through the 1970s, was eased out to become general counsel of the Central Intelligence Agency, where a former SEC chairman, William Casey, had become director. The SEC then began cutting back its enforcement program, as demonstrated by an internal fight over whether to prosecute Citicorp for the offshore currency transactions that it had been using to avoid taxes. The SEC then became the target of criticism for its lukewarm prosecutory zeal. The SEC also encountered some of its own scandals. Staff members in one of its regional offices were charged with sexual harassment, and sex and drinking parties were claimed to be common in that office. The new head of the Enforcement Division was charged with beating his wife, an event that was turned into a television movie. To bolster its image, the SEC began pursuing insider trading cases. The SEC assumed that these cases would not unduly disturb Wall Street, but exactly the opposite was true. When the smoke had cleared, a number of high-profile financiers found themselves in jail, and the decade of the eighties would be forever characterized as one of base greed.

In one high-profile case, the SEC charged Paul Thayer, a deputy secretary of defense, with insider trading. He had been providing information to his friends and his mistress. Thayer had obtained that information from his previous position as chairman of the LTV Corporation and as a director of Anheuser-Busch. Dennis Levine, a managing director at Drexel Burnham, was the center of another highly publicized insider trading ring. Levine, who was paid a million dollars a year at Drexel Burnham, used a group of informants to provide him with inside information. The members of that ring included Robert Wilkis at Lazard Frères; Ilan Reich, a partner at Wachtell Lipton, the New York law firm that specialized in mergers and acquisitions; Ira Sokolow, an executive at Shearson Lehman Brothers; and David Brown, an employee at Goldman Sachs & Co.[26]

Levine made over $12 million from insider trading in the stock of fifty-four companies between June of 1980 and December of 1985. His scheme unraveled when an anonymous letter was sent to Merrill Lynch from Venezuela advising that an account of the Swiss Bank Leu that was being traded from that bank's office in the Bahamas was receiving only profitable transactions. Brokers were "piggybacking" on that account by trading off its orders. This was reported to the SEC by Merrill Lynch, and the SEC staff began an investigation of that account. The SEC was curious how an account could always be profitable, but it was initially stymied by the bank secrecy laws of the Bahamas, where Levine was conducting his trading. The SEC placed pressure on the Bahamian bank, and it eventually revealed Levine's name.

Levine was arrested on May 12, 1986. He pleaded guilty to four felony charges. In order to lessen his prison term, Levine then ratted on Ivan Boesky, the Wall Street arbitrageur and corporate raider. Boesky was barred from the securities business and agreed to pay a fine of $100 million. But Boesky was given the opportunity to select his own sentencing judge, and he served only twenty months. Claims were made that Boesky was given special treatment because of his high profile. The SEC was further embarrassed when it was discovered that Boesky's plea agreement permitted him to sell his stock before public announcement of his fine. This inside information allowed Boesky to avoid the sharp drop in stock values for that stock that occurred after the announcement of his conviction.

Boesky and Levine were not the only investment bankers trading on inside information. E. Jacques Courtois, an employee of Morgan Stanley, was imprisoned for a year and paid a $150,000 fine for insider trading. Another former Morgan Stanley employee, Adrian Antoniu, engaged in insider trading along with James Newman, his Harvard classmate. Antoniu left Morgan Stanley, but he maintained contact with Courtois, who supplied him with inside information. Antoniu and Newman earned some $800,000 from their insider trading activities before they were caught.

Carlo Florentino, a partner at the Wachtell, Lipton law firm, was charged with insider trading in 1981. He made some $600,000 from that trading. Martin Siegel was another inside trader who provided inside information to Ivan Boesky on possible acquisition candidates. Siegel had developed the golden parachute as a way to fend off corporate takeovers and was being paid $3 million a year as an investment banker at Drexel Burnham, which he had joined after leaving Kidder, Peabody. It was not enough for Siegel. Ivan Boesky paid him $150,000 for tipping him that Martin Marietta was going to use a "Pac-Man" defense to fight off Bendix Corporation's takeover. Siegel pleaded guilty to felony charges of insider trading and was sent to prison. He had to pay $9 million to settle with the SEC. Kidder, Peabody paid $13 million to the SEC to settle charges for its liability from Siegel's activities, and it had to surrender another $165 million to settle private litigation arising from the resulting scandal.

Timothy Tabor and Richard Wigton, employees and arbitrageurs at Kidder, Peabody, were arrested. Wigton was handcuffed and "frog-marched in tears" out of his office, but both he and Tabor had their indictments dismissed. Robert Freeman, the head of the arbitrage department at Goldman Sachs, was charged with insider trading. The indictment brought against Freeman was found to be defective, but he later pleaded guilty to a single felony count. Freeman admitted to trading on insider information that had been provided to him by Martin Siegel. It seemed that Bernard (Bunny) Lasker, a floor trader on the New York Stock Exchange, had told Freeman that the sale of Beatrice Foods was running into difficulties. Freeman called Martin Siegel, who was involved in the transaction. Siegel told Freeman that "your Bunny has a good nose." This was viewed as inside information. Freeman was sent to prison and fined $1 million. The list of insider trading prosecutions continued to grow. Stephen Sui-Kuan Wang, an analyst at Morgan Stanley & Co., was charged with obtaining over $19 million from insider trading profits. A trader at Merrill Lynch, who was tipped on material that would appear in a stock trading column in *Business Week,* was charged with trading on advance information.

In order to lessen his sentence, Ivan Boesky implicated John Mulheren in his illegal activities. Mulheren, a Wall Street arbitrageur and friend of the singer Bruce Springsteen, armed himself and went to assassinate Boesky. He was intercepted and later tried on the charges that resulted from Boesky's accusations. Mulheren's conviction was overturned on appeal. Boesky implicated Carl Icahn in claims of misconduct, but no charges were ever brought. Boyd Jefferies, a trader in the third market, was another Boesky target. Jefferies pleaded guilty to a criminal charge of parking stock for Boesky and manipulating the Fireman's Fund stock that was sold by American Express. Paul Bilzerian was convicted of engaging in fraudulent stock transactions in the stock of Cluett, Peabody & Co., Hammermill Paper Co., H. H. Robertson Co., and Armco Steel. Bilzerian concealed his ownership in those companies by parking the stock with Jefferies & Co. in order to avoid SEC disclosure requirements. He also filed false tax returns. Bilzerian was fined $1.5 million and sentenced to four years in prison.

Michael Milken

Michael Milken was another Boesky victim. Milken was indicted in March of 1989 on ninety-eight felony counts of securities violations, mail and wire fraud, and racketeering. The government wanted a forfeiture of $1.1 billion from Milken, which was the amount of his compensation between 1984 and 1987. The charges brought against Milken involved parking of stock and some rather convoluted manipulation claims. The charges, which were extremely complex and somewhat dubious, did not include insider trading.[27] Milken eventually pleaded guilty to six felony counts and agreed to pay a fine of $600 million. He was sentenced to ten years in prison. The sentence handed out to Milken was said to be "a case of an inexperienced judge playing to the headline writers calling for blood," and his sentence was later reduced.[28] Drexel Burnham pleaded guilty to felony charges and agreed to pay a fine of $650 million because of Milken's violations. By the time of his indictment, Milken was the "most demonized" financier of his generation.[29] Yet he survived prison and was reemerging as an education czar as the twentieth century closed.

Insider trading continued. In one case, a psychiatrist, Robert Willis, was charged with trading on information supplied in confidence by a patient who was the wife of Sanford Weill, who was then president of American Express. She told the doctor that her husband was seeking to become chief executive officer of BankAmerica. BankAmerica was having financial difficulties, and Weill had a $1 billion commitment from Shearson to bolster the bank's balance sheet. The doctor traded on that information and made a profit even though the arrangement did not go through. In another case, the SEC brought charges against Edward Downe, the husband of Charlotte Ford, a member of the Ford automobile family. Downe was obtaining inside information from his position as a board member of Bear Stearns & Co. He was turned in by Alan H. Abrahams, the ex-convict who had previously escaped from prison and engaged in the massive fraud through Lloyd, Carr & Co. that resulted in a suspension of options trading in the United States by the CFTC. Apparently, Abrahams turned informant because he was annoyed with a lady friend who was connected with Downe socially. She had accused Abrahams of stealing from her purse.

4 Banking Woes

BankAmerica was the largest, most profitable bank in the world in 1980. Six years later, it would post a loss of more than $1 billion. BankAmerica's chief executive officer, A.W. "Tom" Clausen, had led the bank during a period of growth and profitability in the 1970s. Clausen left the bank in 1981 to head the World Bank. His successor, Samuel Armacost, proved unable to deal with the crises that followed and was removed when it appeared that the bank was about to fail. BankAmerica's nonperforming loans increased from about $400 million to $1.2 billion between 1980 and 1981 and climbed to $3.1 billion in 1982. Between 1980 and 1985, the bank wrote off over $4 billion in bad loans. Another $7 billion of its loans in Mexico, Brazil, and Venezuela were in doubt. Thousands of employees were laid off and 187 branches closed. Clausen was then brought back to rebuild the bank. It recovered its profitability by 1988. BankAmerica was not the only bank in trouble from Latin American debt. Citicorp had nonperforming foreign loans in 1983 in excess of $1.7 billion.

Latin America

At the center of the Latin America debt crisis was Mexico, which experienced a massive flight of capital from its borders in 1981 and 1982, as confidence in the peso declined. Mexico devalued its currency by some 40 percent in early 1982, which only increased the flow of funds out of the country. A run on the peso began, and United States banks became reluctant to make further loans. In August of 1982, Mexico announced that it could not meet its debt obligations, which totaled $85 billion. This further accelerated the movement of capital out of the country. In September of 1982, Mexico nationalized its banks, closed all bank accounts denominated in United States dollars, and declared a moratorium on the principal payments of its debt. Exchange controls were imposed that required all deposits in Mexican banks to be repaid only in Mexican pesos at an exchange rate that was well below the market.

One court stated that these regulations constituted a "Montezuma's revenge" on American investors with dollar deposits in Mexican banks.[30]

Mexico had outstanding foreign debts in excess of $80 billion. Of that amount, about $25 billion had been loaned by banks in the United States. The nine largest American banks had Mexican loans that totaled 44 percent of their capital. Grupo Industrial Alfa, the largest company in Mexico, defaulted on its loans to Citibank and Continental Illinois, which had each loaned that company more than $100 million. To alleviate the crisis, the Fed loaned Mexico over $600 million. The Fed created a currency swap arrangement in which the Fed swapped dollars for pesos. More aid was needed, and the United States put together a $4 billion rescue package. Over $3 billion in new loans were made to Mexico. The United States granted Mexico $2 billion in emergency credits, and advance payments were made by the Department of Energy for $1 billion of oil. An additional $1 billion was supplied by the United States Commercial Commodity Corporation for grain imports to the United States. The Bank for International Settlements provided another $1.5 billion in loans.

This did not stop a growing debt crisis in the lesser developed countries. Mexico's problems were followed by defaults in Brazil, Argentina, and more than twenty other countries around the world, including Nigeria, Venezuela, and Colombia. This debt crisis provided a new role for the International Monetary Fund (IMF), which appeared to have lost much of its relevancy when exchange rates began floating. The IMF had to scrounge for a new mission after Richard Nixon eliminated the gold standard. "By the early 1980's, it had settled into lending to countries hit by massive capital flight."[31] The IMF became a lender of last resort. IMF emergency funds were increased from $7.1 billion to $19 billion in 1983. The IMF found a ready market for its services. The ten largest United States banks had $50 billion in loans to countries that were about to default at the end of 1982. The situation was so serious that concern was being expressed that the entire banking system could break down. The IMF focused initially on Mexico and began an effort to restructure that country's finances. The IMF provided $4.5 billion to rescue Mexico.

The American banks began rescheduling their loans to avoid defaults. In October of 1983, $20 billion of Mexican debt was rescheduled. Rescheduling, an event that would occur with several other Latin American countries, involved changes in loan terms such as extending the maturity date of the loan, reducing the interest rate, forgiving some of the debt, or a combination of those and other changes in terms. Additional loans were often granted as a part of such rescheduling so that the countries could have some liquidity. The American banks were eager to reschedule because this allowed them to avoid treating the loans as nonperforming, which would have required a charge against earnings. Nevertheless, some losses had to be reserved for by the banks. The International Lending Supervision Act of 1983 required United

States banks to increase their loss reserves for loans to countries having difficulties meeting their debt payments. The debt crisis continued in the lesser developed countries, including Argentina, Brazil, Venezuela, Peru, Chile, Colombia, and Ecuador. Numerous countries announced that they could not meet their obligations. Additional fiscal breakdowns occurred in the Philippines and Nigeria. Poland was having trouble repaying its foreign loans. It was about to default on $2.4 billion of debt in 1981. To stave off an economic collapse, the IMF loaned billions of dollars to several troubled countries.

It appeared in 1980 that Brazil was going to default on its debt. That default was deferred for a while, but another debt crisis began in Brazil in October of 1982. At that time, Brazil had outstanding foreign debt of some $85 billion. In December of 1982, Banco Do Brasil began delaying its payments through the New York Clearing House electronic payments system (CHIPs), which nearly caused that system to crash. The bank could not repay its obligations, and the New York banks had to step in to assist the Brazilian government. In February of 1983, the IMF provided $5 billion in loans to Brazil. This was a "conditionality" loan that required the Brazilian government to cut spending and reform its fiscal policies as a condition for the loan. In April of 1983, riots broke out in Brazil as the effects of the IMF's conditions took effect. In the event, Brazil failed to meet the IMF conditions. Even so, Brazil sought another $6.5 billion in loans in 1983.

Argentina raised additional concerns. At the time of the Falklands War in 1982, Argentina owed some $40 billion to foreign creditors. A substantial portion of those loans had been supplied by United States banks. Argentina defaulted, and a rescue was arranged by the IMF in August of 1983. The IMF loaned Argentina $1.1 billion, and the Argentina government obtained another $1.5 billion from a syndicate of 300 banks. Venezuela rescheduled about $9 billion in foreign debt. The Latin America crisis continued as the underlying economic problems of the lesser developed countries remained unsolved. In 1986, the Baker plan, named after the Secretary of the Treasury, James A. Baker, sought to restructure the Latin American debts. The Baker plan proposed additional lending from the banks as well as funds from the World Bank. Rates on outstanding loans were to be reduced and maturities were to be extended. In March of 1987, before the Baker plan could be implemented, Brazil declared a moratorium on repayment of its debt in the amount of over $120 billion. By this time, the U.S. banks had begun to recognize their losses. The fifteen largest banks in the United States set aside $8 billion as loss reserves for loans to Latin America in 1987. Citibank announced that it was reserving $3 billion for losses on its Latin American loans. It was joined by several other large banks, including Manufacturers Hanover, which took a $1.7 billion charge, Chase Manhattan with nearly the same amount, and BankAmerica and Chemical Bank, which each took about $1.1 billion in reserve charges.

Brady Bonds

The crisis continued. Nicholas Brady, the new Secretary of the Treasury, announced another restructuring plan in 1989. It provided debt relief that was conditioned on the adoption of changes in government spending and fiscal programs by the countries involved. The Brady plan sought debt reduction through the IMF and the World Bank and by restructuring commercial bank credit. The bank loan restructurings had numerous alternatives, but included extending maturity dates, reducing principal, and adjusting interest rates. In one arrangement, banks were allowed to exchange existing loans for thirty-year bonds at a discount of 35 percent. These "Brady" bonds were secured by international funding arrangements. The banks could, as another alternative, swap their loans for bonds at the same face value, but the new debt would pay a lower rate than the original loans. Another method for bailing out the Latin American debtors was through debt equity swaps. Here, the banks sold their debt at a discount in exchange for an equity position in a government-owned industry. Nature swaps were used to allow banks to write off losses by having the borrowing government protect wilderness areas in exchange for debt forgiveness.

In 1989, Mexico agreed to a restructuring of its debt by discounting bank loans in exchange for twenty-year floating rate Brady bonds that were collateralized by United States Treasury securities. Mexico then began to privatize its economy by selling off government enterprises. Additional Brady plan restructurings were conducted in Argentina, Brazil, Bulgaria, Costa Rica, the Dominican Republic, Ecuador, Jordan, Nigeria, Panama, the Philippines, Poland, Uruguay, and Venezuela. Some Brady bonds were collateralized, others were not. Most were issued in United States dollars but others were in local currencies. Collateralized Brady bonds were either fixed rate or floating rate bonds and were secured as to principal by United States Treasury zero coupon bonds having the same maturity as the Brady bonds. A market began to develop in the Brady bonds, which often traded at a discount, reflecting continuing concern with Latin American debt. The economies of Argentina and Brazil began to recover, however, and they were able to refinance much of their debt. Among other things, these countries engaged in offerings in the European markets that permitted them to buy their Brady bonds back at a discount. At that time, Brazil's thirty-year par bonds were selling at around fifty cents on the dollar.

Banking in America

Despite these setbacks, the banking industry in the United States was still a behemoth. Banks held more than $2.8 trillion in assets in the 1980s. The industry was highly concentrated. Sixty-four banks accounted for more than 50 percent of bank industry resources in 1984. Headed by Walter Wriston, Citicorp was the largest American banking institution in 1984. It was followed by the BankAmerica Corp., the Chase Manhattan Corp., Manufacturers Hanover Corp., and J.P. Morgan & Co. Willard C. Butcher became the leader of the Chase Manhattan Bank in 1981, replacing David Rockefeller. Chase Manhattan had assets of almost $90 billion. In contrast, the Girard Bank had only about $4 billion in deposits.

Many banks in the United States had difficulty adjusting to the new regime of competitive interest rates. Nonperforming loans of the ten largest banks amounted to $11.9 billion in 1982. Even the banks that were not involved in Latin American lending experienced losses in their real estate lending. Bank workout departments expanded as the banks sought to restructure, refinance, and otherwise deal with delinquent loans. The number of "problem" depository institutions on the FDIC watch list was rising, to over 500 problem banks in 1984. Many of these were small banks, but there were several large institutions on the list. Seventy-nine banks failed in 1984. In the first six months of 1985, over forty commercial banks failed. By year-end the number reached 120. By 1986, over 1,000 institutions were on the FDIC watch list. The FDIC was then providing insurance to almost 15,000 depository institutions. The FDIC had established reserves for about $18 billion in liabilities from those institutions, but the large number of problem banks was raising fears that more was needed. Those concerns would continue to grow. Over 700 banks were closed in 1988.

One bank encountering trouble was the Crocker Bank in San Francisco, which had been bought in 1981 by the Midland Bank, an English institution. Crocker had itself taken over the United States National Bank of San Diego after it failed under C. Arnholt Smith. Trying to grow rapidly, Crocker took on a large number of questionable loans that turned sour. Wells Fargo took over Crocker in 1986. Declining oil prices in the middle of the 1980s resulted in another banking crisis in the oil patch states of Arkansas, Louisiana, Oklahoma, and Texas. Several Texas holding companies were acquired or merged with others. The First Republic Bank Holding Company was having problems in 1986, and its losses mounted over the next few years. First Republic lost $2.3 billion in the first half of 1988 and was taken over by NCNB in Charlotte, North Carolina, the bank that became NationsBank.

NationsBank grew rapidly by taking advantage of provisions in the banking laws that allowed interstate acquisitions of failing banks. NationsBank was allowed to branch statewide in North Carolina, its home state. These and other loopholes in the antibranching laws permitted NationsBank to reach a size that would soon allow it to compete with money center banks in New York. The Garn-St. Germain Act of 1982 furthered the trend toward interstate banking by allowing interstate mergers of banks and thrifts. Maine adopted legislation that allowed interstate banking on a reciprocal basis. New York and Alaska adopted banking acts in 1982 that permitted reciprocal branching in those states. Regional interstate banking pacts were adopted by groups of states that encouraged interstate banking. A southeastern state compact allowed the banks in those states to acquire or start banks in any of the signatory states. Nevertheless, after increasing their numbers through the 1970s, the banks found themselves closing some branches in the 1980s. The number of branches dropped by about 1,000 in 1982. In contrast, the number of ATMs exploded. About 50,000 ATMs were in operation in the United States by 1983. That number nearly doubled by 1990. ATM access cards continued to be lost and stolen in large numbers. Over 1,300 such incidents were reported each day in 1985.

Some states began soliciting out-of-state banks to establish a presence within their borders. South Dakota allowed out-of-state banks to own state-chartered institutions that would allow them to underwrite and sell insurance nationwide to out-of-state residents. That particular action was blocked by the Fed. Nevertheless, Citibank opened a credit card facility in South Dakota in order to escape New York State usury restrictions. By 1983, Citibank had offices and operations in South Dakota, Delaware, California, and Maine, and its credit card system was operating nationwide. Citicorp expanded to Nevada and opened a credit card processing center there. Citibank became involved in the Florida and Illinois markets when it took over some failed S&Ls.

New York State imposed limits on fees that banks could charge for bounced checks. Initially, in 1982, the amount was $7, but this was increased to $15 in 1991. The fees charged by banks for their services, and the increasing lack of access to bank facilities by lower-income individuals, led to the creation of check-cashing “stores.” Some 300 of these stores were opened in New York in 1984. Those check-cashing operations were “the fastest-growing segment of the financial services industry” in the 1980s. About 5,000 of the check-cashing firms were in operation in 1992.[32] The credit card had become a substantial substitute for cash for the more fortunate. Almost 200 million people around the world held Visa cards by the end of the eighties. Those cards were accepted by 6.5 million businesses and generated payments of almost $600 million per day. Visa had competition from American Express and the Sears Discover Card. Credit card holders paid exorbitant interest rates to carry balances from month to month on Visa and Discover cards—generally, 18 percent or higher.

The 1980s witnessed a change from “relationship” banking to “transactional” banking. Previously, banks had depended on established relationships with customers as the basis for their lending business. The banks were constantly trying to expand their relationships in order to acquire new customers. That approach was now being abandoned. Instead, banks began marketing product lines to customers with whom they did not have an existing relationship. Banks had several product lines to offer. Banks provided cash management services and computerized programs that allowed corporations to readily access their cash positions and bank accounts, as well as to transfer balances and funds. Structured financing and the securitization of assets were transforming the banks from deposit takers and loan makers into conduits for loans as underwriters and distributors. Mezzanine finance became an important market for banks—that is, debt placed in priority between senior debt and common equity in corporate capital structures. Such debt included subordinated debt and junior subordinated debt. Mezzanine debt was considered more creditworthy than junk bond debt. Warrants were sometimes attached to loans in order to provide an upside to banks. Banks were increasing their loan participation activities—that is, loans originated by one bank were then sold off in portions to other banks and investors. These arrangements permitted portfolio diversification on the part of the banks and allowed them to improve their balance sheets by spreading the default risk. Loan participation sales included a multitude of credits such as short-term loans and "loan strips" under revolving credit facilities. Other bank loan sale activities included medium- and long-term debt. These loan sales allowed the banks to enter into the business of financing leveraged buyouts and acquisitions during the merger binge in the 1980s.

Financial information services offered another opportunity for banks. Citibank acquired Quotron in 1986 for $680 million. Quotron was, however, rapidly losing market to the company formed by Michael Bloomberg, the individual who was fired from Salomon Brothers when it combined with Phibro. Bloomberg Financial Markets established a global financial information system and placed terminals in brokers' offices. By 1995, Bloomberg would have over 50,000 screens in offices throughout the financial community and would even open its own financial television network. The Bloomberg terminals provided analysis of securities and their yields and allowed the data to be analyzed and risks considered. Merrill Lynch paid $30 million for a 30 percent equity stake in Bloomberg. It later sold part of that stake back. Initially, Bloomberg agreed not to market its terminals to firms in competition with Merrill Lynch, but that restrictive agreement was subsequently dropped.

Banks continued to account for a significant portion of the underwriting of state and municipal bonds. Pooled trust accounts that were similar to mutual funds were offered by the banks. Traditional trust accounts were another source of bank revenue. Some 100 national banks were accused by the Comptroller of the Currency of failing to invest trust funds at prevailing market rates. Home equity lines became popular in the 1980s. Interest payments on such loans were deductible by the homeowner, even if the purpose of the loan was for a personal benefit unconnected with the home. Driven by floating rates, foreign exchange trading in the interbank currency market totaled about $60 billion a day in New York in 1986. That figure would increase to over $100 billion in 1989. Worldwide, average daily foreign exchange trading at that time was $1 trillion.

Other Financial Concerns

The American economy was suffering. A large trade deficit with Japan caused by increasing competition from Japanese products was raising concerns with the viability of U.S. industries. Japanese firms were also buying large amounts of real estate and assets in the United States, suggesting that a friendly takeover of America was under way. The dollar was under continued pressure from currencies of other countries with stronger economies, such as Japan and Germany. At the beginning of the 1980s, the Reagan administration announced that it would not intervene in the foreign exchange markets to stabilize the value of the dollar. The dollar increased so much, however, that intervention was deemed necessary. In September of 1985, representatives of the five leading industrial nations (the United States, Japan, Germany, Great Britain, and France) met at the Plaza Hotel in New York and agreed to drive down the value of the dollar. They intended to devalue the dollar slowly, but the market reacted by a sharp and rapid devaluation. The dollar continued to decline, and the yen strengthened. This launched the Japanese on a spending spree abroad, but made it difficult for them to export their goods. Another meeting was held at the Louvre in Paris in 1987. There the Group of Five countries agreed to continue to cooperate to stabilize exchange rates. This agreement was soon under attack because Germany began increasing its interest rates.

Deposit brokers were acting as intermediaries by placing deposits with banks. These brokers invested large sums for their clients in certificates of deposit (CDs) by breaking up their investments into amounts of $100,000, the maximum amount covered by federal insurance. Those deposits were then placed with several banks. This allowed investors to avoid credit risk concerns, and the brokers would shop for the highest CD rates. In 1983, it was estimated that banks and thrifts were holding $46 billion in brokered deposits. The bank regulators sought to stop this practice, viewing it as an abuse of federal insurance. The Court of Appeals for the District of Columbia ruled, however, that the FDIC and FSLIC could not adopt a rule that limited insurance coverage to $100,000 per money broker per institution where funds were being placed by a broker.[33] Later, in 1989, limits were placed by Congress on brokered deposits placed with weakly capitalized banks. Some hybrid financial companies were appearing. The Philadelphia National Corporation merged with the National Central Financial Corporation in 1983. The name was then changed to CoreStates. CoreStates sold Colonial Mortgage, a firm that bought, sold, and serviced residential mortgages, to the General Motors Acceptance Corporation in 1985. The latter entity was then expanding its consumer financial services.

Securities brokers and commercial firms began establishing "nonbank banks." Under the definition of what constitutes a bank in the Bank Holding Company Act, a bank was an institution that both accepted demand deposits and made commercial loans. A nonbank bank conducted only one of these activities. This allowed the nonbank banks to escape the Bank Holding Company Act and the Glass-Steagall Act. Gulf & Western acquired a California bank and sold its commercial loan portfolio so that it could become a nonbank bank. J.C. Penney, a retail clothing store, did essentially the same thing in 1983 when it bought a national bank and sold its commercial loans. Some of the brokerage firms operating nonbank banks were Merrill Lynch, E.F. Hutton, Paine Webber, Drexel Burnham Lambert, and Shearson Lehman/American Express. Banks also used nonbank banks in the 1980s to extend their operations. The nonbank banks could offer negotiable order of withdrawal (NOW) accounts that operated like checking accounts but were not deemed to be demand deposits that were subject to the banking laws. The Fed adopted rules in 1984 that sought to treat the nonbanks as banks through an expansion of the definition of a bank. This action was stricken by the Supreme Court in 1986.[34] Congress then intervened by adopting the Competitive Equality in Banking Act of 1987, which curbed the use of nonbank banks, but it grandfathered the nonbank banks of numerous institutions.

Banks Enter the Securities Business

The banks began to exploit the provisions of Section 20 of the Glass-Steagall Act, which prohibited bank securities affiliates from being "principally engaged" in the securities business. These subsidiaries could engage in numerous permitted activities such as dealing in "eligible" securities that were exempt from registration under the federal securities laws. Eligible securities included United States government securities, municipal bonds, certificates of deposit, and banker's acceptances. The securities affiliates could additionally deal in ineligible securities, including stock, as long as the subsidiary was not "principally engaged" in that activity. In *Securities Industry Association v. Board of Governors of the Federal Reserve System*, a court of appeals held that the Fed could properly allow bank affiliates to engage in up to 10 percent of ineligible securities activities without running afoul of the Glass-Steagall prohibition that bank affiliates not be "principally engaged" in such activity.[35] This opened the door for the banks to expand into the securities business.

Section 16 of the Glass-Steagall Act allowed banks to purchase and sell securities and stock without recourse and solely upon the order and for the account of the customer. This allowed agency business. The Comptroller of the Currency authorized the Security Pacific National Bank to create a subsidiary called Discount Brokerage Service in August of 1982. This bank subsidiary was created to act as a discount broker that would execute customer securities transactions on an agency basis. It could not deal in securities for its own account or provide investment advice, but could provide margin loans. This arrangement was actually a joint venture between Security Pacific National Bank of Los Angeles and the Fidelity Brokerage Services of Boston. This was the first linkup between a bank and a discount broker. Thereafter, more than 200 banks created joint ventures with discount brokers.

The Fed concluded that discount brokerage services were closely related to bank activities and, therefore, permissible under the Bank Holding Company Act. In 1983, the Fed approved the acquisition by BankAmerica Corporation of Charles Schwab, the nation's largest discount broker. That decision was reviewed by the Supreme Court in *Securities Industry Association v. Board of Governors of the Federal Reserve System*.[36] The Court noted that the Bank Holding Company Act prohibited the acquisition by bank holding companies of the voting shares of nonbanking entities unless they are "so closely related to banking . . . as to be a proper instrument thereto." The Court agreed with the Fed that the discount brokerage activities of Schwab were closely related to banking and did not violate Section 20 of the Glass-Steagall Act. This was a victory for banking, but BankAmerica found itself in financial trouble and had to sell Schwab back to its founder after only a short interval. The Supreme Court held in another case that the provision in the National Bank Act that limited branch banking did not preclude national banks from opening discount brokerage offices nationwide.[37] Numerous banks entered the discount brokerage business following the Supreme Court's rulings. Although they were hobbled by banking restrictions that limited their ability to cross-sell, the banks continued to seek access into other areas of the securities business. The Comptroller of the Currency and the Fed began allowing banks to acquire full-service brokerage firms that were dealing with institutional customers. A federal court ruled in 1987 that the National Westminster Bank PLC and its subsidiary, NatWest Holdings, could provide investment advice and securities brokerage services to institutional customers without violating Section 20 of the Glass-Steagall Act.[38]

In another case, *Board of Governors v. Investment Company Institute*, the Supreme Court held that the Fed could permit bank holding companies to act as investment advisers to closed-end investment companies.[39] Earlier, in *Investment Company Institute v. Camp*, the Supreme Court held that national banks were prohibited by the Glass-Steagall Act from operating what amounted to open-end investment companies.[40] The Court distinguished open-end mutual funds from common trust funds that commingled the assets of fiduciary customers and were permitted under the Glass-Steagall Act. The Comptroller of the Currency later allowed banks to manage individual retirement account (IRA) funds in a common trust fund. This was upheld by the courts. In *Arnold Tours, Inc. v. Camp*, a federal court of appeals held that it was illegal for a national bank to operate a travel agency because such activities were not incidental to the powers of a bank under the National Bank Act.[41] The Court stated that this would not prevent banks from providing lending services such as traveler's checks, foreign currency, and travel loans, issuing letters of credit, and providing free travel information. The District of Columbia Circuit Court of Federal Appeals held that the Fed had gone too far in finding that courier services were incidental to banking for nonfinancially-related activities.[42] In another case, a federal court held that banks could not provide data processing services to merchants unless it was limited to banking activities.[43]

Banks had for several years entered into investment contracts under which a depositor placed funds with a bank and the bank agreed to repay those funds together with a specified rate of interest over a stated period of time. These contracts operated much like an annuity and were similar in nature to the guaranteed investment contracts that were offered to employee benefit plans by insurance companies. The Fed found several other financial activities not to be closely related to banking. They included insurance premium funding, underwriting life insurance operations, real estate brokerage, land development, real estate syndication, property management, and the operation of savings and loan associations. In *Securities Industry Association v. Board of Governors of the Federal Reserve System*, the Supreme Court held that Bankers Trust Co. could not market commercial paper for its corporate customers.[44] This activity was found to be prohibited under the Glass-Steagall Act. Later, a federal court held that banks could make private placements of third-party commercial paper on an agency basis without violating the Glass-Steagall Act.[45] The Supreme Court held, in *Marine Bank v. Weaver*, that certificates of deposit issued by a United States bank were not securities that had to be registered with the SEC under the federal securities laws.[46]

The growing intrusion of banks into the securities industry was raising eyebrows at the SEC. That agency adopted a rule in 1985 that required banks to register with it if the banks were engaged in the securities business. The Court of Appeals for the District of Columbia held that the rule exceeded the SEC's authority,[47] but Congress was also becoming concerned with the banks' intrusion into the securities industry. The Competitive Equality Banking Act of 1987 imposed a one-year moratorium on Fed approval of further securities activities by banks. That only slowed the banks briefly, particularly when Congress began considering legislation that would repeal the Glass-Steagall Act. In 1988, the Senate passed a bill that would have essentially repealed that act, allowing the banks to create subsidiaries that could engage in a broad range of securities activities. The bill, however, did not pass in the House of Representatives. The failure of Congress to enact that legislation placed further pressure on the bank regulators to continue their expansive interpretations authorizing bank holding company systems to engage in an ever broadening number of securities activities.

Banks Enter Other Fields

The Fed began permitting bank holding companies to sell insurance. Citibank was among the banks selling life insurance. The Garn-St. Germain Act of 1982 prohibited the Fed from considering underwriting of insurance as an activity that is "closely related to banking." This precluded the Fed from allowing bank holding companies to engage in or be affiliated with companies that were underwriting insurance. Nevertheless, in 1986, the Comptroller of the Currency ruled that national banks could sell insurance anywhere in the United States, as long as the sales were made from a bank or branch that was located in a town with a population of less than 5,000. This action was taken under a statute that many people thought had been repealed in 1918. In 1952, that section of the statute was even omitted from the official United States Code compilation, but the Supreme Court later held that the provision was still in effect.[48] Several states authorized mutual savings banks to engage in the insurance business. South Dakota allowed state chartered banks to engage in a full range of insurance activities. The Comptroller of the Currency approved the operations of a national bank subsidiary that planned to issue municipal bond insurance. The comptroller concluded that those policies were functionally equivalent to standby letters of credit. Such letters of credit had long been incidental to banking activities.

Banks were involved in commodity futures markets activities. Banks had traditionally used the commodity futures markets in their crop financing programs. Those programs were often conditioned on the commodities being financed to be hedged by futures contracts. The banking regulators were of the view that futures trading activities were closely related to banking and permissible under the Bank Holding Company Act of 1956. In 1982, the Fed approved the application of J.P. Morgan & Co. to establish a futures commission merchant affiliate that would be regulated by the CFTC. It was to deal in futures contracts involving bullion and foreign exchange, United States government securities, domestic money market instruments, and euro dollar certificates of deposit. About the same time, the Federal Reserve Board authorized Bankers Trust to establish a futures commission merchant (B.T. Markets Corp.) that would trade for customers in futures contracts on United States government securities, money market interest rates, foreign exchange, and bullion. In 1982, the Comptroller of the Currency allowed a subsidiary of a Minneapolis bank to act as a commodity trading adviser that would be registered and regulated by the CFTC and provide advice on commodity futures contracts.

Banks were offering instruments that had elements of securities and commodity futures and options. One such product was indexed certificates of deposit. These included something called bulls/bears CDs that were issued by Chase Manhattan Bank. The return on this certificate was based on fluctuation in the Standard & Poor's 500 stock market index. The College Savings Bank in Princeton, New Jersey, offered tuition-linked certificates of deposit. The depositor's return from these CDs was based on an increase in an index of tuition, room, and board from 500 colleges and universities. Franklin Savings and Loan Association in Kansas began offering certificates of deposit that provided a rate of return of three percentage points above the rate of inflation. Gold-linked certificates of deposit were offered by the Wells Fargo Bank. These certificates gave the customer the option of receiving interest at a set rate or, alternatively, a return that was based on increases in the price of gold. The CFTC, however, sued Wells Fargo, contending that these contracts were illegal commodity options. Wells Fargo agreed to an injunction against further such offerings.

In December of 1986, the Comptroller of the Currency authorized the Continental Illinois National Bank and Trust Company in Chicago to acquire First Options of Chicago, Inc., a firm that had grown up with the CBOE and the futures markets. Banks would become involved in the marketing of so-called over-the-counter derivatives or hybrid instruments. These included gold and silver bullion transactions on a twenty-four-hour basis on the London and other futures markets. Interest rate obligations that set caps or floors on interest rates were another new product for the banks. In approving a request by Chase Manhattan Bank to act as principal in a "commodity price index swap" with its customers, the Office of the Comptroller of the Currency noted,

> The "business of banking" has changed drastically over the 124 years since the National Bank Act was enacted to support a national currency, and no one expects banks today to be restricted to the practices that then constituted the "business of banking." The adaptability of the national banking system will become increasingly important as advances in technology and telecommunications accelerate the rate of change.[49]

The Comptroller's Office adopted a statement by a court in which it was asserted that "'we believe the powers of national banks must be construed so as to permit the use of new ways of conducting the very old business of banking.'"

Bank Thefts

In 1987, the Fed began disclosing the results of its Federal Open Market Committee meetings immediately after the meetings. Previously, those meetings had been closely guarded secrets. The Fed was then relying more on the money supply measure of M2 as its most important aggregate for monetary policy. The Fed then had twelve regional banks and twenty-five branch banks in its system. The Bank of New York took over Irving Trust in 1988 in a hostile takeover. This was a somewhat unusual occurrence in the banking industry. What was not unusual was continuing abuses. Roberto Calvi, the president of the Banco Ambrosiano of Milan, Italy, was found hanging underneath Blackfriars Bridge in London in 1982. His bank was found to have been insolvent to the tune of about $1.3 billion. Calvi was an associate of Michele Sidona, who committed suicide in an Italian jail after he destroyed the Franklin National Bank in 1974. Following the failure of the Banco Ambrosiano, the Basel Concordat that had been developed by the Group of Ten industrialized nations through the Bank of International Settlements was revised. This made parent banks responsible for supervising holding companies.

Jake Butcher, a two-time candidate for governor and a promoter of the World's Fair in Knoxville, Tennessee, was sent to prison for seven years after the collapse of the United American Bank and some two dozen other banks that he controlled. Butcher was charged with embezzling $20 million from those banks and with making some dubious loans to politicians and cronies.

Among the beneficiaries of his largesse were Bert Lance, the former director of the Office of Management and Budget in the Carter administration, and Congressman Harold E. Ford. In December of 1982, an armored car company in New York was relieved of $11 million in cash in an armed robbery. A year later, a gang of Puerto Rican revolutionaries stole $7 million from a Wells Fargo depot in Hartford, Connecticut; a portion of the stolen funds were funneled to the Castro government in Cuba. Twelve persons were convicted of the robbery, but others were never found. The FBI posted a large reward for their capture. President Clinton set off a storm of controversy in 1999 when he pardoned the Puerto Rican terrorists who had been imprisoned for this and other crimes. Political opponents claimed that Clinton had granted the pardons in order to boost his wife's campaign for the Senate in New York. Mrs. Clinton had to disavow the actions of her husband.

Bank thefts would grow more sophisticated as technology was introduced to banking. Armand Moore and four others were convicted in 1988 of stealing $70 million from the First National Bank of Chicago through a scheme that involved wire transfers of bank funds to accounts of the conspirators in Austria. After being jailed, Moore was accused of using a former Seattle Seahawks professional football player and a Fed employee to engage in an attempt to steal $400 million from the Federal Reserve Bank of Detroit by obtaining codes and passwords for electronic transfers. The Atlanta branch of an Italian bank, the Banco Nazionale Lavoro (BNL) was using agricultural credits and making loans of more than $4 billion to Iraq. It was believed that some $1 billion of that amount were used to purchase military technology for Iraq through dummy companies. Weapons purchased by Iraq with funds obtained from the BNL branch were later used in the Gulf War against Americans. Those loans were not reported as required to the Fed. The branch office manager, Christopher Drogoul, was indicted for his conduct in this affair.

Consumer Credit

American households owed on average $7,400 for consumer purchases in 1988. Consumer protection in credit transactions continued to mount. The Expedited Funds Availability Act of 1987 sought to prevent banks from holding customer deposits before clearing them in order to obtain interest on the floats from the funds. This statute set a specified period for the clearing and settlement of checks. The Fair Credit and Charge Card Disclosure Act of 1988 amended the Truth in Lending Act to require disclosures in connection with applications and solicitations for credit, including charge cards. The Federal Deposit Insurance Corporation Improvements Act of 1991 (FDICIA) contained a truth-in-savings provision, requiring disclosures concerning the terms and conditions of interest paid in fees charged on deposit accounts.

5 REITs and Asset-Backed Debt

Mortgage Backs

Asset-backed debt was popularized by the GNMA pass-through security. The growth of these securities was slow at first. Fannie Mae was even suffering losses in 1981 and 1982 as interest rates rose, but the market began to grow as interest rates dropped. By 1983, about 20 percent of residential mortgages were pooled and sold to investors through mortgage-backed securities. The total amount of mortgage backs outstanding in 1984 was valued at $1.6 trillion. The Secondary Mortgage Market Enhancement Act of 1984 expanded mortgage-backed security sales even further. It bolstered that market by exempting those securities from margin requirements and by preempting state laws that restricted depository institutions and trustees from purchasing mortgage-backed securities. Some $368 billion in mortgage-backed government securities were sold in 1985. By 1990, that figure had risen to $1 trillion. Salomon Brothers was the leading investment banking firm for mortgage-backed securities. It established a mortgage securities department in 1978. Salomon Brothers was managing about 50 percent of mortgage-backed trading in 1983.

Asset-backed debt spread to private mortgage transactions. The originators of these programs were often banks that packaged their mortgages in a pool and sold bonds that were secured by those mortgages. Citibank created Chatsworth Funding, which purchased Citibank loans. Those loans were then pooled and sold to investors. Unlike the GNMA pass-through certificates, these mortgages did not have government guarantees. To compensate for the additional credit risk, the private mortgage pools were often overcollateralized and had private guarantees. Banks and other financial institutions soon found themselves originating mortgages, placing them in a pool, selling participations in the pool to investors, and then using the proceeds to generate further mortgages. In the process, those banks acted more like conduits than like the traditional mortgage-granting financial institutions of the past.

The mortgage-backed concept was modified to create other asset-backed securities. Almost any asset or revenue stream could be placed in a pool and sold to investors. This mechanism was used to "securitize" credit card payments, franchise fees, and other revenue streams such as automobile loans and home equity lines. Olympia & York, a real estate developer in New York, securitized three office buildings in New York through asset-backed debt that totaled almost $1 billion in 1984.

CMOs

Freddie Mac, the agency created to expand the secondary market for home mortgages, sold Freddie Mac MCs, nicknamed "motorcycles." Freddie Mac guaranteed the principal and interest and the timing of the cash flow in order to avoid prepayment risk. This, however, simply moved the risk over to Freddie Mac. Freddie Mac then sought the advice of First Boston Corp., and it created the collateralized mortgage obligation (CMO) in June of 1983. This was a variation of the original GNMA pass-through security. In a CMO, assets such as mortgages were pooled together and their payments passed through to different tranches or classes of investors. In the more basic of these CMOs, certain classes received principal payments from the mortgages before other classes until they were repaid in full. The remaining classes received interest payments until the first classes were retired. They then began to receive principal payments. There were endless variations of how these payment streams were directed to the various classes.

The CMO became popular after difficulties were encountered with pass-through securities when interest rates declined. In the event of a sharp drop in interest rates, mortgage holders would refinance their mortgages. The result was that a GNMA-type pass-through security would have a greater than expected amount of its principal paid off more quickly than originally anticipated. This caused a lower return than the participants in the pool had expected because the funds they received when principal was repaid had to be invested at lower interest rates. Consequently, a drop in interest rates caused a sharp decline in value of a pass-through security. This undercut the desirability of the pass-through security. To counteract the prepayment concerns raised by the pass-through security, the CMO could defer principal repayments for certain tranches, thereby reducing concern that they would be paid off prematurely if interest rates dropped. Overlooked by many investors, however, was the fact that, if interest rates rose, serious adverse effects could result to the holder of a CMO. In such an instance, prepayments of principal on mortgages slowed down as interest rates rose. This meant that the investor would be stuck for a much longer time in an investment that was paying a lower than market interest rate. The length of that stay would increase as interest rates rose because fewer mortgage holders were willing to refinance their mortgages. Such an occurrence would cause the value of the CMO to drop sharply.

Some of the tranches of the CMOs were quite complex, and it was difficult to determine when, and exactly what, the holder would receive. Indeed, these and other mortgage-backed securities were "blindingly complex. Analysts at Goldman Sachs had to rent time on two Cray supercomputers to run simulations of mortgage securities cash flows under different interest rate scenarios."[50] The result was that many of these tranches were difficult to value and dropped drastically in price when interest rates rose. The consequences of misjudging the market could be severe. A trader at Merrill Lynch bet the wrong way on CMOs and lost the firm $377 million in 1987. In 1992, J.P. Morgan & Co. lost $50 million in CMO transactions.

REITs

The hedge funds began a comeback in the middle of the 1980s. Two large hedge fund managers were George Soros and Michael Steinhardt. The hedge funds took large leveraged positions in Treasury securities. Institutional investors utilized several securities instruments for investments and funding. Merrill Lynch Money Markets, Inc., offered jumbo certificates of deposit in the amount of $100,000. Merrill Lynch offered to make a market in those instruments if the investor wanted to resell the CDs later. Unfortunately, the pricing mechanism for this market was flawed, and a federal court of appeals held that these instruments had to be registered with the SEC.[51] Medium-term notes were popular. They offered a variety of maturities and pricing provisions and could be sold at floating rates or fixed rates, in United States dollars or in other currencies. Medium-term note offerings included multitranche notes, exchangeable medium-term notes, foreign currency medium-term notes, callable medium-term notes, puttable medium-term notes, and mortgage-backed medium-term notes. The kingdom of Spain made a medium-term offering for $1 billion. The notes were offered on a continuing basis at either a fixed or floating rate computed from several different interest rate indicators, such as commercial paper rates and Libor (the London interbank offered rate).

Real estate investment trusts (REITs) regained popularity as an investment. Initially, there were two forms of REITs available for investors: equity REITs and mortgage REITs. The equity REITs bought, managed, and maintained real estate properties. The mortgage REITs held loans and other obligations secured by real estate. The assets of the REITs increased from $1 billion in 1968 to $20 billion by the middle of the 1970s. Between 1968 and 1970, a number of new mortgage REITs were created that were highly leveraged through the use of borrowed funds. Those REITs were badly injured by high interest rates. The mortgage REITs had nonperforming assets of 73 percent by the end of 1974, and their values dropped sharply. The equity REITs continued to be popular. The Economic Recovery Act of 1981 allowed property owners to depreciate real property and use it as a tax shelter for other income.

This resulted in a "real estate buying frenzy."[52] New forms of REITs appeared. Hybrid REITs invested in a mixture of real estate investments. A finite REIT, or FREIT, terminated on a specified date, like a unit investment trust. Closed-end REITs offered only a limited number of units to investors. An umbrella REIT, or UPREIT, invested in several real estate partnerships.

Warren Buffett. The sage from Omaha, Buffett became one of America's most successful investors. (Courtesy of Archive Photos.)

At the end of 1985, the *Forbes* magazine list of billionaires included Sam Walton of Wal-Mart, Ross Perot, Harry Helmsley, the hotel magnate, and Warren Buffett, the investor. Tax shelters became especially popular for many wealthy people. Losses claimed from tax shelters, mainly through oil, gas, and real estate programs, increased from $7.6 billion in 1975 to $28.3 billion in 1982. These tax shelters allowed deferment of tax payments and a conversion of ordinary income to capital gains. Through the use of nonrecourse loans and other methods, taxpayers were able to multiply their deductions. Sometimes tax avoidance became tax evasion. Leona Helmsley, the wife of Harry Helmsley, had earned the title of "queen of mean," and was convicted of thirty-three counts of tax evasion in 1989. Mrs. Helmsley, often portrayed in advertisements promoting the Helmsley Hotels as one of the American elite, was quoted as saying, "Only the little people pay taxes." She earned her title for meanness from her excessively petty actions in business and her hatefulness to those around her, including employees. Her eighty-year-old husband was found mentally incompetent to stand trial. The Helmsleys' fortune was estimated to be $5 billion at the time of her conviction.

A promoter, Edward Markowitz, was prosecuted for tax fraud in selling limited partnerships with large tax write-offs. Purchasers were told that they could receive a fifteen to one tax deduction. Another firm similarly engaged was Sentinel Government Securities. Still another seller of tax partnerships was Charles Atkins. He bought the New York Hanseatic Corp., a Treasury primary dealer. Atkins's business was destroyed by changes in the tax laws. Atkins was then only twenty-nine years old. He was later found guilty of tax evasion and other criminal violations and was sentenced to two years in prison.

The 1986 Tax Reform Act sharply undercut the tax advantages of tax shelters sold through limited partnerships. Such enterprises were no longer able to multiply their tax deductions. Real estate and oil and gas investments were especially hard hit by these changes. The value of many of these investments dropped sharply, and they had to be reorganized by being consolidated and "rolled up" with other limited partnerships. Those roll-ups often allowed the sponsors to profit handsomely to the disadvantage of those being rolled up. The SEC adopted regulations and Congress passed the Roll-Up Reform Act of 1993 to prevent the worst of the abuses in such transactions. Large numbers of limited partnerships had been sold to the public through inadequate or fraudulent disclosures. The SEC later charged Prudential-Bache Securities with fraud in selling over $8 billion in limited partnerships to the public. The firm agreed to pay $330 million to the SEC as a settlement fund for investor claims, as well as $41 million in fines. The SEC's action was followed by massive private litigation filed on behalf of affected investors that was settled by Prudential. Prudential's total liabilities from this affair were estimated to be $1.5 billion. "It was the costliest fraud scandal for any investment house in the history of Wall Street."[53]

The Tax Reform Act of 1986 changed the manner in which some of the remaining tax shelters were treated. REITs were not subjected to tax at the corporate or entity level, but they were required to pay out 95 percent of their net income to shareholders. The shareholders had to pay taxes unless the investment was held in a tax-advantaged account or other situation. In addition, a REIT was required to hold at least 75 percent of its assets in real estate or real estate mortgages. The Real Estate Mortgage Investment Conduit (REMIC) was a form of CMO introduced after the Tax Reform Act of 1986. It provided tax preferences for issuers and investors and replaced the earlier CMOs. Fannie Mae and Freddie Mac were the two largest issuers of REMICs at the end of the 1980s.

Securities Business

Bear Stearns became a publicly owned company in 1985. A year later, Morgan Stanley sold 20 percent of its stock to the public for $254 million. Goldman Sachs was a partnership and, therefore, could not sell stock to the public. It began looking elsewhere for capital. Sumitomo Bank invested $500 million in Goldman Sachs in 1986. In 1992 and 1994, Goldman Sachs received additional capital totaling $500 million from Kamehameha Schools Bishop Estate, a Hawaiian educational trust. Other changes were underway at Goldman Sachs. The first woman and the first African-American became partners of the firm in 1986. Merrill Lynch was still the largest broker-dealer in terms of capital. Behind it were Salomon Brothers, Shearson Lehman Brothers, Dean Witter Financial Services Group, and Prudential-Bache Securities. Merrill Lynch had size, but its return on capital was low. Its former chairman, Don

Regan, who was then White House chief of staff, urged the company to merge. Instead, Merrill Lynch announced that it was selling its real estate brokerage units and certain other portions of its business. In 1987, Merrill Lynch sold its 25 percent ownership interest in Sun Hung Kai & Co., the Hong Kong securities broker-dealer. Merrill had acquired that investment five years earlier. Later, Merrill sold the Family Life Insurance Company that it had acquired in 1974 to the Financial Industries Corp.

The 1980s witnessed an enormous increase in cross-border securities trading. Foreign issuers were raising funds in the United States, while American issuers were raising funds abroad. Foreign investors purchased and sold about $25 billion of United States stocks in 1975. That number jumped to over $480 billion by 1987. United States investors increased their transactions in foreign stocks from $15 billion to $220 billion between 1982 and 1989. It was estimated that global trading volume was $640 billion a day in 1989.

In 1985, Merrill Lynch became the first United States brokerage firm to become a member of the Tokyo Stock Exchange. The London market opened itself up to competition after a report was submitted to Parliament by the Department of Trade and Industry, the successor to the Board of Trade that had administered the American colonies. That report resulted in the "Big Bang," the unfixing of commissions in the London market, in 1986. The reforms allowed firms in London to act as both brokers and dealers. Significant differences remained between the London and United States markets. In England, most corporations raised additional capital by making a "rights" offering to existing shareholders. This method was used even before the settlement of the colonies in America and was thought to be desirable because it protected the preemptive rights of existing shareholders. In contrast, after the turn of the twentieth century, new offerings in the United States by an existing corporation were usually made without such rights for existing shareholders.

The "emerging markets" in the lesser developed countries were becoming a medium for investment and speculation. A speculative boom occurred in Kuwait in the early 1980s that was financed in substantial part by the widespread use of postdated checks. By 1982, over $90 billion in postdated checks was outstanding. One employee in the passport office issued postdated checks for a total of $14 billion. The bubble shattered when a speculator asked for her check to be cashed. A default occurred and the speculative boom collapsed. International markets posed other dangers. The Rothschilds's bank in France was nationalized by the socialist government in 1981. The bank's owners were paid $70 million as compensation, which the Rothschilds claimed was less than the cost of the bank's building. The Bank of England had to rescue Johnson Matthey, a large trading firm. The tin market collapsed in London in 1985, with losses of $1 billion. Naji Nahas, who had assisted the Hunts in their efforts to corner the silver market in 1980, retreated to Brazil, where he engaged in a price-fixing scheme that nearly wrecked the Rio de Janeiro stock exchange in 1989. Nahas was convicted of criminal violations and sentenced to twenty-four years in jail in Brazil. He then disappeared.

A study conducted by the Fed in 1984 questioned whether federal regulation of margin for securities was still needed. An abuse connected with margin requirements continued to be of concern. These activities, which are referred to as "free riding," involved the purchase of stock with little or no money down. If the stock increased in value, the investor kept the profits. If the stock went down, the free rider defaulted, and the brokerage firm was stuck with a loss. In one free riding scheme, $3 million of stock was purchased for a company that was thought to be the subject of a takeover effort. Twenty-seven accounts were used at seven different broker-dealers to carry out this scam.

Penny Stocks

Penny stock sales increased in the 1980s. Their promotion was the subject of fraudulent boiler room sales operations. Some penny stock issues were known as "blank check" and "blind pool" offerings. These were offerings in which the company had no business plans or operations, but was simply raising funds to acquire some unidentified asset or to invest in some undisclosed opportunity. Such plans harked back to the days of the South Sea Bubble. By 1990, some 70 percent of all penny stock issues were blank check offerings. Between 1987 and 1990, the NASD brought some 250 enforcement cases against penny stock dealers. Several states created penny stock task forces to prosecute fraudulent operations. In October of 1988, the SEC established a Penny Stock Task Force to increase enforcement actions against fraudulent penny stock operators. The SEC adopted a rule that imposed a suitability standard for penny stock sales.

In the 1980s massive penny stock frauds were carried out by Blinder Robinson, the country's largest penny stock dealer. It was selling securities in blind pools. Blinder Robinson came under a long-term attack by the SEC and eventually failed. Customer claims totaled $180 million. The leader of the firm, Meyer Blinder, was sent to prison for over three years. The Justice Department assisted the SEC by instituting criminal actions against some of the other large penny stock firms, including F.D. Roberts Securities and Monarch Funding Corp. The SEC filed an enforcement action against First Jersey Securities and its flamboyant owner, Robert Brennan. That firm was one of the larger penny stock dealers, with 35 offices, 1,200 brokers, and over 500,000 customers. First Jersey Securities acted as an underwriter for many new issues, but most of its revenues came from trading those securities for its own account. First Jersey sold securities it had underwritten to customers and then repurchased the same securities at a slightly higher price. The firm then sold those securities through other branch offices to new customers at significantly higher prices. The firm would split offerings into components—that is, the offerings often included shares of stock and warrants. It would sell the stocks and warrants separately at about twice the price that it had paid the customers from whom the units were purchased. First Jersey closed in 1987 after a bloody fight with the SEC, but litigation continued for another decade.

The Securities Enforcement Remedies and Penny Stock Reform Act of 1990 strengthened the SEC's enforcement powers. The SEC was given the authority to impose civil monetary penalties, to issue cease and desist orders, and to seek authority from federal courts to bar individuals from acting as officers or directors of a publicly traded company where they engaged in violative activities. The SEC adopted rules under that act that required firms to approve customer accounts for trading in penny stocks, and special suitability requirements were imposed. A risk disclosure statement containing warnings on the speculative nature of penny stocks had to be provided to customers in a format specified by the SEC. Other disclosures were required, and limitations were placed on blank check offerings. The penny stock rules did not apply to a brokerage firm unless it conducted a specified amount of its business in penny stocks. The penny stock rules were actually something of a misnomer, because the SEC defined a penny stock as a security whose value was less than $5, if it was issued by a small company and was not traded on an exchange or actively quoted on NASDAQ. The number of penny stock operators declined, for a time, after the implementation of this regulation, but they would return with a vengeance at the end of the century.

Chapter 3

Finance Falters

1 The Stock Market Crash of 1987

New Wave Finance

Derivatives in the form of options and futures contracts were playing a larger role in the securities markets in the 1980s. Trading volume in commodity futures contracts increased from less than 19 million in 1972 to over 100 million in 1982. By the following year, financial futures trading volume exceeded that of the traditional agricultural futures contracts. Trading in securities options was growing as well. Volume on the option exchanges would exceed 300 million contracts by 1987. Those exchanges, particularly the Chicago Board Options Exchange (CBOE), were in intense competition with the futures markets, as both began to trade in similar products, such as options and futures on interest rate instruments and on stock indexes. Institutional trading continued its growth. Only 10 percent of trading on the stock markets was conducted by individuals in 1987. This was a one-third drop from the 1970s. Modern portfolio theory continued to gain currency. It posited that stock prices depended on new information in an "efficient market" and that this fact made stock prices unpredictable. It was claimed that market prices were as predictable as a "random walk" down Wall Street. This meant that investors, no matter how astute they might be, could not outperform the overall market by picking individual securities.

Meltdown Concerns

Modern portfolio theory encouraged institutional investors to diversify their portfolios to reflect overall market performance, as represented by broad-based market indexes such as the Standard & Poors (S&P) 500. This was "passive" investing. In 1986, over $100 billion was managed in such a manner. Portfolio diversification increased interest in stock index futures contracts. Those contracts allowed money managers to hedge their portfolios against price drops in the same way that soybean farmers hedged their crop prices. "Portfolio insurance" was the term given to hedges that used stock index futures as a part of the portfolio's risk management strategies. Portfolio insurance followed the market rather than seeking to anticipate market movements.

"Asset allocation" was popular on Wall Street. Portfolio managers allocated assets among stocks, bonds, and other investments. These portfolios would be rebalanced periodically in anticipation of market events. Such strategies were aided by futures and options, which allowed money managers to make rapid shifts in exposure when short-term market movements were anticipated. Before the advent of these derivative instruments, commission costs and other considerations made it simply too expensive and too difficult to make such shifts with any frequency. "Dynamic hedging" was another trading strategy employed by the institutions to take advantage of the flexibility of financial futures and options. This technique used computer-based programs that allocated assets in a portfolio among equities, fixed income instruments, and other investments. Futures and options contracts were used to facilitate or to hedge changes and to anticipate market movements. "Program" trading was another trading methodology made popular by stock index futures and options. Such trading involved the use of computerized trading programs with enormous databases to analyze market performance and predict future market movements. These programs varied in their complexity and market approach, but they were designed to signal when institutions should buy or sell futures contracts because of impending changes in market conditions.

"Index arbitrage" trading between the futures and stock markets became popular. Arbitrageurs traded back and forth between stock index derivatives and baskets of stock that contained the stocks in the derivative index. The index arbitrageur sought to profit from price disparities between the index futures, index options, and the baskets of stock that underlined those indexes. The arbitrageur would buy the index and sell the basket of stocks (or vice versa) when prices were out of alignment. To facilitate this trading, the New York Stock Exchange (NYSE) began offering a basket of securities that included all 500 stocks in the S&P's index. Customized stock baskets could be arranged. The baskets traded on the NYSE were not executed under the specialist system. Instead, competitive basket market makers operating upstairs conducted these trades at computer terminals.

The use of program trading and index arbitrage gave rise to concern about the "cascade scenario." Most of the program traders used computer-based signals to guide their trading, and these programs shared a common characteristic. When the market began to break sharply, these programs issued signals to sell orders. The amount of selling increased under those programs, if the market continued to drop. This raised concerns of a self-fulfilling prophecy in which the market would be continually forced downward as more and more sell orders were entered by program traders. The NYSE conducted a study of program trading and concluded that the possibility of such a "meltdown" was a real threat to the market.[1] Program trading and index arbitrage were also thought to be adding volatility to the market. The "triple witching hour," which was the common expiration date for certain equity options, stock index futures, and stock index options, became infamous for sharp and rapid price fluctuations and heavy trading as traders scurried to cover their positions.

The instability in the market raised governmental concerns. A joint study conducted by the Commodity Futures Trading Commission (CFTC), the Securities and Exchange Commission (SEC), the Federal Reserve Board, and the Department of the Treasury concluded that index arbitrage trading was causing price aberrations and that regulation was needed. The government's concerns were eventually alleviated by separating expiration times and by requiring orders for certain transactions to be placed before the opening of trading on triple witching day and thirty minutes before the close. Market volatility was becoming a science. The capital asset pricing model was becoming a popular tool to analyze the value of stocks. It assumed that investors required higher returns for riskier investments. The model divided risk into alpha, which was specific to the company, and beta, which was the overall risk from the stock market. Beta measured the volatility of a particular company's stock as it reacted to market movements. A stock with a beta of 1.0 reacted with the same volatility as the rest of the market, while a beta of 1.2 was more volatile and 1.5 was even more volatile.

The Dow Jones Industrial Average rose from 777 to 1,896 between August of 1982 and December of 1986. Severe market volatility was experienced on September 11 and 12, 1986. The Dow dropped 62 points on a single day in December of 1986, and more market volatility was experienced on January 23, 1987. The Dow first hit 2,000 in January of 1987. Favorable economic news was pushing up the market. Inflation was less than 2 percent by 1986, after Volcker's strong monetary medicine. Oil prices began dropping sharply in 1986. These events and the upward rise in the market increased the economic health of Americans. In 1987, the stock market "accounted for approximately $3.2 trillion worth of household wealth."[2] Stock market prices continued to increase until August of 1987, when the Dow Jones Industrial Average reached 2,722. The index then began to drop, falling by some 1,000 points during a two-month period. That market reverse culminated in one of the most memorable events in the history of the securities markets—the stock market crash of 1987. During that crash, the Dow Jones Industrial Average fell by nearly one-third, which caused a loss in equity values in excess of $1 trillion.

The Market Crash

On October 14, 1987, the "U.S. equity market began the most severe one week decline in its history."[3] On that day, the Dow Jones Industrial Average dropped by ninety-five points on volume of 200 million shares. Institutions were selling stocks in enormous amounts, and that pressure drove the market down. On the following day, October 15, almost $100 million in stock baskets was sold as the market continued its decline. On October 16, 1987, the Dow dropped another 108 points. Contributing to that decline were four institutions that sold over $600 million worth of stock. Institutions in the futures markets sold the equivalent of another $200 billion in stock index futures contracts. On Monday, October 19, 1987, the Dow experienced a new historically high one-day decline on both a percentage basis and on the basis of the number of points that the Dow dropped—508.32 points. This was over 20 percent of the market's value. "More than $500 billion had evaporated on the stock market on this single nightmarish day."[4] This drop was almost twice the percentage drop of Black Thursday in October of 1929 and was "perhaps the worst day in the history of U. S. equity markets."[5] Trading volume was in excess of 600 million shares.

Trading was halted on October 19, 1987, in several stocks on the NYSE because of chaotic market conditions. Nevertheless, some $2 billion worth of shares traded in the first thirty minutes. Between 11:40 A.M. and 2:00 P.M., portfolio insurers sold approximately 10,000 futures contracts, which equaled $1.3 billion worth of stock. The Dow fell by almost 300 points in the last seventy-five minutes of trading. Portfolio insurers in both the stock and futures markets sold about $3.7 billion worth of securities on October 19, 1987. Four sellers accounted for $2.85 billion of sales. The markets almost broke down on October 19, 1987, and concerns were raised that the stock market crash of 1987 was becoming a repeat of the crash of 1929.

The CBOE had to suspend trading because NYSE specialists had ceased trading on some 80 percent of the stocks in the options index being traded at the CBOE. The Chicago Mercantile Exchange suspended trading for a time in the afternoon because the NYSE specialists were not functioning in many of the stocks in the S&P 500 Index. The market continued its fall until the afternoon, when several large corporations announced that they would purchase large amounts of their own stocks because prices were so low. The market was further buoyed by an announcement that the Fed would provide liquidity to the financial system to assure that the markets would continue to function. Liquidity was sorely needed. Margin calls were requiring institutions to post billions of dollars within a very short period of time. Normally margin payments totaled some $100 million daily on the Chicago Mercantile Exchange. On October 16, 1987, almost $1 billion in margin calls were issued by the commodity exchanges. Another $11 billion were issued over the next four days. On October 19, 1987, $3.6 billion in margin calls were made by the clearinghouses for the futures exchanges. The Options Clearing Corporation (OCC) collected an additional $2 billion.

The size of these sums resulted in payment delays by two major clearinghouse members. Funds were received at the NYSE clearinghouse late. An emergency capital infusion was needed for the OCC. Clearing members of the exchanges were dependent on commercial bank loans to meet their intraday margin calls. Banks delayed providing credit during the crash until they could determine the financial condition of their clearing member borrowers. The banks were further concerned with the stability of the clearinghouses and began to limit loans. It was then that the Fed stepped in to encourage the banks to continue to make loans and to otherwise assure liquidity. Before that announcement, the financial markets had "approached breakdown" because of a disconnection between the futures and stock markets. On October 19 and October 20, 1987, daily trading volume exceeded 600 million shares on the NYSE, which was then three times the average daily volume of the exchange. Stock clearing corporations in the United States processed over $100 billion in stocks during the stock market crash of 1987.

The Aftermath

The market soon recovered after the 1987 crash, but another two years would pass before the pre-1987 crash level would be reached again. Some adverse effects were experienced from the crash, including a sharp decrease in options trading volume. That decline forced the CBOE to discharge more than 100 employees. Thousands of brokerage firm employees were laid off. E.F. Hutton received its death blow and had to be sold to Shearson Lehman Brothers. The purchase price was about $1 billion. Charles Schwab & Co. announced a $22 million fourth-quarter loss because of the default of a customer on S&P index put options. First Options of Chicago, a clearing firm that had been acquired by Continental Illinois National Bank and Trust Company in 1986, was stung by the crash. In order to save this subsidiary, Continental Illinois provided it with an unsecured loan of $130 million, even though this violated the bank's funding limits. The loan was made despite an explicit warning by the Comptroller of the Currency that the loan would violate the restrictions imposed on Continental Illinois when it acquired First Options. L.F. Rothschild & Co. almost failed as a result of the crash. Several firms also violated SEC net capital rules. Haas Securities Corporation failed, and several over-the-counter market firms ceased business because of inadequate capital. Fortunately, they were small firms that did not pose a threat to the system. Nevertheless, the Securities Investor Protection Corporation (SIPC) increased assessments against broker-dealers in order to raise its reserve fund to $1 billion.

The causes of the stock market crash of 1987 were uncertain, but a merchandise trade deficit was largely suspected. A proposal by the House Ways and Means Committee to eliminate tax benefits associated with the financing of corporate takeovers was thought to have further destabilized the market. Those events, however, at least in retrospect, seem to have been too minor to have caused such a sudden drop. A presidential commission was formed to study the crash and to recommend legislative measures to prevent such an occurrence in the future. This commission was headed by Nicholas Brady, the head of Dillon Read and later Secretary of the Treasury. The Brady Commission found that the stock and future markets had become interrelated because of the creation and popularity of stock index contracts. It concluded that the events on October 20, 1987, were caused in substantial part because the two markets had become disconnected.

Numerous reports were published by the SEC, the CFTC, and other entities that sought in one way or another to explain this event. Some reports on the market crash charged that the drop in prices in October of 1987 was amplified by program trading and the leverage available from futures contracts. The SEC's study found that the futures markets had created an alternative "synthetic" stock market and that futures prices often led stock prices. The SEC asserted that the less regulated futures market had encouraged trading and that volatility in the markets was increasing. The futures markets had become the market of choice for many institutions that were trading actively. That was a powerful choice. By 1988, financial institutions held over $5 trillion in investments. The SEC staff found in 1988 that some 25 percent of institutional trading involved program trading. The CFTC's report on the stock market crash of 1987 noted that no futures commission merchants failed during this crisis, although one major clearing firm did stop clearing for traders on the Chicago Mercantile Exchange after the crash. Clearing mechanisms in the futures markets operated effectively, despite the large cash flows generated by margin calls. No futures market had to close because of margin or collection problems. Concern was raised that price manipulation occurred on October 20, 1987, in an index futures contract on the Chicago Board of Trade. The CFTC could not establish that there were such violations.

Brady Commission

Meanwhile, the Brady Commission was focusing on measures that could prevent a recurrence of the crash. The Chicago Mercantile Exchange (CME) had imposed limits on the maximum of contracts that hedgers and arbitrageurs could hold, as well as speculators. The CME additionally required hedgers to spread their sales out during the day. This "bracket rationing" reduced the concentration of sell orders hitting the market. The Brady Commission considered those restrictions, but concluded that "circuit breakers" would be a better way to curb market panics. Circuit breakers establish price limits on trading that effectively restrict or halt trading on the stock exchanges and the futures markets when prices fluctuate by specified amounts. Such price limits had been used for many years on the commodity exchanges. They allowed traders an opportunity to meet margin calls. It was thought that circuit breakers in the stock market would provide traders on the NYSE time to absorb market information and to avoid panic.

The Brady Commission made other recommendations. It concluded that intermarket coordination of regulation was needed. The Brady Commission was concerned that coordination among the regulators had not worked during the stock market crash of 1987. It proposed that one agency be allowed to oversee intermarket regulation of margin requirements, circuit breakers, clearing and credit mechanisms, and information systems. The Brady Commission was of the view that the Fed should be given that overall authority. That recommendation was overshadowed by a renewal of the battle between the CFTC and the SEC over jurisdiction. That fight consisted of finger-pointing over the causes of the crash. The SEC again sought regulatory authority over index futures contracts, as well as other futures-related products that involved securities. The SEC asserted that its lack of control over futures indexes was endangering the stock market. The SEC was itself, however, split on this issue. The SEC and the Treasury Department wanted the Fed to impose tougher margin requirements. Margin requirements were vested in the control of the commodity exchanges and not the Fed. Using margins to control speculation would change the traditional role of futures margins that served only as a mechanism to protect the exchange clearinghouses.

In March of 1988, President Reagan established a Working Group on Financial Markets composed of the various regulatory agencies involved in the markets. Like the Brady Commission, the working group sought the adoption of circuit breaker mechanisms as a means to prevent market panics. The working group recommended a trading halt for a specific period when the Dow Jones Industrial Average fell a designated amount. This would be followed by another closing if the Dow Jones Industrial Average continued to drop after trading was reopened following the first circuit breaker. Such circuit breakers were subsequently implemented. These were basically coordinated halts in trading between the futures exchanges and the stock exchanges. The presidential working group was split on the margin issue. The result was a somewhat nonsensical compromise in which the Federal Reserve Board was given oversight authority over the exchanges' futures margins. It ceded that authority to the CFTC which, in turn, deferred to the exchanges. In short, nothing was changed.

Securities Market Problems

The stock market crash of 1987 exposed a weakness in the securities markets. Market makers were unable to respond to the extreme price movements and high volume experienced during that event. Specialists and over-the-counter dealers failed to provide liquidity during the most intense periods of the crash. A number of investors found themselves frozen out as the market was dropping. A hotline set up for complaints received 6,700 calls from distraught investors. They had reason to complain. Investors lost some $450 million in the markets during the crash. The Brady Commission found that the specialists on the NYSE had not acted to stem the market break in October of 1987. The specialists were net sellers and in many cases contributed to the market decline. In June of 1988, specialist capital requirements were increased to make sure that they could perform during market breaks. Questions continued to be raised whether even those increased requirements were adequate to assure that specialists would be able to meet their obligations to stabilize the market in times of crisis. The SEC concluded that the over-the-counter (OTC) market had not performed satisfactorily during the stock market crash of 1987. A record number of transactions were executed in that market and, even though the specialists had halted trading in many stocks, most Nasdaq stocks continued trading. Nevertheless, volume was restricted as many Nasdaq market makers "either withdrew, ignored telephone calls, or only traded the 100-share minimum they were required to accept."[6]

The Nasdaq automated small order execution system (SOES) was jammed during the stock market crash of 1987. It was disabled by "locked" and "crossed" quotations—that is, bid quotes were equal to or higher than ask quotes. To cure this problem, the National Association of Securities Dealers (NASD) made SOES participation mandatory for all market makers in the more heavily traded National Market System stocks on Nasdaq. Orders in the system were to be executed even when quotations were locked. Most securities transactions were settled by the National Securities Clearing Corp. It was processing some 95 percent of all equities trading in the United States by 1990. The Brady Commission recommended a unified clearing system to centralize credit risk from exchange-traded financial derivatives. Some centralization was already present. The OCC settled all options that were traded on the national securities exchanges or reported on the Nasdaq. The commodity futures exchanges in Chicago, where the bulk of financial futures were traded, continued to use separate clearinghouses, but efforts to consolidate them would begin.

Congress authorized the SEC in 1990 to facilitate intermarket clearing and settlement of securities, securities options, futures contracts, and commodity options. The SEC was directed to coordinate with the CFTC and to consult with the Fed in that effort. This encouraged cross-margining programs among the securities and option markets. Such cross-margining allowed positions in one market to be used to offset risks from similar positions in other markets. Cross-margining reduced the amount of capital needed to carry offsetting positions. The CFTC was initially reluctant to allow cross-margining because of concerns that it could jeopardize clearing systems in the event of a large market crisis. However, the SEC was in favor of cross-margining, and the CFTC and the SEC eventually were able both to approve some cross-margining by industry professionals. Another fight broke out in 1988 between the SEC and the CFTC over Equity Index Participations (IPs) that were to be traded on the CBOE. An IP represented an interest in the current value of a portfolio of stocks. The SEC asserted that IPs were securities, but the Seventh Circuit Court of Appeals in Chicago ruled that these instruments were futures contracts that were subject to the exclusive jurisdiction of the CFTC. In another case, the Seventh Circuit required the SEC to reconsider its decision to allow certain firms to sell options on United States government securities without registering as a national securities exchange. The futures exchanges had fought that decision by the SEC, but the SEC refused to change its ruling on remand.

More Market Volatility

Market volatility was once again experienced on January 8, 1988, and on April 6 and 14, 1988. In June of 1989, Integrated Resources, a large issuer of junk bonds, defaulted on $1 billion of commercial paper. The failure of Southmark and Campeau Corp. raised further market concerns. A "minicrash" occurred in October of 1989 after a $6.75 billion leveraged buyout of United Airlines fell through. Citicorp and Chase Manhattan were to provide $3 billion of financing and issued "highly confident" letters that the rest of the financing could be obtained. In October of 1989, however, the banks stated that they could not syndicate some $4 billion needed to complete the leveraged buyout, and the deal collapsed. This caused a sharp drop in the market. "On October 13, 1989, the nation's securities markets experienced extraordinary price volatility, losing $190 billion in value, $160 billion of which was lost in the last 90 minutes."[7] The Dow Jones Industrial Average fell 191 points on October 13, 1989. On the following Monday, October 16, the Dow fell another 60 points. The market then began to rally. This price volatility was accompanied by large trading volume. During the last hour of trading on October 13, over 100 million shares were traded on the NYSE. On the following Monday, trading volume on the NYSE exceeded 400 million shares. Unlike in the 1987 stock market crash, selling transactions by institutional traders were relatively insignificant. The SEC and the CFTC again disagreed on the role of futures trading in this minicrash. The SEC staff concluded that index arbitrage and program trading had "significantly accelerated and exacerbated the market decline."[8] The SEC staff blamed this volatility on speculative and professional traders in the futures markets.

Futures Markets

Sixteen exchanges were licensed as contract markets to trade futures in the United States in the 1980s. They included the Chicago Board of Trade, the Chicago Mercantile Exchange, the New York Mercantile Exchange, the Commodity Exchange, the Coffee, Sugar and Cocoa Exchange, the New York Cotton Exchange, the New York Futures Exchange, the MidAmerica Commodity Exchange, the Kansas City Board of Trade, the Minneapolis Grain Exchange, the Chicago Rice & Cotton Exchange, the AMEX Commodities Exchange, the Philadelphia Board of Trade, the Pacific Futures Exchange, the Pacific Commodities Exchange, and the American Commodity Exchange. The number of futures contracts traded increased to over 260 million by 1989, up from 18 million in 1972. By 1990, over 60 percent of futures contracts were financial futures. Financial futures accounted for over three-quarters of the business of the Chicago Board of Trade and the Chicago Mercantile Exchange in 1990. The United States Treasury bond future was the most heavily traded futures contract.

In September of 1987, the Chicago Mercantile Exchange and Reuters disclosed plans to create a computerized trading system called Globex, or global exchange. The Chicago Board of Trade announced a competing product—Aurora—but the two exchanges eventually agreed to the joint development of Globex. Globex began trading in 1992, but it did not prove to be too successful. Trading on Globex was confined to trading after normal trading hours on the Chicago exchanges. That restriction was imposed because the exchange floor members did not want competition from Globex during regular hours. The Chicago Board of Trade withdrew from Globex in 1992.

Manipulation remained a matter of concern in the futures markets. In one case, the CFTC charged that an individual had attempted to manipulate the September 1986 orange juice futures contract in New York. This individual had taken a large position in orange juice well before the contracts called for delivery and did not substantially increase that position. The trader stood for delivery even though he had no use for the orange juice that was to be delivered. This caused a problem because the contract called for delivery in drums, while the market had changed and most deliveries were being made in bulk. The trader insisted upon delivery in drums so that he could redeliver on the exchange. This angered market participants, and the CFTC brought a manipulation case against this speculator and his brokerage firm. The charges of manipulation were subsequently dismissed.

A market emergency arose when soybean prices began to soar after a drought in 1988 reduced soybean stocks. By July of 1989, only some 12.5 million bushels of soybeans were available for delivery in Chicago. At that time, outstanding futures contracts could have required the delivery of over 40 million bushels of soybeans. A substantial portion of the long side of the July futures contracts, as well as a large amount of the deliverable supply of soybeans, was held by a single trader, Ferruzzi Finanziaria. This raised concerns that prices would be squeezed if Ferruzzi stood for delivery. The Chicago Board of Trade declared a market emergency and ordered Ferruzzi to liquidate over 20 million bushels of soybean futures contracts. This caused prices to drop, and a war broke out between Ferruzzi and the Chicago Board of Trade. Newspaper reports claimed that directors on the Chicago Board of Trade had held short positions at a time when the exchange was ordering the liquidation by Ferruzzi. The CFTC found no conflict of interest and concluded that the exchange's emergency action was necessary. Numerous private lawsuits filed after this action were eventually settled.

Stotler & Co., a large commodity futures firm in Chicago, failed in 1990.

Stotler's chairman was also the chairman of the Chicago Board of Trade. The firm became insolvent after several millions of dollars of funds were transferred to the parent company of the futures commission merchant. Commodity pools associated with the firm defaulted on several loans. The CFTC and the National Futures Association thereafter increased net capital requirements for futures commission merchants. In another contretemps, Thompson B. Sanders, a member of the Chicago Board of Trade, arranged for two individuals to visit the floor of that exchange in 1986. The visitors pretended to be traders. One was wearing a wig to conceal his identity. They began trading in the Treasury bond pit, one of the most active pits on the exchange. The conspirators planned to keep the trades they made if they were winners and to disappear if the trades were losers. They made $200,000 before officials were alerted to this activity. That was an embarrassing episode, but worse was on the way.

The Chicago Sting Operation

The *Chicago Tribune* revealed in 1989 that the FBI was conducting sting operations on the Chicago Board of Trade and the Chicago Mercantile Exchange. Undercover FBI agents purchased memberships on the exchanges and were operating on the floors as traders. The undercover agents maintained expensive apartments and joined exclusive health clubs in order to socialize with traders. The agents lost thousands of dollars trading while they were establishing their undercover roles. The agents tape-recorded their conversations on the floor with traders who were engaging in illegal trading activities. Forty-eight traders were subsequently indicted for that trading.

The Chicago sting operation was widely publicized, but it eventually failed to live up to the initial expectations that it would reveal the financial scandal of the century. Some 1,500 trades were involved in the indictments that flowed from the Chicago sting operations. Yet the amount of money at issue was relatively small, at least when compared to the insider trading activities being uncovered in the securities markets. The government undercut its own position of rectitude by engaging in questionable and heavy-handed tactics designed to coerce traders to implicate others and to plead guilty to criminal charges. The government had only mixed success at trial on the Chicago sting charges. Trials of traders in the Japanese yen and Swiss franc pits on the Chicago Mercantile Exchange resulted in hung juries on several charges, and there were some acquittals. In the end, however, most of the traders were either convicted or entered guilty pleas for lesser crimes.

The activities on the floors of the exchanges that were revealed by the Chicago sting operation included "edges," "leads," "matches," and "trading off" of customer orders. These terms described various forms of collusive activity by floor traders and floor brokers. Floor members were given advantages in these transactions so that they could be in a better position to profit from customer orders. Many of the rigged trades involved execution of customer orders at prices less favorable than current market quotations, which provided a profit to the trader given the order. These illegal trades created a bank of money that could be used to cover losses from errors or be kicked back to the floor members participating in the trades. Activities similar to those uncovered by the Chicago sting operation had been occurring on the exchanges for many years. A case brought in 1933 had uncovered such activities, but the government concluded at that time that it did not have jurisdiction to prosecute such conduct.

One target of concern in the Chicago sting operation was the so-called dual traders—that is, floor members who both trade for their own account and execute orders for customers. Dual trading provided an opportunity for fraud. Another issue raised by the Chicago sting operation was the use of broker associations. These were groups of individual brokers that filled customer orders by pooling their resources, revenues, and expenses. The concern was that this pooling arrangement would allow these brokers to engage in improper conduct. Following the Chicago sting operation, the Futures Trading Practices Act of 1992 was enacted. Among other things, this legislation required the CFTC to ban dual trading if an exchange's audit trail was not adequate or where dual trading was not needed to provide liquidity. Exchanges were required to increase their surveillance on the floor. Floor traders were required to register with the CFTC for the first time. Floor broker associations were subjected to increased regulation. More public representation was required on the boards of the exchanges. Ethics training was required for industry registrants, and penalties were increased. Fines of up to $500,000 for violations could be levied.

After the Chicago sting operation, the Chicago Board of Trade tried to develop a handheld computer that would allow brokers to time-stamp their orders immediately. The device was intended to provide an audit trail in order to satisfy CFTC concerns. This effort was later dropped. The CBOE was trying to develop a market maker terminal, a handheld computer that could record trade data by traders on the floor and provide an audit trail for executions. In the meantime, scandals continued. On July 26, 1990, short sales of some 2,000 contracts resulted in a sharp price break in the cocoa futures market. These orders were apparently placed by someone who misrepresented their own identity.

In 1990, false rumors concerning Iraqi troop movements after Iraq's invasion of Kuwait resulted in price increases of some 10 percent on the New York Mercantile Exchange. In 1991, market participants claimed that information from the weather service was being leaked to commodity futures traders in order to allow them to profit. A precious metals dealer in Rhode Island was used as a cover to launder some $500 million in drug money. In 1992, Anthony Catalfo, a trader, and Darrell Zimmerman, an instructor at the International Trading Institute, tried to corner the Treasury bond futures market during a thirty-minute period. The traders were buying Treasury bond puts and selling Treasury bond futures on a massive scale. Catalfo was convicted of wire fraud, but Zimmerman fled to Canada. Even worse was an episode in 1993 that involved a commodity broker who was convicted of killing a dissatisfied customer and his family with a crossbow.

2 The S&L Crisis and Banking Scandals

Billions of dollars were withdrawn from the S&Ls when interest rates rose in the 1970s. Interest rate ceilings prevented the thrifts from competing for funds at market rates, and the net worth of the S&Ls dropped from $32 billion in 1980 to $3.7 billion in 1982. One-third of the thrifts were insolvent or facing severe financial difficulties. In 1981 and 1982, the Federal Savings and Loan Insurance Corporation (FSLIC) paid $12 billion to depositors of failed thrifts. The S&L crisis revolved around the fact that most of the assets of the S&Ls were thirty-year fixed rate residential mortgages that yielded less than 9 percent. The mortgages were financed by short-term deposits with rates that increased from about 6.5 percent in 1978 to 11.4 percent in 1982. This resulted in a negative return for the S&Ls. In order to resolve this crisis, the Federal Home Loan Bank Board (FHLBB) encouraged healthy S&Ls to acquire thrifts that were failing. Competitive relief was provided by the Depository Institutions Deregulation and Monetary Control Act of 1980, which allowed the S&Ls to pay higher interest rates for their deposits. To ensure continued depositor trust, FSLIC insurance for thrift accounts was increased to $100,000 from $40,000.

Investment Restrictions Are Eased

A drop in interest rates in late 1982 eased the crisis for the S&Ls temporarily. The Depository Institutions Act of 1982 (the Garn-St. Germain Act) further aided the S&Ls by allowing them to invest up to 40 percent of their loans in nonresidential real estate, 30 percent in consumer loans, and up to 30 percent in equity investments. Congress thought that such investments would pay higher interest rates and restore profitability to the thrifts. The Garn-St. Germain Act allowed the thrifts to offer money market deposit accounts with no interest rate limitations. This slowed disintermediation and began attracting deposits back to the thrifts. The Garn-St. Germain Act encouraged interstate mergers of banks and S&Ls as a means to strengthen the thrifts. Deposit brokers assisted the S&Ls in their efforts to compete for funds. Large sums obtained from institutional investors by the deposit brokers were broken up into tranches in order to be fully insured by FSLIC. The funds were then placed by the brokers with the thrifts paying the highest interest rates. But, as was the case for commercial banks, brokered deposits represented hot money because it could be moved quickly as interest rates changed. This destabilized the deposit bases of the thrifts. The FHLBB had limited brokered deposits to 5 percent of an S&L's total deposits before 1980, but that rule was then eased.

The S&Ls could now attract more deposits by paying higher interest rates, but they needed to widen their investment base in order to offset that cost and increase their income. Thrifts were initially prohibited from making mortgages on property outside a 50-mile radius from their home office, but that limit was extended to 100 miles in 1960. In 1970, thrifts were allowed to lend statewide. Nationwide lending was permitted in 1983. Another problem was that the fixed rate loans on the books of the thrifts were still paying interest at rates lower than what the S&Ls were paying for deposits at market rates. This encouraged the S&Ls to lend at variable rates. The number of adjustable rate mortgages issued by thrifts increased dramatically in 1984. Home equity lines, which were usually adjustable rate loans, became popular. Interest on such loans was deductible by the homeowner, even if the purpose of the loan was for a purchase or investment unconnected with the home.

The thrift business still remained unprofitable. Increased deposits fostered the growth of thrift liabilities, which increased by 60 percent between 1983 and 1986, from $674 billion to $1.1 trillion. This continued the pressure on the S&Ls to broaden their search for investments that would provide a higher rate of return. The thrifts did so through service corporations that allowed them to engage in a wide range of activities. Unitary thrift holding companies were not restricted in their activities if they controlled only one savings association and if the thrift engaged primarily in housing-related activities. In May of 1982, the FHLBB authorized the creation of a holding company that was owned indirectly by thirty-four thrift institutions and the Kemper Group. This entity created a subsidiary called Invest to provide securities brokerage services to thrift customers. These operations were conducted at separate offices or booths within the thrift institutions. The individuals working in those offices were joint employees of Invest and the thrift where they were operating. Those brokers had to register with the SEC. By 1985, over 100 financial institutions were participating in the Invest program.

Disaster

Although the thrift industry was composed of over 3,000 institutions holding some $1 trillion in assets,[9] it was a declining industry. The easing of investment restrictions led the thrifts to conclude that the best way to regain profitability was to increase the spread between interest rates paid on insured depositor funds and the amount received from the investment of those funds. That was done by investing depositor funds into high-risk investments that offered a chance for a higher rate of return. State regulators encouraged such activity by loosening restrictions on the investment powers of thrifts. Two of the most aggressive states in that regard were California and Texas. The S&Ls went on a binge. The Vernon Savings Bank of Texas increased its assets from $82 million to $1.8 billion in a little more than a year. The Empire Savings Bank of Texas increased its deposits from $17 million in 1982 to $300 million in 1984. Charles Knapp's Financial Corporation of America increased its assets from $1.7 billion in 1980 to $5.8 billion in 1982 and then to $10.2 billion in 1983. The Beverly Hills Savings & Loan increased its assets from $600 million in 1981 to $2.8 billion in 1984. Much of this growth was funded by broker deposits that were invested in high-yield, high-risk investments. The S&Ls invested in shopping centers, large malls, resorts, commercial buildings, and other projects. Unfortunately, the thrift managers did not have experience with such investments, and they often abused customer deposits. Real estate was "flipped" from one S&L to another, and the price of the property increased with each sale. The so-called go-go thrifts of this era began investing in a broad range of speculative investments that included oil and drill operations and "windmill farms" that produced electricity. The S&Ls bought worthless assets from their own executives and cronies in what were called "trash-for-cash" deals.

California relaxed its restrictions to allow thrifts to invest in stock and debt instruments of corporations up to 25 percent of the thrift's gross capital. No more than 10 percent of the thrift's investments could be made in any one corporation. This opened the door for investments in so-called junk bonds by these thrifts. Indeed, the S&Ls became a favorite dumping ground for junk bonds, many of which were purchased from Drexel Burnham Lambert and Michael Milken. The S&Ls owned about 7 percent of outstanding junk bonds at one point. Those holdings were concentrated into a few large S&Ls. The Columbia Savings of Beverly Hills, California, in particular, helped finance various corporate raiders through junk bond purchases with insured deposits of customers. It would announce a loss of $591 million at the end of the 1980s.

Cracks in the profitability of the S&Ls continued to widen. In 1984, FSLIC had to pay out some $2.5 billion to depositors as a result of insolvencies of thrifts and institutions. By then, over 30 percent of all FSLIC-insured institutions were operating at a loss. Over 700 S&Ls became insolvent in 1985. The Financial Corporation of America (FCA) ran into difficulties during 1984 and 1985. It was the holding company for the American Savings and Loan Association, which was then the largest thrift institution in the United States. FCA had grown rapidly, but the SEC questioned its financial statements and required a restatement of its second-quarter earnings in 1984. That restatement showed a loss that exceeded $100 million. FCA posted a third-quarter loss of over $500 million. As these troubles surfaced, institutional investors withdrew $1.4 billion from the S&L. FCA turned to the FHLBB for assistance, receiving aid that totaled $3.3 billion within a few months.

On May 9, 1985, a run on deposits at state-insured thrifts in Maryland began after financial troubles surfaced at the Old Court Savings and Loan Association in Baltimore. Old Court had been making high-risk real estate development loans. Depositors were waiting in long lines to withdraw their money. Another depositor run began on Merritt Commercial Savings and Loan Association in Maryland because of an announcement that it was facing losses from its dealings with Bevill, Bresler & Schulman, the failed repo dealer. On May 14, 1985, Maryland governor Harry Hughes issued an executive order that limited withdrawals from the deposit accounts of state-insured thrifts to $1,000 a month. A special session of the legislature was called, and it required Maryland's large state-insured thrifts to qualify for federal deposit insurance, which stabilized the situation. The industry as a whole, however, continued to suffer losses. S&Ls lost some $7 billion in 1987. The crisis was exacerbated by a change in accounting standards that had allowed the S&Ls to mask the magnitude of their problems.

When real estate values collapsed at the end of the 1980s, all the problems that had been building in the S&Ls were exposed, and hundreds of S&Ls failed. A majority of the distressed thrift associations were in California and the Southwest, particularly Texas. Those failures were caused by many irresponsible investment activities. Vernon Savings and Loan Association in Texas had been one of the worst abusers of loosened restrictions. It invested in high-risk real estate projects by using funds obtained through deposit brokers. At first, Vernon was highly profitable, but then losses mounted. Members of its board of directors and management were later indicted for fraud. Enormous questionable expenditures were made on such pleasures as a beach house and personal travel. Don Dixon, one of Vernon's executives, took a two-week culinary tour of France at the S&L's expense, and he bought jets and other luxuries. When Vernon was taken over by the government, 96 percent of its loans were in default. Taxpayers were stuck with a bill of $1.3 billion.

American Diversified Savings Bank in California held over $1.1 billion in assets that were federally insured. Of those assets, $800 million were used to make worthless loans. The North American Savings and Loan Association failed in 1988. The individuals organizing this entity had sold properties through the S&L for $40 million that they had bought for $3.65 million. The American Savings & Loan Association in California, which was controlled by Charles Knapp, had $6.6 billion in mortgage-backed securities in its portfolio in 1984. It sustained a large loss on those securities when interest rates rose. Columbia Savings & Loan in California invested in $1.8 billion of risky mortgage-backed securities, and much of that S&L's income was derived from trading gains between 1982 and 1984. David Paul controlled the CenTrust Savings Bank in Miami. He bought $1.4 billion in junk bonds from Drexel Burnham and held vast amounts of unratable bonds. He spent $13 million on a painting and $8 million on a yacht. The Franklin Savings Association in Ottawa, Kansas, had begun an expansion program in 1981. In eight years, its deposits grew from $200 million to over $11 billion. Franklin acquired mortgage-backed securities, deep discount securities, reverse repurchase agreements, loan calls, put options, and strips. It acquired junk bonds with the deposits it solicited nationwide through brokered deposits. By 1989, Franklin could no longer be described as an S&L. It more resembled a securities trading firm. Federal regulators appointed a conservator for this institution when it failed as a result of losses.

The abuses by the managers of S&Ls were legendary. S&L executives hired prostitutes to entertain customers and bought Lear jets, extravagant homes, and expensive art, all paid for with S&L money. One S&L executive threw a $148,000 Christmas party for 500 friends. Another S&L employee renovated a house at a cost of over $1 million on her salary of $48,000. Neil Bush, the president's son, became known as the "poster boy of bunco banking" because of his association with the Silverado Savings & Loan Association in Colorado, which had engaged in numerous questionable activities. Silverado would cost taxpayers $1 billion when it was shut down. One of the most notorious individuals involved in the S&L scandal was Charles H. Keating Jr. He purchased the Lincoln Savings & Loan Association in Irvine, California, in 1984 with the help of junk bonds provided by Michael Milken. Keating then used Lincoln's assets to buy more junk bonds. He eventually purchased some $800 million of those instruments. Keating had Lincoln invest in numerous large-scale real estate projects that failed. Keating, nevertheless, paid himself and his family $34 million for his services. The failure of the Lincoln Savings & Loan cost taxpayers more than $3 billion. Several senators, the "Keating Five," were caught up in this scandal: Alan Cranston, Dennis DeConcini, Don Riegle, John Glenn, and John McCain. The senators received $1.3 million in campaign contributions from Keating and numerous freebies including vacation trips. The senators intervened with regulatory agencies to protect Keating. Senator McCain had to contend with the fallout from his involvement in this affair when he ran for president in the 2000 election. Two congressmen, Jim Wright and Tony Coelho, were criticized for their efforts to assist other S&Ls in avoiding regulatory requirements.

The disaster that followed the deregulation of the S&Ls was said to be "the greatest scandal in the history of American banking."[10] The FHLBB initially estimated that losses on insured deposits at the S&Ls would cost the government $15 billion. That estimate rose to $200 billion as more thrifts failed. Estimated losses increased to $500 billion and then to $1 trillion. The crisis in the thrift institutions was blamed on a number of factors, including defective deregulatory measures, poor performance by management, inadequate regulatory supervision, and fraud. Regulators estimated that 40 percent of the thrift failures were due to fraud or insider abuse. Some of the individuals charged with crimes were Vernon's Don Dixon and Edwin "Fast Eddie" McBirney, another S&L executive who abused his position. Charles Keating spent almost five years in jail before his conviction was overturned by a federal district court. He was returned to jail in January of 1998 by the court of appeals, but was released in February of 1998 after the district court set his convictions aside once again. The court of appeals, thereafter, refused to reinstate his conviction, and it reversed a $4.3 billion judgment against Keating that had been obtained by the government. By 1992, over 1,000 individuals had been charged with crimes in connection with S&L activities. Most of them were convicted.

Government Reaction

A congressional investigation concluded that the auditors for the failed S&Ls often did not adequately audit or report the financial condition and internal control problems of those institutions. The thrift failures were further blamed on the Reagan administration's policy of reducing government regulation. The S&Ls were allowed to cover up losses and to engage in a speculative spree through various accounting and regulatory changes that occurred in the 1980s as the result of calls for "deregulation." The hiring of bank examiners and efforts to regulate the thrifts were frustrated by those opposing regulation. The government's strategy in dealing with the early stages of the crisis was to change regulatory accounting principles that then basically overstated the capital in the industry by $9 billion. This reduction of capital reserves allowed the thrifts to grow explosively without increasing their capital base. At the same time, deregulation was letting them expand into riskier fields of investment.

After the S&L debacle, the government began tightening capital requirements. The government tried to impose those higher standards on institutions that had relied on earlier changes allowing greater capital recognition. This only worsened the situation. Despite these shortcomings, the S&L crisis was handled aggressively by the federal government when its magnitude was finally realized. The FDIC was assigned the responsibility of determining which thrifts were insolvent and whether they should be saved or liquidated. Some of the closures of S&Ls were said to be "exciting and dramatic, with features of a police raid."[11] When an institution was to be taken over, federal officials would typically seize the institution and send bank examiners to branches of the S&L wherever they were located.

In one highly publicized action, the Office of Thrift Supervision brought an enforcement action against Kaye, Scholer, Fierman, Hays & Handler, a large New York law firm. The government claimed that the law firm had made false and misleading statements in documents filed in connection with the firm's representation of Lincoln Savings & Loan, the S&L that was operated by Charles Keating. The Office of Thrift Supervision wanted $275 million in restitution from Kaye, Scholer, and the law firm's assets were frozen pending resolution of the litigation. This forced the law firm to agree to pay

$41 million in fines. The action was controversial because attorneys are not normally viewed as guilty of their clients' conduct. The government sued several other law and accounting firms in an effort to recover losses caused by the S&L scandal. Jones, Day, Reaves and Pogue paid $51 million and Paul Weiss, Rifkind, Wharton & Garrison paid about $40 million in settlements of charges in connection with their legal advice to thrifts. Accounting firms were forced to pay $800 million in attorney fees in 1992 alone to defend S&L cases. Ernst & Young paid settlements of $400 million, and Arthur Andersen paid $79 million.

The Competitive Equality Banking Act of 1987 authorized $10.8 billion to bail out FSLIC. This amount was totally inadequate. Over 1,000 S&Ls were closed down in 1988 and another 262 in 1989. The FSLIC fund was insolvent by over $50 billion. Congress passed the Financial Institutions Reform, Recovery and Enforcement Act in 1989 (FIRREA) to deal with the S&L crisis. FSLIC was replaced by the Savings Association Insurance Fund. The Federal Home Loan Bank Board was eliminated and replaced by the Office of Thrift Supervision in the Department of the Treasury. The FDIC was given responsibility for monitoring a restructured Bank Insurance Fund and a Savings Association Insurance Fund. Supervisory powers over S&Ls by bank regulators were expanded. Capital requirements for S&Ls were increased. Insurance premiums were raised. FIRREA reduced the investment powers of S&Ls. That legislation required 70 percent of a thrift's assets to be held in residential mortgages and mortgage-backed securities. It eliminated junk bonds from the 10 percent commercial business loan authority for federally chartered S&Ls. Junk bonds already owned by the S&Ls had to be sold within five years. This liquidation requirement resulted in a drop in the junk bond market. That had the effect of causing other financial institutions to reduce their junk bond holdings, which drove junk bond prices down even further. The junk bond market collapsed in October of 1989 after a proposed buyout of United Airlines failed. The Jim Walter Corporation, a KKR buyout, became bankrupt shortly afterwards, as did the Campeau Corporation and Integrated Resources. Drexel Burnham was unable to maintain a secondary market in junk bonds, which, along with its difficulties with the government, eventually undermined its credit, causing it to fail.

FIRREA

FIRREA appropriated an initial allocation of $50 billion to close down insolvent thrifts and pay off depositors. Funds were made available to encourage the acquisition of failed thrifts by other institutions. Such acquisitions were to be indemnified from losses caused by bad assets. FIRREA created the Resolution Trust Corporation (RTC), a wholly owned government corporation that was assigned the task of managing the liquidation of the failed S&Ls that could not be saved. The RTC assumed control of almost 700 failed institutions. It quickly became one of the largest managers of financial and real estate properties in the United States. The RTC sold the assets of the failed S&Ls through an army of lawyers, banks, insurance companies, and real estate brokers. By the end of 1990, the RTC had disposed of the assets of more than 340 insolvent S&Ls and received more than $110 billion from those sales. The RTC was still managing over $35 billion of assets in 1992. Many sales were made through imaginative techniques such as securitization, in which large amounts of commercial mortgages were pooled and sold to investors. By 1993, some $14 billion of commercial mortgages had been securitized by the RTC. The RTC was a qualified success. The final cost to American taxpayers for the S&L crisis proved to be much less than originally estimated. In 1997, the cost of the bailout of the thrifts to taxpayers was estimated to be $150 to $175 billion, but another estimate placed the figure as low as $91 billion, all of which were well below original estimates.

Congress created the Financing Corporation (FICO) to raise funds to finance the thrift bailout by issuing long-term bonds (FICO bonds). The interest on these bonds was to be paid by FDIC assessments on thrift associations. The thrift industry and the banks paid almost $800 million in annual interest on FICO bonds after their issuance. Later, the Deposit Insurance Funds Act of 1996 imposed a one-time assessment on insured deposits to increase the deposit insurance fund. In the meantime, failures and scandals continued. The CenTrust Savings Bank in Miami, Florida, failed in 1990 at a cost of some $2 billion to the government. Another thrift crisis occurred in Rhode Island in 1991 after the Rhode Island Share and Deposit Indemnity Corporation became bankrupt. It was the private insurer for state S&Ls in Rhode Island. Thrifts continued to fail. In 1991, 232 thrifts were liquidated.

The adoption of FIRREA caused many thrifts to convert from mutual ownership to stock companies in order to raise the increased capital requirements required by FIRREA. It was later claimed that many insiders had profited from these conversions to the detriment of the depositors who were the mutual owners. The stock was said to be underpriced in many of these conversions, and managers were buying more than their fair share of the underpriced shares. Because of criticisms, federal regulators toughened appraisal standards for conversions. Some other belated efforts by the government to close the barn door encountered difficulties. In April of 1999, a federal court judge ordered the federal government to pay Glendale Federal Bank the amount of $908.9 million. That bank was owned by Golden State Bancorp, which was controlled by Ronald Perelman. That judgment followed a Supreme Court decision that held that the government had improperly changed the accounting standards retroactively for thrift associations, causing them to incur large losses. It was estimated that the Supreme Court's ruling could add another $30 billion to the total cost of the banking crisis. An irony of the Supreme Court's decision was that several of the plaintiffs seeking damages for such claims were in prison for crimes involving the misuse of S&L funds. Golden

State Bancorp did not await collection from the government. It began selling litigation participation certificates that allowed investors to receive a portion of the expected award in these suits. Another S&L was issuing litigation participation certificates that were called contingent payment rights.

BCCI

The commercial banks were encountering difficulties. The Mellon Bank, which had earlier acquired the Girard Bank, recorded its first loss in history in 1987. During a five-year period between 1985 and 1990, more than 1,000 banks failed in the United States. Some 200 banks failed between 1991 and 1992. In total, between 1980 and 1992, more than 4,500 federally insured depository institutions failed. These institutions had assets of more than $630 billion. The loss to the FDIC was over $150 billion. By 1990, the FDIC insurance fund was insolvent and was required to borrow $70 billion to cover liabilities. The FDIC Improvement Act of 1991 provided additional funding for the FDIC. It increased the line of credit from the Treasury for bank insurance from $5 billion to $30 billion, and the FDIC was required to take corrective action against critically undercapitalized depositories. This legislation required risk-based deposit insurance premiums and imposed restrictions on the operations of banks that were not well capitalized.

Over $2 billion was expended to rescue the Bank of New England, and it was eventually taken over by Fleet Bank. Washington Bancorp, which owned the National Bank of Washington, D.C., failed. The Capital Bank of Boston was liquidated in December of 1990. The Bank of New England Corp. was the nation's third largest bank when it failed in January of 1991. Its closure was the result of commercial real estate loans that turned sour. The bank had lost $1.1 billion in 1989. Those losses worsened in 1990, and a run on the bank's deposits began. In three days, depositors withdrew over $1 billion. Federal regulators agreed to insure depositors above the $100,000 minimum in order to ease the crisis.

"On July 5, 1991, bank regulators in the United Kingdom, Luxembourg, Grand Cayman, the United States and other countries seized control of a Pakistani-founded, Abu Dhabi-owned, Luxembourg-chartered international bank called the Bank of Credit and Commerce, S.A. (Luxembourg) (BCCI)." BCCI was operating in over seventy countries. It had over 400 offices servicing 1.3 million customers and was the seventh largest privately owned bank in the world. In reality, BCCI was less a bank and more a giant criminal enterprise of bribery, fraud, and bad loans made to politicians, cronies, and individuals associated with the bank. One book's subtitle called it *The World's Most Corrupt Financial Empire*.[12]

BCCI was bribing government officials in several countries; it was supporting terrorism and arms trafficking and unlawful sale of nuclear technology. It was even managing prostitution and assisting in tax evasion, smuggling, illegal immigration, and illegal purchases of banks and real estate. The bank was a money laundering machine for drug barons and corrupt government officials. It had money laundering operations in Europe, Asia, Africa, and the Americas. Manuel Noriega, the Panamanian dictator, had used BCCI's offices in Tampa, Florida, to launder money. BCCI was fined $14 million for that conduct, and several BCCI employees were sent to prison. Massive losses in the commodity futures and options markets added to BCCI's problems. About $9.5 billion in funds were also lost or stolen from BCCI. BCCI was fined $200 million by the Fed because it had illegally acquired stock in a United States bank holding company, First American Bankshares, and a California bank. The fine was later dropped so that BCCI could not escape criminal charges on double jeopardy grounds. Criminal charges involving that conduct were brought against Clark Clifford, a prominent Washington lawyer and presidential adviser. Another target was one of his assistants, Robert Altman, the husband of Linda Carter, who played Wonder Woman on TV. Clifford and Altman settled with the Fed by paying $5 million and agreeing not to participate in the banking industry without approval of the Fed. Altman was acquitted in a New York State court of criminal charges in 1993 in connection with the BCCI affair. Clifford was unable to be tried in the criminal case because of his health. The liquidators of BCCI announced in 1998 that depositors could expect to receive some fifty-five to sixty cents on the dollar on their deposits from this failed bank. They were assisted by a $1.9 billion contribution from Abu Dhabi, BCCI's home country.

International Regulation

The collapse of BCCI led to a tightening of regulation over international banks. Efforts had already been underway for some time to provide more regulatory control over international banks. The Basel Committee on Banking Supervision, which operated under the auspices of the Bank for International Settlements, drew up a supervising agreement, the Concordant, for international banks in 1976. It was revised in 1983 after the Banco Ambrosiano in Italy failed. A College of Supervisors, composed of bank regulators from Britain, Luxembourg, Spain, and Switzerland, was formed to coordinate regulation of BCCI in 1988. It proved to be inadequate, and another revision of the Concordant was undertaken to deal with the problems exposed by the BCCI debacle. The Basel Committee required supervision of banking structures on a consolidated basis by a designated regulatory authority. The Foreign Bank Supervision Enhancement Act of 1991 was another response to the BCCI debacle. It required banks to obtain the permission of the Fed before establishing a branch or agency or a commercial lending operation in the United States. This application would not be approved unless it was shown that the institution received comprehensive supervision or regulation on a consolidated basis in its home country. The foreign bank had to agree to provide information to the Fed, which was authorized to examine branches, agencies, and other offices of foreign banks. This legislation further required foreign banks to have federal deposit insurance for deposits under $100,000.

The Basel Committee was seeking a minimum capital standard for credit risks incurred by banks operating internationally. The need for improved banking capital standards was already being addressed in the United States. Previously, the determination of whether a bank had adequate capital lay with the president of the bank. In 1983, however, the International Lending Supervision Act authorized bank regulators to establish risk-based capital requirements for United States banks. That statute encouraged coordination among authorities regulating international banks. Capital requirements for banks and other institutions imposed by the government were justified on the grounds that these institutions were backed by taxpayers through deposit insurance. Federal banking regulators issued a proposal for public comment on risk-based capital requirements for United States banks in 1986. This was done in conjunction with the Bank of England. In 1987, the Basel Committee issued the Basel Accord, which proposed a risk-based capital system for banks. It was thought that such a system would provide some uniformity in the regulation of international banks. The Basel Committee adopted guidelines that used risk-weighted methods to assess the adequacy of bank capital.

In 1988, the Fed adopted capital requirements for commercial banks that established risk-based capital guidelines based on the risk profiles of banks' assets, including off balance sheet exposure. This required banks to maintain liquid capital in amounts that depended on the riskiness of the assets held in the banks' portfolios. A standard bank capital ratio of 8 percent was adopted. Half of those assets had to be "tier one" capital, consisting of equity and unrestricted cash reserves. The Basel Accord on capital standards was also adopted by the central banks of twelve countries. These new standards imposed some hardships on American banks. Citicorp did not have the capital to meet these requirements. It had to raise an additional $1 billion. The Japanese banks were particularly hard hit, but most major banks met those standards by 1995. The Bank for International Settlements found itself frustrated later in the century in developing uniform worldwide capital adequacy standards. The banking systems were just too complicated and varying in their structures.

Money Laundering

The BCCI debacle increased international efforts to combat money laundering. The 1986 Money Laundering Control Act had sought to prevent such conduct by criminalizing it. This legislation was strengthened in 1992 and 1994. Previously, the Bank Secrecy Act required financial institutions to report financial transactions involving currency and monetary instruments in amounts in excess of $10,000. The Bank Secrecy Act prohibited banks from issuing or selling bank checks, traveler's checks, cashier's checks, or money orders in amounts of $3,000 or more unless proper identification was obtained from the individual seeking such instruments. In 1992, the Department of the Treasury imposed a fine of almost $1 million against the First National Bank of Maryland for failure to file currency transaction reports. Previously, in the late 1980s, more than forty financial institutions were fined for Bank Secrecy Act reporting violations.

The Bank Secrecy Act's reporting requirement for cash transactions of more than $10,000 was widely avoided by "structuring" or "smurfing"—that is, breaking up cash transactions into amounts of less than $10,000 in order to avoid the reporting requirement. The Money Laundering Control Act prohibited such conduct and extended money laundering controls beyond mere currency transaction reports. Congress prohibited financial transactions that involved proceeds from specified criminal activity such as drug profits, bank fraud, export and customs violations, and mail and wire fraud. Banks were required to report suspicious financial activity. A series of international agreements were designed to curb international money laundering.

Other Concerns

Congress began regulating the use of brokered deposits in 1989. Insured depository institutions that were not well capitalized could no longer accept funds obtained through a deposit broker. FIRREA directed the Treasury Department to conduct a study of federal deposit insurance and other issues involving banking. That report was delivered in February of 1991. The Treasury concluded that overextended deposit insurance had removed market discipline from the banks in their investment activities. The Treasury Department recommended that federal deposit insurance be limited to protecting small unsophisticated savers. It recommended that insurance premiums be based on an institution's level of risk-based capital and other factors. This report further sought to reduce deposit coverage for multiple accounts held by the same individual and to eliminate pass-through coverage for deposits by professionally managed pension funds. Congress accepted some of these recommendations. It enacted legislation in 1991 that required the FDIC to establish risk-based assessment systems that would determine its premium assessments.

The Treasury Department report noted that the banks had been rendered less competitive by outdated legal restrictions and a fragmented regulatory system. Those deficiencies had a detrimental effect on banking in America. In addition to the cost to the public from widespread failures, American banks seemed to be losing their competitive position in the world. The Treasury report pointed out that in 1971 there were eight United States banks in the top twenty-five in the world. In 1991 there were none. The Treasury Department submitted legislative proposals in 1991 to rationalize bank regulation, but it did not seek a unified bank regulator. The Task Group on Regulation of Financial Services, headed by Vice President Bush, had concluded several years earlier that there was danger in concentrating regulatory authority into a single regulator for all of the banks. The task force report noted that no single government authority in America had ever been given regulatory authority over all banks. It recommended against such concentration. In any event, the Treasury proposals for banking regulatory reform were ignored. In 1993, the Clinton administration proposed the creation of a Federal Banking Commission, an independent agency that would regulate all FDIC-insured depository institutions and their holding companies and affiliates. This proposed new agency would combine the functions of the Comptroller of the Currency, the Federal Reserve Board, the FDIC, and the Office of Thrift Supervision. The Fed would continue to administer monetary policy. The states would still be the primary regulators for the banks that they chartered. No action was taken on this proposal.

3 Stock Markets and Brokers

Government Finance

Ronald Reagan was a popular president whose strong defense policies were followed by the collapse of communism and the Soviet Union. A boom in the American economy between 1982 and July 1990 furthered his popularity. Secretary of the Treasury Don Regan, the former head of Merrill Lynch, led a drive toward reducing taxes and simplifying the tax code. High taxes and complex tax regulations had encouraged the growth of an underground economy in which cash and barter were used to avoid paying taxes on as much as $500 billion in income. Congress responded with the Tax Reform Act of 1986, which simplified the tax code by restricting many personal deductions, as well as sharply reducing the use of tax shelters. At the same time, the number of tax brackets fell from over a dozen to just two. The minimum bracket was set at 15 percent, and the maximum rate was set at 28 percent, down from the previous top rate of 50 percent. Other financial reforms were enacted. The Social Security amendments of 1983 raised Social Security taxes and subjected Social Security distributions to taxation for high-income individuals. New federal employees were required to pay Social Security taxes, and the retirement age was increased to age sixty-seven. This increase was to be conducted over an extended period of time.

On the other side of the coin, President Reagan's application of "supply-side" economics was creating a staggering budget deficit. Government spending continued to increase under the Reagan administration. The Gramm-Rudman-Hollings Deficit Reduction Act of 1985 sought to balance the budget by 1991 through mandated spending cuts. The Gramm-Rudman targets were not met because of unrealistic assumptions about economic growth and government revenues. In 1990, Congress passed the Budget Enforcement Act, which placed caps on defense and discretionary spending. That effort was undercut by social entitlement program costs that outstripped those savings. The national debt stood at some $2.7 trillion when Reagan's successor, George Bush, assumed office in 1989. Interest payments on that debt were costing the country $200 billion a year.

Securities Business

More than 300 leveraged buyout transactions valued at over $75 billion were completed in 1989. The junk bond market had grown to about $200 billion, of which about 30 percent was held by insurance companies. Those statistics masked the fact that, by 1989, the default rate on junk bonds issued between 1977 and 1978 was over one-third. Junk bonds issued between 1978 and 1983 had default rates of up to 27 percent. Several of the highly leveraged companies that had been involved in the merger and acquisition frenzy of the 1980s were proving to be less than successful. Beatrice Foods, or what was left of it, ran into financial difficulties. Another KKR deal, Hillsborough Holdings, which had acquired Jim Walter Corp. for $2.4 billion, had to be placed in Chapter 11 bankruptcy. That firm failed after it was unable to restructure its junk bond debt because of asbestos litigation concerns. Other leveraged buyouts experiencing problems at the end of the 1980s were Revco and Southland Corp. Robert Campeau's empire remained mired in debt. He had purchased Allied Stores for $3.47 billion. Campeau paid an additional $6.6 billion for Federated Department Stores, which included Bloomingdales. Despite cost-cutting efforts, Federated was forced to file for bankruptcy in 1990. This touched off a crisis in the junk bond market, and the prices of those securities fell rapidly. The junk bonds issued by Allied Stores were trading at 30 percent of their face amount. First Boston Corporation was losing more than $100 million on Campeau junk bonds. By the end of 1989, the collapse in junk bond prices was general. Forty-seven issuers defaulted on junk bonds whose value was in excess of $7 billion.

The Milken problems and the collapse of the junk bond market had a devastating effect on Drexel Burnham Lambert's largest profit center. The firm's credit ratings dropped. Drexel then had some $3 billion in debt outstanding. Of that amount, about $700 million was borrowed through commercial paper. Drexel was forced to reduce its commercial paper borrowings to $575 million, which caused a liquidity crisis. At one point, Drexel had more than $400 million in short-term liabilities coming due within two weeks and another $330 million maturing in the following month. Drexel's cash problems were exacerbated by large bonus payments to its employees that were made to keep them on the payroll during the firm's troubles with the government. Drexel found itself unable to deal with this crisis. The firm filed for bankruptcy in February of 1990, ending the life of one of the most powerful forces on Wall Street. Before declaring bankruptcy, Drexel moved $200 million of capital out of the Drexel Burnham broker-dealer subsidiary into its parent company. Those transfers were made in order to replace the commercial paper funding that was no longer available. The movement of the money into the unregulated parent company caused regulators to question whether public customers of the broker-dealer subsidiary were being endangered. Although customer accounts at Drexel were eventually transferred without loss, the orderly liquidation of Drexel Burnham required the joint efforts of the New York Federal Reserve Bank, the Department of the Treasury, the Fed, the NYSE, and the SEC. Congress enacted the Market Reform Act of 1990 in response to the concerns raised by the transfer of capital by Drexel. That legislation granted the SEC additional regulatory authority over affiliates of broker-dealers.

"Gross revenues for the securities industry tripled between 1980 and 1986, reaching a high of $50 billion."[13] Revenue then flattened and began to decline in 1989. In the first six months of 1989, some $142 billion of securities offerings were made, but only some 4 percent were initial public offerings. Losses soon followed. In 1990, the combined losses of the seven largest firms in the securities industry were $678 million. This caused the brokerage firms to look for ways to cut costs. Before the stock market crash of 1987, 260,000 people were employed in the securities industry in New York. By November of 1990, some 55,000 of those employees had been laid off, and the industry was in a three-year recession. Shearson Lehman Hutton Holdings, Inc., the second largest brokerage firm in the country, laid off 800 employees and cut compensation for brokers. Continued difficulties at the firm resulted in the resignation of its chairman, Peter Cohen. Morgan Stanley & Co. announced that it was dismissing fifty of its 550 investment bankers in New York. First Boston Corp. was laying off employees. Broker income was dropping substantially. Broker-dealers faced a severe problem of overcapacity. Merrill Lynch cut 5,500 jobs between 1987 and 1989, reducing its work force to 40,500 employees, of which 12,600 were brokers. In January of 1990, Merrill Lynch & Co. sold its Canadian retail brokerage operations to Wood, Gundy, Inc., a securities firm in Toronto. Merrill Lynch reported a $362 million fourth-quarter loss for the year-end 1989. This included a one-time restructuring charge of $478 million for reshaping the firm to make it more competitive.

Market Participants

The number of individual shareholder accounts increased from 25 million in 1975 to over 50 million in 1990, which was about 20 percent of the population. The average account was $14,000 in 1990. This statistic disguised the fact that individual customers were rapidly leaving the stock market. Between 1985 and 1990, stock ownership by individuals decreased by more than one-third. Although individual investors still owned a substantial portion of stocks at the end of the 1980s, a large number of those stocks were held in trust accounts that were managed by banks. Individuals were net sellers of stock to the tune of about 3.5 million shares a day in 1989. Fewer than 20 percent of trades were being conducted by individual investors. As individual investors left the market, stock ownership by institutions increased. "Only four decades ago, ninety percent of U.S. equities were held by individuals. Today, more than half of all stock is controlled by institutions."[14] Institutional investors' assets increased from about $2 trillion in 1981 to over $5 trillion in 1988. Pension funds alone held some 27 percent of United States equity securities. Institutional investors were in a position to "increasingly dominate United States securities markets in terms of total assets and volume of trading (doing about 55 percent of all New York Stock Exchange trades)."[15] Institutions were involved as a party in about 39 percent of all over-the-counter stocks. Institutions dominated privately placed corporate securities, holding 87 percent of them by 1990.

This shift in the makeup of market participants posed a problem for broker-dealers. Although institutions often traded in great volume, they were able to negotiate commissions that were only a small percentage of the amounts charged under the previous regime of fixed commissions. Between 1970 and 1989, commission charges for institutional investors dropped on average from twenty-six to less than five cents per share. The result was that revenues from commissions for broker-dealers declined from about 65 percent of industry revenues in 1972 to about 40 percent in 1983 and to about 17 percent in 1989. Commissions made up over 50 percent of Merrill Lynch's total revenues in 1972 but only 15 percent by 1988. The exit of individual customers reduced profits from markups on securities when broker-dealers were operating as dealers in the over-the-counter market. Institutions could negotiate reduced markups, as well as lower commissions. Although "soft-dollar" commission arrangements were used to compensate broker-dealers for research and other services, commission revenue was in an overall state of decline. Broker-dealers began to change the nature of their business as commission revenues fell. One area of growth was proprietary trading. This was a risk-based activity that depended on the ability of the broker-dealers to obtain profits from trading the instruments they had previously sold. In 1982 and 1983, dealer inventories in the securities industry increased by about 20 percent, and revenue from dealer activities increased by a like amount. Risk-based revenue of brokerage firms provided about 60 percent of industry revenues in 1989. The amount of revenue derived by broker-dealers from trading increased from $1.3 billion in 1975 to over $22 billion in 1991.

Institutional investors were having an effect on the exchanges. The average size of a transaction on the NYSE was over 2,300 shares in 1990. Some 50 percent of NYSE volume involved large block trades of 10,000 or more shares. About 20 percent of the block trades conducted in 1988 were for more than 250,000 shares. By 1990, there were over 3,100 block trades per day on the NYSE that constituted more than 45 percent of the shares being traded. This was an increase from the average of nine block trades per day that accounted for 3 percent of daily volume in 1961. The institutional money managers had a human side, as demonstrated by a study conducted of their culture by two anthropologists. They discovered that these money managers had their own language, which was often couched in sports metaphors. The most pervasive cultural theme that the anthropologists discovered was the "need to manage responsibility and blame."[16] The money managers were strongly influenced by the history of their firms, and much of their business was based on personal relationships.

The National Institutional Delivery System was handling settlements between broker-dealers and institutional customers. It used the Depository Trust Company as a central processor. Some 6,500 institutions used this delivery system. By 1987, the majority of securities transactions were being settled by book-entry notations at the Depository Trust Company. The National Securities Clearing Corporation maintained minimum standards to screen out high-risk credit. Less than 70 percent of trading in the stocks listed on the NYSE occurred on that exchange in 1989. NYSE Rule 390 continued to prohibit exchange members from competing with exchange specialists by engaging in over-the-counter transactions in listed stocks or by crossing customer orders in-house and internalizing the order flow or acting as dealers in listed stocks. The rule was circumvented by block and international trades and fourth and third market transactions. The rule had been amended to apply only to stocks listed on the NYSE before April of 1979. Another loophole allowed member firms to make markets even for pre-1979 listed stocks in foreign over-the-counter markets after the NYSE closed. Members could additionally trade multiply listed stocks on domestic exchanges and foreign exchanges at any time.

Stock Trading

The value of stocks increased from $300 billion to $5.5 trillion between 1969 and 1990. Average daily trading volume on the NYSE increased from about 16 million shares in 1973 to 162 million shares in 1989. The NYSE was then listing over 1,700 securities, while the AMEX listed a little over half that amount. Five regional exchanges (the Midwest, Pacific, Philadelphia, Boston, and Cincinnati stock exchanges) served as alternative markets for NYSE-listed stocks and those listed on the AMEX. Those regional exchanges listed only a few of their own stocks. Orders for less than 2,099 shares of multiply listed shares were filled through the Intermarket Trading System, which linked the NYSE, the AMEX, the five regional exchanges, and the NASD's Computer Assisted Execution System. These smaller orders were filled at the best price quoted among those markets. As before, the Intermarket Trading System did not encourage specialists on the regional exchanges to make better prices through competition. Rather, they had only to match the best quoted price before executing an order.

By 1990, the third market was only accounting for about 3 percent of the volume in NYSE-listed stocks. Stiff competition for the exchanges came from fourth market trading such as that conducted by the Instinet electronic securities trading system, which had been acquired by Reuters in 1987. Instinet was responsible for the execution of some 13 million shares a day by 1990, which was about 13 percent of the daily volume of the New York Stock Exchange. Reuters, Quotron, Telerate, and other vendors provided execution services to institutions. A number of proprietary and institutional trading systems appeared. The NASD adopted a "portal" system to facilitate institutional trading. Jefferies & Co. created a Portfolio System for Institutional Trading (POSIT) that permitted institutional traders to trade entire portfolios through a computerized system. Citicorp and McGraw-Hill introduced an electronic commodity trading system called GEMCO, but it did not succeed.

An issue arose whether institutional trading systems were exchanges that had to be registered and regulated as such with the SEC. The SEC ruled that an exchange was a place where trading was centralized and where quotations and market making were conducted on a continuous basis. This allowed many electronic trading systems to operate without registration. These systems raised concern that a three-tier brokerage system was developing among large institutional customers, medium-sized institutional customers, and small retail customers. Such a system would result in inequities that would fall most heavily on the small investor.

The Cincinnati Stock Exchange was conducting fully automated trading by 1990. Orders for up to 2,099 shares could be executed through a computer. But volume on the exchange was very low, and it was moved to Chicago and became simply a computer at the CBOE. The NYSE resisted electronic systems for after-hours and remote-site trading. It did engage in some electronic trading experiments, but such efforts were "belated, cautious and tightly limited."[17] Nevertheless, in 1990, the NYSE announced that it would improve its systems in order to allow "continuous 24-hour trading by the year 2000."[18] As a first step, the NYSE began an after-hours trading session in 1991. Two "crossing sessions" allowed trading to continue until 5:15 P.M. The NYSE "Super DOT" system on the NYSE was handling 128,000 small orders a day. The system operated by pairing small market orders automatically with opposing orders before the opening of the market. After the opening, small orders were executed through the Intermarket Trading System in order to assure the best available price on any exchange. Larger orders continued to be handled by floor brokers on the NYSE. The floor brokers carried large orders to the specialist's post for execution. In 1976, Nasdaq volume was 31 percent of the NYSE volume. By 1990, Nasdaq volume had grown to 76 percent of NYSE volume. By then, there were about 5,000 actively traded OTC stocks on Nasdaq. Executions on Nasdaq securities continued to be carried out over the telephone. Executions reports had to be made public within ninety seconds after a trade for active stocks. Less actively traded stocks had to be reported only at the end of the day. By 1989, an average of over ten market makers were assigned to each security listed on Nasdaq. Orders for 1,000 shares or less in actively traded stocks were executed automatically through SOES.

Orders for stocks that were less actively traded were executed through SOES if they were less than 500 shares. Those orders were routed to the market maker with the best price displayed at the time of the order. Otherwise, quotes were usually only indications of interest, and large orders had to be negotiated over the telephone.

The Nasdaq Market

Considerable debate arose after the stock market crash of 1987 whether Nasdaq market makers should have greater obligations for making firm quotes. Many Nasdaq market makers had backed off quotes, refused to answer their phones, or simply withdrawn from the market during that crisis. To prevent such conduct, the NASD increased the obligations of market makers. They were required to participate in the market, and penalties were imposed for unexcused withdrawals. Market makers were no longer permitted to back off quotations. If an order was entered in SOES before a quote was changed, the market maker was required to execute the order at the quoted price up to the SOES limit. This gave rise to the so-called SOES bandits. These traders were "picking off" Nasdaq market makers by entering orders in the SOES system in response to market news before the market makers could react and change their quotes on Nasdaq. The SOES bandits would then close the order at a profit when the market maker updated the quote. The practice became so lucrative that SOES bandit schools were set up to teach traders how to pick off Nasdaq quotations. This, of course, led to much resentment on the part of the market makers.

Another concern raised by OTC market maker practices involved so-called payments for order flow. These were payments made by market makers to money managers or broker-dealers to direct customer orders to them for execution. The SEC began examining whether such practices were appropriate. It later required broker-dealers to disclose their order flow payment practices to customers. Broker-dealers also had to disclose whether orders could be executed at prices better than the best bid and offer. This latter requirement was a reference to the fact that broker-dealers could negotiate a price better than that quoted by the market makers in Nasdaq. This "price improvement" was often available where the broker-dealer was funneling a significant amount of business to a market maker.

The Nasdaq over-the-counter market was divided into two tiers. The first tier was the so-called National Market System (NMS). It included the most widely held and actively traded stocks. About 2,800 stocks initially qualified for NMS treatment on Nasdaq. There were another 1,700 or so Nasdaq securities that were not actively traded enough to qualify for NMS treatment. This second tier was called the Nasdaq SmallCap Market, and it consisted of securities issued by small and medium-sized companies. Another 40,000 illiquid OTC stocks were not quoted on Nasdaq. Before 1990, those stocks were still being quoted through the Pink Sheets, which was a hard copy commercial service that had provided quotations before the advent of the computer. In June of 1990, however, the NASD opened an electronic bulletin board that allowed dealers to post quotes or indications of interest for these less actively traded securities. Over 6,000 firms were members of the NASD in 1990. They had almost 30,000 branch offices. The discount brokers appeared to have peaked about 1983. Their number declined to about 100 by 1990 even though their commissions were two or three times less than the big brokerage firms. BankAmerica Corporation had sold Schwab back to Charles Schwab in 1987. Schwab paid less than $200 million for the repurchase. Six months later, Charles Schwab & Co. made a public offering for its securities for about $425 million. It then began an aggressive campaign to acquire small investors as customers. The larger brokerage firms competed with the discount brokers by providing more services to justify their higher commissions. Brokerage firms added personalized financial consulting services to attract customers, particularly wealthy customers. Concern was expressed that the brokerage firms had a conflict of interest in rendering this advice because they would be tempted to recommend products that paid high commissions, even if those products were unsuitable for the investors.

Managed Money

"Wrap" accounts were another way for full-service broker-dealers to expand their services to customers. These were simply securities accounts at a broker-dealer that were managed by outside portfolio managers. The portfolio manager made the investment decisions for the customer. The customer was charged a fee for that service and for the execution of the recommended transactions. Wrap fees were either set at a fixed amount or based on a percentage of the value of the client's portfolio under management. Some wrap account programs were criticized for providing little individualized investment advice. In that case, the funds could be treated as a mutual fund, raising the possibility that they might have to be registered as such with the SEC. The SEC required customers in wrap account programs to be provided with a brochure that described the program and the fees being charged. By 1993, some $90 billion was under management in wrap accounts. Related to the wrap accounts were "asset allocation" programs, in which broker-dealers advised clients on how to allocate their portfolio among various mutual funds. These programs sought to provide asset diversification, as well as to match the customers' investment objectives with those of various mutual funds. The growth of asset allocation programs was furthered by the increased popularity, number, and complexity of mutual funds.

The number of mutual funds increased from some 500 in 1980 to over 3,500 in 1992. Those investment companies held over $1.3 trillion in assets and were often organized into "complexes"—that is, large groups of mutual funds associated with common advisers that allowed switching among various funds with different investment strategies. Mutual funds offered investors a dizzying array of investment alternatives. An investor interested in fixed income securities could choose from funds that invested in, to name a few, money market funds (with subchoices of municipal, federal government, or mixed securities); municipal securities (with subchoices of short or long term, high or low yield, or from particular states); federal securities (with subchoices of short or long term or mortgage-backed pass-through or CMOs); corporate bonds (with subchoices that included high-yield, high-quality or convertible bonds); and global bond funds.

Investors in equities had an even broader choice of mutual funds. They could invest in indexed funds that were tied to a broad array of indexes; sector funds that focused on a particular business sector such as utilities, technology, or bio-medical research companies; option funds with varying strategies; growth funds; aggressive growth funds; contrarian funds that traded against popular strategies; international and global funds; emerging market funds holding securities from a number of lesser developed countries; balanced funds, which divided their assets between bonds and equities; flexible portfolio funds; and precious metals/gold funds.[19] Unit investment trust assets were available. They invested mostly in municipal securities, but also were formed with United States government securities, mortgage-backed securities, corporate bonds, preferred stock, and even equity securities. Vulture funds invested in failing companies. Goldman Sachs created one such fund in 1990. It was called the Water Street Corporate Recovery Fund.

Market Issues

One former blue-chip stock was taking a beating. The value of IBM stock dropped by $53 billion in 1992. Of that amount, $30 billion was lost in just two months. IBM laid off some 200,000 employees. The Japanese stock market boomed between 1984 and 1989. Nomura Securities earned almost $4 billion in 1987. Although share prices dropped in Japan in sympathy with the stock market crash of 1987 in the United States, the market in Japan recovered quickly and resumed its rise. But Japanese investors became reckless speculators, investing in questionable activities such as cold fusion and overpaying for large investments made in the United States and elsewhere. Japanese real estate prices more than doubled in a four-year period beginning in 1986. A bubble economy emerged. The Recruit Cosmos scandal occurred in 1988 in Japan after an Education Ministry official was given Recruit stock in exchange for favors. This scandal led to the resignation of Prime Minister Noboru Takeshita. The Bubble Lady in Japan, Nui Onoue, borrowed $23 billion on her restaurants that she invested in the stock market. This was many times the value of her property, and she used forged certificates of deposit as collateral for her trading. Onoue was later sentenced to twelve years in prison. These and other scandals undermined investor confidence, and the Japanese bubble burst. The Japanese economy fell into a recession that gave no appearance of ending at the close of the century. Many Japanese companies had used warrants to conduct their financing that could be exercised for common shares, usually at 5 percent above the market price of the shares upon issuance. Some $140 billion of warrants became worthless when the market collapsed.

The securities markets were undergoing changes as a result of an evolution toward a global economy with corporations and markets operating worldwide. American Depository Receipts (ADRs) were being sold to United States investors seeking investments in non–United States companies. Global Depository Receipts (GDRs) were used for securities sold to international investors, usually in Europe, as well as the United States. European Depository Receipts were another variation that was directed specifically at investors in Europe. The number of mutual funds whose objectives were to invest in international equities increased from twenty-five in 1985 to almost 150 by the end of 1991. By the middle of the 1980s, almost sixty exchanges were conducting securities trading in the emerging markets in the lesser developed countries. Those exchanges listed over 17,000 stocks and were attracting the interest of American investors. Many of the emerging markets had exciting prospects in the 1990s, but they were marked by up and down cycles in which prices would rapidly increase and then drop equally fast.

The growth of international trading raised new regulatory concerns. In November of 1988, the SEC issued a policy statement that described what it believed was necessary to create an international regulatory structure for securities trading. This included efficient systems for price quotations, order execution, settlement, disclosures, and regulatory requirements. The SEC began to encourage international offerings through a multijurisdictional disclosure system. Canada was the first participant in that system. The SEC adopted a regulation designed to provide more guidance and permit additional offerings of United States securities abroad without the necessity of complying with United States laws. The SEC adopted a rule designed to encourage institutional investors engaging in international offerings. The International Organization of Securities Commissions (IOSCO) was created to deal with international regulatory issues. It was a group of securities commissioners from numerous countries that would seek to be the securities counterpart to the Committee on Banking Regulation and Supervisory Practices at the Bank for International Settlements (the Basel Committee). International cooperation among regulators was not going to be an easy process. The SEC in particular refused to cede leadership to this organization.

Derivatives

The derivative exchanges in America continued their evolution. In October of 1990, the CBOE began trading long-term equity anticipation securities

(LEAPS), which were long-term options. These options had expiration dates of up to two and one half years. The CBOE developed "flex" options. Flex options allowed institutional investors to customize the terms of their options and to have extended option periods (up to five years). Flex options were a significant departure from the standardized options terms that had given rise to exchange-traded options. Another new twist were "capped" options that were exercised automatically when the cap price was reached. Those options were also exercisable during a period just before expiration. By 1993, options were being traded on over 1,000 securities. Options were traded on five exchanges in the United States and on thirty exchanges around the world. The CBOE remained the dominant exchange in equity options. In 1992, the CBOE began trading options on sector indexes. This included indexes in the banking, biotechnology, insurance, transportation, and other sectors. The CBOE was trading interest rate options, as well as options on the Standard & Poor's 100 and 500 stock indexes. The Philadelphia Stock Exchange (PHLX) continued as a center for trading in options on currencies, including options that were settled in currencies other than United States dollars. Another PHLX product was the index participation contract that paid a dividend and did not expire.

Some 200 million financial futures contracts were traded in the United States in 1989. By then, financial futures contracts accounted for the majority of all futures trading. Like the stock markets, the futures exchanges were dominated by institutions and wealthy individual traders. In 1992, some 75 percent of futures contracts were traded by commercial firms and professional traders. Program trading continued, but some brokerage firms stopped that activity temporarily after the 1987 crash and after the 1989 market break. Shearson Lehman Hutton was among the firms that announced that they would no longer engage in program trading after the 1987 crash. Later, after the market break in October of 1989, Shearson extended that prohibition to its customers' trading. Nevertheless, program trading still accounted for about 13 percent of volume on the New York Stock Exchange in 1990.

The commodity exchanges in America were losing market share to foreign markets. The Chicago exchanges were particularly hard hit by competition. Those exchanges had accounted for 50 percent of the volume of the world's futures transactions in 1987. Within ten years, that figure would drop to 25 percent. The Chicago Board of Trade made some effort to modernize its facilities to meet the competition. It created the Ceres Trading Limited Partnership to operate an electronic trading system for the exchange and to provide data services. Ceres controlled Chicago Board Brokers, which was established to operate an electronic market for United States Treasury securities repos.

Regulatory Structure

The growth of derivatives and the increasing consolidation of financial services gave rise to concerns whether the regulatory structure needed to be modified. The recurring conflicts between the SEC and the CFTC were hampering market development. Those two agencies continued to take radically different views on such issues as whether price volatility should be dampened and whether regulatory measures were needed to calm markets in stressful circumstances. The Fed was questioning its role in setting margins for stocks, and efforts were continuing to repeal Glass-Steagall Act restrictions on the securities activities of banks. After an economic summit held in Little Rock, Arkansas, by President-elect Bill Clinton in 1992, the Chicago Mercantile Exchange proposed a new regulatory model that would consolidate the regulation of all financial services into a single cabinet-level department. That exchange urged the creation of an organization that would subject financial products "to substantially equivalent regulation . . . so that economic competition, rather than jurisdictional barriers or differences in supervision, can determine which products and services can evolve in response to presently foreseeable and still-unperceived developments and challenges."[20] That proposal was stillborn.

An important legal development in the area of corporations was the enactment of statutes by several states that allowed the creation of the limited liability company (LLC). The LLC may be the successor to an 1892 German limited liability entity, the "GmbH," that originated around 1892. The LLC is essentially an incorporated partnership. Unlike a partnership, the LLC structure provided limited liability for its owners and managers. Wyoming enacted a limited liability company statute in 1977. It was followed by Florida and, thereafter, most other states. By the 1990s, the number of LLCs had exploded. These entities were becoming the business form of choice for many small start-up companies. The nature of this entity raised issues whether its ownership interests were securities that were subject to regulation under the federal securities laws. Not surprisingly, the SEC concluded that they were securities.

4 The Crisis in Derivatives

Hybrid Instruments

A new product line was developing while the CFTC and the SEC were fighting their turf battles. These were the so-called hybrid instruments or over-the-counter (OTC) derivatives, as they were later called. The new derivatives had elements of securities, futures, and options, but did not really fit the classical descriptions of any of those instruments. Although not new to finance, as witnessed by the Erlanger bonds of the Civil War era, hybrids began a fantastic period of growth in the 1980s. One of the first of the modern hybrids was a bond offered by the Sunshine Mining Company in 1980. These bonds were indexed to the price of silver. They promised to pay investors back their principal in dollars plus the greater of a fixed rate of interest or an amount based on increases, if any, in the price of a specified amount of silver. The interest rate paid on the Sunshine Mining bond was lower than the market rate for traditional bonds. The purchaser was willing to forgo a higher return because of the opportunity offered by the silver price alternative in the bond. That speculative feature was enhanced by the fact that silver prices had increased from $9 an ounce in 1979 to over $50 in 1980, before the market crashed.

The Sunshine Mining bond somehow escaped the CFTC's notice. Instead, it was registered with the SEC and sold as a traditional security. As the number of hybrids began to grow, however, the CFTC began considering whether these instruments were subject to its regulation. The CFTC staff concluded in one instance that "commodity certificates" were futures contracts where the holder was entitled to receive the prevailing price of a commodity unit or $1,000, whichever was greater. This meant that these instruments could be traded only on a contract market such as the Chicago Board of Trade. As a practical matter, the exchange trading requirement meant that the instruments could not be sold at all. The CFTC failed to challenge an issue of subordinated debentures that paid an annual rate of 10.5 percent with additional payments based upon increases in the price of natural gas. The CFTC later concluded that similar notes sold by the Standard Oil Company were subject to its jurisdiction. Those notes returned the purchaser's principal plus a premium that was based on increases in crude oil prices. The CFTC allowed the Standard Oil offering to go forward, but warned that in the future the CFTC would treat such offerings as subject to its jurisdiction. Nevertheless, commodity-linked bonds continued to be offered. Magma Copper made a public offering of over $200 million in copper-linked bonds. Interest on the bonds was set at 18 percent, but was to be reset quarterly based on changes in copper prices. In 1989, the Presidio Oil Company offered $100 million in bonds whose interest rates were linked to natural gas prices.

Swaps

Swaps had been used by governments to exchange currencies for some time, but their use spread to private dealers in the 1980s. One of the first of these swap transactions was conducted between IBM and the World Bank in 1981. The CFTC ignored these transactions entirely as they blossomed into a multitrillion dollar business. Swaps were popular because they allowed financial risks to be hedged and were useful for commercial reasons. Currencies swaps, for example, allowed international companies to exchange a currency they held in one of their operations abroad for United States dollars or some other currency needed for operations elsewhere in the world. In 1978, the Beneficial Financial Corporation engaged in a $10 million swap arrangement for English pounds that was to be carried out over a period of ten years. Interest rate swaps allowed counterparties to exchange fixed rate loan payments for adjustable rate loans. The swap concept spread to equity securities. "Equity swaps are swaps in which at least one leg is pegged to the return on a stock index."[21] The other side of the transaction may be pegged to a floating rate of interest or fixed or tied to a different stock index. The popularity of equity swaps was enhanced by favorable tax benefits. They allowed an institution holding securities to swap the return on the stock plus appreciation, which was effectively a sale of the stocks, but was not required to be reported as such for tax purposes. Swaps were also used to exchange commodities such as oil and jet fuel. Commodity indexes were swapped by bank affiliates, and debt for equity swaps were used. The United States government found itself in the derivatives market when it established a swap facility to support the peso after a Mexican presidential candidate was assassinated and that country's economy was threatened.

Swaps dealers sprang up to further this business. These were affiliates of banks and investment bankers that arranged the swaps and put counterparties together. These dealers established uniform contract provisions and worked out legal wrinkles through an organization they formed for that purpose—the International Swap Dealers Association. Citibank and other banks became heavily engaged in swaps. More new instruments were appearing. The CFTC allowed caps, floors, ceilings, and collars to be sold without subjecting them to the exchange trading requirement. The "cap" was created by the brokers to permit borrowers to protect themselves from interest rate increases by paying a maximum rate over the life of a variable rate loan. Under the terms of such "ceilings" and their counterpart "floors," the issuer of the contract agreed to pay the purchaser an amount equal to any increases in the adjustable rate, in the case of a ceiling. This effectively hedged the purchaser against the risk of increases in rates on the adjustable mortgage. The purchaser had to pay the dealer a fee for this cap. These contracts had elements of options or futures, and the dealers often hedged their own risks under the contracts by using options and futures that were traded on the regulated exchanges. Nevertheless, the CFTC did not require caps, floors, and ceilings to be traded on a contract market. The CFTC staff issued an interpretative letter stating that "collars" need not be traded on a contract market. These were combined ceilings and floors on interest rate fluctuations.

New Instruments

Financial engineering continued. During Margaret Thatcher's term as prime minister, England was using index gilt securities that were tied to an inflation-based index. That country had previously used "granny" bonds that were index-linked. Standby commitments were used in the 1980s. These were options contracts in United States government securities. The buyer of a standby commitment was acquiring a put option. The Student Loan Marketing Association (Sallie Mae) offered Multi-Currency Principal Exchange Rate Linked Securities (PERLS). Interest was paid on these notes semiannually in arrears, based on their face amount. Payment of principal on maturity was to be $1,000 plus a United States dollar equivalent of a specified amount of Australian dollars minus the United States dollar equivalent of a specified amount of Japanese yen. This was a play on changes in exchange rates among the Australian dollar, the United States dollar, and the Japanese yen. Unlike the return on a traditional bond, this formula could result in a loss of principal. The Westinghouse Electric Company was another issuer of PERLS. In one such offering, the principal payable on maturity was determined on the basis of United States dollar movements versus New Zealand dollars. Sallie Mae was offering reverse PERLS in 1988. Repayment was to be based on changes in exchange rates between the United States dollar and the Japanese yen. The holder of the certificate would receive more than the principal amount if the United States dollar appreciated against the yen. A lesser amount was received if the dollar depreciated. Ford Motor Credit Company was another issuer of reverse PERLS. It made one such offering in 1987 for $100 million. Principal was to be paid based on the exchange rate between the Japanese yen and the United States dollar.

The Ford Motor Credit Company offered another derivative instrument in the form of currency exchange warrants. These warrants entitled the holder to receive from the Ford Motor Credit Company the right to purchase a specified amount of United States dollars at a specified yen value. Goldman Sachs & Co. was offering foreign currency indexed commercial paper. CMOs were still being sold. Citicorp Securities Markets, Inc., offered Cititrust I collateralized mortgage obligations in March of 1987 in the amount of over $150 million. These CMOs were divided into several tranches. Zero coupon bonds became popular in the 1980s. These were simply long-term discount bonds that sold at steep discount because they paid no coupon interest over their life. Zero coupon bonds were not new. The widely popular Series E Savings Bonds sold during World War II were actually zero coupon bonds. A problem that developed with the zero coupon bonds being offered by corporations in the 1980s was that the Internal Revenue Service began taxing their holders annually on imputed interest payments from the discount even though no interest payments were actually being received. This "original issue discount" (OID) was not taxed if the zero coupon bond was a municipal security or if it was held in a retirement account. This limited the usefulness of those instruments to such tax-advantaged situations.

A new financial instrument that appeared in the 1980s was "unbundled stock units." These were simply common stocks that were broken up into their component parts. In one such offering, the American Express Company agreed to exchange 60 million of its common shares for unbundled stock units. Each unbundled stock unit consisted of three securities; a $75 principal amount of Base Yield Bonds (long-term bonds), one Incremental Dividend Preferred share (IDP) and one Equity Appreciation Certificate (EAC). The attributes of the common shares were separated among the bond, the IDP, and the EAC. These instruments were separately tradable, but their use was blocked by regulators.

General Motors Corp. (GM) was undergoing a metamorphosis as its lock on market share eroded from foreign competition. GM tried to diversify by acquiring Electronic Data Systems Corp. (EDS) for $2.5 billion in 1984 and Hughes Aircraft Company for $5.3 billion the following year. GM paid EDS shareholders by giving them a choice of $44 in cash or $32.50 in cash plus a seven-year promissory note and one-fifth of a share of a special class E common stock of GM. Dividends for the E shares were to be paid from the earnings of EDS. The Hughes Aircraft acquisition was financed by giving the shareholders of Hughes half of their payment in cash and the other half in class H common stock. Dividends for H shares were to be paid from the earnings of Hughes. The E and H shares had restricted voting rights and did not provide any rights to the assets of the corporation in liquidation. This type of security became known as "tracking" stock because its dividends tracked the success of a particular division or portion of a diversified company. The principal holder of the H shares issued by GM was given a put option. This was the Howard Hughes Medical Institute, which wanted to preserve capital. Later, General Motors announced that it was offering its shareholders $8 billion in tracking stock for its Hughes unit. H. Ross Perot was the principal beneficiary of the E share arrangement. He was made a member of the GM board and was soon questioning company policies. Rather than listen to his criticism, GM agreed to buy out Perot's interest for $700 million in 1986. Later, GM split off its Electronic Data Systems subsidiary and gave one share of the stock of the new entity for each class E common share outstanding.

Inverse floaters were introduced in 1986. These securities had a set principal amount and earned interest at a rate that moved inversely to a floating index rate. They were often leveraged, which meant that a small increase in interest rates would cause a dramatic drop in the inverse floating rate. Floaters were issued by United States government entities such as Fannie Mae and by municipal governments. Inverse interest-only strips in CMOs were introduced in 1987. They did not receive principal payments from the pool of collateralized mortgages. Rather, the interest rate paid was an amount computed as the inverse of a specified index rate. Both inverse floaters and inverse interest-only tranches would decrease rapidly in value when interest rates increased. These securities were popular while interest rates were decreasing or stabilized during the period between 1986 and 1994.

Merrill Lynch introduced Liquid Yield Option Notes (LYONs) in 1985. The LYON was a form of convertible zero coupon bond. Investors were also given a put option exercisable on a future date at a price equal to the original offering price of the LYON plus interest that had accrued on the date the put was exercised. The purpose was to reduce downside risk while allowing the holder to participate in equity increases. Merrill Lynch underwrote over $5 billion of LYONs in 1990. In 1992, LYONs constituted some 29 percent of outstanding United States issued convertible bonds. Merrill Lynch later began offering an indexed LYON. Its principal amount was keyed to the performance of the NYSE Composite Index. Merrill Lynch sold almost $11 billion of those LYONs. Merrill Lynch was also offering Treasury Investment Growth Receipts (TIGRs) in 1984. These instruments were zero coupon bonds that were based on future interest and principal payments from United States Treasury bonds. The TIGR purchasers were buying either a "serial" or interest-only (IO) TIGR, which was an interest payment on the bond, or a "principal" TIGR, which was the principal payment from the bond. Salomon Brothers offered competing products called Certificates of Accrual on Treasury Securities (CATS). These instruments allowed flexibility in choosing the timing of the maturity of the zero coupon bond because serial TIGRs or CATS would be available every six months for the period of the long-term bond. After observing the popularity of these instruments, the Treasury Department began creating its own zero coupon bonds called STRIPS. The government STRIPS were actually book entries that allowed the principal and interest payments from Treasury bonds to be stripped into two components, principal and interest. Those interests were then sold separately.

Merrill Lynch had a range of other products, including exchangeable remarketed preferred stock. These were basically floating rate preferred shares. The shares were subject to a dividend reset at specific dates. Merrill Lynch was selling "Dollar BILS" in 1988. These were senior debt securities in which the holder received on maturity an amount equal to the face value adjusted by an amount that would represent the increase or decrease in value of a portfolio of corporate bonds. Another popular instrument was the medium-term note. Merrill Lynch offered a currency-indexed medium-term note. Commercial banks were selling medium-term notes with a variety of maturities and pricing provisions with floating rates or fixed rates in United States dollars or other currencies. Medium-term notes offerings involved multitranche notes, exchangeable medium-term notes, foreign currency medium-term notes, callable medium-term notes, puttable medium-term notes, and mortgage-backed medium-term notes. Morgan Stanley was selling "PLUS" notes, which were peso-linked secured notes. Another instrument sold by Morgan Stanley was the "REAL," a note that paid interest at a specified rate for a stated period. Thereafter, interest was computed on the basis of an inflation rate. Salomon Brothers was particularly innovative in devising new instruments. The firm claimed that it had invented so many new financial instruments between 1980 and 1986 that they took eighteen double-spaced pages to list. They included "COLTS" (Continuously Offered Longer-Term Securities), which were created for the World Bank; "CARS" (Collateralized Automobile Receivables), which were used to sell car loans; "Range Forward" contracts that provided for a range of rates at which currencies could be exchanged when the contracts expired; and "SPINS," which were S&P 500 Index subordinated notes. SPINS paid 2 percent interest, but the principal payment was based on value of the Standard & Poor's Stock Index. This was profitable for Salomon Brothers because the dividends on the stocks were more than 2 percent. Salomon Brothers could simply acquire the stocks and keep a profit on the difference between the dividends and 2 percent.

Hybrid instruments were springing up in the agricultural area. These instruments allowed producers and users to hedge their price risks without engaging in commodity futures contracts on a licensed exchange. The advantage of these OTC derivatives was that they could be customized to meet the individual needs of a party. Futures contracts were standardized and did not provide such flexibility. There was even an off-exchange futures market in stallion shares and Thoroughbred breeding seasons in the United States. The less discerning could simply place a bet on the Dow Jones Industrial Average with a bookie in London. Profits from such bets were not taxable in England. The "City Index" and the FTSE International[22] One Hundred Shares were other indexes available for betting.

Derivative Regulation

The CFTC initially reviewed derivative instruments on an ad hoc basis to determine whether they should be required to be traded on a contract market.

The number of new instruments soon outstripped that approach, and the CFTC adopted rules in 1989 that applied a more uniform and scientific methodology. The CFTC rules contained a complex formula that was based on whether the option and futures elements outweighed the securities characteristics of the instrument. If they did, the instrument was subject to the CFTC's jurisdiction. The CFTC's rules defined certain instruments to fall outside the exchange trading requirement, including certain hybrid debt instruments, deferred equity or depository instruments with option components, and certain other deposits held in federally insured institutions that had returns based on a commodity price change or interest rate change.

A United States district court in New York held in 1990 that transactions involving crude oil from the Brent Oil Market in the North Sea were futures contracts that were subject to the provisions of the Commodity Exchange Act. This required those contracts to be traded on a contract market licensed by the CFTC. The court's ruling caused concern that this international market would be sharply curbed since there was no designated contract market for these contracts. Many oil traders began shifting their operations offshore, and foreign traders refused to deal with United States entities. Brent Oil Market volume declined significantly. The CFTC tried to stabilize the situation by issuing a statutory interpretation that stated that Brent Oil contracts were not subject to the exchange trading requirement of the Commodity Exchange Act. The effect of that statement was uncertain because the CFTC did not have exemptive authority to exclude contracts under the Commodity Exchange Act. More confusion was added to derivatives regulation in 1991 when the House of Lords in England ruled that municipal governments in England that engaged in large-scale swap transactions were not authorized to do so and that those transactions were invalid.[23]

The Futures Trading Practices Act of 1992 provided the CFTC with some exemptive authority from the exchange trading requirement. That authority was limited to institutional traders and was intended to be applied only on a limited basis. The CFTC acted under this authority to exempt swaps and Brent Oil Market transactions by large institutions from the reach of the exchange trading requirement. Still, regulatory uncertainty remained as the number of new financial products continued to expand. The OCC allowed the Blackfeet National Bank in 1994 to issue a retirement CD that combined the payment features of an annuity with the guaranteed interest rates of a certificate of deposit. This instrument sought to compete with insurance company annuities and was protected by FDIC deposit provisions. Other banks began selling these CDs, but ran into regulatory difficulties because the states sought to regulate these contracts as insurance. The states wanted to prevent national banks from selling these products. This resulted in a turf war between the states and the banking regulators that effectively stymied the use of this instrument.

OTC Derivative Disasters

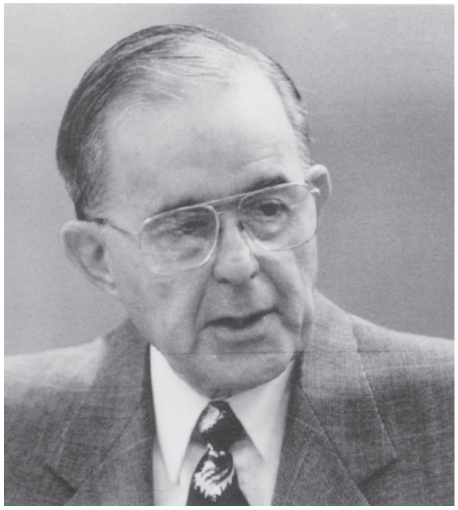
The sale of OTC derivative instruments grew rapidly in the early 1990s. As one newspaper reported, "Only three years into the decade, the 1990s are already being dubbed 'the decade of derivatives.'"[24] A report by the General Accounting Office in 1994 estimated that the notional amount of derivatives outstanding at the end of fiscal year 1992 was at least $12.1 trillion, as well as some $5.5 trillion of foreign exchange contracts. Over 1,200 different financial derivative products were being offered to institutional investors. They included "death backed bonds," "worthless warrants," "inverse floaters," "heaven and hell bonds," swaptions, embedded options, synthetic indexes, synthetic stocks, barrier options, down-and-out options, deferred stop and start options, lateral options, look back options, exploding options, shoguns, sushis, down-unders, and kiwis. Structured investment vehicles were being created in the 1990s to arbitrage credit by issuing debt and purchasing other debt at different rates. The issuer earned a return on the difference of the rates being paid. These companies included Alpha Finance Corp., Beta Finance Corp., Ascot Capital Corp., Sigma Finance Corp., Asset Backed Ltd., and Centura Corp.[25]

The business was proving lucrative for the derivatives dealers. A 2,000 to 1 profit-to-loss ratio was enjoyed by derivatives dealers in the early stages of this market. Merrill Lynch announced profits of over $700 million from its over-the-counter derivatives trading in 1994. Morgan Stanley's derivative products group generated over $1 billion for the firm in a period of two years. Some of the largest dealers in the derivatives markets were Bankers Trust, Chemical Bank, and Citicorp. They accounted for over $6 trillion in derivative transaction values. Many firms dealing in derivatives isolated those activities in separate affiliates. In order to obtain Aaa ratings—the highest credit rating available—from the rating services, the derivative dealers operated through bankruptcy-remote subsidiaries that were structured so that counterparties would be comfortable for credit risk purposes. These subsidiaries included Merrill Lynch Derivative Products, Goldman Sachs Financial Products International, L.P. Goldman Sachs, and Swapco Salomon Brothers.

The derivative dealers' customers included many large corporations. At one point, Chrysler Financial Corporation had interest rate and currency swaps outstanding that were valued at over $2 billion, and its parent company had another $1 billion of swaps outstanding. The Goodyear Tire & Rubber Company invested in derivatives valued at $500 million. In 1993, Procter & Gamble had $2.41 billion in derivative instruments in its portfolio. The California Public Employees Retirement System invested several hundred million dollars in derivatives transactions.

These new instruments posed dangers. In a speech delivered in January of 1992 to the New York State Bankers Association, Gerald Corrigan, a former Fed official and chairman of the Basel Committee on Banking Supervision, warned of the dangers of derivative transactions. Susan Phillips, a Fed member and former CFTC chair, delivered a warning of the dangers of OTC derivatives to Congress. She noted that the banks had become actively involved in the derivatives markets and that failure to manage those risks prudently could result in large losses. Actually, those dangers had already surfaced. It was discovered in 1986 that a mortgage-backed investment pool had been defrauded of some $100 million through overvalued collateral that was put into the pool. The Bank of America was stuck with the bill from that escapade. The Banca Cremi lost $20 million on CMOs when the market collapsed in 1994. It sued its broker, Alexander Brown & Sons, in a vain attempt to recoup those losses. Askin Capital Management lost $600 million on CMO transactions for its Granite Hedge Fund that were supposed to be "market neutral." The manager of this fund, David Askin, had headed the fixed income research department at Drexel Burnham. Askin was investing in particularly risky CMO tranches that incurred large losses when the Fed raised the discount rate by one-half of a percent. Hedge funds operated by Cargill, a large grain company, lost some $100 million from mortgage-backed securities transactions. Harris Trust and Savings had to absorb $50 million in losses on mortgage-backed transactions that were placed in supposedly low-risk accounts.

On April 12, 1994, Gibson Greetings, Inc., announced that it had lost $20 million on an interest rate swap with Bankers Trust. Gibson Greetings had previously engaged in a ratio swap with Bankers Trust. Under this arrangement, Gibson Greetings agreed to pay Bankers Trust a floating rate equal to the London interbank offered rate (LIBOR) of interest squared divided by 6 percent, while Bankers Trust agreed to pay Gibson a fixed rate of 5.5 percent. This arrangement was to be for five years and covered a notional amount of $30 million. If rates fell, Gibson would benefit, but if rates increased, Bankers Trust would make large profits and Gibson Greetings would suffer large losses. Gibson Greetings actually profited from that initial transaction. Subsequent transactions were not so profitable. They included a basis swap, a spread lock, and a wedding band option that linked two spread locks. The Gibson Greeting problems touched off an avalanche of derivative loss disclosures by other companies. Procter & Gamble Co. had large losses on interest rate swaps with Bankers Trust. One derivative that Procter & Gamble invested in was a "quantoed constant maturity swap yield curve flattening trade."[26] The government of Orange County, California, declared bankruptcy in 1994 after losing as much as $1.5 billion in speculative financial transactions. It had invested revenues generated from taxes in structured notes, reverse repos, inverse floaters, and other exotic instruments. This was the largest municipal bankruptcy in history. Losses amounted to "almost $1,000 for every man, woman and child in the county."[27] Orange County's trading had been conducted by its elected treasurer, Robert Citron. He had dealt with several brokerage firms, but chiefly with Merrill Lynch and one of its bond salesmen, Mike Stamenson. Citron had leveraged $7.6 billion of investment



Robert Citron. Orange County, California, lost millions of dollars in taxpayer funds through Citron's less than skillful use of derivatives and other investments. (Courtesy of Archive Photos.)

funds into a $20.6 billion portfolio. He was betting that interest rates would continue to fall.

Other municipalities and even educational institutions lost large sums through derivative transactions. They included Escambia County and St. Petersburg in Florida, Sandusky County in Ohio, Odessa Junior College in Texas, and the Baptist Missionary Association of America. Maple Grove, Minnesota, lost $1.4 million and Charles County, Maryland, lost over $5 million in derivatives. The City College of Chicago, which had purchased $100 million in derivative obligations, lost $45 million. San Diego County had a $700 million derivatives portfolio. One of the country's largest credit unions failed from derivative losses. Large losses were sustained by the army welfare and recreation fund. Some losses were staggering. Metallgesellschaft AG, a German company, faced losses of $1.87 billion in 1994 from derivative transactions in oil. The company did not understand its trader's hedging strategy and closed out the position at an enormous loss.

A Piper Jaffray mutual fund lost some $700 million from its trading of derivative instruments. The BankAmerica Corp. had to cover $70 million in losses for two mutual funds that it was selling. Paine Webber, the giant brokerage firm, had to bail out a short-term United States government securities mutual fund that it sponsored. That fund lost $268 million as the result of derivative transactions. Some of the derivatives that Paine Webber had bought were called "kitchen-sink" bonds. Several other mutual fund managers had to inject funds into their funds in order to offset losses from derivatives. A New York municipal bond fund was found to have placed some 40 percent of its assets in derivatives. Some money market funds, which were thought to be safe investments, were suffering losses from derivatives. In December of 1994, the Community Bankers United States Government Money Market Fund liquidated its portfolio at ninety-four cents on the dollar. This was the first money market fund to "break the buck"—that is, to fall below the amount invested by its participants.

Kashima Oil, a Japanese company, lost $1.5 billion as a result of foreign exchange transactions. Sandoz Pharmaceuticals lost $50 million from derivative transactions. One of the most stunning losses occurred at Barings PLC, a firm that had been closely linked with the American securities markets almost from their inception. In 1995, Barings lost over $1 billion and was put in receivership as the result of derivatives trading by a twenty-eight-year-old trader in its Singapore office. That trader, Nicholas Leeson, had been trading Nikkei 225 Index futures and options. He was arbitraging between the Osaka Stock Exchange in Japan and the Singapore International Monetary Exchange (SIMEX). Leeson hid the trading losses in an account identified as number 88888. By concealing that loss, he was able to show profits from other transactions that swelled his bonus. Kidder, Peabody lost $350 million in transactions conducted by one of its traders, Joseph Jett, who was trading stripped securities. Jett had made millions of dollars for Kidder, Peabody and was named employee of the year by the firm in 1993. It turned out that Kidder, Peabody had actually lost a massive amount on his trades. Kidder, Peabody had been improperly booking the strips transactions that Jett had been trading. Jett was cleared of serious fraud by an SEC administrative law judge in July of 1998, but other violations were found. Jett was barred from the industry, fined $200,000, and ordered to disgorge $8.2 million. He continued to maintain his innocence and charged that he was a victim of racism against African-Americans.

There were other losses. J.P. Morgan & Co. announced in 1995 that it was cutting back its mortgage-backed trading operations after it lost over $120 million in such transactions. Macy's Department Store defaulted on a swap that involved $83 million in interest payments. Japan Airlines lost $450 million from currency trading; Glaxo Holdings, a pharmaceutical company, lost $115 million from derivatives; and Lehman Bros. suffered defaults on foreign exchange and swaps totaling over $100 million. When Drexel Burnham Lambert failed, it had some difficulty in unwinding swap transactions with a subsidiary. Swap and derivative transactions had to be unwound at Olympia & York and the Bank of New England when those institutions ran into financial trouble. Chemical Bank lost $70 million from currency transactions in Mexican pesos trading. The Shoshone Indian tribe lost $1.5 million from derivative trading. Dell Computer lost $26 million. It had a derivatives portfolio with a notional amount of over $350 million. Air Products and Chemicals lost $69 million from derivative transactions. An employee fund at Atlantic Richfield Company lost over $20 million on derivative trading. The Mead Corporation lost $12 million. The founder of W.R. Lazard, an investment banking firm, committed suicide after an investigation was begun in connection with millions of dollars of fees paid by the New York State Job Development Authority in connection with derivatives transactions.

The casualty list lengthened. A Hawaiian insurance company failed after large losses in derivatives trading. CS First Boston agreed to pay clients $40 million after it made unauthorized derivatives trades in their private portfolios. An investment fund managed by the State of Wisconsin lost almost $200 million dollars on derivative transactions involving swaps on Mexican and European interest rates. The largest credit union in America was taken over by federal regulators after it suffered large losses in derivatives in 1995.

American companies were not the only ones suffering losses from derivatives transactions. ABM-Amro NV, a Dutch bank, lost $70 million as a result of a trader's activities. Daiwa Bank lost over $1 billion as the result of the activities of one of its traders. Traders at Showa Shell Sekiyu KK lost $1 billion in currency trading in 1994 and 1995. A trader at Codelco, which was Chile's national copper company, lost $200 million trading on the London Metal Exchange.

More Derivative Concern

Derivatives became a pariah after these events and were the subject of numerous congressional and regulatory investigations and reports. Concern was expressed by regulators that these instruments could pose a "systemic" risk to the entire financial system. But the regulators could not agree on what steps should be taken to reduce or prevent such a risk. Although the House Banking Committee minority staff conducted a massive study of the derivatives market, its report resulted in little legislative action or further regulation. The Group of Thirty, a private group of major financial institutions chaired by Paul Volcker, who had left the Fed, examined derivative instruments and concluded that further regulation was not needed. Instead, this group recommended that institutions dealing in derivative instruments should agree to adhere to sound risk-management practices. Another concern was the accounting for derivative instruments. Such transactions were "off balance sheet" items that were mentioned only in general terms in the footnotes to the financial statements of the firms dealing in those instruments. Those footnote disclosures provided very little data as to the actual amount of risk exposure to the firm from those instruments. Steps were taken by the accounting industry to increase reporting and disclosure of derivative activities. The SEC began to place pressure for even greater disclosures.

In 1993, the Basel Committee proposed to modify the 1988 capital accord because of concerns with derivative instruments. The committee sought to define when credit risks could be netted with counterparties. It proposed capital charges against open positions in debt and equity securities on bank trading books and in foreign exchange. It further sought to address the interest rate risk caused by mismatching maturities of assets and liabilities. Federal regulatory agencies in the United States began amending capital standards to recognize bilateral netting in financial contracts. Following the collapse of Barings, regulatory authorities from sixteen countries, including the United States and England, met in Windsor, England, and issued the Windsor declaration. That declaration set forth measures that should be taken to strengthen the arrangements for the supervision of the futures markets. That effort was to be carried out under the auspices of the International Organization of Securities Commissions (IOSCO).

A debate that arose over the losses in derivative trading was whether brokers and dealers that were selling those transactions should be responsible for recommending unsuitable instruments to their institutional customers. It was claimed that institutional customers were not sophisticated enough to deal with those derivatives. Traditionally, suitability was a securities law concept that had been used to protect "widows," "orphans," and other apparently unsophisticated investors from overreaching by their brokers. It was presumed that institutional investors did not need such protection. Yet regulators seemed willing to adopt such an extreme position after the avalanche of losses from derivatives suffered by institutions. The NASD required broker-dealers to make a suitability determination when an institution was relying on the broker-dealer's recommendations and advice. The Office of the Comptroller of the Currency announced in 1994 that banks should not recommend derivatives instruments that were not "appropriate" for their customers. The comptroller further directed banks subject to its regulation to adopt comprehensive risk-management systems for derivatives trading. The SEC staff advised the Investment Company Institute that floaters were not appropriate investments for money market funds, and bank regulators warned banks about the dangers of those instruments.

The CFTC took an even more extreme approach in extending protections to institutional investors. In *Drexel Burnham Lambert*, *Inc.*, *v. CFTC*, the CFTC held that a broker was liable for unauthorized transactions in the account of a corporate customer, the Sansom Refining Company.[28] The trades had been entered by an employee of the customer who was a convicted felon and a compulsive gambler, as well as a disbarred lawyer. Sansom claimed that, while this individual was authorized to trade its account, he was not authorized to enter the trades that caused the Sansom losses. The CFTC was upheld in its decision by a federal appeals court. The court held that Drexel Burnham was liable because it failed to determine whether the employee was authorized to enter the trades at issue. Other sophisticated customers followed suit by bringing actions claiming that they were misled or that fiduciary duties were breached by the dealers who sold them derivative instruments.

Two of the more highly publicized court cases arising out of the derivatives debacle involved the losses sustained by Gibson Greetings and Procter & Gamble. Gibson Greetings had entered into a "LIBOR-squared" transaction through Bankers Trust that caused large losses. Procter & Gamble had lost over $150 million as the result of a swap with Bankers Trust in which payments were tied to the yield on five-year United States Treasury notes and the price of thirty-year Treasury bonds. The swap was based on an assumption that interest rates in Germany and America would converge more slowly than predicted by the market. After experiencing losses, Gibson Greetings and Procter & Gamble claimed that these derivative transactions were unsuitable for them and that Bankers Trust had breached its fiduciary duties by recommending such transactions to these giant corporations. Those claims bordered on the silly, but Bankers Trust Company was forced to settle the litigation after the discovery of recorded conversations with Gibson Greetings and Procter & Gamble that disclosed some improper practices, including misrepresentations as to the true value of the customers' derivatives positions. Not one to put too fine a point on his intentions, the Bankers Trust salesman for the Procter & Gamble account revealed, according to a transcript of his statement, that he wanted to "lure people into the calm and then just totally fuck 'em." Even then, the federal district court was somewhat skeptical of Procter & Gamble's claims. Nevertheless, Bankers Trust entered into settlements with various clients including $14 million for Gibson Greeting, $35 million for Procter & Gamble, and $67 million for Air Products and Chemicals. Charges brought by the Fed against a trader at Bankers Trust for inflating the profits in a Procter & Gamble position were later dismissed.

More such cases followed. It was charged in 1995 that Lehman Brothers had allowed a Chinese trader to engage in $35 billion in unauthorized derivative transactions that resulted in losses of $128 million. Orange County was able to obtain $739 million in settlements from its brokers before a lower court rejected claims that the transactions engaged in by Robert Citron were unauthorized because they were so risky. Before that decision, Merrill Lynch agreed to pay $437.1 million to settle claims against it by Orange County and other governments caught up in that debacle. Orange County sued McGraw-Hill, the parent company of Standard & Poor's Corporation, claiming that S&P had given the county the highest municipal rating for its borrowings right before it filed the largest municipal bankruptcy in history. Standard & Poor's asserted as a defense that its opinions were protected by the First Amendment to the Constitution. Orange County also sued Moody's, but that case was settled for a nominal amount. Despite the losses and lawsuits, the derivatives market continued its growth. In 1998, the notional amount of the derivatives market was estimated to be $70 trillion. That figure increased to $80 trillion in 1999.

Chapter 4

American Finance Rebounds

1 Markets and Broker-Dealers

Economic Concerns

The banks reduced their lending in 1990 after suffering large losses from the excesses of the eighties. This caused another credit crunch, and the economic boom that began in 1982 ended in July of 1990. Unemployment in America rose to 6.1 percent in December of 1990, but the economy began to recover in the spring of 1992, as interest rates fell sharply. The Federal Reserve Board reduced its discount rate to 3 percent, which was the lowest level in more than thirty years. That action was too late to save President Bush from defeat at the polls. He had received wide acclaim and popularity for America's victory over Iraq, but the glow of that triumph quickly faded as the country suffered through a recession. Although the recession that followed was not particularly long in duration, layoffs were endemic. Many of those being fired were white-collar employees who had previously been immune from such cutbacks. Despite the fact that George Bush's father, Prescott Bush, had been a financier of some renown, finance would doom his son's reelection. One disrupting event was a shutdown in the federal government in 1990 when a fight over the budget developed. Ronald Reagan had tripled the national debt, and Bush had painted himself into a corner in dealing with the effects of that deficit by his "read my lips" promise of no increased taxes. Having broken that pledge and having to face a third-party candidacy from the billionaire H. Ross Perot, as well as a recession, Bush lost the presidency to Bill Clinton.

Trading Markets

Commercial real estate prices dropped sharply between 1989 and 1992 in the Northeast during the recession. The securities industry was in a slump. Large numbers of employees were laid off on Wall Street as brokerage firm profits dropped. The Dow Jones Industrial Average hit 3,000 in April of 1991, but dropped on November 15, 1991, by almost 4 percent because of concerns with bank and biotechnology stocks. That alarm was short-lived, and the Dow rose to 3,300 in 1992. New York Stock Exchange (NYSE) trading volume was nearing a robust 180 million shares a day in 1991. Within a few years, 600 million and even 1 billion share days would arrive on Wall Street. By July of 1991, record profits were being reported by Merrill Lynch & Co. and Smith Barney, Harris Upham & Co. Trading volume on the securities exchanges exceeded 65 billion shares in 1992, adding further profits to the brokerage firms. The NYSE celebrated its 200th anniversary in May of 1992. The celebration was not entirely joyous. The country was still in the midst of economic uncertainty, and the NYSE was under the threat of growing competition. Daily trading volume on the NYSE averaged ten times the trading volume in 1974 and 100 times that of the early 1950s. But volume in the over-the-counter (OTC) market was starting to challenge that of the NYSE as Nasdaq's popularity grew. By 1992, the volume of trading on Nasdaq was about 42 percent of total share volume on all United States equity markets. Some 1,000 companies were listed on Nasdaq that were large enough to meet the listing requirements for the NYSE. This suggested that the NYSE's position as the market of choice for large companies was slipping.

Another off-exchange market was the private placement of securities with institutional investors. Almost $220 billion in debt and equity were underwritten through private placements in 1993. Institutions accounted for more than 80 percent of trading volume in the stock markets in 1992. That volume was often the result of block trades that were arranged upstairs in the offices of the block positioners. An institution that continued to grow was the pension fund. From 1975 to 1992, the amount of equity securities of U.S. companies held by pension plans grew from $132 billion to $1.3 trillion. By 1994, institutions, in total, were holding over $2.3 trillion in U.S. equity securities. That number would explode. Institutional investors worldwide controlled $26 trillion in assets in 1996. America held $13 trillion of those assets.

Wall Street received a severe shock on February 26, 1993, when a group of terrorists bombed the World Trade Center. Although the death toll was less than that of the bombing at J.P Morgan's offices some seventy years earlier, seven people were killed and more than 1,000 were injured. The terrorists turned out to be Muslim fundamentalists. Foreign involvement in the markets was posing other challenges. Over 150 non–United States companies were listed on the NYSE, but the exchange was losing market share to international markets, as well as to OTC trading. The amount of stocks traded outside the United States increased to more than 50 percent in 1992, up from one-third in 1969. By 1992, international finance involved capital flows across borders around the world twenty-four hours a day. Daily trading volume worldwide was estimated to be reaching $880 billion, and over $560 billion of privately held debt was owned by foreigners. Emerging markets around the world were increasingly the object of investment and speculation. By the beginning of the 1990s, emerging market trading volume reached $150 billion. Merrill Lynch opened branch offices in China in 1993, and Russia was attracting American investors as it sought to introduce capitalism into its financial system. Fraud soon made an appearance in the former communist bloc countries. An investment fund known as MMM collapsed in Russia, causing large losses to investors, and pyramid schemes in Albania nearly led to civil war.

Sanford Weill. Through a number of combinations and skillful moves, Weill created one of the world's greatest financial empires at Citigroup. (Courtesy of Archive Photos.)

Changes in Players

Computers continued their invasion of the markets. The NYSE spent over $1 billion on technology between 1982 and 1995. Of that amount, some $600 million was expended by the exchange for new technology on its trading floor. The automation of order entry and execution reduced the time required to execute customer orders. In 1975, an order for 100 shares could take up to an hour for execution, but in the 1990s, those orders were being executed in less than a minute. The small order execution system (SOES) on Nasdaq and the Super DOT system on the NYSE continued to provide automated executions for smaller customer orders. The Philadelphia Stock Exchange, which had listings for over 2,000 companies, was using an automated execution system called the Philadelphia Automated Communication Execution System (PACE). Over 8,000 broker-dealers were operating in the United States in 1992, but consolidation of financial service firms was accelerating. By 1994, nine broker-dealers were handling almost 50 percent of all public customer accounts in the United States. T. Rowe Price Associates was providing financial services to investors, including mutual funds and checking accounts.

The American Express company saw the value of its credit card franchise eroding, and the firm's Shearson operations lost almost $1 billion in 1990. A new chief executive officer, Harvey Golub, was hired to revive the company's fortunes by focusing on its credit card operations. American Express sold its Shearson brokerage operation in 1993 to Primerica, Inc., for $1.15 billion. Sanford I. Weill was the force driving Primerica, a firm with a complex background. Weill had received his start on Wall Street as a runner for Bear Stearns in 1955. He and some partners opened their own brokerage firm in 1960. It was called Carter, Berlind, Potoma & Weill. Weill built up that business by buying brokerage firms in trouble, including Hayden Stone, Shearson Hammill, and Loeb Rhoades. These combined firms became Shearson Loeb Rhoades, which was sold to American Express in 1981 for about $1 billion. Weill became president of American Express but left there in 1985. He flirted with a job at BankAmerica before obtaining control of Commercial Credit Co., a Baltimore subsidiary of the Control Data Corp. It was engaged in commercial finance, leasing, and factoring. Weill took that company public, and it became a consumer finance company. Weill soon focused on acquiring Primerica, the former American Can Co., which had moved away from the food container industry into financial services under the leadership of Gerald Tsai Jr., the former mutual fund czar. Tsai had acquired Smith Barney for Primerica in 1987. That purchase was made just before the stock market crash of 1987, during which Smith Barney suffered heavy losses. Weill's Commercial Credit Co. bought Primerica Corp. and its Smith Barney unit for about $1.7 billion in 1988.

The acquisition of financial services companies by General Electric, American Express, and Prudential Insurance Company of America was widely regarded as a failure at the end of the 1980s. The notion of the "financial supermarket" had peaked even earlier, but the sell-off of the financial supermarkets took some time. General Electric tried to sell Kidder, Peabody to Smith Barney, Harris, Upham & Co., in 1992, but that deal fell through. Kidder, Peabody then encountered a sea of troubles and was finally sold to Paine Webber in late 1994. Critics had claimed that efforts by Sears Roebuck to sell "stocks and socks" would not be a success. They were correct. In September of 1992, Sears, Roebuck & Co. announced that it was selling its brokerage and residential real estate services, which it had acquired in 1981. These sales were necessary to help Sears pay off $3 billion in corporate debt. Sears sold Dean Witter Financial Services Group, the Sears Savings Bank, and Coldwell Banker, a residential real estate firm. Sears sold 20 percent of its Allstate Insurance Group, but maintained its control of that entity. Interestingly, Sears's financial service operations were not causing its problems. Dean Witter was the third largest brokerage firm in the country and was posting record profits. Sears retail sales were the source of its losses. The company eliminated 48,000 retailing jobs between 1989 and 1992 in an effort to cut costs. Sears stopped its catalog sales in 1993, after it had already lost its dominant position in retailing.

Dean Witter's Discover Card, which had been launched in the 1980s, had about 38 million cardholders in 1993. After being spun off from Sears, Dean Witter and NationsBank announced a strategic alliance in the form of a joint venture called NationsSecurities. This entity was to sell stocks and bonds to bank customers through 400 investment officers in NationsBank branches. NationsBank claimed that its joint venture with Dean Witter was prospering in 1993 and that NationsSecurities was soon expected to have 700 branches. That position was sharply reversed in November of 1994, when NationsBank announced that it was buying out Dean Witter's 50 percent ownership interest in NationsSecurities. The joint venture had encountered regulatory and operational problems. Investigations were underway by the Securities and Exchange Commission (SEC) and the Comptroller of the Currency to determine whether brokers in NationsSecurities had used improper sales practices. Regulators were concerned that bank customers were not informed that securities products being sold were not insured by the federal government, unlike bank deposits. This did not stop NationsBank from continuing to expand into financial services. Among other things, the bank owned NationsCredit, which had been purchased from Chrysler First, Inc. This was a high-yield consumer and private label finance company that competed with Beneficial Corporation and similar financial companies.

Goldman Sachs was changing its business mix. Investment banking had accounted for 35 percent of its profits in 1989. Four years later, investment banking was providing only 16 percent of profits. In 1991, the investment banking firms that were leading underwriters in relative ranking were Merrill Lynch; Goldman Sachs; Lehman Brothers; First Boston; Kidder, Peabody; Morgan Stanley; Salomon Brothers; Bear Stearns; Prudential Securities; and Donaldson, Lufkin & Jenrette. Other leading underwriters were J.P. Morgan Securities; Alexander Brown & Sons; Smith Barney; and Dean Witter. Smith Barney earned over $150 million that year, triple its prior year's performance. Paine Webber was another giant among the brokerage firms. In 1995, it had over 2 million accounts. Merrill Lynch was still a leader, with almost $500 billion in customer assets in 1993. Merrill Lynch advocated that its clients "get rich slowly" and was rapidly expanding its international operations. Merrill bought Smith Newcourt, a British investment banking firm, for over $800 million in 1995. The Rothschilds had held a 26 percent ownership interest in that company.

"Prime" brokers were used in the 1990s to settle securities trades for large retail and institutional customers. These were broker-dealers that cleared and financed trades for customers that were executed by other brokers at the customer's direction. Charles Schwab was America's largest discount broker in 1992. It had 150 branch offices nationwide that were operating in 42 states and servicing over 1.6 million customers. Schwab owned Mayer & Schweitzer, Inc., a large market maker in OTC securities. Schwab introduced the Mutual Funds Marketplace in 1984, which offered 140 no-load mutual funds. In 1992, Schwab introduced a mutual fund "supermarket" called Mutual Fund OneSource, which allowed customers to choose from more than 500 no-load mutual funds providing a wide range of investment objectives and trading programs. Other brokerage firms soon mimicked this development. Another large discount broker was Quick & Reilly, which had over 600,000 customer accounts by 1992.

The Internet and Other Advances

The Internet was operating several years before it began to have a broad effect on the growth and development of financial services. Quick & Reilly provided computer-based trading software for individuals in 1983. Charles

Schwab introduced its own program in 1985. By 1990, some 100,000 individual investors were using their personal computers to manage their portfolios. The home trading system developed by Schwab had 50,000 customers. The system gave access to research databases, provided for real-time quotations, and allowed investors to place real-time orders, receive confirmations, and track their portfolios. In 1991, some 13 percent of executions by Schwab customers were conducted electronically through their telephones without broker participation. Fidelity Brokerage Services, Inc., another discount broker, was offering computerized trading through its Touchtone Trader system.

Dow Jones, Standard & Poor's Corporation, the NYSE, and the AMEX had been computing stock indexes on industrials, utilities and rails and on other stock composites for some time. The Russell Indexes were becoming popular. Published by Frank Russell Co., these indexes covered 1,000 large cap stocks and 2,000 smaller cap stocks. Dow Jones & Co. and Reuters were leading providers of financial news. Knight-Ridder and the Commodity News Service provided financial information for the futures industry. Other financial news services were the Associated Press, McGraw-Hill, Financial News Network, and Market News Service. Quotron Systems and Automatic Data Processing provided stock market quotations. In 1990, some 90 percent of financial information services were provided by those two firms. Other quote vendors were Shark, which was owned by the Wang Company, Telerate, and Bridge Information Systems. Telerate was the primary provider of government securities prices. The quote vendors were disseminating information through 400,000 terminals by 1989. Michael Bloomberg was becoming a king in the growing financial information services sector. Bloomberg's information system's enormous database attracted widespread interest on Wall Street. In 1992, Bloomberg Financial Markets was priced at $1,500 a month for a single screen and $1,000 a month for further screens containing additional databases. Bloomberg's revenues were $300 million a year and growing. Its business soon eclipsed Reuters, Telerate, and Knight-Ridder. The primary rating agencies in the 1990s were Standard & Poor's, Moody's, Fitch IBCA, and Duff & Phelps, which was becoming an important ratings agency for public utility bonds.

The junk bond market was staging a recovery from what had at first appeared to be a terminal case of defaults. Even some expired bonds had value. A defunct bond issued by the Selma, Marion & Memphis Railroad after the Civil War sold for $2,750 in the 1990s. Its value was enhanced by the fact that a signature on the bonds was that of the Confederate general Nathan Bedford Forrest. In February of 1994, the bond market crashed, and the Dow Jones Industrial Average dropped more than 300 points in the spring. This upheaval occurred after the Fed raised the discount rate 2.5 percent over a nine-month period in 1994. Rates had been stable or declining since 1986. These sudden increases in the discount rate caused sharp drops in bond prices. "Five year bonds had their worst year since 1926."[1] Long-term Treasury zero coupon bonds dropped 18.7 percent in value. The collateralized mortgage obligation (CMO) market was especially hard hit and many of these securities became illiquid, as well as dropping sharply in value. An investment fund lost $600 million on CMOs and filed for bankruptcy. Inverse floaters caused some really big losses. These were securities whose payments to the holder decreased as interest rates increased.

Scandals and Setbacks

Scandals continued to surface. The body of Robert Maxwell, the British publishing czar and securities pirate, was found floating in the Atlantic Ocean off the Canary Islands in 1991. Maxwell had apparently fallen from his boat and died from a heart attack. Maxwell had built a publishing empire after he paid £90 million for the Mirror Group of companies in 1984. Maxwell set his sights even higher by announcing a $2 billion bid for Harcourt Brace Jovanovich, an American publishing company that also owned theme parks in Florida. Maxwell failed in that effort, but was able to convince the Delaware Supreme Court that he should be given control of Macmillan Publishing Co., another large publishing house. Maxwell lost some £300 million a day during the stock market crash of 1987. Maxwell's companies were unable to absorb those and other losses that arose from his lavish spending. Before his death, Maxwell looted his employees' pension funds. That theft was discovered after his death. Lacking a live Robert Maxwell for a defendant, the English government concluded that his sons would do just as well. They were charged with fraud in connection with their father's thefts, but were acquitted after a trial. Goldman Sachs was badly stung by Maxwell's defalcations, since he had engaged in several improper trading practices through that firm.

International Business Machines (IBM) had become one of the most successful companies in history as a result of the revenues generated by its mainframe computer leases. IBM's stock was the bluest of the "blue chip" securities that were widely viewed as safe and profitable investments for even the most timid investor. But IBM's success made it another "money trust" that had to be broken by the federal government. IBM prevailed in the litigation, which lasted from 1969 until 1982, brought by the Justice Department's antitrust division, but the company was crippled. IBM then got caught up in wars over market share in the personal computer industry, and the company was nearly destroyed. In September of 1992, IBM announced that it was selling $2.1 billion of assets. The company reduced its workforce by 25 percent and was operating at about 40 percent of its manufacturing capacity between 1985 and 1992. Losses mounted. IBM announced a $4.6 billion operating loss in 1992, which was then the largest loss of any company in history. Although IBM would recover under a new leader, Lou Gerstner, it lost its lead in the computer world to Microsoft and other companies. In October of 1998, Microsoft was America's most heavily capitalized business at $267 billion. Predictably, Microsoft and its leader, Bill Gates, then became the next victims of the money trust busters. As the richest man in the world, Gates made an attractive target, but he had to be demonized first, a task that the Justice Department was happy to assume as the century closed.

General Motors Corporation (GM) was hemorrhaging red ink in the early 1990s and was losing market share. GM began to squeeze its suppliers in order to increase its profitability. Between 1991 and 1992, GM began restructuring its operations and raised over $8 billion to make the company more competitive. Merrill Lynch was the lead underwriter on a $1.1 billion fixed-rate perpetual preferred stock issue by GM that was designed as an alternative to money fund investments. GM issued four classes of depository preference shares. These shares were callable but had no specific redemption date. GM floated over $700 million of series A preferred equity redemption cumulative stock (PERCS). Those PERCS had a mandatory three-year redemption requirement on a one-for-one basis into GM common stock, but the maximum appreciation was set at 35 percent above par value. GM issued 57 million shares of stock in 1992 in order to raise over $2 billion. It retired some older cumulative preferred issues in 1993 that had contingent voting provisions that were threatening to GM management. Indeed, management was concerned enough to pay $120 for each of the $5 preferred shares. At the time, the market value of those securities was about half of that amount. The restructuring of GM and its continuing decline in market share led to some turmoil at the company. An abrupt change in management occurred after institutional investors on the board began to exercise their muscle. A senior executive was fired, the first such casualty at GM since William Durant's dismissal some seventy years earlier.

Rogue Brokers and Rogue Traders

The brokerage firms were encountering difficulties with "rogue brokers" and "rogue traders." The rogue broker was a commissioned salesman that provided large amounts of revenue to the firm through fraudulent sales practices. Because of their high production, the rogue brokers were profit centers that developed a power base that freed them from much of the supervision imposed over other brokers. Some of these rogue brokers were virtually firms within firms. Prudential-Bache was particularly hard hit. The SEC charged the firm with failing to supervise a broker who was one of the firm's largest producers. That broker, Sam Kalil, had engaged in unauthorized transactions for customers and was selling them unsuitable securities. He looted some $2 million from customer accounts. In 1994, the SEC began an investigation of large brokerage firms to determine whether they were properly supervising rogue brokers with past enforcement problems. The project focused on 268 registered representatives who had been the subject of customer complaints or private or government action for misconduct. The study concluded that increased efforts were necessary to ensure that individuals with prior histories of sales practice problems were properly supervised and that their backgrounds were more carefully scrutinized before they were hired. The General Accounting Office conducted a study of rogue brokers in 1994 and recommended additional supervision.

The proprietary trading activities of the broker-dealers were often lucrative, becoming a large revenue source as commission revenue continued to decline. That trading exposed the firms to enormous risks, especially from "rogue traders," who were hired by the firms to conduct proprietary trading. These individuals were given broad trading authority and an incentive to engage in high-risk trading because large bonuses were awarded for successful trading performance. Rogue traders took big bets with firm money in order to increase those bonuses. One of the more startling examples of a rogue trader was Nick Leeson, the twenty-seven-year-old employee at Barings PLC, who lost over $1 billion and destroyed that centuries-old firm. Leeson was not alone in the billion dollar club. Daiwa, a Japanese firm, lost some $1.1 billion as a result of the trading activities of a rogue trader in the United States. Another member of the exclusive billion dollar loss club was Metallgesellschaft AG, which faced losses of some $1.87 billion from the trading strategies of its traders in the United States. A Chemical Bank trader cost his employer a relatively trivial $70 million in unauthorized currency trades. The phantom trades in government securities at Kidder, Peabody cost it some $350 million.

Treasury sales in the early 1990s were sold with maturities of three months, six months, and one year. The Treasury was issuing "cash management bills," which were short-term instruments designed to cover funding gaps. The primary means for issuing Treasury debt was through the Federal Reserve Bank of New York in the early 1990s. It held periodic auctions in which about forty primary government securities dealers participated. Those firms entered competitive bids for themselves and their customers. The Treasury prohibited any one primary dealer from purchasing more than 35 percent of a Treasury auction. Paul Mozer, a rogue trader at Salomon Brothers, was manipulating the market in United States Treasury securities in 1992. Mozer was using the names of customers without their permission to enter orders in Treasury auctions in order to gain a controlling portion of the issue. In December of 1990, Mozer submitted a $1 billion bid on behalf of a customer, Mercury Asset Management, that was not authorized. In another auction, Mozer obtained 87 percent of the auction. Mozer was able to obtain $10.6 billion of an $11.3 billion "when issued" offering of May 1993 Treasury notes through the unauthorized use of customer names. Mozer's purchases caused difficulty in the market for institutions and other traders that were selling those securities short. Because Salomon Brothers had obtained most of the auction, the short sellers had to buy the securities from Salomon Brothers when it came time to deliver. This allowed Mozer to squeeze the market. Mozer was fined $1.1 million and sent to prison after his activities came to light. John Gutfreund, the head of Salomon Brothers, was fined $100,000 by the SEC because of laxness in reporting this conduct to the government. Gutfreund had come to personify a breed of overly aggressive investment bankers after his management style was profiled in a book called *Liar's Poker* by Michael Lewis.[2] The book described Gutfreund's challenge to John Meriwether, another Salomon Brothers executive, to a game of "liar's poker" for stakes of £1 million. Meriwether responded by raising the stakes to $10 million: "One hand," "no tears." Gutfreund backed down. This appetite for gambling was very much reminiscent of John "Bet-a-Million" Gates of an earlier era. The firm was skewered by parody in a best-selling book by Tom Wolfe, *The Bonfire of the Vanities*.[3] After this literary feast, the credibility of Salomon Brothers was undermined, and the Mozer episode made it vulnerable to attack by the government. The firm was fined and paid damages of $290 million for Mozer's misdeeds. In another suit by the SEC in 1992, Salomon Brothers was charged with entering fictitious trades. In those transactions, Salomon Brothers had agreed to repurchase certain trades so that it could show losses at year-end and gains in the next year. This was a tax avoidance scheme. Later, ninety-eight brokerage firms and banks admitted that they had submitted improper bids for Treasury securities in the government auctions. In total, those banks and firms were fined $5.2 million.

Following these problems, the Treasury Department started using "Dutch" auctions, in which all winners received notes that paid the same interest rate at the highest level of bids that would allow sale of the issue. In September of 1996, the Treasury Department adopted rules that established record keeping and reporting requirements for firms controlling large positions in Treasury securities. Authorized by the Government Securities Act Amendments of 1993, the "on-demand" system required these large position reports to be filed upon request by the Treasury Department. The SEC had earlier proposed a rule to establish a reporting system for large traders and their broker-dealers. These traders would have to report their positions and identify themselves. A large trader was defined as one that engaged in a transaction of 200,000 shares or $10 million in value in one twenty-four-hour period. The Commodity Futures Trading Commission (CFTC) already had a large trade reporting system in place.

The Mozer debacle nearly destroyed Salomon Brothers, and it had to be rescued by one of its large shareholders—Berkshire Hathaway, Inc., a company that was controlled by Warren Buffett from Omaha, Nebraska. Buffett's net worth was some $4 billion[4] and consisted principally of stock in Berkshire Hathaway, a former coat lining manufacturer that Buffett had converted into a giant investment pool. Berkshire Hathaway had successfully invested hundreds of millions of dollars in companies as diverse as American Express, Salomon Brothers, and the Coca-Cola Company. It also invested in GEICO Corporation, the *Washington Post*, Capital Cities/ABC, Inc., General Foods, Exxon Corporation, Time, Inc., R.J. Reynolds Industries, Ogilvy & Mather International, and F.W. Woolworth Co. Buffett became the temporary head of

Salomon Brothers in order to restore confidence in the firm. He replaced John Gutfreund, the chairman of Salomon Brothers, and Thomas Strauss, its president. The vice chairman, John Meriwether, went as well. More would be heard from him later. This was the second rescue effort of Salomon Brothers by Buffett. He had acted as a white knight in 1987 when Salomon Brothers was under attack from Ronald Perelman, who was trying to obtain a controlling interest in the firm. Buffett had Berkshire Hathaway invest about $700 million in Salomon Brothers in order to discourage Perelman.

Government Securities Markets

The government securities market that Salomon Brothers was playing such a key role in was no small affair. It was the largest securities market in the world. Daily trading volume in U.S. government bonds in 1992 was $100 billion, versus the $8 billion traded on the New York Stock Exchange. The total U.S. government securities market was valued at almost $5 trillion. Interestingly, over 20 percent of Treasury securities was held by foreigners in 1994. Only primary dealers were allowed to submit bids on behalf of clients at Treasury auctions. The primary dealers in 1995 included B.A. Securities, Bear, Stearns, & Co., BT Securities Corporation, Chase Securities, Chemical Securities, Citicorp Securities, Daiwa Securities America, Goldman Sachs & Co., Fuji Securities, HSBC Securities, Merrill Lynch Government Securities, J.P. Morgan Securities, NationsBank Capital Markets, Nikko Securities, Nomura Securities, Paine Webber, Salomon Brothers, and Smith Barney. Most trading in short- and long-term government obligations was handled by a dozen dealers in New York City. Assisting them were “blind” brokers who brought buyers and sellers together by executing their orders on an anonymous basis. Cantor Fitzgerald Securities Corp. was the only major interdealer broker that was serving both primary dealers and retail customers in the government bond market in 1990.

The growth of the U.S. government securities market was a direct reflection of a massive increase in government spending. Federal government expenditures ballooned from less than $600 billion to over $1.5 trillion between 1980 and 1995. The net national debt was about $330 billion in 1973. That figure rose to over $1 trillion by 1983. Ten years later, the national debt stood at more than $3 trillion. In 1975, the national debt had been about one-quarter of gross domestic product (GDP), but it increased to over one-half of GDP by 1993. The deficit for fiscal year 1992 alone was almost $300 billion, and the interest on the national debt was almost $200 billion. A year later, interest on the debt was the third largest budget item, exceeded only by Social Security and national defense. Congress then increased taxes and ordered spending cuts to reduce the annual deficit.

Some 50,000 state and local governments issued municipal bonds in the United States in 1994. At that time there were 1.3 million municipal securities issues outstanding that were valued at $1.2 trillion. In 1993 alone, $335 billion in municipal securities were sold. The SEC approved a rule by the Municipal Securities Rulemaking Board (MSRB) that required the mandatory filing of offering statements by municipal securities issuers. This rule required municipal securities dealers to review and obtain an "official statement" from the issuer, and underwriters were required to forward copies of official statements to potential customers on request. This effectively required the preparation of a prospectus by municipal authorities seeking public financing. Municipal securities financing was becoming more complex. Municipal authorities were selling such things as "conduit" bonds, certificates of participation, and numerous derivative products, including inverse floaters. At the end of the century, some municipalities were selling bonds that were secured by their share of a $206 billion settlement with the cigarette companies.

The MSRB sought to automate settlement procedures in the municipal securities industry. Depositories were set up, where about half of the existing municipal securities were maintained by 1987. Automated systems were used for the clearance and settlement of municipal securities and mutual fund transactions at the National Securities Clearing Corporation. A Government Securities Clearing Corporation was created to clear government securities transactions; the Participants Depository Company served as a depository and book entry system for Government National Mortgage Association (GNMA) and certain other agency securities; the Delta Clearing Corporation was clearing repos; and the Emerging Markets Clearing Corporation was seeking to clear Brady Bonds.

Market Updates

Computer-assisted trading systems (CATS) were making inroads into the securities industry. The Toronto Stock Exchange was using such a system. The London International Stock Exchange was computerizing its operations. Computers posed their own special dangers. A clerk at Salomon Brothers in 1992 mistakenly entered an order to sell 11 million shares of stock for a client rather than $11 million as was ordered. This error caused the Dow Jones Industrial Average to drop sixteen points. A problem with a software package at the Bank of New York in 1985 prevented it from receiving electronic payments even though its liabilities were being paid out. The result was that the bank had a net debit of $23 billion and the Fed had to step in to rescue the bank.

So-called quant funds were appearing. These were computerized trading programs that were designed to predict changes in the stock market. There was concern that this high-powered and high-priced analysis was not much more reliable than flipping a coin. Hedge funds became popular once again. Their managers sometimes engaged in high-risk, aggressive speculation that threatened to destabilize markets. Some 800 hedge funds held $75 billion in assets in 1994. The National Securities Markets Improvement Act of 1996 gave more flexibility to hedge funds. It allowed investment companies to act without registration, if their investors were qualified purchasers—that is, large, sophisticated investors—without limitation as to the number of persons. Previously, registration of a hedge fund as an investment company was required if the fund had more than 100 investors.

Clearance and settlement were improving. The Depository Trust Company System had substantially immobilized most stock certificates. Clearing and settlements systems were increasing the efficiency of international transactions. The Cedel Bank Société Anonyme, Luxembourg, cleared and settled international securities transactions and provided custody services, trade confirmation, and lending services. Cedel settled over $7 trillion in securities transactions in 1994 and had settlement links in thirty countries. Euroclear was another international clearance and settlement facility. It was founded by Morgan Guaranty in 1968, but ownership was later transferred to an entity owned by over 100 banks and broker-dealers. Euroclear was handling almost two-thirds of the settlement of internationally traded debt instruments by the middle of the 1990s. Cedel and Euroclear established an electronic bridge to provide for settlement and clearance among their respective clients. An International Securities Clearing Corporation provided international clearance and settlement facilities in the Asia-Pacific region. It was linked to Cedel.

Before 1993, there was no regulatory requirement that set a minimum settlement time for securities transactions. The custom in the industry was a five-day settlement cycle. In 1992, the Group of Thirty Clearance and Settlement Project recommended that the settlement period should be reduced from five to three business days. The committee found that most funds due from customers were already available within three days. Thereafter, the Bachmann Task Force, created by the securities industry, recommended a three-day settlement cycle (T+3). The SEC followed that recommendation by adopting a rule in 1994 that required a T+3 settlement period for equity securities. The rule did not apply to U.S. government securities, municipal securities, commercial paper, and banker's acceptances. The SEC thought that this requirement would reduce the number of outstanding unsettled trades, reduce exposure to credit and market risk and push the industry toward paperless and certificateless trading. The SEC promised to continue its efforts to reduce that settlement period, hopefully to single-day or same-day settlement. The commodity futures industry already had an overnight settlement system that required its transactions to be settled before the opening of business on the succeeding day.

An economic study of the Nasdaq market in 1994 found that market makers were colluding in setting spreads. This led to investigations by the Justice Department and the SEC. Those investigations discovered several noncompetitive practices by market makers. Many of these practices were defensive measures employed against the so-called SOES bandits. Participation by market makers in SOES was made mandatory after the crash of 1987, because the market makers had refused to answer their phones and had exited the market, leaving many small investors stranded. This mandatory rule opened the door for the SOES bandits to "pick off" market maker quotes before they could be changed in reaction to market events. The National Association of Securities Dealers (NASD) had sought to curb the SOES bandits by prohibiting professional traders from using SOES. A federal court of appeals struck down that regulation. The result was that market makers adopted several collusive practices to protect themselves. Private suits were brought against the Nasdaq market makers in connection with their price-fixing and other improper activities. A settlement of $900 million was reached in that litigation. Several years later, the SEC announced that it was imposing $26.3 million in fines against twenty-eight securities firms and suspending fifty-one individuals in connection with those trading abuses on Nasdaq. Paine Webber was fined $6.3 million in those proceedings.

The NASD was reorganized as a result of concerns that it was not effectively policing the Nasdaq market. The operations of the NASD were reviewed by a committee chaired by former senator Warren Rudman. The market and regulatory functions of the NASD were, thereafter, split into two entities. Mary Shapiro, a former CFTC chairman and an SEC commissioner, was appointed to be the first head of the NASD regulatory subsidiary. The subsidiary began operations in 1996. The NASD was required by the SEC to spend $100 million to upgrade its enforcement efforts. Several rules were changed in order to make Nasdaq more efficient and open and to reduce the effects of the SOES bandits. Those rule changes resulted in reduced spreads on Nasdaq, but Nasdaq dealers began to add new fees to replace those revenue losses. In another effort to increase standards of conduct in the industry, the NASD and the securities exchanges adopted continuing education requirements for securities industry registrants that dealt with the public.

The Real Estate Investment Trusts (REITs) were still around. There was a bear market in those securities during 1990, but the recession led to bargains that could be acquired, particularly as the Resolution Trust Corporation and limited partnerships sold assets at distressed prices. Another boom in those securities began in 1991. Between 1993 and 1995, almost $17 billion in new REIT assets were accumulated[5] and numerous initial public offerings were made by the REITs. Those instruments were popular because they offered higher rates of return than those available on fixed income instruments. The REIT market fell between 1994 and 1995, but still another boom began in 1996 and 1997. Although the number of privately sponsored pass-through certificates dropped significantly between 1988 and 1989, over $150 billion of nonmortgage asset-backed securities was issued as of the year-end 1991 for such things as automobile loans, credit card receivables, computer and airplane leases, mobile homes, vacation time shares, and recreational vehicle loans. The CMOs had become popular as interest rates dropped because they provided protection from prepayments.

In 1993, interest rates for home mortgages dropped below 7 percent, their lowest level since the Vietnam War. On February 4, 1994, however, the Fed increased short-term interest rates for the first time in five years. Interest rates were increased by 2.5 percent over the next nine months, reaching a level of 5.5 percent. The result was a near panic in the bond market. CMOs and other instruments such as inverse floaters caused especially big losses. Five-year bonds had their worst year since 1926. The price on zero coupon Treasury securities dropped 18.7 percent, and long-term Treasury bonds lost 7.5 percent in value. In April of 1994, an investment fund that had primarily invested in CMOs filed for bankruptcy. It had losses of $600 million.

The International Organization of Securities Commissions (IOSCO), which traces its origins to 1974 when the InterAmerican Association of Securities Commissions was created for the purpose of considering securities regulations in the Western Hemisphere, was incorporated in Quebec, Canada, and a secretariat was established in Montreal. The Bank for International Settlements urged IOSCO to move from Montreal to Basel, Switzerland, in order to more closely group the international regulatory bodies for financial services. The International Insurance Regulators Group moved to Basel in 1994. A fight broke out between the SEC's chairman, Richard Breeden, and European members of the IOSCO over capital adequacy requirements. The fight involved the amount of the haircut, or reduction on the amount of equity securities in a broker-dealer's portfolio. The haircut proposed by European regulators was less than that used by the United States, and concern was raised that this would weaken the capital of securities firms. The SEC organized a countergroup called the Council of Securities Regulators of the Americas.

In January of 1994, the SEC issued a *Market 2000* report on the equity markets. This study was an attempt "to provide guidance for the development of a national market system."[6] The *Market 2000* report noted that the securities markets were changing "dramatically" in response to advances in technology, new products, and the internationalization of the markets. Nevertheless, the markets were operating "efficiently" in pricing securities, and record amounts of volume were being processed smoothly. The *Market 2000* report included assurances that customers were receiving the best prices for the execution of their orders. The SEC concluded that a major revision of market regulation was not required, but that some improvements were needed. Practices such as payment for order flow by broker-dealers and soft dollar arrangements required closer scrutiny, and market information, including information on quotations, trading volume, and execution prices, needed to be disclosed in a more timely and comprehensive manner. Competition among markets and market participants should be increased. The growth of proprietary trading systems and the development of an OTC market in listed stocks raised concerns that the regulatory playing field was not level for the participants in those markets. The SEC's *Market 2000* study wanted more open market access that would reduce restrictions on who could use various markets.

Litigation

An increasing number of lawsuits against public companies and officers making claims under the federal securities laws led the courts to curb such litigation. The Supreme Court required "scienter" or wrongful intent before a violation could be found under rule 10b-5, the SEC's antifraud rule that had been adopted under the Securities Exchange Act of 1934. An individual also had to be an actual purchaser or seller of a security before a claim could be made. This cut out claims by individuals who were dissuaded from purchasing a security by unduly pessimistic statements. The Supreme Court held that there was no private right of action for aiding and abetting claims under the Securities Exchange Act of 1934. This restriction shut off many lawsuits under rule 10b-5 against lawyers and accountants involved in securities transactions. Several courts recognized a "bespeaks-caution" defense in suits brought under the federal securities laws. This doctrine allowed corporations and their officers to make forward-looking statements concerning profit predictions, earnings, and so forth, provided that such statements cautioned investors that the information was a prediction of events that might not actually occur. One of the beneficiaries of that doctrine was Donald Trump, the New York real estate magnate. He and several companies were sued by bondholders who had provided $675 million in financing for the development of the Taj Mahal, the largest and most lavish hotel-casino complex in Atlantic City. This project went into bankruptcy, and the bondholders sued claiming fraud. A federal appeals court ruled that they had been duly warned of the dangers of such an occurrence.

Unfortunately, these judicial decisions did not slow the flood of litigation. The Private Securities Litigation Reform Act of 1995, which was passed over a presidential veto, restricted the use of class actions in securities fraud claims. Congress was concerned that class actions were being used to coerce settlements, particularly from high technology companies that were making initial public offerings. The act adopted the bespeaks-caution doctrine by providing a safe harbor for forward-looking information such as projections for earnings or profits, provided that appropriate cautionary language was given with these projections. The legislation sought to curb class actions. A lead plaintiff was required to be chosen to represent the class, and pleading requirements for complaints were strengthened. Restrictions on settlements were imposed in order to reduce abuses in attorneys' fee awards and settlement terms. In 1998, Congress went one step further and preempted many class action lawsuits under state laws. This legislation preempted state securities fraud class actions for securities traded on stock exchanges and in the Nasdaq National Market System. The National Securities Markets Improvement Act of 1996 also sought to reduce the regulatory load on the securities industry. The act exempted exchange-traded securities and those traded on the Nasdaq stock market from state registration requirements. Investment companies registered with the SEC were exempted from state registration, as were large investment advisers. The legislation further prohibited the states from imposing regulations on broker-dealers that differed from those of the SEC.

Markets and Politics

The top futures exchanges in 1994 by volume were, in order, the Chicago Board of Trade, the Chicago Mercantile Exchange, the London International Financial Futures Exchange, the Chicago Board Options Exchange (CBOE), the BM&F in Brazil, the MATIF in France, and the New York Mercantile Exchange. The top traded exchange futures contract was the three-month euro dollar contract on the Chicago Mercantile Exchange. It traded 104.8 million contracts. The second most actively traded contract was the U.S. Treasury bond future on the Chicago Board of Trade, which traded 100 million contracts. Daily trading volume in the interbank currency market was exceeding $1 trillion per day. Over fifty exchanges worldwide were trading options. The CBOE was trading 700,000 option contracts daily. This was 47 percent of equity options trading volume, 95 percent of index options trading, and a combined 65 percent for all options trading. New instruments continued to appear. The American Stock Exchange began trading portfolio depository receipts (PDRs). These were interests in a unit investment trust that actually operated as an open-end investment company. The trusts were intended to provide investors with a security that tracked the underlying security portfolio and traded like a share of common stock. The PDR holders would receive dividends from the securities in the trust.

Some trading profits were suspect. It was revealed in March of 1994 that the president's wife, Hillary Rodham Clinton, had made an incredible, short-term profit of $100,000 from a $1,000 investment in commodity futures trading. Her broker had previously been disciplined for improperly allocating trades among customers and for attempting to manipulate the Chicago Mercantile Exchange egg futures market in 1970. The owner of the brokerage firm where Ms. Clinton had traded was also accused by investors of manipulating the cattle futures market during the period when the president's wife was trading. That case was subsequently dismissed.

2 Insurance Troubles

The insurance industry was being blown by the winds of change. The number of insurance companies increased from about 650 to 2,200 between 1950 and 1990, but that growth was accompanied by a wave of disasters and failures that had severe adverse effects on property and casualty insurers.[7] Those disasters included the mass poisoning in Bhopal, India, involving the Union Carbide Company, the Lockerbie airline bombing, the MGM Grand fire, the explosion of the space shuttle *Challenger*, toxic waste in Love Canal, Agent Orange, and toxic shock syndrome. Hurricane Andrew resulted in claims against Allstate Insurance Company exceeding $1 billion. The nation's largest casualty insurance company, State Farm, lost over $750 million in Florida from that hurricane. Asbestos claims began increasing in the mid-1970s, and the size of the awards was growing. The total for those claims was estimated to be as much as $60 billion. Cleanup costs for toxic dumping were said to be much higher. The outbreak of AIDS had its effect on the insurance industry. For insurance purposes, the District of Columbia banned the use of HIV tests to determine if individuals had been exposed to AIDS. Eighty-two percent of the major insurance companies in the District of Columbia then stopped writing new individual life insurance policies.

Losses Mount

Numerous insurance companies and reinsurance companies stopped selling insurance policies on an occurrence basis and limited their insurance to a "claims made" requirement in order to stop large losses that they were experiencing. Insurance policies that covered an occurrence paid on claims from events that occurred during the policy term even if the claim was not made or discovered until later. This prevented the insurance companies from closing their books on those claims. Many companies also decided to stop selling accidental pollution policies. Reinsurance was another way to deal with these risks by spreading exposure through sales of policies to other insurance companies. New instruments appeared to deal with the catastrophes encountered by the insurance companies. Catastrophe "CAT" bonds were sold in 1994. These bonds paid high interest rates, but their principal could be reduced or forfeited should a catastrophic event occur that would cause losses on the part of the insurance company that issued the bonds. Berkshire Hathaway was writing so-called supercats, which were reinsurance policies for large disasters. Berkshire entered this business in 1989 after Hurricane Hugo and an earthquake in San Francisco generated massive claims.

Lloyd's of London encountered some staggering losses. The syndicates at Lloyd's lost more than $12 billion between 1988 and 1992 as the result of rising insurance claims from natural disasters, product liability, and environmental claims. An explosion on an oil rig in the North Sea caused more problems for Lloyd's. Members of the Society of Lloyd's participated in underwriting syndicates by becoming an underwriting member or a "name." The names were responsible only for their share of a syndicate's losses, but liability was unlimited for that share. Some 15,000 names were engaged in litigation over the liabilities from syndicate operations. Many of the names were innocent investors who did not fully appreciate the liabilities they were incurring. Numerous suits were brought in the United States in order to take advantage of our liberal laws and jury awards, but the U.S. courts sent most of those claims back to England. Lloyd's made a recovery after 1993, but conceded that it was not likely to recover some $1 billion in debts owed by its names.

Insurance Regulation

The insurance industry in the United States, unlike other financial service sectors, continued to be regulated only by the states. In 1988, Congress began hearings to determine whether federal regulation was needed. None was adopted. After forty multistate insurance companies failed in 1992, a bill entitled the Federal Insurance Solvency Act was introduced. It sought to create a Federal Insurance Solvency Commission, which would establish national standards for the financial soundness and solvency of insurance companies. That legislation was beaten back by the industry and state insurance administrators. In lieu of federal regulation, the National Association of Insurance Commissioners (NAIC) coordinated state insurance regulation and registration examinations. NAIC tried to create model laws, but as a voluntary organization it could not compel state legislatures to adopt those laws or model regulations. Most states, for example, did not require independent audits or reviews of actuaries in setting reserves. International reinsurance issues were outside the jurisdiction of this organization. NAIC did create a joint reporting and surveillance system for large interstate insurance companies. NAIC had few enforcement powers, but it did suspend New York's accreditation in the association in 1993 because that state had failed to enact NAIC model legislation. NAIC established an Insurance Regulatory Information System that created risk profiles to determine whether an insurance company's financial condition was deteriorating. This did not prove successful. NAIC sought to further its testing of the adequacy of insurance company reserves by creating risk-based capital tests. Before 1992, most states had capital requirements based on static minimum amounts of capital and surplus. Risk-based capital standards changed these to require capital levels based on the risk of the investments in an insurance company's portfolio.

All of the states had insurance guaranty funds. Those state-administered funds were generally small affairs and did not assure protection in the event of a large failure. Most state funds tried to protect life policies to a limit of $300,000 in death benefits, $100,000 in cash or withdrawal value, $100,000 in the present value of annuity benefits, and $100,000 in health benefits. Between 1969 and 1990, more than 150 property-casualty companies failed. Seventy-five of those failures were between 1985 and 1990. By 1985, twenty-one large insurance companies were being liquidated. State regulators took over thirteen life insurance companies in 1988, thirty-two in 1990, and thirty-four in the first nine months of 1991. Insurance company failures in the 1980s resulted in losses estimated at $10 billion. The failures of the Mission Insurance Company, the Transit Casualty Company, the Integrity Insurance Company, and the Anglo-American Insurance Company were projected to cost the public more than $5 billion. State insurance funds proved inadequate in that crisis. Mission Insurance of California, which failed in 1985, was placed into receivership by the California Department of Insurance. The receiver estimated the cost to the public to be $1.6 billion. Another failure was Transit Casualty in California, a commercial property-casualty company whose losses were estimated to be as high as $4 billion. Integrity Insurance in New Jersey failed in 1987 with losses that reached $1 billion. The Maryland Indemnity Insurance Company also failed. It was connected with forty-eight other companies operating in Maryland. They were not licensed and total losses reached $50 million. The Champion Insurance Company and its affiliates collapsed in 1989. Claims against the company amounted to $150 million. The Mutual Benefit Life Insurance Company collapsed in 1991. This was the largest insolvency of an insurance company in United States history. It came about as a result of guaranteed investment contracts. Under these contracts, the insurance company agreed to guarantee a return on the assets held by the pension fund for a specified period of time in exchange for a premium payment. The time period usually varied from five to ten years. There were about $4 billion of those contracts outstanding at Mutual Benefit when it failed. New Jersey rescued Mutual Benefit, which was then the eighteenth largest life insurer in the United States.

Failures

Other failures involved Monarch Capital and Fidelity Bankers Life Insurance. The Great Southwest Life Insurance Company, based in Houston, Texas, failed. The Kentucky Central Life Insurance Company collapsed and had to be liquidated. That company had reported large profits while it was losing millions of dollars. Another insurance company in trouble in the early 1990s was the American Standard Life Insurance Company in Oklahoma. The Mid-Continent Life Insurance Company in Oklahoma was placed in receivership by insurance regulators later in the decade. It was the oldest insurance company in the state. Baldwin United with assets of $3.9 billion, Integrated Resources with assets of $6 billion, and First Capital Holding with assets of $8.6 billion were other large failures. All of those firms were involved in the insurance industry. The Confederation Life Insurance Company, a $30 billion company, failed in August of 1994. The Equitable, the fourth largest insurance company in the United States, had losses of over $2 billion in real estate, junk bonds, and guaranteed investment contracts by 1992. Several large life insurance companies had their credit ratings downgraded in 1991. They included John Hancock Mutual Life, the Mutual Life Insurance Company of New York, Aetna Life Insurance Company, Kemper Investors Life Insurance Company, and Travelers Corp., First Executive Corporation, which was headed by Fred Carr, failed in early 1991. It was a large purchaser of junk bonds underwritten by Drexel Burnham. First Executive had announced losses of $836 million for a single quarter in 1989 after junk bond prices declined, and the company filed for bankruptcy a few months later. This was the biggest insurance failure in history. First Executive was selling "vanishing premium" life insurance policies. The company claimed that premiums would be invested in such a manner that the policyholder would not have to make premium payments in later years. The vanishing premium policies were sold under "illustrations" that assumed market performance that sometimes did not have a reasonable basis. The illustrations used double-digit interest rates as the basis for return. Numerous lawsuits were filed claiming that policyholders were not told that their premiums would not vanish if the expected returns were not obtained. Another First Executive product was a variation of the guaranteed investment contract—that is, the muni-guaranteed investment contract (GIC). Under the terms of these contracts, First Executive guaranteed a specified rate of return on the proceeds of municipal bond offerings until the funds were used for the purposes for which they were raised. The muni-GIC allowed the municipalities to issue bonds at low interest rates and then put the proceeds into a GIC with Executive Life, which would pass on a higher return through its junk bond portfolio. The result was that the investors who bought the bonds backed by these muni-GIC contracts had purchased the equivalent of a junk bond rather than a municipal bond. Their values dropped by 80 percent as the junk bond market plunged.

Fraud

The National Heritage Life Insurance Company failed, defrauded of millions of dollars by three individuals who were given twenty-five-year prison sentences. Other insurance companies failing were the Summit National Life

Insurance Company and the Equitable Beneficial Life Insurance Company. They were liquidated in 1994, and one executive was sentenced to fifteen years in prison. The chief executive officer of AMS Life Insurance was sentenced to twenty years in prison after his insurance company became insolvent. American Universal Insurance and Diamond Benefits Life Insurance failed. Two individuals were charged with defrauding those companies. One was sentenced to ten years in prison.

In June of 1999, the FBI was investigating the activities of Martin Frankel, who controlled seven insurance companies. He was looting large sums that he was supposed to be investing on behalf of several insurance companies. Frankel disappeared from his Greenwich, Connecticut, home as the investigation intensified. Some $335 million disappeared with him. Frankel fled the country, and a worldwide manhunt began. Frankel eluded pursuit for several months but was finally run to ground in Germany. Frankel had used the St. Francis of Assisi Foundation as a cover for some of his activities. That foundation had been using the names of famous individuals, such as Walter Cronkite, the television broadcaster, and Lee Iacocca, the former head of Chrysler, to solicit donations. This debacle again raised concerns that the regulatory structure for insurance companies by the states was inadequate. Louisiana was also having trouble with its insurance regulation. Two of the last three insurance commissioners in that state had been sent to prison, and the third was under indictment in 1999.

Fraud in insurance sales was becoming a widespread problem. Among those victimized was Joe Montana, the football player, who was sold a fake disability policy that was supposed to provide coverage in the event of an injury. Separately, in February of 1993, a state court in Texas found that the New York Life Insurance Company had committed fraud and awarded $15 million to policyholders in punitive damages, as well as additional damages. This was the first punitive damages award against New York Life in its 150-year history. Among other things, it was shown that employees were "windowing" policies—that is, policyholder signatures were being forged in order to convert policies from term insurance to permanent insurance. The New York Life Insurance Company ended up paying settlements of $65 million. The Phoenix Home Life Mutual Insurance Company in New York settled a class action for $100 million. Connecticut General Life Insurance Company entered into a settlement that was expected to cost $35 million and covered 130,000 policyholders. Another insurance company settling charges of improper sales practices was MetLife, the second largest insurance company in the United States. It was required to pay $100 million in Florida for such abuses. Later, MetLife agreed to settle other lawsuits in connection with deceptive sales practices in its insurance sales. The settlement could cost the company as much as $1.7 billion. It covered a period between 1982 and 1997. John Hancock Life Insurance Company was also charged with misleading sales practices. The company was negotiating a settlement for as much as $100 million. The State

Farm Mutual Automobile Insurance Company was hit with a $730 million judgment in October of 1999 for using less expensive generic auto body parts in settling claims, rather than those of automakers. The Prudential Insurance Company of America was under attack by regulators. Prudential paid $62 million to settle several suits brought in California by policyholders who claimed abusive sales practices. Prudential settled a class action brought against it for such sales practices. It was claimed in that litigation that thousands of Prudential policyholders were defrauded through sales of whole-life policies by agents who were churning the policies to generate commissions and misleading customers as to policy terms, especially for vanishing premium policies. By 1999, Prudential had paid out more than $1 billion to 250,000 policyholders in the class action. This amount covered only 40 percent of the claimants. Prudential had set aside a total of $2.6 billion to settle these claims. Prudential agreed to settle its life insurance regulatory problems through a multistate settlement under which it paid a $35 million fine. That was the largest penalty ever imposed on an insurance company. Prudential had additionally agreed to settle its limited partnership claims at a cost of about $1.5 billion. These and other problems resulted in a reduction in Prudential's credit rating by Standard & Poor's.

Restructuring

The amount of credit life insurance in effect was $231.3 billion in 1995. Credit life insurance was usually term insurance that would pay a debt in the event of the death of the debtor. Industrial life insurance policies (burial policies) were still being issued in small amounts. The average size of these policies was $660 in 1995. Premiums were paid weekly or monthly to an agent who collected the premium at the policyholder's home. The industrial life insurance sellers were calling themselves "home service" life insurance agents to reflect the nature of their payment programs. Sixty-nine Blue Cross-Blue Shield companies were operating in the United States in 1994, insuring 68 million individuals. A Senate report found that the Blue Cross-Blue Shield plans were poorly managed and that employees often made extravagant expenditures, such as $300,000 for a skybox at the baseball park in Baltimore. Rising insurance costs caused concerns that many people were uninsured and that a national health care program was needed. President Clinton and his wife, Hillary, sought to have a national health care program adopted. That effort ran into a storm of criticism and was abandoned. Managed health care was facing a crisis in the United States, as services slipped and costs skyrocketed.

Primerica acquired the A.L. Williams insurance agency in December of 1989. This network of life insurance agents had caused controversy in the 1970s by claiming that less expensive term life insurance was better for consumers than more costly whole-life insurance policies. The A.L. Williams sales philosophy was "buy term and invest the difference." Its sales force was second behind the Prudential Insurance Company of America in the amount of insurance in force. The A.L. Williams Corp. came under investigation in Florida for unfair business tactics involving spying on a competitor. Arthur Williams, the founder of the company, then took a leave of absence. The number of agents at A.L. Williams had reached 200,000 at one point in the 1980s. That number dropped down to 85,000 after Williams left the firm. The Florida investigation did not result in any charges against Williams. Primerica began rebuilding the sales force. By 1994, it had 110,000 agents nationwide. Most of them were part-time employees. Primerica bought Travelers Insurance in 1993. The latter firm was having difficulty with real estate investments gone sour, and it had to add $325 million to its property casualty reserve for asbestos and other environmental losses. Travelers received a capital infusion of $550 million from Primerica. After its acquisition by Primerica, 5,000 employees were laid off at Travelers in order to restore that company to profitability.

In another restructuring effort, Metropolitan Life Insurance Co. and Travelers, Inc., announced that they were merging their health care businesses into a new company that would insure 13 million people. The acquisition by Primerica Travelers did not remove the hostility built up against A.L. Williams in the industry. Between 1995 and 1997, the National Association of Life Underwriters banned Travelers Life Insurance from exhibiting at its annual convention because of its association with Primerica. National Benefit Life Insurance Company, a unit of Travelers and Primerica, was fined $500,000 by state insurance regulators in New York in 1995 for using misleading sales material. Those were only minor pinpricks. Primerica was now a financial giant. It was the top seller of insurance, and its Smith Barney brokerage operations had more than 4 million clients and 11,000 brokers working out of 500 offices.

Insurance Growth

Despite all of their troubles, the assets of U.S. life insurance companies were reaching astronomical levels. By 1982, the insurance companies had assets of $700 billion, which was more than the value of the nation's top fifty corporations combined. The insurance industry had assets of $1.75 trillion in 1988. That figure hit $6.1 trillion in 1995. The mix of investments of the insurance companies was changing. Mortgage holdings for insurance companies were 9.9 percent of assets in 1995. This was the lowest percentage since records started to be kept on such holdings in 1890. In 1998, Kentucky and Minnesota allowed life insurers to invest up to 20 percent of their assets in common stock. In Arkansas, Ohio, and Indiana, the limit was 10 percent.

Two of every three adults and nine out of ten households had some form of life insurance in 1992. The total life insurance in force in 1995 was $12,577 billion. The average amount of life insurance per household was $124,100. By 1996, in total, 154 million Americans were covered by some form of life insurance. The news was not all good. Although the amount of insurance in force increased between 1975 and 1995, the number of purchasers of life insurance grew at a much slower rate and even declined between 1993 and 1995. The number of new life insurance policies declined from some 18 million in 1993 to about 11.1 million in 1997, a reduction of 37 percent. Whole-life insurance sales in particular dropped sharply. Term insurance accounted for only 16.2 percent of life insurance in force in 1954. Forty years later, term insurance accounted for about 48 percent of life insurance, up from 38 percent a year earlier. But whole-life insurance staged a comeback. There was $7 trillion of ordinary life insurance in effect in 1996. This was an increase of 10.4 percent over the last two years. Whole-life would constitute 66.3 percent of the life insurance policies written in 1997. Most life insurance being purchased (68.8 percent in 1995) was bought individually, rather than through a group plan.

Insurance Products

The product base for the life insurance companies was changing. The insurance companies were selling "universal" insurance products. These products provided more flexibility than was available under traditional whole-life policies. Universal life insurance was a product that sought to unbundle the life insurance mortality costs and the interest credited on policy values and expense charges. This allowed the policyholder to vary the amount or timing of premium payments. Some of these contracts had a level death benefit and others had a variable death benefit, depending on the level of payments being made. If premiums were not paid, the policy lapsed when the cash value dropped to zero. Universal life insurance became a popular product that accounted for 38 percent of the industry's premiums by 1985, up from 2 percent in 1981.

Variable insurance was another new product. It allowed the policyholder to invest premiums in investments that would provide an opportunity for a greater return than was available on traditional whole-life. Coverage from such products increased from about $6.8 billion in 1985 to $83.6 billion in 1995. The initial variable life insurance policies provided for a fixed premium and a fixed death benefit that could not drop below a specified amount but could go higher based on investment returns. The cash value of the policy varied depending on the investment performance of the assets held in a separate account. The cash value of the policy could drop to zero or below or could increase as much as the investments in the account. Flexible premium variable or universal variable life insurance had the flexible features of universal life insurance and had death benefits that would vary according to investment performance of assets under the contract. Group universal life insurance was introduced in 1985. This product had a group term life insurance provision and a cash accumulation feature. Under these programs, employers were issued a master policy and employees received certificates of coverage and paid the premium. It provided participants with a choice of investment options and allowed them to specify where the cash value of the policy was to be invested.

Some 110 insurance companies were offering over 260 different variable annuity products in 1998. By 1995, about 12.8 million individuals had variable annuity plans. Of that amount, 2.9 million individual annuities were issued by insurance companies, a decrease of 1.3 million from 1994. Most of these annuities were deferred annuities. Some variable annuities provided for fixed income payments that were guaranteed, once payments began. The size of those payments depended on the value of the accumulated units that had been invested in a separate account. Other variable annuities had variable income payments that changed with the current value of the investments in the separate account. Some variable annuities provided a combination of fixed and variable income.

The appeal of variable annuities was hurt by changes in the tax laws that reduced capital gains taxes for competing investments. Even so, the increased emphasis on variable insurance sales meant that the insurance companies were becoming more like mutual funds or stockbrokers. That trend was accentuated by the fact that life insurance companies were divesting themselves of their health, property, and casualty businesses. In the 1990s, multiline insurers faced large losses and sold off unprofitable operations. Among those selling portions of their insurance business were Prudential Insurance Company of America, Metropolitan Life Insurance Company, and Travelers Insurance. Because variable products were securities, the insurance industry was subject to regulation by the SEC. The insurance companies "separate" accounts holding reserves for securities-based products, such as variable annuities and variable life insurance, held in excess of $400 billion by 1995. This was an increase of over 30 percent from 1994. Common stock constituted over 60 percent of those assets. In *Prudential Insurance Company of America v. SEC*, a federal court of appeals held that the separate account for a variable annuity contract was a separate legal entity from the insurance company, which meant that those accounts would be regulated as investment companies.[8] The SEC granted relief to allow the insurance companies to avoid most of the effects of this regulation. The SEC did set forth requirements that insurance companies had to meet in order to sell securities to retail customers. A subsidiary of Prudential Insurance Company of America was censured and fined $20 million by the NASD for deceptive sales practices in selling variable life insurance.

Industry Employment

The life insurance industry provided jobs to 2,238,000 individuals in 1995, 1,541,200 employed in home offices and another 696,800 as insurance agents, brokers, and service personnel. Concern was expressed that the independent insurance agent "may be headed the way of the milkman."[9] Insurance agencies' profits were down and their numbers had been sharply reduced. There were some 80,000 independent insurance agencies in the United States in the middle of the 1950s. That number fell to 70,000 in 1983 and then plunged to 41,000 in 1992. The owners of those agencies were getting older: The average agency owner was fifty-six.

The use of independent or general managing agents was the target of congressional criticism. A congressional subcommittee noted in 1990:

> The use of managing general agents (MGA's) by insurance companies to write business on their behalf is an industry practice that can be exceedingly dangerous. In the worst cases, an insurance company hands over responsibility for its business to the MGA, granting the agent power to underwrite business, obligate the company, handle claims, and even arrange for reinsuring the business written by the MGA in the company's name. Such a complete delegation of authority would be dangerous by itself, but the problem is compounded by the fact that MGA's are compensated by commissions on the amount of business they write.[10]

The independent insurance agents opposed reforms of the Glass-Steagall Act in 1996 and 1997. They viewed the possibility of banks expanding their business into insurance as another threat to their existence. The independent agencies already faced competition from direct line purchasers that allowed consumers to buy insurance from the insurance underwriting company without having to pay the intervening agency costs. American International Group, Inc., a leader in selling commercial insurance in the middle of the 1990s, was dropping agencies in favor of insurance brokers, who represented clients. The broker's compensation was lower than the agent's. The largest of these businesses was Marsh & McLennan, which arranged for insurance coverage by the American International Group and other insurers. Another large firm was Aon. Concern was expressed that insurance brokers for commercial insurance were receiving fees that would induce them to place insurance at rates that were not as low as might otherwise be available.

The decline in independent insurance agents began leveling off in the middle of the 1990s. Nationwide Mutual Insurance Company was signing up large numbers of independent agents. But there was another threat. As one writer noted, "we are witnessing the virtual disappearance, nominally, of the 'life insurance agent' as this person is now being named 'financial planner.' "[11] This was because many insurance agents and securities brokers were cross-licensed. Insurance companies were developing securities businesses while broker-dealers were developing insurance businesses. MetLife announced in October of 1998 that it was using Raleigh, North Carolina, to test-market a new financial planning operation that would be handled by Fulcrum Financial Advisors, an entity that was affiliated with MetLife and New England Financial. The new entity was to provide customers with income tax planning, mortgages, and investment planning advice. Still another threat was the Internet. Allstate Insurance Company announced in November of 1999 that it would sell car and home insurance directly to consumers through the Internet and over the telephone. The company stated that it was also cutting 4,000 jobs. Online companies helped consumers to buy insurance on the Internet. One service allowed consumers to review the offerings of fifty major insurance companies in order to find the best product. This allowed price comparison.

The insurance companies involved themselves in some exotic financing. Prudential Insurance Company of America provided $200 million to CAK Universal Credit Corp. to allow that company to make loans to musicians in 1998. The loans were to be secured by income from the future sales of their works. The insurance companies were selling an equity indexed annuity in 1998. It guaranteed a minimum return in a falling stock market and protected the investor's principal. Investors received only a portion of any increases in the underlying index, usually the S&P 500. Some of these indexed annuities did give 100 percent of the S&P gain. The Equitable Life Assurance Society of the United States established a fee-based financial planning program, wrap programs, a wholesale distribution network for financial products, and a multimanager mutual fund for variable insurance products.

Mergers and Demutualization

Eighty-six mergers and acquisitions, valued at $18 billion, occurred in the insurance industry in 1995. One transaction involved a $1.1 billion takeover of Continental Corporation by CNA Financial. Travelers Group bought the property casualty unit of Aetna Life & Casualty. Another acquisition was Alexander Hamilton Life by Jefferson-Pilot Corp. On December 10, 1998, Aetna announced that it had agreed to purchase Prudential Insurance's health care business for $1 billion. This made Aetna the largest health insurance company in the country. It would be providing health care insurance and services to one in ten Americans. In June of 1999, Lloyd's Bank announced that it was paying $11.13 billion to buy the Scottish Widows Fund and Life Assurance Company, which had been created in 1815 to provide for the families of soldiers killed in the Napoleonic wars. Chubb Corp. bought Executive Risk, Inc., in February of 1999. CNA Financial was the third largest property and casualty insurer, employing 20,000 people, after buying the Continental Corp. in 1994. Owned largely by the Lowe Corp., it was an American "financial giant in 1998."[12] CNA encountered difficulties in 1999. It was shedding jobs and sold some of its operations to the Allstate Corp. for $1.2 billion. In September of 1999, MetLife announced that it was buying the General American Life Insurance Company for $1.2 billion. General American had sought to grow through so-called funding agreements. Under these agreements, the insurance company agreed to provide a yield keyed to a financial index. General American experienced trouble with these contracts because they could be liquidated on short notice but the firm had invested the proceeds into longer-term instruments.

Mutual life insurance companies accounted for over 35 percent of total life insurance in force in the United States in 1995. The remainder was issued by the stock life insurance companies. The mutual form limited the ability of an insurance company to raise capital. In 1988, New York adopted legislation that permitted mutual life insurance companies to convert to stock companies in order to obtain additional capital. One company needing capital was the Equitable, which had lost $1.5 billion on guaranteed investment contracts. The Equitable obtained $1 billion in capital from a French insurer, Groupe Axa S.A. Equitable demutualized to raise more capital in 1992. This would become a trend in the industry. Prudential announced in 1998 that it was changing itself from a mutual insurance firm owned by its policyholders into a publicly owned company. At that time, Prudential had $260 billion in assets, making it the nation's largest life insurance company. Earlier, in September of 1997, the Mutual Life Insurance Company of New York announced that it was converting from a mutual life insurance company into a publicly owned company. The company was then 150 years old. Several other mutual insurance companies began converting to stock corporations as a means to increase their capital. In 1998, MetLife, a 130-year-old institution, announced that it too was converting itself into a publicly owned company. MetLife planned to demutualize itself through a public offering that was to raise $5 billion. This was to be the largest financial services offering in history. The restructuring of mutual insurance companies sometimes was to the disadvantage of their owners. Conversion raised other problems. The Mutual Life Insurance Company of New York (MONY) was under SEC investigation in 1999 for the sale of its vanishing-premium policies. The SEC began its investigation after MONY changed from a mutual company to a publicly held company. That conversion gave the SEC jurisdiction. MONY had made bad investments in the 1980s in real estate and other areas.

Large insurance companies were moving their headquarters to Bermuda in the 1990s in order to take advantage of low taxes there. Their move saved them a collective $7 billion in taxes each year. General Electric acquired two German reinsurance companies and a French consumer finance company as well as banks in Poland and Germany and financial interests in Britain. General Electric acquired additional annuity and life insurance businesses in the United States. Provident announced a merger with UNUM valued at $5.2 billion in November of 1998. This would create the largest seller of worker disability insurance in the United States. CMAC agreed to acquire Amerin through a stock swap valued at $646.7 million in November of 1998. This would create the second largest writer of mortgage insurance. Lincoln National bought Aetna's life insurance business for $1 billion in May of 1998. Warren Buffett's Berkshire Hathaway purchased General Re for $22 billion in 1998. Swift Re became the largest life reinsurer in America when it purchased Life Re for $1.8 billion. Conseco, a large life and health insurance company, announced in April of 1998 that it was paying $7 billion for Green Tree Financial, which specialized in "subprime" lending for mobile homes.

The amalgamated company was valued at some $20 billion. This effort to expand into financial services failed, and the company encountered financial difficulties just after the turn of the century.

In August of 1997, Crédit Suisse merged with Winterthur, the second largest insurance company in Switzerland. Allstate announced that it was buying American Heritage for $900 million in July of 1999. Another growing financial giant was Zurich Financial Services, which had $375 billion in assets under management in 1998 and was servicing 30 million customers in more than fifty countries. It was largely an insurance company but did provide other financial services. New York Life Insurance Company announced in March of 2000 that it was consolidating eight retail and institutional asset management units into a single subsidiary with $130 billion in assets under management. This move was made to allow better competition with mutual funds. Aetna divided its operations at the end of 1999 into health insurance and financial services. Thereafter, it was the subject of separate buyout proposals for those two services by ING Financial Group from the Netherlands and Well Point. Aetna rejected those offers and announced that it planned to split off its financial service and health care businesses.

A form of insurance was the retirement programs that had spread broadly throughout American society. In 1992, there were 88,621 defined benefit plans outstanding, as well as 619,714 defined contribution plans. The latter had 42.7 million participants. By 1995, half of all workers in the United States and three-quarters of government employees had some form of retirement program other than Social Security. About 65.4 million Americans were covered by pension plans that were maintained with life insurance companies in 1995. At that time, 173 million individuals in the United States were fully qualified for benefits under the Social Security system. Hannover Re, the German reinsurer, announced in 1998 that it was planning to issue bonds that would be backed by life insurance policies. "Their effect will be increasingly to blur the distinction between insurance and investment banking."[13] The banks were entering the insurance market and providing competition to the insurance agencies, as were the brokerage firms. In 1986, Merrill Lynch even formed its own life insurance company, the Merrill Lynch Life Insurance Company. This highlighted a phenomenon cutting across all financial services. As one author noted, there have traditionally been

> relatively succinct "borders" between what an insurance company, a bank, and a securities firm could do. Each industry operated within its compartment—the insurance companies sold insurance, banks took deposits and securities firms bought and sold equities. In today's world, both insurance and securities firms have financial instruments similar to bank deposits. In many countries, the banks have taken over insurance companies and securities firms and now offer their services. All three organizations actively sell financial expertise around the world, using technology and wide-ranging corporate know-how.[14]

Bank Insurance

A number of states had for years allowed state-chartered banks to provide insurance services to their customers. Federally chartered banks had been sharply restricted in their insurance activities until the Comptroller of the Currency ruled in 1990 that insurance sales were incidental to the business of banking. This included credit insurance, disability insurance, and title insurance. The banks exploited a loophole in the National Bank Act that authorized national banks to sell insurance as agents in communities with a population under 5,000. The comptroller allowed banks to operate insurance agencies out of those small communities even when their main office was located in a large city. A court further held that national bank offices in towns of less than 5,000 could be used to sell insurance to customers nationwide. The comptroller found other insurance and annuity activities to be incidental to the banking powers of national banks. This included credit life insurance. The comptroller concluded that title and municipal bond insurance were functionally equivalent to a standby letter of credit, and banks were allowed to engage in mortgage reinsurance.

The national banks were given another boost in their efforts to intrude into the insurance industry in 1995 after the Supreme Court held in *NationsBank v. Variable Annuity Life Insurance Company* that a national bank could sell fixed and variable rate annuities.[15] The Court held that annuities were investments rather than insurance. The Supreme Court held in *Barnett Bank of Marion County, N.A. v. Nelson*, that state legislation could not restrict national banks from selling insurance.[16] The legislation in question was antiaffiliation laws enacted by several states that prevented national banks from being affiliated with entities selling insurance in those states. Between 1995 and 1998, the number of states that allowed state banks to have insurance agencies increased from twenty-two to forty. Several other states allowed banks to sell annuities or insurance, with some restrictions. The banks plunged into the insurance business as restrictions were eased. In 1991, banks sold $300 million in ordinary life and health insurance. That figure increased to $3.6 billion in 1994. By 1996, most banks were selling some form of life insurance product. Annuity sales by banks were some $4 billion in 1987. That figure increased to $16.4 billion by 1994. In 1995, banks accounted for 20 percent of the market for annuities in the United States. By 1997, banks were selling 25 to 30 percent of the insurance industry's annuities. The First Union bank in North Carolina sold over $1 billion in annuities in 1996, which was an increase from $30 million in 1993.

3 Banking Growth

Bank Products

Many of the larger banks were receiving from one-third to over one-half of their revenues from noninterest income by the middle of the 1990s. This was a reflection of increased competition and an expanded product base. Among the activities that the banking regulators had found to be closely related to banking were trust company functions, acting as an investment or financial adviser, leasing personal or real property, acting as underwriter for credit life insurance and credit accident and health insurance related to an extension of credit, providing courier service for checks and commercial papers and documents exchanged among banks and financial institutions, providing management consulting advice to nonaffiliated bank and nonbank depository institutions, issuing money orders and selling traveler's checks and savings bonds, performing appraisals of real estate, arranging commercial real estate equity financing by acting as an intermediary, providing security and brokerage services, individual retirement accounts, and cash management services, underwriting and dealing in obligations of the United States and other government bodies, acting as a futures commission merchant through an affiliate, providing tax planning and preparation services, offering check guaranty services, operating an agency for collecting overdue accounts receivable, and operating a credit bureau.

The banks were "selling stocks and bonds, providing advice on mergers and acquisitions, concocting new fangled financial products and trading."[17] Banks sold U.S. Treasury securities and asset-backed securities, municipal securities, corporate bonds, corporate equities, financial derivatives, and precious metal futures. Banks acted as agents in private placements, sponsored closed-end investment funds, and offered deposit accounts with returns that were tied to stock market performance. Other bank and bank affiliate activities included euro dollar dealings, trust investments, automatic investment services, dividend investment services, financial advising, dealing in swaps and other OTC derivatives, and providing research services. Banks were still the principal factor in the foreign exchange market. This broadening of the banks' product base was driven by market forces. The banks could no longer depend on their deposit and loan business as the prime basis for generating revenues. This was underscored by the fact that, by 1993, commercial bank deposits were exceeded in amount by the funds held by mutual funds.

The banks responded to the mutual fund threat by creating their own mutual fund operations. At the end of 1987, over 200 mutual funds were connected in one way or another with a bank. This was under 10 percent of the amount of mutual funds. By the end of 1992, the number of bank funds had grown to 884. By 1993, a third of all mutual funds were being sold through banks. Commercial banks in the 1990s could sell mutual funds directly to customers as agents or establish separate broker affiliates for brokering mutual fund shares. Banks could additionally provide investment advisory services to their customers with respect to mutual funds. Banks would later offer "private label" mutual funds as well as those of other organizations. These activities soon raised regulatory concerns. The Office of the Comptroller of the Currency (OCC), the Fed, the FDIC, and the Office of Thrift Supervision issued an Interagency Statement in 1994 that sought to govern financial activities in nondeposit financial products, including sales of mutual fund shares and annuities. This directive required banks to maintain written policies and procedures governing the sale of investment products and required written agreements with third-party vendors. Disclosure obligations were imposed and other customer protection provisions were required.

Concord Holding Corp., which had been created in 1987, administered and distributed mutual funds for banks. It handled over $36 billion in assets in 1993. Sixteen similar firms operated mutual funds for banks in order to avoid Glass-Steagall prohibitions on bank underwriting activities. The Chemical Banking Corp. in New York agreed with Liberty Financial Company of Boston to sell mutual funds and investment products to Chemical customers through a new company that would employ 230 brokers. Liberty was a subsidiary of Liberty Mutual Insurance Company, which owned several mutual fund groups. Before this joint venture, Chemical Bank had already sold $3.6 billion in mutual fund assets through Hanover Funds. Another arrangement with Fidelity Investments to market mutual funds to Chemical bank customers had not been successful.

Mellon Bank acquired the Dreyfus mutual fund complex and became the largest bank manager of mutual funds, as well as the second largest asset manager in the United States. Fidelity Investments, which handled mutual funds, was first. NationsBank Corp. announced that it was adding eleven mutual funds to the twenty-eight mutual funds that were already under its umbrella. In 1993, the First Union bank in North Carolina bought Lieber & Co., which was the manager of $2.2 billion of Evergreen Mutual Funds. First Union was training 2,600 employees to sell mutual funds. That bank announced in 1996 that it planned to have $100 billion in mutual fund asset sales by the year 2000. Citibank was selling a family of mutual funds after regulatory changes allowed the banks to use their names in selling such securities.

Bank securities activities increased in other areas. First Union announced that it planned to double its staff of stockbrokers to 225 by the end of 1993. Legg Mason, Inc., in Baltimore began marketing investment products through banks in December of 1992. NationsBank announced that it was buying Chicago Research and Trading Group, Ltd., an options trader and primary dealer in government securities, in March of 1993. Like the brokerage firms, the banks were seeking revenues from proprietary trading. This included the writing and buying of OTC put and call options on United States government securities. Chemical Bank reported revenues of $1 billion based on proprietary trading activities in 1993. The Bank of America made more profits from trading than from its lending activities. Bankers Trust earned $600 million from proprietary trading.

The top dealers in OTC derivatives in 1993 were Chemical Bank, Citicorp, Bankers Trust, Société Générale, J.P. Morgan, and the Union Bank of Switzerland. In total, banks accounted in notional amount for as much as $14 trillion in derivatives sales. Bankers Trust announced that some 70 percent of its first-quarter profits in 1994 came from derivative products. At one point, over 50 percent of revenue for Bankers Trust was from derivatives transactions, although some of those gains turned sour when Bankers Trust was sued by customers that experienced large losses from those transactions. Citicorp was earning most of its profits in the emerging markets in 1997. Securitization became a watchword for complex corporate finance. It was an activity that the banks wholeheartedly embraced. That financing began with the securitization of residential mortgages in the 1970s, which remained the dominant form of this financing. Over $1 trillion of asset-backed securities involving family mortgages were outstanding in 1991. In March of 1990, Citibank sold $1.4 billion of consumer receivables that were pooled and sold as asset-backed securities. NationsBank securitized $1.4 billion of commercial real estate mortgages in 1996. It securitized $800 million in other mortgages. Complex arrangements were designed in order to boost the creditworthiness of particular borrowers.

Another growing loan activity was loan participations in which the originating bank sold interests in the underlying loan to third-party participants. Such sales were made in tranches or tiers with differing maturities and obligations. Syndicated lending reached a value of $1 trillion in 1997 before loan demand began to drop in 1998. The banking industry in the United States was highly profitable between 1994 and 1995 as a result of these activities. The barriers between investment banking and commercial banking continued to erode. The Fed approved an application by the Swiss Bank Corporation (SBC) in 1994 to acquire the assets and liabilities of O'Connor & Associates, an options and futures firm. SBC was also authorized to engage in securities-and derivative-related activity and underwriting and dealing in all types of debt and equity securities. Those nonbanking activities were to be kept isolated in SBC's Section 20 subsidiary, which was required to create "firewalls" designed to assure that separation.

The Bank Service Corporation Act allowed banks to operate service corporations that could perform back-office services for banks and certain other activities. The Comptroller of the Currency allowed NationsBank to operate a subsidiary to develop residential condominiums. Zions First National Bank was allowed to deal in municipal revenue bonds; such dealings had been traditionally prohibited under Glass-Steagall as investment banking activities. The comptroller adopted regulations in 1997 that permitted national banks to establish operating subsidiaries to engage in activities that a national bank could not engage in directly. National banks could, for example, underwrite municipal revenue bonds through such an operating subsidiary. The comptroller approved an application by BancOne that allowed it to operate a subsidiary that planned to engage in reinsurance, which has the same effect as underwriting. Banks continued to shed the hobbles imposed by restrictions on branch banking that had prevented them from expanding nationwide. In the early 1990s, the only states that allowed interstate branches were Alaska, Nevada, New York, North Carolina, Oregon, and Rhode Island. National banks were able, under something called the thirty-mile rule, to circumvent restrictions on interstate branching by relocating their headquarters across state lines while they retained branches in their former state. This scheme was used by several banks but was challenged in Texas. More states began removing restrictions on out-of-state banks, sometimes on a reciprocal basis. Even so, interstate banking in those states often required the creation of a separate bank.

Branch and Interstate Banking

By the middle of the 1990s, every state permitted multioffice banking. Yet "no commercial banking organization was even close to establishing a truly nationwide franchise."[18] Only seven organizations had commercial bank operations in at least ten states. The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 finally opened the door widely to interstate banking. That legislation allowed bank holding companies to acquire banks in any state. Banks were allowed to open interstate branches without having to create a separate banking corporation in each state. States could opt into or out of this legislation. Forty-eight states opted into the Riegle-Neal interstate branching provisions. Only Texas and Montana did not accede to these provisions. Later, in 1997, the Riegle-Neal Amendments Act of 1997 gave host states control over interstate branches within their jurisdiction to the same extent that the host state's laws would control the interstate branches of national banks. Somewhat ironically in light of the industry's efforts to extend branch banking, an executive for First Union announced in the middle of the 1990s that the banking industry was seeking to eliminate the branch delivery system and replace it with electronic banking. This was not at all inconceivable. Automated teller machines (ATMs) were scattered across the American landscape. Grocery stores became a favorite location for banking centers in the 1990s. In 1994, Wells Fargo & Co. operated a twenty-four-hour telephone banking service.

States were dropping restrictions on banking. Texas voted in 1998 to allow second mortgage lending. Anomalies remained. Some fifteen foreign banks had been given grandfather rights that allowed them to underwrite securities in the United States. This gave them a competitive edge over American banks. Banks and other institutions were using risk management models to assess the risk of their trading positions. The most popular of these models was called value-at-risk (VAR). The VARs assumed risk by determining what was likely to happen in the market from prior trading events. These models had some flaws: for example, they did not provide for catastrophic market events. Nevertheless, the Fed allowed banks to use such VAR models to determine the adequacy of their capital, and the SEC examined the usefulness of such models for securities-related activities. The insurance industry was already using risk-based capital methods to determine the sufficiency of the capital of insurance companies.

Public Interest Issues

Environmental consciousness was intruding into the financial area. Under the Comprehensive Environmental Response Compensation and Liability Act, lenders could become liable for the cleanup of hazardous waste when the lender's activities rose to the level of participation in management. The statute excluded liability for lenders holding ownership interest in a property primarily for the purpose of protecting their security interest in the facility, provided that they did not participate in management. Consumers were receiving additional protection in their banking transactions. The Consumer Credit Reporting Reform Act of 1996 preempted most state laws governing credit information sharing. This legislation required consumer lenders to provide notice of adverse action on a credit decision when the decision was based on information shared with other creditors. In 1994, redlining charges were brought against Chevy Chase Savings Bank and B.F. Saul Mortgage Company for considering the racial composition of residential areas in determining whether to market their financial products. Chevy Chase Bank agreed to establish a remedial plan to market mortgage loans and to open ATMs in black neighborhoods. The B.F. Saul Mortgage Company agreed to invest $11 million in the black community in Washington, D.C.

The Community Reinvestment Act required federal bank regulators to assess banking institutions' records of meeting the credit needs of low- and moderate-income neighborhoods before approving a merger. This provided a great deal of leverage for activist groups to protest the banks' lending activities and to claim abuses. The Riegle Community Development and Regulatory Improvement Act of 1994 sought to improve community development by creating a fund that would support community development financial institutions in low-income areas. The Treasury Department was authorized to spend $382 million for such lenders over a four-year period starting in 1994. These institutions included community credit unions and microfinance funds that supplied capital to poor people. The Central Appalachian People's Federal Credit Union, which supplied credit to the poor in Appalachia, was provided with $575,000 from the community development fund. Subprime lenders were another source of credit for the disadvantaged. These entities provided loans to high-risk borrowers, including individuals with prior credit problems. The fees, of course, were high. One company charged a 24.8 percent annual interest rate plus additional fees. Among other things, subprime lenders made residential loans that were not eligible for government-insured mortgages, including jumbo conduit loans of over $200,000. One subprime automobile lender had more than 300 dealers across the United States.

Bank Competition

By 1992, 94 percent of factoring was done by bank subsidiaries. The banks faced stiffer competition in consumer financing. The assets of the consumer finance companies were almost $800 billion. One author asserted that there had been a "shift from the dominance of the old line of commercial banks and investment houses to a new generation of non-bank financial institutions such as General Electric, Nippon Telephone & Telex, and Allianz."[19] This was due to the changes in technology and the increased importance of financial services to consumers. General Motors was selling insurance, making loans, and offering mortgages. This competition was having an effect. The share of total financial assets held by banks was about 40 percent between 1960 and 1980. That number was reduced to 30 percent by 1994. Thrift institutions' percentage dropped from 20 percent to 8 percent during that period.

The General Electric corporation (GE) was the first company to be valued at more than $200 billion. GE had nearly 2 million shareholders, and 40 percent of its revenues was from financial services. Success was not without cost. Losses at Kidder, Peabody before that firm was sold to Paine Webber cost GE $1.2 billion. The GE Capital Corporation was America's largest nonbank commercial lender, with profits of almost $5 billion. It was America's largest finance company and encompassed twenty-eight business operations in November of 1998. Those businesses included home mortgages, credit cards, reinsurance, equipment leasing, corporate financing, and life insurance. GE announced in December of 1998 that it was selling half of its $4.5 billion Visa and MasterCard portfolio to First USA, which was owned by BancOne. This was part of the restructuring that was intended to allow GE to increase its role as one of the largest issuers of private label credit cards for department stores and retailers. This project was to be carried out with First USA. Among the private label credit card issuers were Home Depot, Lowe's, Macy's, and Best Buy. BancOne became the second largest credit card issuer in the United States in 1997 after it purchased First USA. BancOne needed the credit card business. Merrill Lynch had used BancOne since 1978 to process its cash management account checking and credit card services, but Merrill eventually bought its own bank to carry out those procedures.

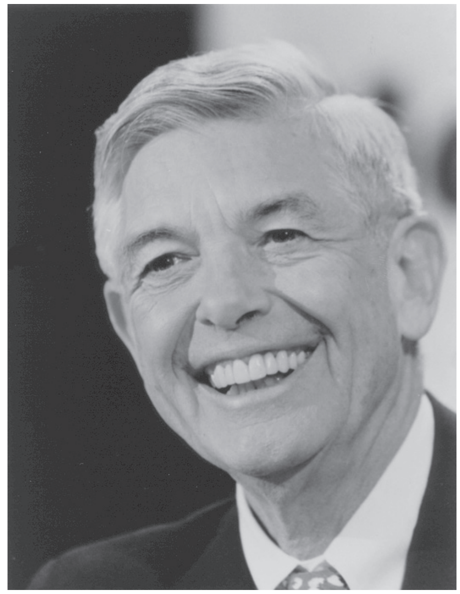
The Ford Motor Company earned about $15 million per quarter from its automobile operations in 1996. That was small change in comparison to the $300 million earned by the Ford Motor Credit Company from its financing operations, which involved almost four million vehicles. Ford Motor Credit had more than $133 billion in assets and was the largest automotive finance company. It was one of the world's largest issuers of corporate debt securities. Among other activities, Ford Motor Credit sold medium-term notes that were continuously offered, sold commercial paper through the Internet, and boasted that it had been named the "most professional end-user of derivatives" in 1997. Ford Motor Credit allowed customers to open money market accounts and access their account status online, and they could obtain advance online credit approval in order to buy a car.

The Beneficial Corporation, another large consumer finance company, had $17 billion of assets in 1997. It used the asset-backed market to obtain funds as well as the "traditional" corporate debt market. Beneficial Corporation's medium-term note program was at the center of the company's domestic financing strategy. During 1997, Beneficial issued $2.4 billion in medium-term notes. It began a wide-scale development of second mortgage loans in California in the early 1970s, and this remained a major product for the company thereafter. However, Beneficial experienced problems as the century closed and sought strategic alternatives. Household International, a large finance company that was started in 1878, provided that alternative by purchasing Beneficial in an $8.6 billion transaction in April of 1998.

Bank Consolidation

The number of banks declined from around 14,000 in 1980 to under 10,000 in 1995 and then fell to less than 7,500. These statistics reflected the massive restructuring of the banking industry that was occurring through mergers. Most bank acquisitions were friendly. Only twenty-three hostile bank takeovers occurred between 1984 and 1998. The most notable of those events occurred in 1988 when the Bank of New York acquired Irving Bank. Chemical Bank bought Manufacturers Hanover in a friendly transaction in 1991, and Bank of America acquired Security Pacific in 1992. That was then the largest banking merger in history. In that year, bank mergers were valued at $24 billion. The bank merger frenzy gave rise to the "super-regional" banks.[20]

They included BancOne Corporation, First Chicago NBD Corporation, Fleet Financial, Norwest Corporation in Minneapolis, CoreStates, First Union, Wachovia Corporation, Wells Fargo, and NationsBank. The assets of BancOne grew from $9.1 billion in 1984 to $88.9 billion in 1994. BancOne made over fifty bank acquisitions in five states between 1984 and 1990. In 1994, BancOne employed almost 50,000 people and had over 14,000 banking offices in twelve states plus 1,900 ATMs. This banking empire included more than sixty-nine banks.



Hugh McColl Jr. As head of NationsBank and later Bank of America, McColl represented the rise of banking in the South, which was beginning to challenge New York. (Courtesy of Archive Photos.)

NationsBank was the third largest banking company in the United States in 1995. Its assets grew from $15.7 billion to $169.6 billion between 1984 and 1994. NationsBank then had 2,000 branches in nine states, which was the largest branch network in the country. The bank was headed by Hugh McColl Jr., a former marine who kept a plastic hand grenade on his desk. McColl was called the George Patton of banking because his acquisition strategies were as aggressive as those of General Patton of World War II fame. NationsBank was among the ten largest credit card issuers in the country. It had 5.4 million credit card customers with balances owed of $4.8 billion. NationsBank was offering cobranded credit cards with *Southern Living* Magazine and Exxon. NationsBank, Dean Witter, and Discover were co-offering a charge card. NationsBank's acquisitions included C&S Sovran and Chrysler First. The latter was the nonautomobile consumer credit business of the automobile manufacturer. It was a $2 billion operation. In 1996, NationsBank acquired the BankSouth Corporation in Atlanta for $1.69 billion. Later in the year, NationsBank acquired Boatmen's Bancshares, Inc., in St. Louis for $8.7 billion. NationsBank's other acquisitions included Gulfstream Banks in Boca Raton, Bancshares of North Carolina, First Republic Bank Corp. of Dallas, and MNC Financial, Inc., in Baltimore. In September of 1997, NationsBank Corp. agreed to purchase Barnett Bank, Inc., a banking group in Florida, for over $14 billion. This acquisition made NationsBank the third largest bank in the United States, behind Citibank and Chase Manhattan Corp.

First Union, like NationsBank, was headquartered in Charlotte, North Carolina. It had almost $113 billion in assets in 1995. First Union began a merger and acquisition campaign under its chairman, Edward Crutchfield, aka "Fast Eddie." First Union acquired First Fidelity Bancorp in June of 1995 for $5.2 billion. This provided an opening to First Union in the Northeast. Between 1985 and 1997, First Union made seventy-five acquisitions, which included First Fidelity of Newark, New Jersey, for $5.6 billion. In 1997, First Union acquired the Signet Banking Corporation in Richmond, Virginia, for $3.25 billion. It acquired CoreStates Financial Corporation in what was then the largest acquisition in banking history. The purchase price was over $17 billion. First Union's acquisitions made it the sixth largest bank in the United States. Another financial giant in North Carolina, BB&T Financial Corporation, was both a bank holding company and a savings & loan holding company. It had $6.23 billion in assets in 1991.

Bank merger transactions amounted to $45 billion and involved some three hundred acquisitions in 1995. The increasing size of the banks was arousing concern. One congressman noted in 1994 that the multitrillion-dollar activity of the ten largest American banks amounted to more than twice the annual gross national product (GNP) of the United States. In the first half of 1995, four of the largest banking acquisitions in United States history occurred. They were Fleet Financial and Shawmut National, First Union and First Fidelity, First Chicago and NBD, and Chemical Bank and Chase Manhattan. The Chase Manhattan and Chemical Bank merger resulted in a combination with assets of almost $300 billion. Chase Manhattan became the largest bank in the United States after that combination. In other mergers, National City Bank of Cleveland bought Integra Financial Bank in Pittsburgh; the Fifth Third Bancorp of Cincinnati consolidated with Kentucky Enterprise Bancorp;[21] and Security Pacific joined BankAmerica.

Foreign Banking and Finance

Foreign banks were encountering difficulties. The Crédit Lyonnais had losses of over $4 billion between 1992 and 1994. The French government, which owned the bank, continued to pour money into its operations. By 1997, Crédit Lyonnais had become one of the biggest banking disasters in history. Losses were estimated at as much as $30 billion. It was discovered in 1995 that a senior official at the New York branch of the Daiwa Bank in Osaka, Japan, had been engaging in unauthorized trading of United States Treasury securities over an eleven-year period and had sustained losses of $1.1 billion. The Fed found a lack of controls, and Daiwa and its New York branch failed to provide regulators with timely notice of their discovery of this problem. On November 1, 1995, Daiwa consented to the issuance of an order terminating its United States banking activities. The bank entered a guilty plea to charges of violation of United States banking laws and paid a $340 million fine.

A New York court ordered a canton in Switzerland to pay a New York investor $125 billion in damages for losses from the failure of a Swiss bank that had supposedly been the depository for options on oil and mineral deposits in Venezuela. This caused quite a shock in Switzerland, but the ruling was later set aside. Computer crime was striking the banks. Between June and October of 1994, a Russian hacker penetrated Citibank's central computer on Wall Street and transferred $10 million out of several Citibank customer accounts into accounts that he had opened up for himself and his accomplices in California and Israel. Citibank was under investigation in 1996 for possible money laundering violations as the result of the deposit of over $100 million by Raul Salinas de Gotari, the brother of the former Mexican president.

The hotel that was the site of the Bretton Woods Conference was sold in a foreclosure auction in June of 1991. Its principal creditor was a savings bank. The Bretton Woods agreement had already broken down, giving impetus to efforts, which had begun in March of 1979, to establish a single currency for the European Union. The Maastricht Treaty announced a timetable for that unification in December of 1991, and it proposed the creation of a central bank. The treaty envisioned an introductory period of converging rates that would allow the unification to proceed smoothly. An exchange rate mechanism (ERM) was designed to maintain the stability of the currencies of the participating countries within narrow bands so that they could all converge. The European Monetary Institute was created to coordinate economic policies and plan monetary union. The next stage of this agreement was to commence in January of 1999 when the exchange rates of participating European Union countries were to be fixed against each other and common monetary policy adopted.

Efforts to unify the European currencies after the Maastricht Treaty met with frustration as speculators disrupted the ERM convergence program. European countries spent over $133 billion in order to stabilize their currency rates, but they were unable to match the resources of the speculators. Great Britain was required to stabilize the pound at 2.95 German marks under the ERM, but economic problems impeded that effort. In September of 1992, George Soros, whom *Business Week* labeled as the "man who moved markets," and other speculators began shorting the British pound. Soros sold $10 billion of British currency and made $2 billion during the ERM crisis. Goldman Sachs made about $200 million from the fall in the pound. On September 15, 1992, Great Britain withdrew from the ERM. The Italian lira also ran into trouble. This precipitated a financial crisis. Other European countries widened the bands in which they allowed their currencies to fluctuate. The increase was from 2.25 percent to 15 percent of current prices. But these problems were only temporary setbacks. In May of 1998, fifteen of the members of the European Union agreed to adopt a single currency, the "euro" that would be introduced in 1999. Coins and notes were to be in general circulation in the year 2002.

The European Bank for Reconstruction and Development and the European Investment Bank were two European institutions seeking a role in international finance. The European Investment Bank was created by the Treaty of Rome. The European Bank for Reconstruction and Development, established after the fall of the Soviet Union, was designed to help the reconstruction of central Europe. Another crisis occurred in Mexico in 1994 after a presidential candidate was assassinated. President Clinton announced a $50 billion rescue plan for Mexico that was to be carried out by the United States, the IMF, the Bank for International Settlements, Canada, and several other countries. Trade relationships were evolving, and the world appeared to be breaking up into trade blocs. The Canadian Free Trade Agreement, signed by the United States and Canada in 1988, was designed to create a trading bloc that could compete with the European Union. The North American Free Trade Agreement, which was signed into law in 1993, added Mexico to the American and Canadian free trade area. Numerous other nations began forming similar groups. They included the Caribbean Common Market (Caricom), the Mercado Commun del Sur (Mercosur) in Latin America, and the Common Market for Eastern and Southern Africa (COMESA).

The Uruguay Round of negotiations for GATT was concluded in December of 1993 after seven years. It created a World Trade Organization (WTO) to administer GATT. A similar proposal had been rejected by the United States after World War II. The new WTO provided a mechanism by which members could settle their trade disputes in a binding manner and negotiate reductions in tariffs. Trade wars over hormones in beef, banana imports, and ecological issues were threatening to disrupt that system before the adoption of the dispute settlement procedure. The WTO provided new ground for conspiracy theorists who claimed that it was a threat to humanity as the century closed. A new round of tariff negotiations was to be considered at a conference to be held in Seattle in 1999, but antiglobalization protests broke up the conference.

The Fed

The Federal Reserve Banks held over $450 billion of assets in 1996. The Fed was under attack for being too big, too expensive, and inefficient. It then had 25,000 employees and owned forty-seven Lear jets and other airplanes. The regional Reserve banks were veritable palaces. The Federal Open Market Committee continued to meet in Washington, D.C., eight times a year to determine economic policy, which had broad effects on securities prices, as well as the cost of credit. The Fed had depended until the 1980s on M1 money supply figures to determine monetary policy. When banks started paying interest on checking accounts, however, M1 accelerated. This caused the relationship between M1 and the economy to break down. The Fed switched to M2, which included savings accounts. That indicator lost its usefulness when interest rates went down and depositors pulled money out of savings accounts. In 1993, Fed chairman Alan Greenspan announced that M2 would no longer be used as the Fed's indicator for the condition of the economy. This also seemed to signal the demise of governmental reliance on money supply as the basis for determining growth in the economy.

4 The Market Boom

The economy soon recovered from the recession that occurred in 1991, and a boom began that extended to the end of the century. The Dow Jones Industrial Average rose to over 4,000 in February of 1995 and reached 5,000 by November. Although the Dow fell 53 points on its 100th anniversary in 1996, it had increased from its starting point of 48 in 1896 to over 6,000 during that one-hundred-year period. The Dow passed through 7,000 on February 13, 1997. On July 16, 1997, it exceeded 8,000, an increase of over 5,600 points since 1990. Between 1987 and 1997, the Dow jumped by over 300 percent, its “best 10-year stretch in history.”[22] President Clinton suggested in 1997 that business cycles were no longer affecting the economy as the stock market boomed and the economy continued its expansion. All of the news was not good. Bond prices dropped sharply in 1994, even as the stock market began one of the “most powerful bull markets in history.”[23] It was a volatile market. “Circuit breakers” adopted after the stock market crash of 1987 resulted in automatic trading halts on the NYSE when market prices moved a specific amount. Circuit breakers were employed over 100 times in 1996.

Market Growth

A NYSE seat sold for $1.75 million in 1997, but prices fluctuated. A seat was sold on March 9, 1998, for $2 million, while in May of 1998 a seat went for $1.35 million. It was a high-pressure business for members on the floor. The heart attack rate there was as much as ten times that of the general population, a fact that was attributable to stress and “gluttony.”[24] The secondary markets for equity securities totaled over $5 trillion by 1995. Almost 3,000 companies were listed on the NYSE in 1996, and over 100 billion shares were traded on the NYSE that year. Average daily trading volume exceeded 400 million shares. NYSE volume was over 133 billion shares in 1997. Included among the new offerings was Vimpel Communications, the first Russian company to be listed on the NYSE.

Mutual funds were growing in number and sales. In 1970, there were about 360 investment companies with assets of $48 billion. By 1995, that number had increased to 5,700. Mutual funds grew by over 30 percent in that year alone. The number of mutual fund accounts increased from 8.7 million in 1978 to 131.8 million in 1995. By 1997, mutual funds held $4.2 trillion in assets, and the number of mutual funds increased to some 8,000 in the following year. The top ten global money mutual fund money managers were Kampo, which is the postal life insurance bureau in Japan, Fidelity Investments, Axa in France, Barclays Global Investors, Merrill Lynch, Union Bank of Switzerland, Nippon Life, Crédit Suisse, Swiss Bank Corp., and State Street Global Advisors. The largest mutual fund in the United States in 1997 was Fidelity Investments, which had over $500 billion under management. The Vanguard Group managed $300 billion, Capital Research & Management over $200 billion, Merrill Lynch Asset Management over $187 billion, and Dreyfus Corp. $95 billion. Peter Lynch, who managed Fidelity Magellan, was a star of the mutual fund industry. Another mutual fund star was John Neff of the Vanguard Group's Windsor Fund. One fund manager who was having difficulties was Gary Pilgrim. His growth funds rose quickly in the early 1990s but then began to fall. At one point, Pilgrim's fund had $2 billion under management.

Massachusetts Financial Services (MFS) was said to be America's oldest mutual fund organization, tracing its origin back to the Massachusetts Investors Trust in 1924. In 1996, MFS was managing over $40 billion for almost 2 million investor accounts. The mutual funds were broadening their operations by offering additional services through their money funds and by opening brokerage affiliates where investors could purchase and sell stocks. Concern was expressed in 1998 that the directors of mutual funds were not doing much directing. Instead, the funds were controlled more and more by their outside advisers who were trading the funds. That raised the issue of whether the advisers were managing for their own benefit, rather than that of their investors. The fund advisers were often traders; they did not always follow a buy and hold strategy. In 1998, the average mutual fund manager held stock for only about twelve months. This meant that the portfolio was turning over annually.

Almost 140 billion shares were traded on the Nasdaq Market in 1996. Nasdaq trading volume was up 19 percent in 1997, and average daily trading volume was 648 million shares. Nasdaq was the world's second largest stock market. More growth was expected. The NASD signed an agreement with MCI, the telephone company, to upgrade Nasdaq's systems so that the market would have the capacity to handle 4 billion shares a day by the year 2000. Over 6,000 issues were already being traded through the facilities of Nasdaq. About 4,000 of those issues were traded on the National Market System, and the rest were small cap stocks. Over 500 firms were active market makers in the Nasdaq in 1997. Every Nasdaq stock had at least two market makers; most had ten, and some had as many as forty or more. Knight Securities was the largest market maker of Nasdaq securities. The Nasdaq OTC Bulletin

Board listed 7,000 securities. It was an electronic forum for posting quotes and indications of interest for thinly traded securities, many of which were penny stock companies, limited partnerships, American depository receipts for foreign companies, and warrants. The NASD stepped up efforts to regulate the bulletin board, which had no listing requirements. The NASD tried to require these companies to file current financial statements. It was thought that increased regulation could cut the number of companies listed on the bulletin board in half. Companies that did not qualify even for the bulletin board could still trade in the Pink Sheets printed by the National Quotation Bureau.

Market Volatility

The volatility in the stock market was causing concern. The Dow Jones Industrial Average dropped 115 points in one day in mid-1996 when data on jobs was announced. At the end of 1996, Fed chairman Alan Greenspan warned of "irrational exuberance" in the markets. He repeated those warnings in 1997. There seemed to be some basis for his concern. On August 15, 1997, the Dow Jones Industrial Average dropped 247.37 points. That was then the second largest drop in a single day in the history of the market. Technology stocks dropped sharply on October 14, 1997. The stock markets experienced an even greater shock in that month after Asian markets fell sharply when Thailand began experiencing currency problems. That trouble spread into Hong Kong, where the market dropped over 10 percent on October 23. This touched off a run on other markets and spread to the United States, where the Dow dropped by 186 points. The Dow fell another 554.26 points on October 27. This was the largest single drop in the history of the Dow Jones Industrial Average, but only the twelfth worst in percentage terms. On October 28, small investors returned to Wall Street to push stock prices back up in exceedingly heavy trading volume. On that day, 1.2 billion shares were traded, and the Dow increased over 337 points, the biggest single-day jump in history. This was also the first time that the NYSE traded more than 1 billion shares in a single day. Volume that day was 76 percent greater than the amount that had ever been traded before in a single day and was about twice the volume during the stock market crash of 1987. Although the markets seemed to have settled down, trading volume was still heavy on October 30, 1997, with more than 777 million shares being traded on the NYSE. This was the second busiest day in history.

Volume was heavy in the OTC market during the October crisis. On October 28, 1997, Nasdaq processed 1.4 billion shares. Because of the heavy volume, traders encountered some difficulties in having their orders executed. Efforts to sell stock resulted in delays of as much as ninety minutes. Unlike in the stock market crash of 1987, there were few liquidity concerns.[25] Circuit breakers kicked in on the NYSE, which required a halt in trading, and the market was shut down. That action resulted in much criticism, and the NYSE broadened its circuit breakers in 1998 so that the market would close only in the most severe declines. The NYSE traded $23 billion of securities each day in May of 1998. International markets were seeking growth. The London Exchange had spent $600 million for a Taurus clearing and settlement system that had to be abandoned in 1996 because of technical difficulties. Despite that setback, electronic trading in the European markets was providing competition to the NYSE. To meet such threats, the NYSE announced that it planned to spend $1 billion on a new trading floor and upgrading its technology. This included the development of handheld devices that would allow floor brokers to receive orders and transmit reports from the floor to their customers.

Markets Merge

Increased competition was causing the exchanges to reconsider their market positions. Several exchanges sought to merge in 1998. The Pacific Exchange and the CBOE agreed to consolidate in July of that year. They were the first and third largest stock options exchanges in the country. But that merger was called off after the Justice Department raised antitrust concerns. The AMEX announced that it was combining with Nasdaq, which was calling itself the "market of markets." Nasdaq announced that it was planning to create a European exchange in the year 2000. The Philadelphia Stock Exchange agreed to merge with AMEX, but that deal fell through in April of 1999. The NYSE was seeking a linkage with the Paris Bourse. The London and Frankfurt Stock Exchanges announced that they were planning to create a pan-European stock exchange. The basis was laid for an even broader-based European stock exchange in November of 1998. The Paris Bourse agreed to join an alliance with the London and Frankfurt exchanges. It was hoped that a total of ten European exchanges would join this Pan-European affair, but success in obtaining that linkage was not immediate.

A merger of the London Stock Exchange and the Deutsche Bourse in Frankfort was announced in May 2000. The combined entity was to be called "iX" for international exchange. At the same time, those exchanges announced a joint venture with Nasdaq and a new Japanese market that would allow trading on a twenty-four-hour basis. A fight thereafter broke out when the OM Group from Sweden made a hostile bid for the London Exchange in August 2000. The Chicago Mercantile Exchange, the Bourse in Paris, which operates MATIF, and the Singapore International Monetary Exchange had earlier announced that they were creating a global network for futures and options. Ten exchanges around the world negotiated a linked market in June of 2000. They included the NYSE and exchanges in Tokyo, Amsterdam, Paris, Mexico, and Saó Paulo.

Business Changes

The securities industry took the first step toward decimal trading in June of 1997 by allowing trading to be conducted in increments of sixteenths. This was a change from the one-eighth increments that had been used as the smallest unit for securities trading from the beginning of the markets in the United States. The NYSE planned to move from the minimum of sixteenths to decimal points by the fall of the year 2000. The SEC sought the implementation of a decimal pricing system for the stock and options markets by July of 2000 but had to extend that deadline into 2001. Claims were made that investors would benefit by as much as $1 billion a year in more efficient spreads in securities prices through the use of decimal quotations. In fact, when decimals were introduced on the NYSE, specialists were able to increase their profits by widening their spreads slightly in the new one-cent increments. This practice, called "penny jumping," was sharply criticized by those affected.

The Securities Investors Protection Corporation (SIPC) was still offering up to $500,000 in protection per customer in the event of a broker-dealer insolvency in the 1990s. Even as late as 1993, there appeared to be a deep misunderstanding of the role of federal deposit insurance and SIPC with respect to mutual fund sales. A survey by the SEC found that two-thirds of investors in bank-managed mutual funds believed that their funds were federally insured. Nearly half of all mutual fund investors erroneously thought that mutual fund shares purchased through broker-dealers were federally guaranteed.

Most securities were subject to a 50 percent margin requirement set by the Fed. Treasury bills could be margined up to 90 percent. The Fed amended Regulation T to allow "good faith" loan value treatment for margin purposes for money market funds and nonequity (fixed-income) securities. Good faith loan treatment was a retreat from the New Deal legislation of the 1930s to use margin regulations as a means to limit speculation in securities. Good faith loan treatment meant that the decision on how much to loan on security would be left to the judgment of the creditor. It would be a credit decision and not a social judgment on the degree of speculation or leverage that should be allowed. Restraints were maintained on margin treatment for equity securities.

Brokerage Firms Evolve

Computerized trading programs were still popular in 1997. One firm, BNP/Cooper Neff Advisors, located in Radnor, Pennsylvania, was trading over 100 million shares of stock weekly. This was as much as 4 to 6 percent of the trading volume on the NYSE. The firm dealt heavily in Nasdaq shares. This entity was controlled by Banque Nationale de Paris. The two largest discount brokers in 1997 were Charles Schwab and Fidelity Investments. In September of 1997, Fleet Financial Group, Inc., purchased Quick & Reilly Group, for about $1.6 billion. At that time, Quick & Reilly was the third largest discount brokerage firm in the country.

Goldman Sachs & Co. was transforming itself from a partnership into a more highly capitalized corporation. The firm had been struggling for years with the problem of acquiring sufficient capital to support its expanding business. In 1986, the partnership acquired $500 million from Sumitomo Bank as investment capital. This provided only temporary relief. Forty Goldman Sachs partners resigned in 1994 as the firm's capital base declined sharply "during the worst bond market in a generation."[26] The firm then cut $650 million in costs. But the firm recovered quickly from that setback and had a pretax profit of over $3 billion in 1997. Junior partners at the firm received bonuses of $5 million each. More senior partners received $10 million or more. Goldman Sachs initially decided in 1996 that it would not go public even though it continued to need additional capital, but the firm did become a limited liability partnership.

Dean Witter announced a merger with the Morgan Stanley Group valued at over $10 billion in February 1997. Thereafter, Morgan Stanley Dean Witter announced that it was preparing to build a 1-million-square-foot office building in midtown Manhattan near Times Square. Primerica Bank was a nonbank bank that issued MasterCard and Visa credit cards. It had about 400,000 cardholders. Primerica Bank issued the Quicken Visa Card, which allowed holders to consolidate their purchases on a single card that they could track on their personal computers. Cardholders were given monthly records through their modem or on a computer diskette. Travelers Bank of Delaware issued an affinity credit card with the Rainbow Foundation, a group that supported gay causes. The Rainbow Visa Card was introduced in 1995. In September of 1997, Travelers Group, Inc., announced a $9 billion stock swap with Salomon Brothers. The new entity was renamed Salomon Smith Barney Holdings. It was larger than Merrill Lynch & Co. The Travelers Group then included Salomon Smith Barney, Primerica Financial Services, Travelers Life and Annuity, Travelers Property Casualty, and Travelers Bank and Trust. Primerica Financial Services had a network of 90,000 representatives in 1997. It was directing its efforts to providing investment services to middle-income Americans. Travelers was reported to have considered the acquisition of Bankers Trust, but that deal fell through.

In the first half of 1996, underwriting volume was $691 billion. Merrill Lynch, Lehman Brothers, and Salomon Brothers accounted for more than one-third of that amount. Merrill Lynch was a $25 billion company in November of 1997. The firm signed a $400 million contract with AT&T to manage its communications system. Merrill purchased Mercury Asset Management, a money manager in London, for $5.3 billion. In June of 1998, Merrill Lynch purchased one of Canada's larger brokerage firms, Midland Walwyn, Inc., for $855 million in Merrill Lynch stock. This put Merrill Lynch back into the Canadian retail securities business, which it had left in 1990.[27] In 1997, Merrill Lynch made $2.7 billion from investment banking, $3.8 billion from trading, $2.8 billion from asset management and other services, and $1 billion from interest and dividends. Goldman Sachs had $2.6 billion in revenue in 1997 from investment banking, $2.3 billion from trading, $1.5 billion from asset management and other services, and $1.1 billion in net interest and dividend income. Morgan Stanley Dean Witter received $2.7 billion from investment banking revenues, $3.7 billion from trading, $3.3 billion from asset management and other services, and $2.8 billion from interest and dividend income.

Merrill Lynch was displaced as the leader of the initial public offering underwriting market in 1998. Goldman Sachs took over that position. Hambrecht & Quist, a California broker-dealer, was a popular underwriter for high-tech companies in Silicon Valley. The number of initial public offerings fluctuated. In July of 1998, Bear Stearns & Co., Paine Webber, Wasserstein Perella Securities, CIBC Oppenheimer, and others acted as underwriters for 2,182,500 shares of Nortek, Inc. In another offering, Bear Stearns, Everen Securities, Jefferies & Co., NationsBank, Montgomery Securities, and others acted as underwriters for 4,025,000 shares of Maxim Medical common stock that was priced at $24 per share. CIBC World Markets, the Canadian Imperial Bank of Commerce affiliate of CIBC Oppenheimer Corp., acted as an underwriter for $800,000 of Global Crossing Holding, Ltd., senior notes, $350,000 of Samsonite 10.75 percent senior notes, and other securities in July of 1998. The corporate bond market had largely replaced bank lending for corporations by 1997. Banks were providing only some 22 percent of corporate finance, as compared to over 70 percent in France and Germany. Junk bonds were alive and well in 1998. The Second Annual Rocky Mountain High-Yield Conference was held on July 29, 1998, in Aspen, Colorado. It was sponsored by CIBC World Markets. The announcement for this conference included tombstones for NTEX, Inc., which had floated $75 million of 11.5 percent senior notes in May of 1998, and Pen Holdings, Inc., which issued $100 million of 9.875 percent senior notes. The top firms in junk bond sales and merger and acquisition activities in 1997 were Donaldson, Lufkin & Jenrette; Merrill Lynch; Goldman Sachs; Morgan Stanley Dean Witter; Salomon Smith Barney; Chase Manhattan; Bankers Trust; Bear Stearns; J.P. Morgan; Crédit Suisse; First Boston; and SBC Warburg Dillon Read. The three best-known proprietary trading firms on Wall Street in 1997 were Goldman Sachs, Salomon Brothers, and Bear Stearns. Goldman Sachs announced that it was entering the commercial mortgage lending business through mortgage-backed securities. Other brokerage firms were already in the business, including Merrill Lynch.

Information Services

Consideration was given to whether the credit rating agencies should be regulated by the federal government since they played such an important role in the financial markets. The leading ratings services were Moody's, Fitch, Standard & Poor's, and Duff & Phelps. These were the only full-service rating agencies. Several other firms rated foreign securities. They included the Canadian Bond Rating Service, the Dominion Bond Rating Service, IBCA Ltd., and the Japanese Bond Rating Institute; TRIS was rating securities in Thailand. Standard & Poor's was rating over $2 trillion of debt and other fixed income instruments in more than fifty countries. Moody's and Standard & Poor's dominated the business of rating government and corporate debt. Duff & Phelps Credit Rating Co. began rating bonds in 1982. It had previously published research reports on public utilities companies. Another rating agency that was begun in 1975, McCarthy, Crisanti & Maffei, was acquired by Duff & Phelps in 1991. Thomson BankWatch rated the obligations of financial institutions. A.M. Best rated the creditworthiness of insurance companies. In 1996, Dun & Bradstreet split itself into three public companies and engaged in a further split the next year. The companies included Moody's Investor Services, the Bond Rating Agency, and Dun & Bradstreet Commercial Credit Rating. Value Line continued to provide information on stocks and to predict their performance. It proclaimed, "Since 1965, stocks we ranked No. 1 have grown 11,939% vs. 138% growth for stocks we ranked No. 5. (During the same period, the N.Y.S.E. composite rose only 874%.)"[28]

The financial information services industry was big business. In 1996, Bloomberg, Dow Jones, Reuters, and Bridge had over $4 billion in revenues. This industry was headed by Reuters, with 40 percent of revenues. Its competitors included Bloomberg Financial Markets, which listed over 300 stock indexes in its database. Included among the indexes were an Italian fashion index, an Islamic Malaysian index, and an amalgamated index of companies owned or operated by African-Americans. Bloomberg was operating its own financial news network. The financial information services industry was valued at $5.8 billion in 1998. Dow Jones' Internet revenues rose to $313 million in 1996 and were expected to reach $400 million in 1998. Competition was not always friendly in the financial information industry. In 1998, Reuters was accused of having pirated information from Bloomberg. Dow Jones Market Services and Knight-Ridder were finding it difficult to compete with the market leaders in financial services information. Dow Jones bought Telerate in 1990 for $1.6 billion. Telerate provided news and data services for the securities business, but it was losing out to competition from Reuters. Dow Jones sold Dow Jones Market Services to Bridge Information Systems for $510 million in March of 1998. Bridge later declared bankruptcy. Lipper Analytical Services was sold to Reuters Group PLC in July of 1998. Lipper was a leading mutual fund data analyst company.

The accounting industry was experiencing the effects of change. The Financial Accounting Standards Board (FASB) sought to establish an accounting standard that would require corporations to mark their securities positions to the market quarterly. This proposal met with opposition because it could cause wide, unexpected changes in financial statements as the market changed. Agreement was reached through IOSCO on a uniform set of accounting standards that would facilitate international offerings. The original "Big Eight" accounting firms were Arthur Andersen; Arthur Young; Coopers & Lybrand;

Deloitte Haskins & Sells; Ernst & Whinney; Peat, Marwick, Mitchell; Price Waterhouse; and Touche Ross. They were being reduced by consolidation. Deloitte Haskins & Sells and Touche Ross merged in 1989, as did Ernst & Whinney and Arthur Young. In September of 1997, Coopers & Lybrand and Price Waterhouse, two of the world's largest accounting firms, announced their merger. In the following month, Ernst & Young and KPMG Peat Marwick LLP disclosed that they were merging to form the world's largest accounting and consulting firm. The revenues of that combined firm would have been over $18 billion, but the merger plan was abandoned in February of 1998. The "Big Five" accounting firms as the century closed were PricewaterhouseCoopers, Ernst & Young, KPMG, Deloitte & Touche and Andersen Worldwide. PricewaterhouseCoopers was the world's largest accounting firm. The SEC investigated it to determine whether the firm's partners had violated rules requiring independence of accountants. Thirty-one of the firm's top forty-three partners owned stock in companies that were being audited. Over 8,000 violations by partners and employees of the firm were found. Later, the Big Five accounting firms agreed to disclose violations of independence standards voluntarily and to conduct a review of their members' stock holdings.

The accounting firms were exploring entry into the legal business as well as continuing to expand their consulting businesses. Some of the accounting firms created financial investigative services to assist their clients. Mid-sized accounting firms were still operating, including BDO Seidman and Grant Thornton. By the end of the 1990s, the consulting operations of accounting firms had grown to such size that they often competed with their accounting activities. Andersen Worldwide experienced difficulties in coordinating the activities of its consulting partners with its accounting business. A fight broke out over the control and direction of the firm between the two competing groups of consultants and accountants. In December of 1997, Andersen Consulting partners voted to split themselves away from their accounting partners in Andersen Worldwide. Billions of dollars were at stake in this internal struggle. Finally, in August of 2000, an arbitrator ordered Andersen to split off its consulting operation. The consulting arm adopted Accenture as its name. PricewaterhouseCoopers approved a restructuring plan to separate its audit and certain other accounting units from its management consulting practice. Ernst & Young was seeking to sell its management consulting business to a French company in December of 1999 for $4.8 billion. KPMG was restructuring its consulting operations into a separate unit in order to spin it off in a public offering. Deloitte & Touche decided not to break itself up into separate consulting and accounting divisions.

PricewaterhouseCoopers announced in January of 1999 that it planned to extend its business into legal services and was hoping to become one of the largest law firms in the world within five years. Ernst & Young was then financing the creation of a law firm in Washington, D.C., drawing lawyers from the Washington office of the Atlanta firm of King & Spalding. This was an attempt to create a "multidisciplinary" firm. The internationalization of finance and business caused law firms to react by expanding their own reaches. The world's largest law firm was created in August of 1999 with the merger of Clifford Chance in London, Rogers & Wells in New York, and Punder Volhard Weber & Axster in Germany. The total number of lawyers in the merged firm would be 2,700.

Market Transactions and Products

The global custody business for securities was a multitrillion dollar affair by the end of the 1990s. First Chicago NBD Corp. announced in 1998 that it planned to combine its stock transfer businesses in a joint venture with BankBoston Corp., State Street Corp., and DST Systems, Inc. This would be the country's largest stockholder transfer company. It was to be called EquiServe and would maintain records for 1,400 publicly traded companies. In March of 1999, the Depository Trust Company and the National Securities Clearing Corporation announced that they were merging. The Depository Trust Company was owned by its participants, while the National Securities Clearing Corporation was owned by the NYSE and the NASD. At the time of the merger, the Depository Trust Company held securities valued at $19 trillion and processed $77 trillion in transactions in 1998. The National Securities Clearing Corporation had guaranteed and settled over $40 trillion in transactions in 1998.

Microsoft was selling put warrants on its stock. The company received $225 million from those puts in the quarter ending September 30, 1998. Some downside protection looked necessary. In November of 1999, a federal district court judge declared that Microsoft was a monopoly, and consideration was being given by the court to whether the company should be broken into smaller pieces. The court of appeals was expressing skepticism toward the judge's rulings. Stock options were popular as a measure for other corporate officers' incentive compensation plans, and employees were being given stock options. Those rights raised concerns in the 1990s that corporations would have large liabilities in the event they had to purchase stock to satisfy those options. The SEC was concerned with the excessive compensation sometimes paid to corporate executives. The SEC adopted rule changes to require more disclosures to shareholders with respect to that compensation.

Yankee bonds and 100-year bonds became popular in the nineties. Yankee bonds are U.S. denominated dollar bonds issued in the United States by non–United States borrowers. The Chinese government was among those issuing 100-year bonds. In 1996, IBM announced that it was issuing $850 million of 100-year bonds. These bonds paid a coupon rate of 7.22 percent, which was eighty basis points higher than the thirty-year Treasury bonds. A previous sale of 100-year notes had been made by BellSouth in 1995. That issue was for $500 million. Goldman Sachs was offering Monthly Income Preferred

Shares (MIPS). It was also offering perpetual preferred market interests and convertible capital notes. Convertible preferred securities became popular in 1996. They entitled the holders to cumulative cash distributions at a specified percentage, and there was a tax gimmick for these shares that made them useful. In November of 1997, Merrill Lynch introduced Market Index Target Term Securities (MITTS), which paid a return based upon the Dow Jones Industrial Average. At maturity, the MITTS would return the principal invested by the customer plus an additional payment based upon the increase, if any, in the Dow Jones Industrial Average over a specified level.

Costa Rica was selling "carbon bonds" for certified tradable offsets in 1998. These bonds were designed to allow carbon dioxide production to be offset by reforestation. In April of 1998, the federal government announced that it was issuing inflation-indexed 30-year Treasury bonds. The bonds would increase in value each year by the amount of an increase in the consumer price index. In October of 1997, Princeton University borrowed $100 million in the commercial paper market. Asset-backed securities were booming. Total issues were over $480 billion. These securities covered such things as revenues from royalties due to Rod Stewart, the singer. In 1997, the singer David Bowie securitized himself by selling over $50 million of "Bowie Bonds," which were 7.9 percent ten-year average life bonds. The bonds were backed by royalties from his albums. This allowed the singer to collect his royalties in advance. Two years later, James Brown, the soul singer, securitized $30 million of future revenues from the royalties on his music. He sold those securities at a discount that ranged from 8 to 10 percent. In 1999, George Foreman, the former boxer, sold his name and likeness for $137.5 million to Salton, Inc., a manufacturer of housewares, for advertising purposes.

Scams

Fraudulent schemes continued to appear. Irwin H. "Sonny" Bloch was charged with defrauding investors of more than $21 million by pitching investment schemes on his call-in radio program, which had 1 million listeners. George I. Norman Jr. was captured in 1996 after being on the run since 1973. He had been convicted of stealing $500,000 from a Denver bank. After fleeing prosecution, he sold penny stocks and defrauded others in various financial schemes. Steven Hoffenberg was charged with defrauding investors of $450 million through his Towers Financial Corporation. One of the worst scandals ever experienced in the securities markets occurred in 1997 when it was discovered that claims of an unprecedented gold find in Indonesia by a Canadian company known as Bre-X were fraudulent. Ore samples had been salted. The Bre-X stock had soared to $4.5 billion in value before exposure of this hoax. The company's mining engineer mysteriously disappeared while flying in a helicopter over the site.

The SEC charged six individuals with running a scam in which they borrowed shares from publicly held companies on the condition that the shares would not be sold or released on the market. The shares were then used by the borrowers as collateral for loans. The borrowers defaulted on their loans, resulting in losses to the banks and institutions where the loans were obtained. Comparator was a spectacular penny stock failure. Some 170 million shares were issued by that company in May of 1996. They increased in price thirty-fold in a period of three days and then the stock collapsed. The SEC then suspended their trading. This company was developing technology for fingerprint identification. It had few assets. In May of 1998, the United States Customs Service announced charges against eight individuals who had fleeced international venture capital investors of $60 million. The investors had been induced to pay a processing fee that ranged from $40,000 to $2 million. The investors were then told that they had violated the terms of the financing agreement and that their processing fees were being forfeited.

The SEC brought a suit in 1998 against what it claimed was one of the largest pyramid schemes in history. Some $150 million was raised from 150,000 investors by International Heritage, a North Carolina company. The firm marketed a plan under which investors could obtain additional income by enrolling new members. The SEC brought another action against fifty-eight individuals for manipulating the prices of seven penny stocks. Stockbrokers who had been previously connected with the penny stock operations of Robert E. Brennan were indicted for using fraudulent sales practices in selling low-priced securities. It was charged that Brennan had controlled two penny stock firms secretly while he was still engaged in litigation with the SEC over his earlier operations. Regulators believed that Brennan and Randy Pace were behind a number of penny stock schemes.

The penny stocks in which these and other fraudulent operations were being carried out had a new moniker. They were now referred to as small cap or "microcap" stocks to reflect their lack of capital. Some of the microcap stock frauds involved Mayflower Securities, Broadchild Securities, and Rooney Pace, Inc. Stratton Oakmont, Inc., was expelled from the NASD in 1996 for engaging in various mysterious practices in marketing the stocks of microcap companies that benefited insiders. One such offering involved Steve Madden Ltd. Stratton Oakmont was considered one of the "worst actors" in the securities business. Two of its executives later admitted to manipulating the stocks of thirty-four companies over a seven-year period with losses of hundreds of millions of dollars to investors. Another firm involved in microcap fraud in the 1990s was Sterling Foster & Co. in Long Island, New York. It was claimed that one individual involved in the Sterling Foster scandal had made $200 million in illegal profits. In May of 1999, the SEC charged Hartley Bernstein, a securities lawyer, with engaging in fraud in connection with the operations of Sterling Foster.

The New York State attorney general announced in June of 1997 that he was holding public hearings on the sale of microcap stocks through the use of improper sales activities. At that time, there were some seventy-five penny stock firms operating in New York. The attorney general stated that, for too long, New York had been a home to boiler rooms engaged in cold-calling. He later sought additional authority and funds from the legislature to investigate and prosecute penny stock frauds. As often in the past, it was found that brokers were running boiler room operations involving scripts of sales pitches that contained prepared answers to questions to deflect investor concerns. The attorney general was concerned that these boiler rooms were using big-name clearing firms to provide themselves with an aura of respectability. A little drama was given to the proceeding by having a "hooded" ex-broker testify in the hearings. State securities regulators reported that they had brought over 100 enforcement actions in July of 1998 against cold-call operations that were marketing penny stocks and foreign currencies.

In November of 1997, nineteen individuals were indicted in connection with claims that organized crime had manipulated the stock of HealthTech International, Inc. The Bonanno and Genovese crime families were said to be involved, operating through Meyers Pollock Robbins, Inc., a broker-dealer. Brokers at that firm were bribed to sell stock in a company that owned fitness clubs. In another action, the SEC charged a compliance officer at Morgan Stanley Dean Witter, Discover & Co. with engaging in insider trading. This individual, Marisa Baridis, was selling confidential information to Jeffrey L. Streich, a disbarred broker. Baridis was caught selling this information for $2,500 in cash. Harking back to the 1920s, a corporate publicist was convicted of tax evasion and violation of the federal securities laws in connection with stocks of companies he was hired to promote. Among his other duties was to introduce clients to a famous financial analyst and business journalist, Dan Dorfman. In April of 1998, a radio talk host in New York City was charged with receiving thousands of dollars to promote the stocks of various companies on his program. The defendant was Jerome M. Wenger and the name of his show was *The Next Super Stock.*[29]

In another action, the SEC charged that forty-one people had manipulated the prices of several small company stocks and defrauded investors of $25 million. Other fraudulent operations involved bank debenture trading programs, prime bank guarantees, and Bank of England certificates of deposit. Usually these schemes allowed investors to purchase and resell a negotiable bank instrument. The proceeds were then supposed to be used for some purpose that would assure a large return. In one operation, customers invested several million dollars with the understanding that the proceeds would be used to trade U.S. Treasury bills. Those trades were supposed to generate a 4 percent profit. Another scheme claimed that pension funds could not purchase bank debentures in a new issue. Wealthy investors were urged to make such purchases for resell in the secondary market to the pension funds for a large profit.

In February of 1998, eight floor brokers on the New York Stock Exchange were charged with criminal violations for using their knowledge of pending orders to trade for their own account. The floor brokers used a fictitious account to "front run" customer orders. It was charged that these floor brokers had made more than $10 million through such transactions. In May of 1999, six individuals, including four persons who worked on the floor of the NYSE, pleaded guilty to these charges. Six other individuals had previously pleaded guilty. The government continued its investigation of the floor brokers. In addition to front running and other abuses, concern was expressed that floor brokers participated in profits earned by their clients, which raised the question of whether this violated prohibitions on floor brokers trading for their own account on the floor of the exchange.

In July of 1998, two commodity brokers pleaded guilty to mail and wire fraud after they made over $4.7 million from information obtained from John W. Henry & Co., a large money manager. The government charged that the brokers were front running the trades of that organization. One of the defendants was a trader at John W. Henry, and he knew that its trades would have market effect. Despite the CFTC's prior report that rejected insider trading in the futures industry, the CFTC charged in a related civil action that this conduct also violated the Commodity Exchange Act. Michael Milken's troubles with the SEC were not over. In February of 1998, the government announced that Milken had agreed to pay $47 million to settle charges that he had violated his lifetime ban from the securities business. This investigation had begun in 1996 when Milken acted as an adviser to News Corp.'s $500 million investment in New World Communications, which was controlled by Ronald Perelman. Milken was charged with acting as an adviser in connection with another transaction involving MCI Communications Corp. Milken had introduced News Corp.'s chairman, Rupert Murdoch, to MCI's chairman. Milken was not charged for the advice that he rendered in connection with the Ted Turner-Time Warner merger, for which Milken was paid $50 million.

Municipal Securities

In 1994, individual investors held about 70 percent of outstanding municipal securities. The municipal securities market was then worth about $1.2 trillion. The SEC adopted a new rule that required underwriters of municipal securities to obtain a written agreement from the issuer to provide annual financial information and to send special event notices to information repositories. This rule was designed to provide more information to investors in municipal securities. Municipal financing was becoming increasingly sophisticated. Lottery bonds were sold by Florida, Oregon, and West Virginia in 1998. These bonds were secured by revenues from the lotteries of those states. In February of 1999, municipalities in New Jersey were selling taxable municipal bonds that paid dividends in much the same manner as preferred stock. Merrill Lynch was publishing a Muni Master Municipal Bond Index. It was based on major municipal issuers having bond amounts outstanding of at least $50 million and an investment grade rating. In April of 1996, that index showed a yield of 4.96 for AAA guaranteed bonds with a maturity of twenty-two years. Municipal bonds were being sold online in an auctioning process that began in June of 1999. The largest municipal bond offering in history was conducted in May of 1998. It was a $7 billion offering to finance the state takeover of Long Island Lighting Co. Other records were being set for offering sizes. The largest REIT debt offering made to date was conducted in February of 1998, for $1 billion. The World Bank announced in February of 1998 that it was planning a $5 billion offering, which would be the largest ever made. Then, as a part of its restructuring in 1998, South Korea floated a $12 billion bond issue on the world market.

"Yield burning" was an issue at the end of the 1990s. This involved an anomaly that occurred when municipal securities were being refinanced. If the municipality had excess funds on hand during the refinancing, it was not permitted to reinvest those funds at a rate higher than the issue being refinanced. This prohibition was intended to prevent municipalities from investing the proceeds of bond issues into other securities as a tax gimmick. In order to assure that the municipalities did not earn more than the rate permitted on their short-term funds, dealers sold short-term securities as investments for the municipalities at an excessive markup. This reduced the yield on the securities to permitted levels—that is, the yield was "burned" by the excessive markups. Firms that were investigated for yield burning included Lazard Frères, Merrill Lynch, and Goldman Sachs. Rauscher Pierce Refsnes, Inc., and one of its vice presidents were charged with fraud by the SEC in connection with yield burning activities. Lazard Frères & Co. later agreed to pay $11 million to settle claims concerning yield burning for twenty municipal bond offerings that totaled more than $5 billion. A group of brokerage firms including Citigroup, Paine Webber Group, Dain Rauscher, Inc., and Merrill Lynch agreed to pay $139 million to settle SEC charges in connection with yield burning abuses in April of 2000. Banc One Capital and other dealers also agreed to pay $13.5 million to settle such charges.

The SEC began a broad-scale investigation of political contributions by municipal bond underwriters. These practices were called "pay-to-play." In December of 1997, Lazard Frères & Co. paid a $12 million fine as a result of the activity of two of its officers who had paid an executive at Stephens, Inc., a Little Rock, Arkansas, brokerage firm, to steer municipal business to Lazard. The SEC later brought pay-to-play cases against various individuals and firms, including Stephens, Inc., and the head of its public finance department. Lazard Frères & Co. and First Boston Corp. were the subject of other investigations involving municipal bond underwritings in Louisiana and New Jersey. In 1993, Merrill Lynch had to remove one of its officials in municipal underwriting because of irregularities in a refunding by the New Jersey Turnpike Authority. The transactions involved Armacon Securities, a broker-dealer that was owned at least in part by Joseph Salema, the chief of staff to the New Jersey governor, Jim Florio. BT Alex. Brown agreed to pay $15.3 million to settle SEC charges that it had engaged in making improper payments to obtain municipal bond business in the 1990s.

The Municipal Securities Rulemaking Board adopted rule G-37 to prohibit pay-to-play practices for municipal bond underwritings. The District of Columbia Court of Appeals refused to enjoin the enforcement of this rule. That suit was brought by William B. Blount, the chairman of the Alabama Democratic Party and a registered broker-dealer who was an underwriter of municipal securities. Blount solicited municipal underwriting business from state officials for whom he raised funds. The SEC charged thirty-eight Mississippi municipalities in July of 1998 with violating federal securities laws in the offer and sale of urban renewal revenue notes that raised over $287 million. The municipalities failed to disclose potential tax problems with the notes. The SEC asserted that the proceeds were used to pay underwriting and legal fees and to purchase investments that could yield higher than the interest being paid on the notes. This violated federal tax law. Between 1997 and 1998, the SEC brought a total of fifty enforcement actions against municipalities in connection with their offerings in the municipal bond market. Other municipal finance scandals involved claims that campaign contributions were being solicited by politicians in exchange for business from portfolio managers for state pension funds. A New Jersey official was convicted of criminal violations in connection with such conduct.

Other Market Concerns

The SEC began an investigation of so-called spin accounts in which underwriters provided securities to corporate officials in the hopes that those officials would later give the underwriters business. The officials given the shares often sold them quickly and obtained large profits. This was somewhat akin to the preferred lists of J.P. Morgan earlier in the century. State securities regulators were investigating penalty bids used in underwritings to discourage customers from selling ("flipping") their securities immediately after their purchase during an underwriting. The penalty bids were designed to restrict such practices so that the distribution price could be maintained.

Twenty-five percent of all Wall Street professionals were women at the end of the century, up from 15 percent ten years before. They were still meeting resistance from Wall Street. Some 900 female employees complained in March of 1999 that Merrill Lynch had discriminated against them in their employment. A prior discrimination suit brought by eight female employees had been settled in 1997. The women claimed, among other charges, that men were given better treatment in terms of allocation of walk-in customers, leads, referrals, and allocations of accounts when brokers left the firm. Another sexual harassment case was brought against Smith Barney. This was called the "Boom-

Boom Room" case because it was claimed that male brokers were engaging in verbal and physical sexual harassment in a branch office of Smith Barney in Garden City, New York. Salomon Smith Barney entered into a settlement agreement in 1999 that provided for mediation or arbitration to resolve harassment and sexual discrimination complaints by as many as 20,000 women employees. In 1998, the firm had agreed to spend $15 million on "diversity programs" and had been required to pay $750,000 as a result of same-sex sexual harassment charges. Morgan Stanley was also found by the Equal Employment Opportunity Commission (EEOC) to have discriminated against women. Sexual discrimination cases were spreading abroad. Deutsche Bank A.G. settled one such case in London for a large amount. The NASD discovered another problem. It had to advise members that it was improper to engage in communication with customers that constituted threats, intimidation, the use of profane or obscene language, or calling that was done in order to annoy, abuse, or harass a client or potential client.

Berkshire Hathaway issued a new class of B shares in 1996. Those shares were sold at a lower price than its other shares so that small investors could invest in the company. At that time, the stock of Berkshire Hathaway was trading for $33,400 and would reach $80,000. Forty thousand small investors bought the new B shares. Berkshire Hathaway held $4.6 billion in long-term zero coupon Treasury bonds at the end of 1997. By this time, Berkshire Hathway's leader, Warren Buffett, had a net worth approaching $10 billion. Buffett's acumen would be called into question at the end of the century, when he missed out on the run-up in Internet stocks. The value of Berkshire Hathaway shares was cut almost in half, but its net income doubled in 2000 as brick-and-mortar investment values increased against a drop in Internet commerce.

U.S. Government Securities

Great Britain had become the largest foreign holder of U.S. government bonds, replacing Japan in that category. Over $300 billion of U.S. Treasury securities were held in Great Britain in 1998 versus $293 billion in Japan. The repo market had a turnover of some $600 billion in 1997. That market was larger than the cash market in Treasury bonds. In November of 1997, investigators for the United States and Great Britain were pursuing a fraud involving $800 million in counterfeit U.S. Treasury bonds. A budget crisis arose in the federal government in the fall of 1995. It was then unclear whether an agreement could be reached in Congress, and it appeared that the U.S. government might default on its debt, which would upset credit markets around the world. That crisis passed. Tax law revisions cut the long-term capital gains rate to 20 percent in 1997. This gave the mutual funds an advantage over variable annuities because the gains on those variable annuities when paid out would be taxed at regular income tax rates, which were much higher.

The United States government began to allow investors to automatically deduct the cost of savings bonds from their bank accounts. This was to be an adjunct to the payroll deduction plan for such savings bonds. Purchases could be made of the series EE bonds, which sold for half their face value in denominations that ranged from $50 to $1,000. The Treasury was also selling series I bonds that carried a lower than market interest rate, but were adjusted to reflect inflation. These instruments were being sold at their full face value in denominations that ranged from $50 to $1,000. The Treasury was having problems with its auctions once again in 1998. Arbitrage activities and nominee accounts were being used to obtain greater than permitted levels in the auction. The Treasury conducted a noncompetitive bidding process for smaller investors that assured a minimum amount of securities and a market-based yield determined by competitive bids in the auction. The limit on noncompetitive bids was $5 million. The Treasury reduced the minimum amount for direct purchases of Treasury bills to $1,000 from $10,000 in August of 1988. The minimum purchase price of Treasury notes was dropped to $5,000. Investors who wanted to purchase notes could do so by telephone. Beginning in September of 1998, investors could make direct purchases of Treasury securities through the Internet as well as by Touch-Tone telephone. The Treasury was broadening its menu in other ways. On July 1, 1999, it announced that it was raising $7 billion of cash through the sale of "reopened" ten-year inflationary indexed notes.

5 International Finance and Derivatives

The IMF

The International Monetary Fund (IMF) was now the lender of last resort to developing countries. In 1995, a $50 billion rescue was arranged for Mexico, but not before millions of dollars of flight capital left the country. Compounding this crisis, Mexico had previously exchanged peso-denominated bonds for something called a tesobono. This was a short-term note indexed to the dollar, which was to protect investors against devaluation. The amount of these tesobonos reached $29 billion in 1994 and placed further pressure on the country's finances. The Mexican crisis also "produced a quantum jump in the scale of the IMF's activity."[30] The economic disaster in Mexico was followed by an Asian crisis that began after the Thai currency imploded in July of 1997. That event touched off an economic collapse that spread from one nation in Asia to another. The GDPs of South Korea, Malaysia, and Indonesia fell by more than 20 percent in the first quarter of 1998. The IMF stepped in and arranged financial rescue packages for those countries. In August of 1997, the IMF provided $17.2 billion to Thailand to stabilize its economy. A few months later, the IMF and several governments pledged $30 billion to aid Indonesia after its economy collapsed.

South Korea received $55 billion in an IMF-arranged bailout of its economy. Contributing to that package were the World Bank, the Asian Development Bank, Japan, and the United States, as well as the IMF. The United States and Japan were to supply $20 billion of that amount. Russia's economy appeared to be coming unglued. It had staggered from one crisis to the next after the fall of the Soviet Union. In August of 1998, the IMF supplied funds to Russia because of the worsening crisis there. The amount was to be $11.2 billion, but it was estimated that Russia would receive a total of $17 billion by the end of 1998 from the IMF, the World Bank, and Japan. The Clinton administration and its Treasury secretary, Robert E. Rubin, a former partner at Goldman Sachs, were blamed for the financial crisis that swept across Russia and Asia. Apparently, critics claimed that the Clinton administration's efforts to liberalize capital flows around the world were undermining the financial structures of these and other underdeveloped countries. On August 17, 1998, Russia defaulted on its domestic debt and announced a ninety-day freeze on payments for its foreign debt. Russia was selling dollar-denominated bonds known as "Prins," which were restructured Soviet-era debt. They dropped to record lows as the Russian economy collapsed. The IMF halted lending to Russia because of its failure to implement reforms. This breakdown in the Russian economy raised concerns of a worldwide global recession.

This crisis placed the IMF once again in the forefront as a global rescue unit. Its structure was not entirely designed for such a role. The accounts of the IMF were denominated in its own currency of "special drawing rights." Each member country paid a quota that was based on its size. One fourth of that quota has to be paid in hard currency. In 1998, the IMF had $192 billion in quotas available, but only a portion of that was in hard currency. Those reserves were being strained with the Asian and Russian bailouts. The IMF then sought to increase its quotas, but the American Congress began questioning IMF expenditures. Congress balked at increasing the U.S. quota, which was the key to the increase. The World Bank was another critic of the role being played by the IMF. In November of 1998, an accommodation was reached, and Congress approved additional funding for the IMF.

Japan

Japan's finances went into a nosedive in the 1990s, after its "bubble" economy broke. Japan's economy was officially in recession and showed little prospect for improvement. Yields on Japanese government bonds were stated to be "only a whisker above the lowest in history (in Genoa in 1619)."[31] The Yamaichi brokerage firm, one of the four largest brokerage firms in Japan, failed in November of 1997. Sanyo Securities and Hokkaido-Takushoku Bank failed at about the same time. The Yamaichi firm had more than $23 billion in liabilities, and three of its executives were arrested by Japanese authorities for possible securities law violations. Among Yamaichi's creditors was the Bank of Japan, which was owed $3.95 billion. The Japanese government had rescued Yamaichi in an earlier bout with bankruptcy, but this time it was Merrill Lynch that came to the rescue. Merrill acquired the securities operations of the Yamaichi, but that investment was not immediately successful. Merrill Lynch lost $212 million in its Japanese operations in the first nine months through March 31, 1999. The Travelers group announced that it was investing $1.6 billion in Nikko Securities in June of 1998. This too proved to be a difficult partnership for both parties because of different corporate cultures.

Nomura Securities, one of the world's largest securities firms, experienced difficulties in 1997 after it was discovered that the firm maintained a preferred list similar to the one used by J.P. Morgan back in the 1920s. The

Nomura preferred list included some 10,000 influential persons in Japan. Nomura had created confidential numbered accounts for special clients, who included government officials and gangsters. This created a scandal, and the Japanese government and numerous clients restricted their dealings with the firm. This severely affected Nomura's business, and the firm had to restructure its operations. Nomura announced a loss of $1.76 billion for the first half of the fiscal year in 1998. Most of this loss was due to an American commercial mortgage loan subsidiary called Capital Company of America. Capital had made more than $32 billion in such loans over a six-year period. It had kept some of those loans for investments but also packaged them and sold them as securities. In December of 1998, Nomura announced that it was selling off those loans and that it would cease these operations.

Japan advised the United States in October of 1998 that its top nineteen banks were facing capital shortages that threatened their ability to operate internationally. They were having difficulty meeting the 8 percent Basel Committee capital requirements. Sanwa and Daiwa Banks in Japan were seeking $7.4 billion in financial aid from their government. Sanwa was expected to incur a loss of $4.2 billion in 1998 and was writing off $6.6 billion in bad loans. Daiwa was expected to report a loss of $1.5 billion. Daiwa Bank, one of Japan's largest commercial banks, withdrew from all overseas business because of its inability to meet international capital requirements. In October of 1998, the Japanese government nationalized the Long Term Credit Bank. Its liabilities exceeded assets by $2.9 billion.

The Japanese government restricted short selling in order to stop the declines in the Japanese stock market in October of 1998. The government had been slow to respond to the crisis, but Japan had its own "big bang" in October of 1999, when commissions on equity securities were unfixed and bank subsidiaries were allowed to trade equities. This was designed to make the securities industry in Japan more competitive. The Bank of Japan even adopted a rather drastic zero interest rate policy to stop deflation in the economy. Financial conditions appeared to be improving in Japan as the century closed. The Japanese Nikkei Index was 51 percent lower at the end of the century than its closing price in 1989, but the economy seemed to be recovering only slowly. Japanese brokerage firms, including Nomura Securities and Nikko Securities, experienced substantial profits at the end of 1999 as a result of increased trading volume on the Tokyo Stock Exchange. Japanese banks also experienced an increase in profits for the first time in many years.

International Finance

In December of 1997, the members of the World Trade Organization agreed on opening banking, insurance, and securities markets to competition among WTO members. The turnover in foreign exchange trading was in the trillions of dollars. Central banks sometimes sought to intervene and support their currencies, but few had the reserves to compete with speculators. The Bank for International Settlements (BIS) was holding about 7 percent of the world's foreign exchange reserves in 1998. The BIS had its own currency, the gold franc. The BIS was still owned largely by central banks, but some of its shares were traded in Zurich and Paris. The Group of Ten countries sent representatives to the BIS monthly to discuss coordination of policy. The Group of Seven issued a report on world financial reform in October of 1998. The report proposed a new global financial structure that would require increased regulation and supervision. The report advocated international codes of conduct and best practices for fiscal, monetary, and governance procedures. An economic forum was created by the Group of Seven countries composed of central bankers, finance ministry officials, regulators, and representatives from the World Bank, the IMF, and the BIS. The World Bank announced that it was creating a fund to finance projects that would reduce gas emissions and aid the environment. Countries that participated in the fund would receive emissions credits from the World Bank that would be based on the amount of gas emission reductions achieved from funded projects.

In late 1999, the United States sought an agreement with China over the admission of that country to GATT. The irony of that effort went unspoken. China had been a strong adherent of communism until the opening of relations with the United States under President Nixon. Now China was seeking admission to an organization dedicated to capitalism and free trade. All was not harmony. The "Battle in Seattle" saw demonstrators protesting, sometimes violently and incoherently, the opening of a new round of GATT trade talks. The demonstrators were concerned with "globalization" and labor practices in lesser developed countries. The number of protesters in Seattle was estimated to be as many as 50,000. Similar protests were held in other cities around the world, including London. The lesser developed countries expressed their own opposition to these protests because they believed that international trade would bolster their economies. Still more riots broke out at an IMF conference in Prague in September of 2000.

England was reexamining its regulatory structure over financial institutions after the Labour Party returned to power. The new government almost immediately provided the Bank of England with the authority to set interest rates. This gave the bank new independence. At the same time, the Labour government removed the bank's long-held authority to supervise other banks in England. That authority was transferred to the Securities and Investments Board, which was already exercising supervisory authority over brokerage firms. Financial regulation in the United Kingdom was then centralized. The government announced that it planned to place more responsibility on the Financial Services Authority and less on self-regulation for securities and other financial services. The Financial Services Authority was becoming a superregulator. The "Flaming Ferraris" crashed in London in March of 1999, when it was discovered that this group of young traders had apparently been involved in manipulating the Stockholm market index. The leader of the group was James Archer, the son of Lord Archer, a famous author later imprisoned for perjury. The traders were nicknamed after the Flaming Ferrari, their favorite drink. An arbitration award required the leader of this group to be paid a $2 million bonus despite his discharge. It was shown that the group had earned more than $175 million for the firm.

Futures Markets

The London gold market was clearing almost 1,000 tons of bullion daily in 1997, and London was the world's largest foreign exchange dealing center. Daily turnover in 1998 was $637 billion, up from $464 billion in 1995. The New York market was smaller, but growing faster. A lottery scheme was adopted in England in order to encourage speculation in foreign exchange transactions in the United Kingdom. By 1997, the London International Financial Futures and Options Exchange (LIFFE) had become the second largest futures exchange in the world, behind the Chicago Board of Trade (CBOT), but ahead of the Chicago Mercantile Exchange (CME). LIFFE was reorganized in November of 1998. It slashed its workforce and announced that it was moving toward electronic trading, rather than the traditional open outcry system. LIFFE had earlier moved out of the Royal Exchange building that had opened in 1571. That building was slated to become a shopping arcade. The London Clearing House tried to set up a clearing facility for OTC derivative instruments in July of 1998. It wanted to use its SwapClear program to clear swaps for American firms. The clearinghouse found itself caught between the CFTC and the rest of the regulatory world over the issue of whether additional regulation was needed for swaps.

Electronic trading of futures contracts accelerated in Europe in the 1990s. Dominant market share in the German bund futures contract moved from LIFFE in London to the Deutsche Terminbörse, which is now Eurex. The London exchange had traded by open outcry, while the Eurex traded electronically. Eurex soon became the world's largest derivatives exchange. In September of 1999, Eurex volume was almost twice that of the CBOT, and Eurex volume for the year exceeded that of the once invincible CBOT. Electronic trading systems were appearing elsewhere around the world, including the exchange in Singapore (SIMEX) and the Paris Bourse, which operated the MATIF. Their trading was conducted under the Principles for the Oversight of Screen-Based Trading Systems for Derivative Products, which were developed by the Technical Committee of IOSCO.

In June of 1998, a seat on the CBOT sold for $495,000, down from $857,500 earlier in the year. That price drop reflected the fact that the American commodity exchanges were losing market share to foreign exchanges and to over-the-counter derivatives. The CBOT announced a proposed linkup with Eurex, but quickly encountered difficulties in implementing that arrangement. The proposal was rejected in January of 1999 by the CBOT members, but that vote was reversed and the linkage was approved in June of 1999. The CME was creating an electronic routing system for retail orders through the GLOBEX system. The CBOT opened a new high-tech trading floor that cost $182 million. The CME and the CBOT announced their intention to establish a common clearinghouse system. But those plans fell apart in September of 1998. The Chicago Mercantile Exchange and the New York Mercantile Exchange were adopting plans to separate their electronic trading systems from their traditional open outcry trading and to demutualize. The CBOT continued to struggle with the issue of how to compete with the electronic exchanges without losing its traditional auction trading floor. The CBOT considered plans to introduce electronic trading as a response to competition from electronic trading and more efficient international markets, but floor members of the CBOT continued to fight for their manual open outcry trading system.

The NYSE gave up its efforts to enter the derivatives business. The New York Futures Exchange was sold by the NYSE to the New York Cotton Exchange. The NYSE shut down its options trading operations in 1997. Those contracts were moved to the CBOE. The CBOE began trading options on catastrophic insurance in 1995. Returns were based on claim service reports. BrokerTech announced that it was creating an electronic trading facility for trading derivatives globally in December of 1999. A fresh fruit commodity exchange began operations on the Internet in November of 1999. It was called the fruitXchange and allowed produce to be traded electronically. Other commodities were being traded on the Internet. Azurix Corp. in Houston announced that it was creating an online exchange for buying and selling water in the West. This was an effort to mimic markets in natural gas and electricity. The Internet had other uses for commodity sales. The Ford Motor Company announced that it was creating a joint venture with Oracle, a software firm, to move the Ford supply network to the Internet. Ford was allowing retail customers to negotiate prices for new cars over its Web site.

The CFTC had approved 92 new futures and options contracts for trading on American exchanges in 1996. This was the highest number of contracts ever approved. At that time, over 230 contracts were being traded on United States futures exchanges. The CFTC also approved trading in electricity contracts without requiring the vendor to register as a contract market. The National Cheese Exchange in Green Bay, Wisconsin, was closed in 1997. Although this was a small and largely unnoticed market, its facilities were used to price cheese in America. Trading in that commodity was taken over by the CME. Merrill Lynch announced that it was discontinuing its agricultural commodity futures business and its trading in gold and other metal futures. Those businesses were declining.

The CFTC warned the public about radio and television "infomercials" that claimed that investors could get rich by turning $5,000 into $20,000 through speculation on seasonal variations in petroleum prices and anticipated shortages in agricultural commodities caused by El Niño. These infomercials were produced by marketing firms that made profits by selling the names of investors responding to the advertisements to brokerage firms that would then pursue those leads using fraudulent, high-pressure sales techniques. The CFTC sought to stop this practice by charging the infomercial firms with failing to register as commodity trading advisers. This claim raised some serious constitutional issues, including First Amendment concerns with licensing the press.

Boiler room commodity operations were being attacked by state securities administrators. These operations often involved foreign exchange scams that were fueled by the crisis in Asian economies and the uncertainty of the currency values of the affected countries. In December of 1998, a former head of the CFTC Division of Enforcement, John A. Field III, who was also a former United States attorney in West Virginia, pleaded guilty to charges of racketeering and fraud in connection with boiler room sales operations. The CFTC was frustrated in its efforts to stop the bucket shops that promoted OTC currency transactions by the Supreme Court, which had held that such transactions were exempt from regulation under the Commodity Exchange Act. Although the CFTC continued to claim jurisdiction, investors lost millions of dollars in these scams. Thomas W. Collins had been running a bucket shop and Ponzi scheme for several years but had to flee when the firm became bankrupt. The firm had taken in $100 million from investors. Collins committed suicide after he botched a bank robbery in San Diego.

A fight broke out in 1997 between the CFTC and the commodity exchanges. The exchanges wanted Congress to deregulate their operations when the participants were professional traders and large institutions. This would allow the exchanges greater flexibility in competing with the unregulated over-the-counter derivatives. The CFTC was opposed to that proposal, contending that the government would lose control over the exchanges if such an exemption was adopted. Another furor was set off after the CFTC announced that it was undertaking a review of swaps and other OTC derivatives to determine if regulation was needed. The CFTC chair, Brooksley Born, who was pushing this review, encountered a storm of opposition, including criticism from Alan Greenspan, the Fed chairman, Secretary of the Treasury Robert Rubin, and SEC chairman Arthur Levitt. The CFTC's action was actually a thinly disguised response to an SEC proposal that sought to pull the derivative dealers under the SEC's regulatory envelope by creating a new registration category that would exempt those dealers from most of the SEC's more onerous regulations. The SEC hoped that through this "broker-dealer lite" proposal the derivative dealers would be encouraged to keep their derivatives activities in the United States instead of abroad, where they were subject to little or no regulation.

The CFTC objected to the SEC's proposal, but the SEC eventually adopted this registration scheme. Only one firm registered as a broker-dealer lite, but the CFTC responded with its own grab for jurisdiction by commencing an inquiry into the derivatives market as the precursor for its own regulations. The Fed, the SEC, and the Treasury Department asked Congress to stop the CFTC inquiry because of concerns that it would destabilize markets. Much objection was raised in Congress, but the CFTC refused to back down. In November of 1998, Congress blocked the CFTC from taking any action on its efforts to regulate OTC. The CFTC later claimed vindication of its position when a large hedge fund, Long-Term Capital Management, ran into trouble as the result of its derivative activities during a market downturn in 1998. That hedge fund had to be bailed out by its creditors and investors in a rescue overseen by the Fed, which was concerned that the hedge fund's failure could trigger a market panic. Even so, it was unclear what role CFTC oversight could play in such situations. A new chairman at the CFTC, William J. Rainer, eased this situation. Federal regulators at the Federal Reserve, the Treasury Department, SEC, and CFTC advised Congress in November of 1999 that they did not think additional regulation was needed for the multitrillion dollar over-the-counter derivatives markets.

Chairman Rainer and the CFTC later proposed a drastic restructuring of futures regulation that was enacted into law. The Commodity Futures Modernization Act of 2000 allowed futures contracts to be traded on individual stocks and narrow-based indexes of securities pursuant to "passport" provisions that permit cross-registration for commodity and security brokers vending these products. This legislation also exempted institutional markets from most regulation and provided for the creation of electronic markets and flexible clearing arrangements.

Earlier, in December of 1997, the CFTC sought comment on an application by FutureCom Ltd. to become the first Internet-based contract market in the United States to trade commodity futures. A later proposal sought to create an Internet-based futures exchange for live cattle futures and options. Most traders still clung to the open outcry system of trading on the floor of the exchanges in America. The CBOT announced that, while it was preparing to engage in full-time electronic trading, the exchange's members were not prepared to reject open outcry trading. The CBOT then found itself locked in a fight over electronic trading of Treasury bond futures. Cantor Fitzgerald L.P. and the New York Board of Trade, a holding company that was formed from the merger of the New York Cotton Exchange and the Coffee, Sugar and Cocoa Exchange, sought CFTC approval of an electronic exchange for the trading of those contracts. This caused consternation at the CBOT because the Treasury bond future was its highest volume contract. The CBOT responded by beginning twenty-four-hour electronic trading of the bond futures contract. The threat to the CBOT turned out to be an empty one, at least at the inception of the electronic trading on the new exchange. Volume was very low on both electronic systems, while pit trading remained active. Undeterred, the Cantor Financial Futures Exchange announced in April of 1999 that it was upgrading its systems to allow fully interactive trading.

Other Derivatives

The SEC ordered the stock options exchanges to create a plan to link their operations. The exchanges, however, were unable to reach agreement and submitted separate proposals to the SEC for such a system. The International Securities Exchange based in New York disclosed in 1999 that it was planning to trade options electronically using screen-based technology. The CBOE then announced that it was developing its own electronic trading system. Competition among the stock options exchanges increased in August of 1999 as they began to compete for options on the same stock. The CBOE and the AMEX began trading options on Dell Computer Corporation stock, which had been previously traded only on the Philadelphia Stock Exchange (PHLX). The PHLX responded by listing options trading on those exchanges.

Salomon Smith Barney Holdings, Inc., was selling 1.1 million call warrants on the Ten-Plus Index that would expire on July 17, 2000. "Death spirals" and "toxic convertibles" were being privately placed. These were convertible preferred securities. Enron Corporation was selling contracts that let public utilities buy insurance against weather changes that could cause unexpected increases in their electricity costs. That business had started in 1997. Within two years, the company had sold $1 billion in weather hedges. The CME announced in 1999 that it planned to trade weather derivatives. Such contracts were to be based on a "heating degree day index" for four cities that measured their temperature changes. Supplementing the weather derivatives market were weather bonds that were sold in October of 1999 by utility companies as their own hedge against the effects of adverse weather.

Reliance National announced that it planned to offer "earnings-protection insurance" that would insure companies against lower than expected earnings. A market for credit derivatives was active in the summer of 1999. These contracts allowed participants to buy or sell credit risks. The International Swap and Derivative Association issued a "master agreement" to standardize such contracts. J.P. Morgan published an index based on credit derivatives in March of 2000. Creditex allowed the electronic trading of credit derivative instruments worldwide.

The amount of credit derivatives increased from about $4 billion in 1994 to almost $40 billion by 1997. Default swaps were the most popular of these credit risk instruments. Under these agreements, if the borrower defaulted, the seller would take over the debt at face value. Some $170 billion in default swaps were written in 1997 and another $340 billion in the first six months of 1998. Those swaps ran into trouble in December of 1998 over the question of what constituted a default and what exactly was to be paid when there was a default.

Salomon Smith Barney bought back $1 billion of Comcast Corp. bonds that it had underwritten in October of 1999. These bonds were exchangeable bonds, called "zones," that were tied to the value of Sprint PCS shares that were owned by Comcast. The bonds had not performed as hoped. Merrill Lynch was the lead underwriter for a $718 million offer by Comcast Corporation of 8.7 million PHONES (participating hybrid option note exchangeable securities) due in 2029. These securities were exchangeable for cash based on the value of AT&T Corp common stock. The maturity was subject to an extension to 2059. The Merrill Lynch PHONES allowed a corporation to issue debt linked to the stock it owned in another company. Investors received fixed interest payments from the debt plus dividends from the stock. In addition, the holder could exchange the PHONES for the stock's cash value at maturity or 90 percent of that value if they converted at an earlier date. This allowed the issuer to obtain a loan at low rates while at the same time deferring capital gains tax. In February of 2000, Merrill Lynch & Co. was offering "PAY PHONES," which were exchangeable senior notes that could be exchanged for cash based on the value of McLeod USA, Inc., class A common stock. The payment was guaranteed by Alliant Energy Corporation.

The AMEX was offering index shares that "trade like a stock." They included "Diamonds," which provided the holder with an ownership interest in all of the stocks contained in the Dow Jones Industrial Average. Another index share was the Nasdaq-100 Index Tracking Stock, which gave the holder an interest in the performance of all the companies in the Nasdaq-100 Index, which were the largest nonfinancial companies in Nasdaq. Another instrument, called "Spiders," gave the owner an interest in the S&P 500 Index and operated like a mutual fund. Other indexes covered foreign investments, sectors such as transportation, energy, financial, technology, and utilities, and there was even a mid-cap (middle capitalization) stock index. Merrill Lynch was offering "Pharmaceutical HOLDRs." These were depository receipts representing undivided beneficial ownership in the common stock of twenty companies involved in the pharmaceutical industry. The HOLDRs would be offered on a continuous basis. Merrill Lynch also offered HOLDRs for telecom and Internet stocks. They were to be traded on the AMEX.

A fight broke out over efforts by the FASB to improve accounting for derivative instruments. Finally, in 1998, standards were agreed on for greater disclosures in accounting for derivatives. Companies were required to report the fair market value of derivatives on their balance sheets. Additional disclosures were needed by some participants. The General Accounting Office reported that 360 customers lost $11.4 billion from derivatives transactions between April 1987 and March 1997. The Belgian government lost as much as $300 million in derivatives transactions in 1998. It was trading currency-based "power options." The Belgian government's losses were as high as $1.2 billion after the United Kingdom left the European Exchange Rate Mechanism in 1992. The size of the loss was reduced over the years, but Belgium threatened to sue its broker, Merrill Lynch, and Merrill Lynch agreed to settle for about $100 million. A Japanese company, Yakult Honsha, lost over $800 million in derivative transactions in 1998.

A farming crisis in the 1990s spawned new financial engineering and lawsuits. Something called "hedge-to-arrive" contracts were used as a means to allow farmers to price their grain more rationally. Grain price fluctuations resulted in numerous defaults in those contracts, and farmers claimed that these were illegal futures contracts that should have been traded on an exchange. Most of the courts rejected those claims. Copper prices collapsed in 1996 after it was discovered that a trader for the Sumitomo Corp. had concealed $2.6 billion in losses from his employer. The trader was sentenced to eight years in prison. The CFTC fined Sumitomo Corp. $150 million for manipulating the copper market in 1995 and 1996. It was charged, at one point, that the rogue trader at Sumitomo controlled more than 90 percent of the London Metal Exchange's deliverable warehouse stock of copper. Merrill Lynch was charged by the CFTC with aiding and abetting the Sumitomo trader in his manipulative activities. Merrill Lynch agreed to pay $25 million in fines to the CFTC and London regulatory authorities to settle that claim. It also settled with Sumitomo for a large amount. Private litigants obtained over $150 million in settlements. This case appeared to be an effort by the CFTC to expand its jurisdiction, since the trading at issue was conducted almost entirely in London. Rogue traders remained a problem. Plains All American Pipeline lost $160 million in unauthorized trading that involved bets on oil prices in December of 1999.

Gold and Silver

Silver prices jumped by more than 50 percent in 1997 and 1998. The CFTC conducted an investigation. Purportedly, a syndicate of U.S.-based speculators was seeking to push silver prices to $9 from then current levels of about $5.50. The price of silver had been just over $4 per ounce in July of 1996. In January of 1998, a suit was filed in New York charging Phibro and others with manipulating silver prices. Phibro handled the commodity operations of Salomon Smith Barney, which was then owned by the Travelers Group. Silver prices increased to $7 an ounce after announcement that Warren E. Buffett and Berkshire Hathaway were purchasing enormous amounts of silver in 1998. Buffett had apparently accumulated some 20 percent of the world's supply of silver—130 million ounces—in anticipation of a price rise. Another investor in silver was George Soros, who owned Apex Silver Mines. Silver prices began falling after February of 1998, when it was believed that Warren Buffett was selling his silver stocks.

Some 147 million troy ounces of gold were held at Fort Knox in 1990, which was less than half of the nation's gold reserves. The rest of the nation's gold was held in the Federal Reserve banks, at West Point, in the New York Depository, and in the Mint. The Federal Reserve Bank in Manhattan was storing a stack of gold ten feet by ten feet by eighteen feet for foreign governments. That horde supplied the terrorist plot for a *Die Hard* movie sequel, starring Bruce Willis, in 1995. It had been estimated that before 1850 only some 10,000 tons of gold had been mined in the world. That number changed drastically with the California gold rush and the discovery of gold in South Africa. Other sources of gold continued to appear. By 1997, worldwide gold production was in excess of 2,000 tons per year. The supply was increased by the recovery of the gold that went down with the SS *Central America* off the coast of North Carolina in 1857, adding to the panic in that year. The ship lay several thousand feet below the surface, but a group of entrepreneurs was able to salvage much of its contents. They then had to fight in court against the insurance companies that had paid claims for the treasure when the ship sank and now claimed it as their own.

Gold was losing its luster as a monetary device. By the 1990s, some central banks were ridding themselves of gold reserves, particularly as its price plunged. A sharp drop in gold prices occurred in October of 1997 when Swiss banking officials suggested that Switzerland should sell more than half of its gold reserves. Argentina sold all of its gold reserves and invested the proceeds in U.S. Treasury bonds. A Yale professor criticized the whole gold reserve system, questioning why it was necessary to dig gold out of the ground at great expense so that it could then be reburied in underground vaults. Even so, the World Gold Council asserted that most central bankers still viewed gold as an important monetary tool.

Gold prices dropped to $282.80 an ounce on December 10, 1997. This was a twelve-year low. A rally later occurred in the gold market during a period when the stock market was plunging. On September 10, 1998, prices reached $293.80 an ounce on the New York Mercantile Exchange for December delivery. That increase was short-lived. In April of 1999, the Swiss voted to cut the link between gold and the Swiss franc and to allow their government to sell half of its gold reserves. Several other central banks were selling gold, including Australia, Belgium, and the Netherlands. The United Kingdom announced in May of 1999 that it was selling 125 metric tons of gold from its reserves. This cause gold prices to drop further.

President Clinton did additional damage to the gold market when he announced that the IMF should sell $1.4 billion of its gold reserves in order to finance debt relief for lesser developed countries. At that time, the IMF held 103 million troy ounces of gold. The IMF had already sold 1,500 tons of gold between 1976 and 1980. In 1999, it announced that it planned to sell another 10 percent of its reserves. The price of gold fell to $268 an ounce by June of 1999, a twenty-year low. It had been trading at $400 an ounce in 1996. Gold prices hit another low in July after the Bank of England auctioned off twenty-five tons of its reserves. Gold rallied in October of 1999 when fifteen European central banks announced that they were suspending their gold sales for five years. Prices rose almost \$50 an ounce. In March of 2000, the Swiss National Bank announced that it was selling about half of its gold reserves. They were valued at \$12 billion. J.P. Morgan did provide some bullish news in April of 2000 when it created an Internet site to sell gold products in order to push up the price of that metal. Another precious metal was fluctuating in price. In September of 1997, the U.S. Mint sold platinum coins as investments for \$424, but platinum prices then began to fall.

Chapter 5

The Century Closes

1 Internet Money and Trading

Old Money

Coins and paper money were being used for only about 8 percent of all dollar transactions in the world as the century closed. The rest were handled by checks, electronic transfers, and book entries. Cash transactions were relegated largely to small transactions of less than $20. Even so, the Bureau of Engraving and Printing in Washington used 5,000 tons of paper and 2,000 tons of ink each year to print money. Some of that printing was for the purpose of replacing damaged and worn-out currency. Studies had shown that a dollar bill could be folded 4,000 times before wearing out. The government was considering whether to adopt plastic as a replacement for paper money. In the meantime, it was replacing most of its paper bills with new designs in order to curb counterfeiting. Counterfeiting continued to be a problem. Counterfeit Federal Reserve certificates totaling $2 trillion were seized in the Philippines, along with counterfeit currency from other countries. In Danville, Kentucky, a clerk at the local Dairy Queen accepted a bogus $200 bill with President George W. Bush's picture on the front.

A penny shortage developed in July of 1999 even though the United States Mint had produced over 312 billion pennies in the prior three years, which production made 426 pennies available for each individual in the United States. The shortage arose because people were throwing the coins in drawers and keeping them out of circulation. The Philadelphia and Denver Mints were minting pennies six days a week on a twenty-four-hour schedule in order to increase supplies.

In 1997, businesses in Montpelier, Vermont, accepted a local currency called "Green Mountain Hours." This currency was valued at $10, which was equal to the average hourly wage in Montpelier. Businesses participating in the program agreed to accept those work hours in exchange for goods and services. In Italy, a law professor created a private currency called the simec that he valued at two-to-one to the lira. The government tried to seize this currency, but an Italian court ordered its return. Another novelty was introduced by J.S.G. Boggs, an artist. He was spreading his art by spending it. He made caricatures of currency and tried to use it as a substitute for money. It was frequently accepted by merchants and became a valuable collector's item.

Credit Cards

None of this was a serious threat to the existing monetary system, but cash and checks were facing competition from the "electronic money" that was becoming a major focus of banking. Credit cards, for example, permitted electronic payments that substituted for cash or check payments and allowed instant credit. This "plastic money" could be obtained by nearly anyone, as banks continued to make large-scale mailings of unsolicited credit cards to potential customers. Three billion pieces of direct mail solicitations were mailed by credit card issuers in 1997. They offered frequent flier miles and other inducements, including credit lines and discounts on purchases, to cardholders. The credit card companies were pushing their "gold cards." These cards generated more revenue because customer fees, charge limits, and account balances were all higher. The gold cards offered by Visa and MasterCard had a $5,000 minimum credit line. Platinum credit cards, which usually had a higher credit line than other cards, became more popular than gold cards for prestige seekers. The black American Express Centurion Card issued in 1999 had an annual fee of $1,000. It was not certain what that fee was for other than the prestige of carrying the card, which could be obtained by invitation only from American Express.

Consumer borrowing increased from $770 billion in 1992 to $1.3 trillion in October of 1998. Forty percent of that credit was due to credit cards. In October of 1998, Americans owned an average of three credit cards and used them for about 25 percent of their spending. The credit card lending activities of United States banks were their most profitable business. Visa and MasterCard were responsible for 75 percent of all credit card purchases in the United States. Visa International, the association created to service the Visa cards issued by its members, had over 20,000 member institutions in 1998. Visa International offered several cards including the Visa gold card, Visa debit cards, Visa commercial cards, and a Visa classic card, all of which could be used to access the Visa Global ATM Network. Almost 600 million Visa cards were outstanding, and they were accepted at more than 14 million locations. Those cards were used to purchase over $1 trillion in goods and services in 1997. Small businesses were using credit cards as a way to finance their business.

American Express was recovering from its failed attempts to expand into the world of financial services. The company's refocused efforts on its credit card empire were achieving success. In 1995, American Express had 38 million cardholders who charged over $160 billion to their cards. Another traditional line of business continued. American Express traveler's checks worth $26 billion were sold in 1995. American Express was still exploring alternative businesses, including overseas telephone banking, in which customers could access their accounts by telephone or from their personal computers. GE Capital was leading the industry in private label credit cards in 1998. It issued cards for, among others, John Deere and Montgomery Ward. Another form of credit card was the affinity card that was sponsored by trade associations, labor unions, and other groups such as the International Hot Rod Association. Two large affinity card distributors were MBNA Corp. and First USA. The Discover card was another popular credit card. It was owned by Morgan Stanley Dean Witter through its Novus Services Unit. American Express and the Discover card faced stiff competition from Visa and MasterCard, perhaps too stiff. Visa USA and MasterCard International were the targets of an antitrust suit in October of 1998. The Justice Department claimed that the joint ownership of Visa and MasterCard by the same group of major banks violated the antitrust laws and that the defendants were preventing other banks from issuing American Express cards.

Warfare broke out on the Visa board. Citigroup left that group in February of 1999. Citicorp was concerned that its logo was not receiving enough attention on the Visa card. Citigroup wanted the Visa logo to be moved to the back of the card so that its own logo could dominate the cards that it was issuing. Citigroup was opposed to a communal brand. In March of 1999, Citigroup announced that it was joining the board of MasterCard and that it would be moving its business to that card. These developments reflected a conflict between the smaller banks and the bigger banks. The smaller banks were happy to use the Visa card and the MasterCard because it aided their marketing. The larger banks were concerned that the use of the Visa logo was diminishing the value of their own public image. It appeared that the larger banks might form their own credit card franchises while the smaller banks would continue to seek the support of the Visa card name for their cards. In response to this threat, Visa announced in June of 1999 that it was allowing banks to put the Visa logo on the back of their debit cards.

The "merchant processing" business was an important adjunct to the credit card industry. This business involved the obtaining of authorizations for purchases with credit cards at the time of the purchase, processing credit card transactions and settlement of those transactions, and depositing funds in merchants' accounts. The principal processors in the middle of the 1990s were NaBanco/First Data Card Services, American Express, Discover, GE Capital, Sears, Card Establishment Services, First USA, and National Data Corporation. Providian Financial Corp., the sixth largest credit card issuer in the United States, agreed to repay consumers $300 million as the result of misleading billing and sales practices at the end of the century.

Some credit card holders were avoiding payments by transferring their credit card balances to other cards, particularly those with low interest rates that were offered as an enticement to attract new customers. There were, of course, deadbeats. Commercial Financial Services Inc. (CFS) was the largest debt collection agency in the United States. Among other activities, it bought unpaid credit card bills from banks that were pooled and sold in the form of fixed income instruments. CFS then worked with borrowers to obtain collection. CFS experienced trouble in November of 1998 because of allegations of wrongdoing.

An innovation in the credit card industry was the so-called prepaid gift card. It was intended to replace gift certificates. The SEC allowed investors to purchase mutual funds and variable annuities with credit cards. The Internal Revenue Service (IRS) allowed taxpayers to pay their federal income taxes with credit cards in 1999. The largest tax payment by credit card was $5.3 million. This program was attractive because of frequent flyer programs that awarded free plane tickets for credit card usage. Debit cards were gaining popularity in the United States. These cards acted essentially as electronic checks in that the funds were withdrawn from the customer's account upon use of the card. In contrast, the classic credit card required balances to be paid off at month-end or carried forward on the basis of a loan from the credit card issuer to the consumer. Interest rates, frequently exorbitant interest rates, were paid on those balances. A fight broke out between Visa, MasterCard, and their retailer network over debit cards. The retailers claimed that the card issuers violated the federal antitrust laws by forcing acceptance of their debit cards. The retailers were angry because they had to pay higher transaction fees on the debit cards than were being charged by credit cards. At that time, the market for debit cards was growing faster than the market for credit cards. Visa had issued 73.8 million debit cards in 1998, which was an eight-fold increase. It was predicted that, by the year 2005, debit card payments would account for 48 percent of total card transactions, as compared to 21 percent in 1997.

Smart Cards

"Smart" cards were a variation of the debit card. These cards operated through a microchip embedded in the card. Smart cards could be recharged at cash machines. These "stored" value cards were programmed to allow withdrawals from the value added to the card. Smart cards were widely used in Europe in the 1990s as a substitute for cash and checks to pay bills, parking charges, and telephone tolls. The maquiladoras (fabrication factories) on the Mexican border used smart cards to pay workers. The workers swiped their cards when they entered and departed the factories instead of punching a time clock. The card could then be used to dispense cash in payment for the workers' services. Smart cards were used in Uganda to buy gasoline and in South Africa to pay miners and farm workers. Several universities in America used stored value cards to allow students to pay for meals, books, and other expenses.

Supersmart cards were being developed that allowed the holder to check account balances, make securities transactions, and perform other functions. These and other smart cards sought to act as substitutes for money and were sometimes referred to as "e-purses." More than 70 million smart cards were distributed in 1996. At that time, their use was doubling annually.

Other innovations appeared. Grocery stores used self-scanning machines that allowed customers to check themselves out and pay for their groceries without requiring the services of a cashier. Gas stations allowed customers to pump their own gas and then pay at the pump with a credit card. This was a far cry from the days of "full-service" stations where the customer did nothing but enjoy having his windshield cleaned and tank filled by an attendant.

The federal government made electronic deposits for welfare payments and required the states to switch from paper food stamps to cards that operated like an ATM or debit cards. It did not take long for the government to find out that this system could be the subject of fraud. Ten people in Louisiana were charged with defrauding the government of $20 million through the use of electronic benefit cards. Twenty-one similar investigations were under way elsewhere.

Visa began adopting chip technology for its credit cards to replace the magnetic strip used on the traditional credit card. VisaCash was introduced in 1996. This was a chip-based stored value card that was used at the 1996 Summer Olympics in Atlanta, Georgia. Athletes and visitors were given reloadable smart cards that numerous merchants agreed to recognize. Over 200,000 transactions were conducted on the cards during the Olympics. Even so, the experiment suggested that consumers might be slow in adapting to these cards. Another experiment in virtual money was undertaken by Chase Manhattan Bank, Citibank, Visa USA, and MasterCard International in 1998. This program issued tens of thousands of smart cards and installed card readers in about 400 stores in Manhattan. These smart cards had computer chips instead of magnetic strips that could be loaded with as much as $500 through an automated teller machine (ATM) and used as a substitute for cash purchases.

Unfortunately, store owners found that customers did not always like smart cards. Nevertheless, the banks were optimistic that the cards would eventually be accepted by the public. The Mondex System, which was owned by MasterCard and National Westminster Bank of London, had participated in this experiment. This system was a fairly sophisticated electronic substitute for money. It allowed the consumer to transfer credit from a card to a merchant who could then use that electronic payment to pay the merchant's own bills. Pilot programs with the Mondex smart card were not deemed a success because of lack of consumer interest. The smart cards were also raising some new legal issues. One concern was whether the funds carried on a smart card would be treated as insured deposits in the event of the bank's failure. Another issue was whether these cards were really "dumb" cards since they contained consumer money that the issuer could use as an interest-free loan—that is, the banks issuing the cards had the use of that float at the expense of the consumer until the card was used. By the end of 1998, it seemed that the banks would have to reconsider smart cards because consumers were not expressing interest in this payment medium. Some smart cards were turning into collectors' items. SunTrust Banks, Inc., tried to discourage the collection of its cards, which had "funky artistic designs that make them novelties."[1]

Other Electronic Finance

An effort was under way to develop an electronic check that could be written through the Internet on a computer screen using a digital signature. A cybercash system allowed consumers to transfer funds through the Internet when purchasing goods. DigiCash was developed in 1997 as a means to provide electronic cash. In order to use this service, the customer established an account at a bank. The customer could then withdraw cash electronically in making payments to an Internet merchant. Another system called NetCash transmitted cash through the Internet using an encryption scheme. In order to use this system, the customer sent a check or money order to NetCash and then received electronic coupons through e-mail. An experiment in Houston, Texas, allowed customers to use checks in the same manner as a debit card. Under this system, the consumer presented a check to the merchant, who swiped it like a credit card. The funds were then debited from the consumer's account.

The Fed, the Treasury Department, and others created the Direct Deposit Coalition to have businesses offer direct deposit of payroll checks to their employees' bank accounts. Many large companies already provided this service. The amount of funds being transferred electronically by wire transfers each day around the world was in the trillions of dollars. In 1993 alone, electronic transfers totaled $400 trillion in the United States. Over 140 domestic and foreign banks used the New York Clearing House CHIPS in 1995. SWIFT, the international payments system, was used by 5,200 financial institutions in 137 countries. Utility companies and banks sought to expand electronic bill payments. In 1998, electronic bill payments totaled 3 billion transactions, while debit cards accounted for 2.6 billion transactions. Even those consumers using cash were more frequently obtaining it electronically through an ATM. By 1996, there were some 120,000 ATMs in the United States that were dispensing $9 billion in cash a year. In California, some local communities sought to prohibit banks from charging cash withdrawal fees at their ATM machines. Bank of America and Wells Fargo announced that they would not let clients of other banks use their machines for cash withdrawals if this prohibition were imposed.

Checks

Despite the growth of electronic money, the number of checks written in America increased. This was surprising because it had been expected that their number would drop as the use of credit cards and other electronic payments increased. In 1998, 65 billion checks were written, twice as many as twenty years earlier. Americans were writing checks eight times faster than Europeans and 122 times faster than the Japanese. It was estimated that eliminating checks would save $90 billion a year in processing costs. The immediate answer was to automate the check clearing process even further. The New York Clearing House established an electronic check presentment system for clearing and settling checks that was intended to speed the process and to reduce costs. Banks phased out the practice of returning canceled checks to customers. Instead, customers received small images of their checks with their bank statements, or they could have the banks keep their canceled checks. The Fed authorized banks to provide monthly statements to customers electronically through the Internet.

Concern was raised that banks were making inappropriate profits from fees assessed on checks that were returned for insufficient funds in the writer's account. The banks allocated the checks in such a manner that the largest checks were processed first when received with other checks. This often meant that several small checks would bounce that would have been cleared, if the larger check had been cleared last. Because fees were imposed on each check that bounced, the amount of the fees was increased substantially by this allocation process. Claims were also made that credit card accounts were sold by one bank to another in order to increase interest charges. As a result of such sales, the interest rates on the balances being transferred sometimes jumped considerably.

Home Banking

Personal computers had been made popular by the Apple computer in the 1980s. By 1998, Americans were spending more on personal computers than on television sets. At that time, there were 30 million personal computers in American households. By 1999, some 54 percent of Americans would have a computer in their homes. The World Wide Web became operational in 1991 and was soon being accessed by millions of consumers. The Internet became a popular place for financial service companies and other businesses to advertise and provide information about their services, as well as a mechanism for payments and purchases. Computer Internet money was developed that allowed consumers to make purchases from merchants through the Internet using credit cards. An example was Amazon.com, a cyber bookstore that allowed consumers to purchase books, videos, music, and later other merchandise on the Internet with their credit cards using a secure server. Those purchases could be made with a few clicks of a computer mouse. One problem raised by Internet commerce was that states found it difficult to collect sales taxes, which were a large part of their revenue base. Congress sought a moratorium on taxation for Internet transactions. An online electronic money payment system was developed by First Virtual Holdings that permitted payment through the Internet with credit cards. First Union Bank in North Carolina offered CyberCoin, a payment service that allowed purchases to be made over the Internet. Efforts were under way in 1998 to create a single payment system that would allow individuals to pay their bills online. "Bill aggregators" received and arranged payment of consumer bills online. The commercial banks developed similar electronic bill delivery payment systems that would allow consumers to review and pay their bills online. CheckFree became one of the larger providers of online bill paying. It handled 125 million transactions in 1999. This firm was owned in part by the Bank of America, Citigroup, and Microsoft.

Banks had started examining the concept of home banking as early as 1970. In October of 1981, *American Banker* published a group of articles promoting home banking through the telephone. This initial effort at home banking involved the use of Touch-Tone telephones to access bank account balances and to transfer funds. Citibank created a Direct Access program to allow customers to pay bills and check account balances. The Internet opened up the door much wider for home banking, quickly introducing customers to Web-based banking. Web-based banking allowed consumers to conduct banking without putting additional software on their computer. Instead, they could conduct transactions and access their account through a secure server over the Internet. A modem was required, but this device was soon standard on most personal computers. Concern was raised whether the Stamp Payments Act of 1862 would interfere with electronic money. That legislation had been used during the Civil War to stop the circulation of small denomination bank notes called "shinplasters." That hurdle was overcome, and consumers were allowed to use their personal computers to go online with their banks. Even so, alarms were raised that Internet money could become the basis for the creation of another set of wildcat banks such as those existing before the Civil War.

MECA Software LLC provided software that allowed direct bank access. This company was owned jointly by the Royal Bank of Canada, BankAmerica, NationsBank, Fleet, and First Bank Systems. Customers could obtain checking account balances, pay bills, write checks, transfer funds between accounts, and obtain current interest rates. The Comptroller of the Currency approved a request in 1996 by Apollo Trust Company to provide home banking services through the Internet. At that time, three major banks allowed customers to apply and receive automobile loans online. NationsBank announced that it was developing automated loan machines that would allow unsecured personal loans of up to $10,000. That bank also developed a service that would allow companies to conduct an online store through its facilities.

Fifteen major banks formed Integrion Financial Network with IBM to develop an infrastructure for home banking. By 1998, over twenty banks had Internet sites that allowed customers to conduct transactions. Citibank announced in October of 1998 that it was creating a new Internet banking system that would provide online banking, brokerage, and financial information to its customers. It was to replace Direct Access, Citibank's prior online banking system that required customers to use special Citibank software. Wells Fargo & Co. began offering online banking in 1995. By 1999, it had 840,000 customers who could access its facilities for trading online. Chase Manhattan began offering Internet account access in 1997 and had 400,000 online customers by 1999.

"Virtual" banks were operating online. These cyber banks existed only on the Internet. They had no brick and mortar offices for consumers to visit. Instead, customers opened accounts and performed their banking activities through the Internet. The first Internet bank was the Security First Network Bank, followed by the Atlanta Internet Bank, the Citizens Bank of Canada, the Mark Twain Bank, and the First Bank of the Internet. These banks obtained charters from the Comptroller of the Currency and were covered by FDIC insurance. The BestBank was another virtual bank operating only on the Internet. Unfortunately, it became bankrupt in July of 1998.

Bank One announced that it was creating an Internet computer bank. Wells Fargo and Bank of America already had online banking facilities that were used by more than 1 million customers. Over 2 million homes were using personal computers to perform banking transactions by 1997. It was then estimated that 95 percent of all homes could be using online banking within fifteen years. By 1998, over 800,000 customers were conducting online checking with 150 firms. This was an increase of 400 percent over the prior eight months. Intuit's Quicken, a personal computer program that allowed consumers to manage their finances, operated like a checkbook. Intuit was offering home banking services through America Online in 1995. The Swiss bank UBS announced in July of 1998 that it planned to offer online banking services built around Intuit's Quicken financial software. In the meantime, Microsoft sold its Money package to various retail banks in the United Kingdom, including Barclays and the Royal Bank of Scotland. The Dutch bank ABN Amro Holding announced that it was investing approximately $1.8 billion in Internet banking. The ING Group announced in March of 2000 that it planned a $2 billion investment in online banking activities over the next three years. Other European banks made similar announcements, including Deutsche Bank AG.

Internet Commerce

Oak Investment Partners IX announced the creation of a $1 billion facility on September 30, 1999, that was to be used for financing in the developing Internet economy. An online firm, eCredit.com, offered real-time credit in business-to-business transactions (B2B). It promised credit decisions within seconds. CapitalThinking opened an online commercial mortgage marketplace that presented loan applications to lenders. The lenders were to supply information setting forth their lending criteria in order to assist in this matching process. MortgageSelector.com was an Internet firm that provided quotes from over twenty lenders on mortgages. It was designed for brokers and bankers.

The securities industry was feeling the effects of computers and the Internet. The National Securities Markets Improvement Act of 1996 directed the Securities and Exchange Commission (SEC) to report to Congress on the effect of technological advances on the securities markets. The SEC submitted that report two years later. The SEC found that many investors were using the Internet to obtain access to information about securities. Disclosure documents were filed with the SEC electronically through the SEC's Electronic Data Gathering Analysis and Retrieval (EDGAR) system that had been created in 1984. By 1995, more than 70 percent of public companies were filing electronically through EDGAR. This system was made accessible by the Internet. In May of 1996, the SEC required all domestic registrants to file electronically through EDGAR. The SEC report on technology additionally found that investment companies were providing substantial amounts of information and services electronically to investors. The SEC's report concluded that improved communications enhanced the efficiency of the capital markets by providing more information faster.

By 1995, nearly half of all American homes had at least one computer and some 16 percent were subscribers to an Internet service. That access created a cyberspace securities market. Many public companies publicized business and financial information through the Internet. Mutual funds provided information and services to investors through that medium. Broker-dealers and institutional investors increasingly used computer systems to manage inventory, order flow, and risk and to receive and dispense information. Spring Street Brewing was apparently the first company to make an initial public offering through the World Wide Web. The company sought to raise $5 million, but could only raise $1.6 million. Nevertheless, that offering was followed by several others. The SEC stepped in to regulate these offerings because of its concern that investors could be misled. The SEC allowed an affiliate of W.J. Gallagher & Co. to sell private and public offerings to accredited investors through the Internet. The SEC also allowed Charles Schwab & Co. to open "road shows" to the Internet. These information sessions about proposed stock offerings had, in the past, been limited to underwriters and institutional investors in advance of an initial public offering (IPO). The SEC, however, adopted a rule restricting public companies from providing information to stock analysts that was not made public at the same time. Since it cut off a traditional mechanism for channeling information to the market, this rule seemed at odds with the SEC's mandate for maximizing disclosure of information. The SEC believed that unequal access to this information outweighed the benefits of selective disclosure.

Internet Fraud

Electronic services were reporting rumors and information that were affecting stock prices in 1988. Internet "chat" rooms were becoming a source of investment advice of sometimes questionable value. One chat room was "Tokyo Joe's Societe Anonyme." Subscribers paid $100 to $200 a month for Tokyo Joe's stock tips. This individual was later charged with fraud by the SEC. Many of the investment advisers who used the chat rooms to provide advice had little investment experience. Other abuses appeared. The SEC and state regulators brought several cases against individuals who committed fraud over the Internet. Investors were said to have been defrauded of over $100 million. The SEC announced in July of 1998 that it was creating a special unit called the Office of Internet Enforcement. At that time, the SEC was receiving over 120 complaints a day claiming possible Internet securities fraud. Abuses through the Internet included gambling through cyber casinos, unregistered offerings of stock, and unwarranted claims by brokers as to the performance of specific securities. In one case, the SEC charged that unregistered securities were sold to 20,000 investors at a cost of $3 million through the Internet. Investors were told that they could obtain large profits from a worldwide telephone lottery that would use a 900 telephone number that charged the user's phone bill for the price of the lottery ticket. The lottery was to have receipts of $300 million. The company failed to disclose the legal, regulatory, and technical obstacles to this proposal. In another lottery scandal, elderly individuals were defrauded of $70 million. These victims were told they had won a nonexistent lottery and were required to pay certain taxes and fees before claiming their winnings.

In another Internet case, the SEC charged that an individual was soliciting funds through the Web for investment in two Costa Rican companies by making false claims that the individual had major distribution contracts with the A&P supermarket chain. Another defendant was charged by the SEC with soliciting funds over the Internet for investments to finance construction of a proposed ethanol plant in the Dominican Republic. Investors were promised a return of 50 percent. In fact, there was no basis for such a claim. In still another Internet case, the defendants were selling bonds in a Panamanian company that had no assets. Investors were told that they would have a risk-free investment and a guaranteed return of 11.75 percent annually. The promoters claimed that the company provided investment capital to Latin American businesses. The company created a *World Financial Report* magazine and published articles in this magazine on the Web that touted the bonds it was offering.

Presstek, Inc., filed a suit in 1997 claiming that certain individuals were making false statements about the company over the Internet in order to make profits as short sellers. An individual in Raleigh, North Carolina, was arrested for a false report of a takeover of his employer that was supposed to have been issued by Bloomberg News. The falsified announcement was apparently intended to drive up the stock of the individual's employer. The SEC sued Internet companies for offering free stocks to investors. The stocks were given in exchange for personal information or an agreement to buy services. The SEC charged that the stock was worthless, but the agency later allowed such offerings, provided that they were registered under the federal securities laws. One of the Internet firms that gave away stock was DoctorSurf.com.

In October of 1998, the SEC filed twenty-three cases against forty-four individuals for activities involving fraud on the Internet. The charges included fraudulent "spam" messages, which were Internet junk mail. In May of 1999, the SEC charged twenty-six companies and individuals with selling unregistered securities and making fraudulent profit claims through the Internet. "Internet touts" were another problem. They purported to make unbiased stock recommendations but were in fact touting the stock that they were promoting. The Internet created other possibilities. In 1999, the GTE AirFone allowed airline passengers to access real-time quotations on Nasdaq from Bloomberg while they were flying. The most exciting development was the ability of investors to enter their orders online. This avoided the delays encountered when an individual broker was used. It was a business that was custom-made for the discount brokers because an account representative was not needed for trade execution or advice. Trades could be executed cheaply and commission charges lowered. This allowed small traders to trade rapidly and in volume. The first Internet trade was conducted in 1994 by K. Aufhauser & Co., a discount broker that became a part of Ameritrade Holding Corp. Ameritrade announced in 1997 that it would charge only $8 in commissions for listed stock trades through the Internet. Quick & Reilly matched that charge. E*Trade Securities joined the firms offering online discount brokerage services through the Internet. That company soon had 80,000 customers. E*Trade Group Inc., went public in 1996. It was offering Internet trades at $14.95 per transaction. E*Trade's advertising urged investors to "boot your broker."

Online Trading

In 1995, Charles Schwab Corp. introduced software called Equalizer that allowed investors to trade stocks through their computers, but not through the Internet. In the following year, Charles Schwab began online trading. In 1997, Schwab introduced a new Internet trading system called e.Schwab, which offered stock trading for a commission of $29.95 for trades up to 1,000 shares. By September of 1998, Charles Schwab was executing over 50 percent of its customers' trades online, an increase of some 36 percent from the prior year. At that time, there were some eighty online brokerage firms. Schwab found that utilizing the Internet to trade was initially an expensive proposition. The proportion of trades executed online rose substantially in the first quarter of 1998, but the lower commission charges for such trading caused a reduction in Schwab's earnings.

Internet trading services sometimes experienced difficulties in executing orders online, particularly during high-volume periods. Computer glitches were another problem. Charles Schwab found itself involved in a lawsuit over trading in an Internet stock that was a hot issue. Investors were upset when they bought shares at prices much higher than the initial offering price. Concerns were raised that the automated trading system had slowed the purchases, resulting in higher execution prices in the secondary market. Some of the online traders had entered orders but tried unsuccessfully to cancel them. Schwab was not able to process about 300 of the 1,500 cancellation orders it received before the opening of trading. The New York attorney general thereafter conducted a nine-month investigation of performance problems by online trading firms. He found that the online firms had advertised heavily to boost online trading but were unprepared to meet the increased demand. Numerous deficiencies were uncovered in the trading systems of various firms. An issue raised by Internet trading was whether broker-dealers would be responsible for trades that were not suitable for the customer entering the transaction. Arbitrators had previously ruled that discount brokers that did not offer advice could still be responsible if customers were engaging in unsuitable transactions. The securities industry began an effort to establish supervisory requirements to assure that Internet abuses were curbed. Brokerage firms began creating "search engines" to ferret out improper terminology in the e-mail communications of their registered representatives.

In February of 1999, online trading represented less than 10 percent of all brokerage commissions. Revenue from such trading, however, was projected to grow rapidly to $3.5 billion by 2002. Some 7.5 million accounts were trading online. That was an increase from 1.5 million in 1996. The growth of this market pushed up the value of the stock of the online brokers. By 1998, Schwab's stock market value exceeded Merrill Lynch's. Other leading online discount brokers included Ameritrade, TD Waterhouse, National Discount Brokers, and E*Trade. Advertising and operating expenses were up for these firms. The top ten online brokerage firms announced in October of 1999 that they planned to spend $1.5 billion for advertising. TD Waterhouse was offering 10,000 frequent flyer miles to customers who opened an online trading account with at least $10,000. In 1997, America Online (AOL) put four discount brokerage firms on its Web site. They agreed to pay $12.5 million a year each for this service.

One broker was reported as saying that the most popular offerings on the Internet were "sex and financial services, and in both cases, it is the most convenient way to get access to that information."[2] Fidelity Investments offered a paging service that provided investment information and automatic alerts on stock prices, execution reports, and account balances. In addition, the firm allowed customers to trade from virtually any location via wireless technology through a program called Powerstreet. It permitted access to accounts online through a personal computer or even by a "Palm" organizer.

Schwab, thereafter, announced that it too would offer such a service through a strategic partnership with Ericsson, a Swedish wireless equipment manufacturer. Liberty Financial Companies, a $48 billion asset manager, developed WebSaver, which allowed customers to order fixed annuities online. In 1997, Deutsche Morgan Grenfell was developing a World Wide Web site to trade international stock indexes. Yamaichi Securities posted merger and acquisition opportunities on the Internet. American Express announced in February of 2000 that its brokerage customers would be able to trade free online if they maintained $25,000 of stocks in their accounts. Customers with $100,000 in their accounts were allowed to both buy and sell stocks online for free as long as orders were kept under 3,000 shares.

The chairman of IBM, Lou Gerstner Jr., had predicted at a securities industry association conference in 1997 that the entire securities industry would be moving to the Internet. Merrill Lynch's chairman, David Komansky, objected. He stated that he did not anticipate that Merrill Lynch would compete with the online traders. Merrill Lynch's concern was that its highly paid "full-service" brokers would be rendered obsolete by the much lower commission charges associated with online trading. The large full-service brokerage firms, such as Merrill Lynch, emphasized personal relationships and service in their marketing, both of which were used to justify their high commission charges. But times were changing. The computer could not be ignored; Merrill Lynch's customer base was becoming younger and more attuned to the Internet. In 1994, the average Merrill Lynch client was sixty-one years old and had $126,000 in assets at Merrill Lynch. There were then 4.1 million clients. By 1998, the average age of those clients had dropped to fifty-seven, and the average amount held in a customer's account rose to $201,000. There were then 5.4 million clients at Merrill Lynch.

Merrill Lynch slowly gave in to the inevitable. Microsoft Corp. created a Web finance site in 1998, and Merrill Lynch & Co. became the first "premier financial provider" on this site. In 1999, Merrill began providing online account access that allowed customers to review their statements, track gains and losses in their portfolios, and read Merrill Lynch research reports. The firm provided online investment advice for investors in connection with their 401(k) retirement plans. Merrill Lynch added online shopping and auctions to its Web sites. It even allowed investors to shop for books from Barnes & Noble and to purchase wine from "virtual vineyards." This was no small market. In 1999, Merrill Lynch account holders bought some $7 billion in goods and services on their Merrill Lynch Visa cards. Merrill Lynch was trying to manage "the total financial relationship" with its customers and not just their investments.[3]

In June of 1999, Merrill Lynch began the process of offering online trading to its 5 million customers. They would be charged $29.95 a trade or a fee based on assets for unlimited trading privileges. Once Merrill Lynch started online trading, it expanded rapidly. Merrill announced that it would allow its customers to engage in after-hours trading by the year 2000 through Archipelago Holdings. Merrill Lynch planned to spend $50 million to promote its online trading programs. The firm was even offering online trading abroad in December of 1999.

Other full-service firms either followed or were ahead of Merrill Lynch. Paine Webber was offering online trading to its customers, as was Morgan Stanley Dean Witter & Co. The latter firm announced in October of 1999 that all of its customers could trade online at discount rates. Dean Witter had previously used Discover Brokerage Direct, a separate online broker it had purchased in 1996, for customers interested in that type of trading. Dean Witter planned to change that arrangement so that all customers would have access to Internet trading. In 1999, Prudential Securities announced that it was allowing Internet trading at $24.95 a trade. Goldman Sachs even began an effort to attract small investors, a departure from its traditional customer base. DLJ Direct was an electronic trading service offered by Donaldson, Lufkin & Jenrette. It soon claimed to be the number one online broker for reliability. DLJ's success led to its acquisition by Crédit Suisse in August of 2000 for $11.5 billion.

Charles Schwab Corp., Ameritrade Holding Corp, and TD Waterhouse Group announced in November of 1999 that they were forming an online investment bank in order to participate in initial public offerings (IPO). These firms wanted an allocation of IPOs to be sold through the Internet. Other financial service firms also saw advantages in online brokering. H & R Block, the tax preparation firm, announced that it was buying Olde Financial Corp., a discount broker, in September of 1999. Traders interested in Forex transactions could trade through the Internet in London. "Margined" share trading was allowed and was being conducted in London, as was margined Forex. The latter was offered by the London office of Lind-Waldock & Company, a Chicago firm. Citigroup, Chase Manhattan, Deutsche, and Reuters announced in August of 2000 that they were creating an Internet-based company that would provide currency services for institutional clients. It would be competing with FX Alliance LLC, which was owned by thirteen large investment banks that included Morgan Stanley, J.P. Morgan, Goldman Sachs, and Bank of America.

The express companies of the horse and wagon era had once been undermined by the telegraph. Now express companies, such as FedEx and UPS, found themselves in competition with Internet applications and improved systems that threatened the demand for overnight service. UPS responded to these threats with a new subsidiary to sell financial services, including credit guarantees, inventory financing, equipment leasing, and factoring.

2 Banking Consolidation

Banking Business Base

American banks were profitable for seven straight years between 1991 and 1998. But the world of banking had to change dramatically in order to obtain that profitability. The traditional deposit and loan business of the banks was fading. One measure of that change was the fact that the percentage of funds held by American households in banks was cut in half between 1979 and 1999. The money market funds had siphoned off much of the deposit business, and the traditional loan business was being replaced by structured financing. The effects of these market shifts were reflected by the fact that commercial banks held less than 25 percent of financial assets in the United States in 1999 compared with more than 50 percent in the 1950s. A 1995 Treasury Department study noted,

> Only 15 percent of all financial assets held by households and the non-profit sector in 1994 was accounted for by insured deposits.
>
> Recent data show that, of the 20 largest financial firms in the United States, only 5 are commercial banks. Moreover, a number of diversified financial services firms own non-bank, thrift institutions, or industrial loan companies.
>
> The differences between the products of banks and non-bank financial firms have become increasingly blurred. The emergence of similar products by different firms operating under different regulatory regimes results in complicated competitive and regulatory issues.
>
> A number of commercial banks engage in little or no traditional banking—funding commercial loans with deposits. Rather, they specialize in trading activities, consumer finance, or fee-based services.
>
> Capital markets have become increasingly globalized, and financial markets in different countries have become more interdependent.
>
> Technological innovations such as remote banking and digital cash daily redefine the nature and delivery of financial services and the respective roles played by bank and non-bank firms. For example, the data processing firm EDS is the second largest owner/operator of ATMs in the U.S.[4]

Glass-Steagall Barriers Fall

The Fed sought to aid the banks in 1996 by increasing from 10 to 25 percent the amount of total revenue that a nonbank subsidiary of a bank holding company could derive from underwriting and dealing in securities. This allowed banks to expand their securities activities in their Section 20 affiliates under the Glass-Steagall Act. "Firewalls" that had been previously imposed by the Fed to allow Section 20 subsidiaries to engage in only a limited amount of securities activities were removed and replaced by more liberal "operating standards." It was thought that these changes would allow "one stop financial shopping at banks and bank holding companies."[5] As one newspaper asserted, "Financial Deregulation Has Given Investment Banks the Chance to Regain Their 19th Century Role as Leaders of Global Development."[6]

Bankers Trust was able to acquire Alexander Brown in 1997 as a result of these changes. Alexander Brown, which had a long history in investment banking, was a regional investment banker in Baltimore at the time of this acquisition. The merger, which was accomplished through a share swap transaction valued at $1.7 billion, was billed as the biggest venture by commercial banks into investment banking since passage of the Glass-Steagall Act. It was not the only such acquisition. U.S. Bancorp announced the acquisition of Piper Jaffray Co. in December of 1997. Piper Jaffray was then the eleventh largest securities firm in the United States. The First Union National Bank in North Carolina acquired Wheat First Butcher Singer, a broker-dealer based in Richmond, Virginia. Later, in April of 1999, First Union acquired Everen Capital Corp., another regional brokerage firm, for $1.04 billion. In July of 1997, NationsBank Corporation purchased Montgomery Securities, an investment banking firm in San Francisco, for $1.2 billion. In October of 1998, Wachovia Bank paid $230 million for Interstate/Johnson Lane, a regional brokerage firm in the Carolinas. BB&T, a North Carolina bank, purchased Scott & Stringfellow, a Virginia broker-dealer, for $145.5 million.

These changes dramatically altered the business of banking. The new role played by banks was illustrated by a two-page advertisement in the *Wall Street Journal* in February of 1998 that announced NationsBank's results for the prior year. The bank had handled initial public offerings worth $4.5 billion; high-yield (junk bond) transactions worth $16.7 billion; mergers and acquisitions worth $14.5 billion; "follow-ons" worth $11.8 billion; syndicated floating rate debt of $442 billion; convertible securities underwritten in the amount of $3.7 billion; private placements worth $940 million; real estate finance valued at $30.2 billion; high-grade securities underwritings of $30.6 billion; asset-backed securities underwritings at $22.5 billion; and project finance of $5.7 billion. NationsBank was not alone in this shifting environment. Chase Manhattan and its affiliates were involved in numerous underwritings. These included senior subordinated notes, warrants, and senior secured discount notes. Chase acted as the London agent bank for the Republic of Venezuela in connection with its almost $1 billion in front-loaded interest reduction bonds that were due in 2007. Chase was the book manager for $271 billion of syndicated loans in 1998.

First Union's Capital Markets Group, which included Wheat First, had almost 1 million brokerage customers. First Union's institutional business employed more than 100 traders, and it was a market maker in more than 300 Nasdaq stocks. Fleet Financial Group announced in November of 1998 that it was seeking to expand its asset base by fifty billion to 100 billion dollars. Fleet Financial bought the specialist operations of Merrill Lynch on the NYSE that Merrill had purchased after the stock market crash of 1987. Fleet Financial additionally purchased an American loan operation of the Sanwa Bank, Ltd., which was experiencing financial troubles. Some bank activities were pretty far afield from traditional banking. On February 26, 1996, the Fed approved an application that allowed the Compagnie Financière de Paribas to market a software program for mobile telephones billing and account-related services for customer accounts.

BankBoston provided senior revolving credit facilities, acted as a manager for the distribution of senior subordinated notes for various corporations, provided global senior secured revolving credit facilities, and senior unsecured revolving credit/term facilities, participated in asset-backed commercial paper distribution, provided sponsorship for equity and expansion capital, served as adviser and placement agent for subordinated notes (some with warrants) and nonparticipating preferred stock, and provided standby letters of credit and senior secured working capital facilities. BankBoston was involved in emerging market transactions through various affiliates and acted as arranger and placement agent for floating-rate certificates and fixed-rate certificates. It acted as joint lead manager, ratings adviser, and bookrunner in a eurobond offering and was involved in a Brady Bond exchange. The bank served as an adviser to Vietnam in the restructuring of its foreign debt, and acted as lead manager and bookrunner for lease-backed notes, global registered notes, and six-month guaranteed notes. It was an arranger for a limited recourse term loan, import notes, and a multicurrency term loan, as well as a placement agent for export trust certificates and a senior secured multiple draw term loan.

The erosion of the barriers between investment banking and commercial banking led one newspaper to conclude that J.P. Morgan was looking increasingly like an investment bank. In 1989, it was the first commercial bank to be allowed to underwrite corporate bonds, and it was later allowed to deal in stocks. In July of 1997, J.P. Morgan & Co. announced that it was paying $900 million for a 45 percent interest in American Century, a money management company that handled the nation's fifteen largest mutual funds. J.P. Morgan was reducing its traditional lending business. The firm was syndicating or selling the loans it originated in the secondary loan market. In November of 1997, J.P. Morgan coordinated a $4.3 billion syndicated loan for Saudi Arabia that was to be used to purchase civilian aircraft. J.P. Morgan had previously arranged a loan of $4.5 billion for Saudi Arabia in 1991. The syndicated loan business was a good one. Bank of America managed $174 billion, J.P. Morgan managed $106 billion, and Citigroup managed another $87 billion in syndicated loans in 1998. Syndicated loans exceeded in volume all new issues of equity, corporate bonds, and asset-backed securities combined in June of 1999. The syndicated loan market was approaching $1 trillion in 1999, and such loans were one of the two largest sources of funding for U.S. corporations. A secondary market developed in these loans. Bank loan funds bought loan participations in corporations with debt rating below investment grade. These loans were adjustable rate loans that were adjusted every thirty to ninety days. These funds benefited from increased interest rates at the turn of the century.

The transformation from banking to investment banking was not always smooth. In November of 1997, Chase Manhattan Corp. suffered a $150 million loss as a result of its trading activities. J.P. Morgan was having difficulties. Two of its traders manipulated the London FTSE 100 index in London in October of 1998. The firm was fined $578,000 for that conduct by the London Stock Exchange. J.P. Morgan sued a South Korean firm for $300 million over derivatives transactions. That claim was settled in part by having the customer give J.P. Morgan 8.9 percent of its stock. J.P. Morgan & Co. had net income of $963 million in 1998. This was a drop of 34 percent from 1997. The decline was due to defaults in Russia in August of 1998 and to other effects from the global crisis that was then occurring.

Commercial banks were selling mutual funds directly to their customers. This caused problems of bifurcated regulation between the banking authorities and the SEC, sometimes resulting in dual regulation. Other restrictions on investment banking activities, while eroding, still frustrated the efforts of the banks to compete equally in all financial services, such as insurance underwriting. The debate over the Glass-Steagall Act continued with claims that Congress was mistaken in blaming the bank affiliates for the stock market crash of 1929. Fed chairman Alan Greenspan was quoted as saying that bank securities activities were not the cause of the depression in the 1930s and that banks with securities affiliates did not fail in greater numbers than banks without such affiliates. This was familiar ground for Greenspan. He had testified previously before Congress that the Glass-Steagall Act could safely be amended because computer and communications technology had reduced the economic role of commercial banks and had enhanced the function of investment banking. Greenspan noted that the key role of banks as financial intermediaries had been undermined by these technological developments. The banks could no longer use their position to gather information that would allow them to make significantly more informed credit decisions than other market participants.

A struggle was brewing between the Treasury and the Fed over rules adopted by the Comptroller of the Currency that allowed operating subsidiaries of national banks to engage in any activity incidental to banking even if such activities could not be engaged in by the parent company. This would undercut the power of the Fed because bank subsidiaries would replace holding company affiliates. The holding company structure was the basis for the Fed's power over the expansion of banking services, and such a change would largely remove the Fed from bank regulation. In 1997, the House considered a bill to repeal Glass-Steagall, but was unable to pass that legislation. Even that bill would have retained some restrictions on banking activities in areas outside commercial banking. The issue over the extent to which banks should be allowed to participate in the insurance industry held up this legislation. The states resisted intrusion of federal regulation into the insurance area. Legislation was introduced that would have created a national licensing system for insurance companies so that banks and insurance companies could sell insurance nationwide without having to comply with differing state requirements. Another bill, the Financial Services Act of 1998 or H.R. 10, sought, once again, to repeal Glass-Steagall. But Senator Phil Gramm held up that legislation because of his objections to provisions of the Community Reinvestment Act. As before, Congress found itself unable to deal with the issues raised by the repeal of that ghost of the New Deal. In February of 1999, Congress made its twelfth attempt to eliminate the Glass-Steagall Act.

Banking Consolidation Continues

In the meantime, bank consolidations were accelerating. Over $70 billion in commercial bank company mergers and acquisitions occurred in 1997. NationsBank and First Union accounted for almost 50 percent of those acquisitions. At the end of 1997, Charlotte, North Carolina, was second only to New York City in the amount of assets held by banks in any one city in the United States. The total assets of financial institutions in Charlotte were $845 billion as compared to $1.8 trillion in New York City. In addition to NationsBank Corporation and First Union Corporation, which ranked, respectively, third and sixth in size, Charlotte was the home of the Wachovia Corporation, a large bank holding company in North Carolina. BB&T Corporation, which held assets worth $27 billion in 1997, was another North Carolina bank of some stature, as were the Central Carolina Bank and the Centura Bank. Even with all of these mergers, there were no United States banks listed in the top ten largest banks in the world as 1997 ended.

Not all attempted bank mergers were successful. On April 22, 1998, the Bank of New York announced that it was bidding $22 billion for the Mellon Bank in Pittsburgh, which owned Dreyfus and Founders, two large mutual funds. The Mellon Bank rejected that bid. The Bank of New York, which was founded in 1784 by Alexander Hamilton and others, was then forced to withdraw. This did not discourage other banks from consolidating. Norwest, a Minneapolis bank, announced in June of 1998 that it was acquiring Wells Fargo in a stock swap that was valued at $31.2 billion. This created the nation's seventh largest bank. Bank One was the result of the merger of BancOne in Columbus, Ohio, and First Chicago. BancOne was one of the larger regional banks in the United States, with more than 1,500 offices in 1997 and $90 billion in assets. The merger of those two banks was valued at $20.7 billion. The combined firm located its headquarters in Chicago. It was then the largest bank in the Midwest and one of the larger issuer of credit cards in the United States. Following the merger, 4,000 jobs were eliminated. In another consolidation, National City agreed to buy the First of America Bank for over $6 billion in stock in 1997.

Sears, Roebuck & Co. sold its HomeLife furniture chain to Citicorp Venture Capital for about $100 million in 1998. Citicorp then had almost 94,000 employees around the world. The bank and its affiliates had relationships with one in five households in the United States. Citibank was offering CitiSelect Portfolios, which was a family of mutual funds that utilized an asset allocation strategy. Its credit card business remained strong, but Citicorp had to increase its write-offs for losses from defaults on credit cards to $1.2 billion in 1997. Citicorp continued to look aggressively for business opportunities. In April of 1998, Citicorp announced that it was merging with Travelers Group, Inc., which owned Salomon Brothers and Smith Barney. The value of this merger was set at $83 billion. The combined firm's holding company became Citigroup, Inc. It had more than 100 million customers worldwide and offered a wide range of products, from corporate finance to consumer banking and securities. Citigroup was subjected to a requirement that it divest itself of the Travelers insurance underwriting unit because of continuing restrictions on bank holding companies engaging in insurance underwriting activities. It was thought that the merger would spur the repeal such prohibitions, but that outcome was by no means certain.

The stunning announcement of the Citicorp-Travelers merger was followed quickly by the merger of BankAmerica and NationsBank, which resulted in the creation of the largest bank in America. To avoid criticism of their merger, NationsBank and BankAmerica announced that they were devoting over $350 billion over twenty years in loans for low- and moderate-income areas and for small businesses. Both Citigroup and Bank of America encountered difficulties in their initial efforts to combine their operations with their merger partners, and senior executives were removed as those problems appeared to be more serious than expected. Citigroup quickly surmounted those problems. On October 14, 1998, Bank of America set aside $1.4 billion for losses in the third quarter. Over $500 million of that amount was for trading losses. Another $374 million was for an unsecured loan made to D.E. Shaw, a stock brokerage firm. D.E. Shaw was the creation of a former Columbia University professor, David Shaw. The bank agreed to supply money and credit for D.E. Shaw's software for arbitrage trading in debt instruments and derivatives. This was a type of "market neutral" trading system based on a theory that prices of financial instruments usually regress to historically established ratios. Either the theory was unsound or something was missing in the execution.

The consolidation of banking and financial services continued. In March of 1999, Fleet Bank agreed to merge with BankBoston. This created the nation's eighth largest bank. It would own the investment banking firm of Robertson Stephens and Quick & Reilly, a discount broker. The merged bank's position in the number eight spot was displaced by the acquisition of U.S. Bancorp in October 2000. A firm left standing at the altar was Chase Manhattan. That bank had merged with Chemical Bank in 1996. Chemical Bank had itself merged with Manufacturers Hanover in 1991. This merger made Chase the country's largest bank holding company in 1996, but it was being forced out of the top tier of newly merged giant banks. Several firms, including Merrill Lynch, Goldman Sachs and Morgan Stanley, were reported to have turned down overtures from Chase. Chase was able to acquire Hambrecht & Quist, the Silicon Valley investment banking firm that was underwriting many of the start-up Internet firms. The purchase price was $1.35 billion. Chase was finally able to find its dream mate in September of 2000 when it acquired J.P. Morgan & Co. for $31 billion.

International Banking

Bank mergers were taking on an international flair. The $25 billion merger of Union Bank of Switzerland (UBS) and Swiss Bancorp announced in December of 1997 had created what was then the world's second largest bank, second only to the Bank of Tokyo-Mitsubishi. That combination was threatened by the disclosure of losses by UBS in equity derivatives in Singapore. UBS was among the banks that agreed to pay $1.25 billion to settle litigation brought by survivors of the Holocaust for gold and silver that had been stolen from them and stored in Swiss banks. The Swiss banks were threatened with economic sanctions in the United States for their retention of those assets. The UBS chairman resigned after a $780 million loss as a result of problems at Long-Term Capital Management, a speculative hedge fund. In total, UBS had losses of $1.2 billion from derivatives trading and lending to hedge funds in 1998. UBS fired the global head of its fixed income currency and derivatives trading in 1997 after the firm suffered losses in excess of $135 million. UBS lost almost $700 million in its equity derivatives department in 1998. UBS had been betting on convertible preferred shares of Japanese banks. The shares were stripped and their components sold. Withal, UBS was the world's largest private banker in 1999. Later, in July 2000, UBS acquired Paine Webber. This pushed the amount of assets under management by UBS to nearly $1.5 trillion. At the time of the merger, the two largest shareholders in Paine Webber were General Electric Co. and Yasuda Mutual Life.

The Swiss Bank Corporation had earlier acquired Warburg Securities, and then Dillon Read, the American investment banking firm, was picked up for

$600 million. The Deutsche Bank announced on November 23, 1998, that it was acquiring Bankers Trust for almost $10 billion. This merger created the world's largest financial services company and the second largest processor of securities transactions behind Chase Manhattan. The Fed helped arrange this merger because of concerns with Bankers Trust's financial condition. Deutsche Bank paid five Bankers Trust officials $187 million over five years in order to retain their services. Later, twelve Bankers Trust executives resigned, including the chief executive officer and the chief financial officer. Deutsche Bank purchased Crédit Lyonnais Belgium for $588 million in December of 1998. Deutsche Bank was then vying for dominance with the combined NationsBank-BankAmerica and Citicorp-Travelers Group. HSBC, a British bank, acquired Republic New York Corporation, an international banking concern. The owner of that banking entity, Edmond J. Safra, was to receive $3.3 billion of the overall purchase price of $10.3 billion. Republic New York Corp. had earlier lost $190 million as the result of investments in Russian securities. The bank ran into additional difficulties in 1999 because of a massive fraud conducted by one of its customers, Martin Armstrong, the head of Princeton Global Management. He was accused of using the bank to defraud Japanese investors of almost $1 billion. That problem was threatening the merger with HSBC before Safra agreed to reduce his sale price by $450 million because of the scandals. Then, in a bizarre episode, Safra was killed by a fire set in his Monaco apartment by his nurse, who claimed that he set the fire to impress Safra.

Crédit Suise acquired Donaldson Lufkin & Jenrette. Société Générale and Bank Paribas in France announced merger plans. Such a combined bank would have been the second largest bank in Europe behind UBS. That planned marriage was interrupted in March of 1999 by the Banque Nationale de Paris's announcement that it planned to take over both Banque Paribas and Société Générale. This would have created a $1 trillion financial institution, if completed. Banque Paribas and Société Générale announced that they would oppose this bid. A long fight ensued. The Banque Nationale de Paris eventually obtained control of Paribas, but could acquire only a minority interest in Société Générale. In October of 2000, the Royal Bank of Canada acquired Dain Rauscher, a large securities firm in Minneapolis.

Banks across Europe and in the United States were being hurt in the third quarter of 1998 by losses in trading in investments in Asia and Russia. In November of 1998, the Russian government indicated that it would be defaulting on interest payments for some $28 billion in Soviet era debt. Bankers Trust announced a loss of $488 million for the quarter ending September 30, 1998. Those losses were due to the drop in prices of Russian securities and problems in other business areas. Crédit Suisse announced that it had lost $500 million in its financial activities in Russia. Those losses were expected to mount.

The megabanks were vying with each other for the title of being the world's largest bank, or, more appropriately, the world's largest financial institution. In August of 1999, three Japanese banks announced a merger that would create the world's largest bank. They were the Dai-Ichi Kangyo Bank, Ltd., the Industrial Bank of Japan, Ltd., and Fuji Bank, Ltd. Their collective assets were $1.3 trillion. Sumitomo and Sakura announced in October of 1999 that they would be merging their banking operations into what would become the world's number two bank. Another giant merger was forming in March of 2000 among Sanwa, Asahi, and Tokai, which were three of Japan's largest banks. The merger would create Japan's second largest bank. A large merger planned between Commerzbank and the Dresdner Bank fell apart.

The banks began the process of digesting their mergers and adjusting their business mix. Bank of America announced that it had completed more than $940 billion of debt equity and advisory transactions in 1998. This included $395.9 billion in syndicated finance, $9.4 billion in debt and equity private placements, $28.6 billion in equity and convertible securities offerings, $34.8 billion in high-yield securities offerings, $91.6 billion in high-grade bond offerings, $48.5 billion in asset-backed securities, and $50 billion in commercial paper. In addition, $92.9 billion in merger and acquisition transactions were handled by NationsBank Montgomery Securities. Banks were becoming heavily involved in venture capital financing. Chase Manhattan Corporation invested $4 billion in start-up companies in 1999.

Adjustments were being made. Bank of America (BofA) sold its Robertson Stephens Investment Management unit, which was overlapping the operations of its merger partner, NationsBank. BofA thereafter announced plans to expand its asset management and securities activities, including mutual fund sales. The investment banking arm of Robertson Stephens was sold to Bank Boston in August of 1998 for $800 million. The remaining asset management functions of the Robertson Stephens firm was sold to its management. Some financial services firms were having difficulty establishing their brand names with the public. HSBC mounted an advertising campaign to establish its presence in the United States. J.P. Morgan began its first ever television advertising campaign with a $25 million budget in July of 1999. Earlier, this once patrician firm had made a mass mailing to potential clients.

Citigroup and State Street Bank agreed in December of 1999 to create a joint venture that would manage $200 billion in assets for 401(k) retirement plans. Citigroup purchased Schroders PLC in England for $2.2 billion in January of 2000. This acquisition was designed to boost Citigroup's investment banking activities in Europe. Some traditional banking activities continued. The Bank of New York was the world's largest global custodian, with assets of almost $6 billion in March of 1999. Two other large global custodians were Chase Manhattan Bank and State Street Bank. Bankers Trust's transaction processing unit had 3,500 employees and held $1.4 trillion in assets. It was administering about $420 billion in debt for clients. The transaction processing business consisted of making electronic transfers for institutional clients, distributing dividend payments and processing interest payments, on fixed income instruments. The average turnover in foreign exchange trading in December of 1999 was $2 trillion. Central banks sometimes sought to intervene and support their currencies but few had the reserves to compete with speculators.

Y2K

The Year 2000 (Y2K) problem was posing a threat to the banks as the century closed. At that time, it was unclear whether many computer software systems had been properly programmed to compute the millennium change as 2000 instead of 1900. Estimates for dealing with this problem ranged as high as $600 billion worldwide. The United States banking industry alone faced a bill of $10 billion. The alternative was potential liabilities of up to $1 trillion for errors caused by computers improperly computing the millennium change for interest and other payments. The Y2K problem posed equal dangers for securities brokers, and the SEC required broker-dealers to report on how they were dealing with this threat. The Fed stockpiled an extra $70 billion in cash in anticipation of runs on banks should widespread computer failures shut down the banking system. The Fed was additionally offering Y2K insurance in the form of options that guaranteed the availability of credit at the beginning of the millennium. The Fed had sold $306 billion of these options at a cost of $4.9 billion and was holding weekly auctions to sell these contracts. In the end, there were few problems, and the Fed's cash was not needed.

Banking on Other Levels

Small businesses were seeking alternative sources for loans and financing. That need was being met by "unbanks" in 1999. These institutions included Mountain West Financial and American Express and Advanta Corporation, which were credit card companies. Other institutions such as Merrill Lynch & Co. and Boston Financial Network were seeking to make business loans and to take that business away from banks. Consumer product companies were obtaining charters to become S&Ls in order to allow them to provide credit to consumers. Hillenbrand Industries, Inc., which sold funeral services, sought a charter. Ford Motor Company sought a charter, as did Nordstrom, a department store chain that wanted to offer home equity loans and money market checking accounts. GMAC purchased the commercial finance unit of the Bank of New York for $1.8 billion in 1999. GMAC was already the largest commercial lender in the United States. Wal-Mart Stores sought to acquire an Oklahoma thrift that would allow it to engage in car loans and credit cards. Wal-Mart was already providing space for bank branches in its stores.

A survey in October 2000 found that half of all savings accounts in the

United States had balances of less than $2,500. Savings accounts paid little interest. Their owners were losing an estimated $50 billion annually in interest on the $1 trillion held in those accounts. About one in eight families in the United States did not have a bank account. The New York attorney general required four large banks to spend $300,000 to advertise the fact that state law required them to offer accounts with a $25 minimum opening deposit, a one cent monthly balance, a $3 maximum monthly fee, and eight free withdrawals or checks each month. As the century closed, "payday" lending companies were becoming a popular banking institution for the poor. The payday companies loaned money to individuals until they received their paychecks. The fees for such services were high, sometimes totaling as much as 780 percent. There were nearly 8,000 of these businesses in operation in June of 1999, and several national chains. The largest was the Ace Cash Express in Irving, Texas. It had 900 stores and revenue of $100 million. Subprime lending was another financial service that targeted the poor as clients. Commercial Credit Corp. in Baltimore, a consumer finance operation of the Travelers Group, engaged in such lending. First Union bought the Money Store, the largest small business and home mortgage lender in the United States, for $2.1 billion. First Union was seeking to increase its subprime lending activities by this acquisition, but it turned out to be a disaster. First Union sold the Money Store in June of 2000 for a $1 billion loss. Mercury Finance, a used-car lending business that had received the highest rating for its credit, defaulted on $17 million of commercial paper in January of 1997. Its stock price then dropped 86 percent. Federal regulators were investigating predatory lending practices that involved low-income borrowers. This included subprime lending companies. The federal government created a joint task force of ten federal agencies to investigate these practices.

The Federal Home Loan Bank System that includes the twelve regional Federal Home Loan Banks issued some $3.1 trillion in debt in 1999. Most of that was short-term debt and a lot of it was overnight debt. The number of federal S&Ls dropped from 5,000 in 1985 to 1,300 in 1999. In March of 1998, Washington Mutual bought H.F. Ahmanson for $10 billion. With that merger, Washington Mutual would have assets of $150 billion. About 40 percent of all home mortgages in the United States were guaranteed by one federal program or another. Homeowners were provided with more leverage. One mortgage company was selling mortgage loans of up to 125 percent of the value of a homeowner's home in November of 1998. Fannie Mae was selling a flexible loan that allowed a homeowner to buy a house with a 3 percent down payment. This was called Flexible 97. That 3 percent could be obtained by a loan or gift or could be secured by a pension plan. Between 1970 and 1996, Freddie Mac financed homes for 20 million families. Freddie Mac claimed that it had financed one out of every six homes in America. In 1996 alone, Freddie Mac financed 1.4 million homes. Much of that financing was carried out through mortgage-backed securities. Mortgage trusts were also being sold to the public in 1997. These were not real estate investment trusts (REITs). Rather, they were trusts that held mortgages instead of property. The mortgage trusts paid out 95 percent of their earnings in dividends and were highly leveraged. Their profits were based on the difference received on their mortgages and the rates they paid on their own fund sources. This posed a risk when mortgage lending rates increased.

The Federal Farm Credit Administration was still supervising twelve credit banks in the 1990s.These banks financed farm cooperatives and made loans to financial operations in the agriculture sector, such as livestock loan companies and agricultural credit corporations. Federal land banks made real estate loans to farmers. In 1995, there were over 12,000 credit unions with over 69 million members. This was a considerable increase from the 190 credit unions that had operated in the United States in 1921. Credit unions held $316 billion in assets in 1995. Many of these institutions offered credit cards, ATM machines, money market accounts, life insurance policies, and other financial services. The largest credit union was Navy Federal, which had assets of some $10 billion.

The National Credit Union Administration allowed credit unions to expand their activities beginning in 1982 to include multiple unrelated employer groups. This reversed a long-standing interpretation that had restricted membership in national credit unions under the Federal Credit Union Act to persons having a common bond of occupation, association, or residential area. National credit unions began to expand their operations under the revised interpretation. The AT&T Family Credit Union had 110,000 members nationwide. Only 35 percent of those individuals were employees of AT&T and its affiliates. Many of its members were employees of other companies, including the Coca-Cola Bottling Company and Duke Power Company. These more expansive credit unions were dealt a setback after the Supreme Court held, in *National Credit Union Administration v. First National Bank and Trust Company*, that the National Credit Union Administration had gone too far in its interpretation that allowed multiple employer groups to be members of a credit union.[7] The Supreme Court ruled that such credit unions had to restrict their activities to a single “common bond” shared by their members. This would include working for the same company or in the same community. This opinion proved to be unpopular, and Congress adopted the Credit Union Membership Access Act of 1998, which reversed the Supreme Court’s decision and allowed broad credit union membership.

Banking Crimes

Fraud and theft did not cease with the consolidation of banking. Some $17 million was stolen from the Loomis Wells Fargo & Co. warehouse in Charlotte, North Carolina, in 1997. Eighteen people later pleaded guilty to charges in connection with that theft. A lawyer was indicted for laundering the money from the robbery. One of the thieves had moved from a trailer park to a $635,000 home after the heist. Among the purchases made with the loot was a large velvet Elvis picture. Several Mexican banks were charged by the United States government with money laundering for drug smugglers connected with Colombia's Cali cocaine cartel in May of 1998. Over 100 defendants were named in that action. The Treasury Department warned in June of 1999 that a money laundering operation by drug dealers in Colombia was washing as much as $5 billion in drug money annually. Under this scheme, Colombian businesses were buying drug money at a discount and purchasing American goods for export to Colombia. An even bigger money laundering operation was discovered at the Bank of New York in 1999. Some $7 billion had been laundered from Russia through nine accounts at a branch of the Bank of New York, and a bank official was charged with criminal violations for her handling of the money. Authorities sought to determine whether the money had been looted from the IMF. The Bank of New York was required to create additional regulatory procedures to monitor possible money laundering after this incident. In October of 2000, investigators examined fifteen bank offices in London that had assisted the laundering of $4 billion by Nigerian dictator Sani Abacha.

A new crime problem in the 1990s was "identity theft," in which the identity of individuals was used to obtain credit or to purchase goods by third parties. The Secret Service made 9,500 arrests for such crimes in 1997. The amount of money involved in those crimes was estimated to be $745 million. The Pentagon and some of its generals were the target of such scams in 1999. Thieves were using names of senior military officers, including several generals and admirals, to obtain credit cards. The Minnesota attorney general sued U.S. Bancorp for sharing information about its customers with telemarketing firms. Apparently, this was a common practice. Bank of America, thereafter, announced that it would no longer engage in such activities. Citibank was accused of using strong-arm tactics, like threats of kidnapping and mayhem, against delinquent customers in India.

The banks continued to make large profits from the "float" as the century closed—that is, they earned interest between the time a customer's deposit was made and the time the check for the deposit cleared the clearing system. In contrast, the banks were sharply reducing the time in which funds were withdrawn from accounts for merchants. A financial service of interest to the banks was "unclaimed property services." The State Street Corp. had such a division, which it sold to Affiliated Computer Services. These services processed unclaimed accounts, which the states required to be escheated to their treasuries. The states had reporting and record keeping requirements for such accounts that the unclaimed property services handled. In 1997, the amount of unclaimed property held by the states reached $13.4 billion, which was estimated to be only a small part of the actual amount of unclaimed funds. Bankers Trust Corporation was accused of using unclaimed customer funds to bolster its earnings in 1999: Some $20 million of such unclaimed customer funds had been diverted into the general reserve accounts of Bankers Trust. Bankers Trust pleaded guilty to three felony counts and paid $60 million in fines.

The Arkansas usury law was crimping development in that state even as late as 1998. The state restricted interest on consumer loans to 5 percent above the Federal Reserve discount rate. Business had been drawn away from Arkansas as a result of that restriction. On a loftier level, the debate was continuing over Basel capital standards for banks. The Basel Committee was proposing new risk-measurement rules for meeting capital adequacy. Existing standards gave some financial institutions an advantage. The principal issue was the treatment of mortgages on commercial real estate. Germany wanted easier treatment than 100 percent weighting. Regulators continued to consider using the banks' own internal credit ratings as the basis for assessing the adequacy of their capital.

3 Market Ups and Downs

Stock Ownership

In 1995, almost 70 million individuals in the United States owned corporate stock directly or indirectly through mutual funds, retirement accounts, personal holdings, and defined contribution pension accounts. This was an increase of 7.9 million since 1992 and an increase of 17 million since 1989. The percentage of assets of American households that were held in stocks reached a fifty-year high in February of 1998. American households were then holding 28 percent of their assets in securities. The average net worth of American households increased 25.7 percent between 1995 and 1998. The average household net worth of Americans in 1972 had been $65,517. That amount increased to $358,297 by 1999. The average American home had more of its wealth in stocks than in real estate at the end of the century. Almost 25 percent of all shareholders were under the age of thirty-five. Nearly half of those shareholders had household incomes of less than $50,000 and 86 percent had household incomes of less than $100,000 in 1995. Thirty-five percent of shareholders in the market were blue-collar workers. Some 50 percent of shareholders did not have a college degree. The poorest 40 percent of United States households invested an average of $1,600 in stocks. These were interesting figures, but the wealthiest 10 percent of Americans owned most of the stocks outstanding in 1999. In that year, 40 percent of the 80 million aging baby boomers in the United States had less than $10,000 in retirement savings.

Much of the growth in securities ownership by individuals was due to mutual funds and retirement accounts. Mutual funds held $1.4 trillion in funds added by consumers to their savings between 1995 and 2000. Almost $38 billion was invested in mutual funds in March of 1998 alone. The number of mutual funds grew between 1970 and 1997 from 361 to some 6,000. The amount of mutual fund assets under management during that period expanded from $48 billion to $3 trillion. Even children were becoming involved in the market through mutual funds directed specifically at their investment needs. One such fund was Stein Roe's $1 billion Young Investor Fund, which had 190,000 participants.

Almost $2.4 trillion was held in individual retirement accounts at the end of the century. Another reflection of small investor participation in the market was the growth of investment clubs. Over 37,000 such clubs were operating in 1998, an increase of 31,000 since 1990. A popular book promoting this growth was *The Beardstown Ladies' Common-Sense Investment Guide: How We Beat the Stock Market—and How You Can Too.* It was written by a group of elderly investors who claimed to have outperformed market professionals in their investments. An exposé later disclosed that their actual rate of return was considerably lower than claimed in the book.

The Rich Get Richer

Barbra Streisand, the actress, was reported as having made millions in the stock market at the end of the 1990s. Some executives were also receiving quite adequate compensation as the stock market boomed. IBM announced that it was paying its chief executive officer, Lou Gerstner, a salary and bonus of over $9 million in 1997. In 1998, Michael Eisner of Walt Disney Co. was paid $575.6 million (although, after a bad year in 1999, he got nothing in the way of a bonus). Sanford Weill at Citigroup, Inc., was paid $166.9 million, and Stephen M. Case at America Online was paid $159.2 million, while John F. Welch Jr. at the General Electric Company received a relatively paltry $83.6 million. The compensation received by executives in 1999 included large amounts of stock options. Some executives were given "reload options," in which they were granted additional options when the old ones were exercised.

Times were, indeed, good. The number of billionaires was growing as the twentieth century closed. In July of 1999, *Forbes* magazine listed several hundred individuals who fell within that category. The 400 richest Americans had combined collected net worth of over $1 trillion. This was more than the gross domestic product (GDP) of China. William Gates, the founder of Microsoft, had the highest net worth, totaling $85 billion. Like his predecessors, Gates began establishing charities in order to deflect criticism and attacks against his wealth, including a foundation worth $17.1 billion. This did not prevent Gates from being attacked as a monopolist by the Justice Department and a federal court in Washington. In an increasingly familiar scenario, a wolf pack of twenty state attorney generals piled on with similar charges. Like his money trust predecessors, Gates was discovering that success in America comes with a high price.

Two other Microsoft executives were ranked as second and fourth in the *Forbes* list of the most wealthy. Warren Buffett was near the top with wealth totaling $31 billion. E-commerce initial public offerings had created numerous new billionaires, including Richard Braddock of Priceline.com and Pierre Omidyar of eBay, Joe Ricketts of Ameritrade, Steve Case of America Online, Mark Cuban of Broadcast.com, F. Thomas Leighton of Akamai Technologies, Larry M. Augustin of VA Linux Systems, and Marc Ewing of Red Hat. The number of millionaires in America tripled between 1987 and 1997. A book entitled *The Millionaire Next Door* pointed out that there were some 4 million millionaires in the United States as the century closed. They typically were high savers who did not live an extravagant lifestyle or have a glamorous job. The rich were carrying the lion's share of the load in paying for government expenses. In 1998, taxpayers who made more than $100,000 a year met 62 percent of the federal income tax burden. Divorces for financiers were becoming more expensive as the century closed. The estranged spouse of Sumner Redstone, the head of Viacom Entertainment Group, sought $3 billion from him as a divorce settlement.

Success for entrepreneurs was not assured. Sunbeam Corp.'s "Chainsaw Al" Dunlap was fired. He had sought to revitalize the company's finances by sharply cutting the company's workforce, as he had done at Scott Paper Co., but that tactic proved to be a failure at Sunbeam. Not everyone in America was rich. Over 13 percent of Americans were still living below the poverty line in 1997. The top 20 percent of American households accounted for half of all aggregate income, while the lowest 20 percent accounted for less than 4 percent. The disparity between the richest and poorest Americans was claimed to be widening in the 1990s, but the statistics used to prove this were complicated and uncertain. Of course, being poor in America at the end of the century was a relative term. Almost 68 percent of American families owned their own homes. Forty-one percent of poor households in America owned their own homes, over 70 percent owned at least one automobile, more than two-thirds had air conditioners, 72 percent owned washing machines, and 50 percent owned dryers. Two-thirds of poor families owned a microwave oven, and 97 percent had color televisions. Seventy-five percent had VCRs. One in four poor individuals had credit cards. The young people in those poor homes were, on average, one inch taller and ten pounds heavier than the average American soldier in World War II.

Market Action

By December 1, 1997, the Dow Jones Industrial Average was trading above 8,000. Volume for stock trading in 1997 was 160 billion shares on the stock exchanges and Nasdaq, up 27 percent from volume in 1996. The Dow reached 8,398.50 of February 18, 1998, and then surged to 8,800 in March. Price earnings ratios in the stock market in April of 1998 were at a 100-year high. Then, in May of 1998, the Russian market nearly collapsed, and the Russian central bank raised interest rates to 150 percent. That setback, and continuing economic problems in Southeast Asia, raised concerns that the malaise in those countries could spread to America. Big losses in mortgage-backed securities were experienced in America in June of 1998, when interest rates dropped. The market shrugged off those problems.

The Dow Jones Industrial Average reached another all-time high of 9,337.97 on July 17, 1998. A few days later, on July 22, Alan Greenspan, who had earlier complained of "irrational exuberance" in the markets, warned the nation that the stock market rise could not continue. It appeared that he was right. The Dow dropped below 9,000 on July 23, 1998. Among the factors affecting the market were President Clinton's sexual peccadilloes. More significantly, the effects of the collapse of the Asian markets were finally being felt in the United States. The Dow dropped nearly 300 points on August 4, 1998. On August 5, volume on the NYSE was 849.96 million shares.

On August 27, 1998, the Dow fell 357 points after the economic crisis in Russia deepened. By August 28, that average was down almost 14 percent from its peak in July. It would fall even more. On August 31, 1998, the Dow plummeted by 513 points, one of the largest drops ever, exceeding the 508-point drop in October of 1987, although it was a smaller drop in percentage terms than the 1987 free fall. NYSE volume on August 31, 1998, was 914.7 million shares. The Dow Jones was then down 19.26 percent from its July high. The news was still bleak around the world as September began. The economies of Great Britain and Canada were slowing down, as was China's. Japan remained mired in recession. Southeast Asia was still in trouble, as was South Korea. Charges were made that the IMF worsened the Asian crisis by seeking to have those countries increase their interest rates. Russia was experiencing what appeared to be an almost complete collapse of its economy. Latin America also faced difficulties. The IMF approved an $18 billion loan to Brazil in December of 1998. This was part of a $32 billion package, but economic troubles continued in that country. The stock market in America seemed to have absorbed all of this bad news. On September 1, 1998, volume on the NYSE was 1.2 billion shares, and the Dow jumped by over 288 points. This was another record day for share volume. Volume on the NYSE was over 870 million shares on September 3, 1998, and the Dow increased by over 380 points on September 8. The market was rallied by a speech from Fed chairman Alan Greenspan, who hinted that interest rates might be cut. Despite an occasional glitch, the markets were able to process the massive increases in trading volume efficiently. The ability to handle such volume seems almost wondrous when it is remembered that the industry nearly collapsed in 1970 on volume of only a fraction of the amount traded daily in 1998. This was no accident. The NYSE had invested $2 billion in new technology over the past ten years in order to deal with increasing volume.

However, the parade of bad news continued on the economic front. Citicorp disclosed that it expected to lose $200 million from trading in Russian securities. Merrill Lynch lost $135 million in July and August from its business in Russia and other emerging markets. Barclays, a British bank, lost over $400 million as a result of its activities in Russia. Salomon Smith Barney had asserted in July of 1998 that it was significantly lowering its risk profile in trading U.S. government securities. Apparently, more risk reduction was needed. The firm announced in September of 1998 that it had lost $360 million in global bond trading.

Another blow was struck when Brazilian stocks declined by 15 percent on September 10, 1998. The Dow fell almost 250 points on that day. More economic concerns were surfacing in America. The 1996 Freedom to Farm Act had reduced the subsidies on many commodities. Thereafter, grain prices began dropping as the effects of market pricing began to be felt. By October of 1998, farm commodity prices in the United States were plunging, and net farm income was expected to decline by almost 16 percent. A bailout of the farmers was approved by Congress after prices fell further in the wake of the Asian economic crisis. This undermined the efforts of the Freedom to Farm Act to eliminate crop subsidies. The American icon, the small farmer that had long been protected by Congress, was increasingly an anachronism. Small farmers were leaving the farms in droves. Farm income had dropped 38 percent between 1997 and 1999, and Iowa was losing 1,500 farmers a year by 1999. Large farmers, as opposed to small farmers, accounted for 72 percent of all agricultural sales in 1999. This was an increase from 53 percent in 1989.

BankAmerica, which had recently merged with NationsBank, announced losses of $1.4 billion in the third quarter of 1998. Contributing to those losses was the $400 million loan default by D.E. Shaw. Losses in emerging markets were responsible for more millions of BankAmerica's problems. Harvard University announced in September of 1998 that it had lost $1.3 billion since the beginning of July 1998. Bankers Trust experienced a $488 million loss in October of 1998 that was caused largely by trading in Russian and Latin American securities.

Long-Term Capital Management

In 1987, some 800 to 1,000 hedge funds were holding capital of somewhere between $75 billion and $100 billion. By 1998, the number of hedge funds had increased to 4,000 and their assets were in excess of $200 billion. Hedge fund assets were claimed to have doubled between 1991 and 1994. The hedge funds, or venture capital funds, as they were sometimes called, attracted universities and other institutions as investors. Returns could often be lucrative. In September of 2000, the Harvard endowment reported a gain of 32.2 percent that was largely the result of venture capital investments.

Some of the well-known hedge fund managers in the 1990s were George Soros and Michael Steinhardt. Another well-known money manager was Paul Tudor Jones, who made almost $100 million in 1987. He quickly became a target for federal investigators. In a rather twisted bit of government logic, Jones was fined $2 million for building duck ponds on his own wetlands. Various boutique hedge funds were operating at the end of the century. They took principal investments and provided advisory services. These firms included Greenhill & Co., the Blackstone Group, Allen & Co., Evercore Partners, and Gleacher & Co.

Generally hedge funds were investment partnerships that were not subject to regulation. They sought high returns through risky investments and compensated the managers based on financial performance of the fund. Minimum investments in such funds ranged typically from $250,000 to $5 million. The hedge funds were often involved in highly leveraged instruments. That leverage provided large profits in favorable market conditions, but it accentuated losses in a market decline. Several hedge funds experienced large losses when bond prices dropped abruptly in 1994. Larger losses were experienced in the volatile markets occurring in 1998. Tiger Management, a hedge fund that had $23 billion in capital, lost $2.1 billion in September and $3.4 billion in October of 1998. Tiger Management lost $2 billion from currency trading losses in a single day in October of 1998. But, even with that loss, the hedge fund showed a positive performance for the year. Another hedge fund experiencing trouble in October of 1998 was Ellington Capital Management in Greenwich, Connecticut. George Soros's $20 billion Quantum Group suffered large losses when the Russian government defaulted in August of 1998. Soros announced that he was shutting down a $1.5 billion emerging markets hedge fund that was a member of his Quantum hedge fund group. Soros had given up day-to-day management of the Quantum Fund, but he was one of the three supervisors of Soros Fund Management, which oversaw that fund. Soros had $1 billion invested in Russia in the summer of 1998 through his hedge funds when the economy there began to collapse.

More serious were losses occurred at Long-Term Capital Management (LTCM), a hedge fund that lost 90 percent of its $4.8 billion in capital in September of 1998 as a result of its trading positions. LTCM had started as a hedge fund in 1994 and employed some academic superstars to guide its "market-neutral" trading. LTCM initially had $3 billion in equity capital and twenty-five Ph.D.'s on its payroll. Several large financial firms had invested in LTCM, and numerous banks had loaned LTCM large amounts so that it could further leverage itself. LTCM was headed by John Meriwether, the trader of *Liar's Poker* fame who had left Salomon Brothers in the wake of the Paul Mozer scandal. Other principals at LTCM were David Mullins, a former vice chairman of the Fed, and Robert C. Merton and Myron S. Scholes, both of whom had received Nobel prizes for economics.

LTCM was engaged in "convergence" trading. In one instance, it borrowed Brady bonds, selling them short and buying non-Brady bonds issued by the same countries. LTCM anticipated a narrowing of the price gap between the Brady bonds and the non-Brady bonds. If the prices widened between these two securities, however, LTCM lost money. Another LTCM investment involved total return swaps in which it agreed to pay an institution a fixed interest rate on the amount it would cost to buy a block of stock. The institutional investor agreed to pay LTCM an amount equal to the dividends generated by the stock during the period of the swap, as well as any increase in the price of the stock. LTCM had to pay any decrease in value in the stock.

LTCM encountered massive losses as a result of turmoil in the market. The Fed became concerned that the failure of LTCM could result in a market panic. The Fed then pressured LTCM's banks and investors, including Merrill Lynch, Travelers Corp., Goldman Sachs, and J.P. Morgan & Co., to put up more than $3.5 billion to save LTCM. Within a short period, LTCM had used up $1.9 billion of its rescue package, but the firm appeared to have survived. Although the bailout of LTCM did not involve any government funds, it raised a lot of controversy as a result of the Fed's involvement and because derivatives were involved. Various banks acknowledged that they had lost about $1.1 billion as a result of LTCM's activities. Those banks included the Bank of Italy, which had invested $250 million, and the Sumitomo Bank in Japan, which had invested $100 million. The UBS, Europe's largest bank, lost $780 million as a result of its dealings with LTCM. But this episode seemed to be only a temporary setback. The hedge funds rebounded in the latter part of 1998, but an index that measured their performance at the end of 1999 showed that the hedge funds were not outperforming the S&P 500.

Market Volatility and Growth

Although the issuance of asset-backed securities increased to $150 billion in 1997, that market was suffering in the second half of 1998 as the stock market plunged. Concern was expressed with value-at-risk (VAR) models used for risk assessment of institutional proprietary trading after huge losses were experienced in the stock markets during that period. Blue-chip stocks were being pummeled. The "Nifty Fifty," the fifty large cap growth stocks that had been used since the 1970s as a measure of the core strength of the market, were trading down as the market began to tumble. The Dow Jones Industrial Average fell almost twenty percent between July and August of 1998; it fell by 512 points on August 31. Even though Merrill Lynch, Paine Webber Group, and Donaldson, Lufkin & Jenrette had declared record earnings in the first quarter of 1998, the market slump in the third quarter led to layoffs on Wall Street. Bankers Trust and Citigroup, Inc., were among those preparing for the dismissal of large numbers of employees. Merrill Lynch announced that it was eliminating 3,400 jobs after its stock price dropped by two-thirds in a three-month period. The number of mergers and acquisitions was also falling. Yet there was some good news. In October of 1998, unemployment was close to a thirty-year low and M3, the current popular measure for money supply, was growing at the fastest rate in thirteen years. In September of 1998, mortgage rates were at their "lowest levels in a generation."[8]

The market remained volatile. For one six-week period in September and October of 1998, the Dow fluctuated between 7,400 and 8,200. It was jumping 240 points on average between intraday highs and lows. By the middle of

October, the Dow dropped to around 8,000, which was 15 percent below its peak in July, it then rose by over 12 percent. On October 15, 1998, the Dow increased by 330.58 points. That rally was touched off by the announcement that the Fed had cut the discount rate by 0.25 percent. This was a surprise to the market. A computer breakdown on the NYSE stopped trading there for almost an hour on October 26, 1998. This affected trading in related stock derivative contracts. The Dow rose by 9.6 percent in October of 1998. By November 7, 1998, the Dow had reached 8,975.46, which was 4 percent below its July 17, 1998, record high. The Dow hit 9,041 on November 18, 1998. This was the highest since July 22, 1998. It rose 214.72 points on November 23, 1998, to 9,374.27. This surge was credited to interest rate cuts and to merger activity. With that jump, the Dow had increased by 1,835.20 points since its low on August 31, 1998.

The Dow had competition. The Russell 2000 was gaining popularity as a stock index. It was an index of small-cap stocks. These stocks were particularly active because they included many so-called Internet stocks, of companies involved in e-commerce, that attracted investor interest. Another index that competed with the Dow as a stock market indicator was the S&P 500. Standard & Poor's announced in November of 1998 that it was adding Safeway to the S&P 500 Index, to replace Chrysler Corporation, which had merged with Daimler-Benz AG. This required mutual funds and other investors who were indexing their portfolios to the S&P 500 to purchase large amounts of Safeway shares. This caused a sharp jump in that price and resulted in criticism of how that trading was handled by the specialist on the NYSE.

About 170 billion shares were traded on the NYSE in 1998. That was an increase of 27 percent from the prior year. Average daily trading volume in 1998 was 673.6 million shares. This was up from the 526.9 million shares per day in 1997. In 1998, 17.5 percent of total NYSE volume was due to program trading. This was over 117 million shares per day. In 1998, there were 3.5 million block transactions on the New York Stock Exchange. The NYSE was threatening to leave New York, but the city was negotiating desperately to keep it. An agreement was reached under which the NYSE would be allowed to build a new exchange building behind the offices of J.P. Morgan & Co. at 23 Wall Street. The leading investment banking firms in 1998 were Merrill Lynch & Co., Morgan Stanley Dean Witter, Goldman Sachs & Co., Salomon Smith Barney, Citigroup, and Lehman Brothers. Some 50 percent of IPOs by American firms were underwritten by Morgan Stanley Dean Witter, Merrill Lynch, or Goldman Sachs. Those three firms were advisers in nine of every ten mergers and acquisitions in the world. By 1999, Charles Schwab Corp. had converted most of its brokerage business to the Internet. This was a great business as the market soared in 1998 and early 1999.

Pension funds continued their growth. By 1997, the Teachers Insurance and Annuity Association–College Retirement Equities Fund (TIAA-CREF) was managing the pensions of 1.5 million teachers and employees of tax-exempt organizations. It held $52 billion in equity securities and had total assets of $125 billion. Conoco was making what it called the largest U.S. IPO in history in November of 1998. This was a $4.4 billion offering involving over 190 million shares of class A common stock. Among the underwriters in that offering were several affiliates of banks.

REITs

Beginning around 1995, REITs started buying large amounts of property and were achieving strong earnings and growth. The Federal Reserve noted that loans to REITs were usually large and unsecured. The REITs suffered a setback in 1998. Some REITs were walking away from acquisitions as a downturn began in that market in November of 1998. REIT stocks fell sharply during 1998. Hotel REITs declined by 50 percent and office buildings were down 25 percent. Shares of commercial mortgage REITs fell by more than 75 percent between the beginning of 1998 and November of 1998.

The GMAC Commercial Mortgage Corp. and GE Capital Services were buying up commercial mortgage-backed bonds in October of 1998 as the market collapsed. Another purchaser was Criimi Mae, Inc., a mortgage REIT that bought risky mortgage-backed bonds. Criimi Mae declared bankruptcy in October of 1998. This Rockville, Maryland, company had been the largest purchaser of bonds backed by commercial mortgages. Commercial mortgage-backed securities recovered in December of 1998. The REIT market staged another comeback. REIT values had dropped by 21.3 percent over the prior two years but were starting to rebound. Many REITs had been using their stock to buy properties until the value of the stocks dropped by 22 percent in 1998. This reduced the capitalization of REITs by $30 billion in total and dried up their ability to obtain additional property even though market values were increasing. Cushman & Wakefield remained heavily involved in the real estate business and investment banking operations, which included sales of commercial properties. A phoenix or two was rising from the ashes. The Canary Wharf office project in London, which appeared to have been a disaster and a prime example of overbuilding in the 1980s, was finally becoming successful. The project was able to make a $900 million bond offering in 1997. Also back from the grave was Donald Trump, who had built a real estate empire in New York and a gambling colossus in Atlantic City. He ran into severe financial problems in the early 1990s, but was able to survive and even to make a comeback. Trump was even being promoted as a possible presidential candidate. Saul Steinberg stepped down as the chief executive officer of Reliance Group Holdings, an insurance that company was experiencing trouble. Steinberg had previously sought, unsuccessfully, to take over Walt Disney and Chemical Bank. William Zeckendorf Jr., the former real estate magnate, was facing financial difficulties and would be bankrupt at the end of the century.

The Euro

The "euro" was replacing national currencies in Europe. Participants included Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and Greece. Great Britain had opted out of this arrangement, and Danish voters decided not to join in September of 2000. The euro conversion rates were fixed in December of 1998, and the euro was being used for book entry transactions in January of 1999. Euro notes and coins are being introduced in January of 2002, after which national notes and coins would be withdrawn. The launch of the euro was said to be "arguably the most momentous currency innovation since the establishment of the United States dollar in 1792."[9] It was not immediately successful. The euro was losing ground to the dollar. The German government sought to limit exchange rate fluctuations of the euro against the dollar and the yen through the creation of exchange rate target zones. The United States opposed that proposal. The euro continued to drop, falling well below par with the U.S. dollar. Concern was even expressed that it might have to be abandoned, and government action was undertaken in October 2000 to support its value.

The European Central Bank (ECB) was established in May of 1998, to facilitate dealing in the euro. It was to be an independent central bank for the European countries. The ECB was to be the "most independent central bank ever."[10] It would not have responsibility for bank supervision. Instead, national authorities would continue to exercise that supervision. The combined financial markets of the European countries that adopted the euro were nearly as large as those in the United States. The euro provided a new business opportunity for the London Stock Exchange, which was trading that currency. It was already trading dollars, sterling, and thirty-five other currencies. This was in addition to its global equities market, which listed 531 companies from over sixty different countries. At the end of the twentieth century, London had $2.5 trillion in equity assets under management, while New York held almost $2.4 trillion. Five other cities in the United States were in the top ten for most assets under management. New York's asset base was also growing faster than London's.

Record Growth

In December of 1998, the American economy was in its ninety-third month of uninterrupted growth, which had begun in March of 1991. This was longer than the expansion of 1982 to 1990 but not as long as the one in the 1960s. Unemployment was at its lowest level in forty years. Unemployment remained at a twenty-nine-year low as the century ended. A matter of some concern arose when the savings rate for Americans turned negative in September of 1998. This was the first time that this had occurred since the Great Depression. Inflation was a decreasing concern. Instead, deflation was raising fears on the part of the economists. Despite a decision by the Supreme Court that the president could not exercise a line-item veto on budget items, the federal deficit was being reduced. The government reported that the fiscal 1998 budget surplus was $70 billion, and the Congressional Budget Office projected a total surplus of $1.5 trillion over the next ten years. Some politicians suggested that government surpluses should be used to meet projected Social Security shortfalls. At the same time, consideration was given to changing the Social Security system by using individual investment accounts or having the government invest in stocks and other securities in order to improve returns. This proposal was based on an assumption that investors could fund their Social Security benefits through private investments that would provide a higher rate of return than Social Security benefits, at least under market conditions prevailing in the 1990s. The alternative was to cut benefits because of funding problems within the existing system or use the surplus balances. President Clinton, in the midst of the impeachment proceedings in 1999 over his sexual misconduct, proposed in the State of the Union message that the government invest in the stock market on behalf of Social Security programs. Clinton was concerned that investors, if they invested themselves, would lose their money in the market or become victims of fraudulent investment schemes. Clinton's proposal raised concerns that the government might socialize business in America by trying to control the activities of corporations through such investment programs. Clinton abandoned this effort as a result of this opposition. The creation of retirement accounts as a supplement or replacement for Social Security continued to be an issue in the presidential campaign in 2000.

4 Market Bubbles and Changes

Consolidation

Economic studies of mergers indicated that many of them could not be considered successful. This revelation did not have a deterrent effect. Westinghouse Electric acquired CBS for $5.4 billion in 1995. That transaction presaged another merger binge. Almost $200 billion in mergers and acquisitions occurred in the first three quarters of 1996. Some 11,000 mergers valued at over $900 billion took place in the following year. Another $950 billion of mergers and acquisitions occurred in the first half of 1998. WorldCom, Inc., made a $37 billion bid for MCI Communications Corp. in November of 1997. This would have been, at that time, the largest merger in American history, but the merger fell apart under the threat of an antitrust action by the Justice Department. Chrysler Corporation and Daimler-Benz agreed to merge in another giant transaction in May of 1998. ITT, which had gobbled up companies by the score in the 1970s, found itself the target of a takeover battle in November of 1997. Starwood Lodging Trust and Hilton Hotels were the bidders. Starwood won the contest with a $10.2 billion offer. Some of the large conglomerates were selling off operations that were not profitable, and others were streamlining their activities. RJR-Nabisco announced that it was splitting its tobacco business from its food business. The tobacco business was to be sold to a Japanese firm. That decision came after Carl C. Icahn began seeking control of RJR. Later, Philip Morris acquired the Nabisco operations. One of the great corporate raiders left the scene on July 18, 1997, when Sir James Goldsmith died at age 64. His fortune was estimated at $2.5 billion.

The administration of President Clinton began another money trust hunt with a review of concentration in United States business in May of 1998. That announcement had little effect as the merger frenzy continued. Among those merging were America Online and Netscape. International Paper bought Union Camp for $6.6 billion. The value of mergers and acquisitions in 1998 totaled $2.5 trillion. Cross-border mergers and acquisitions amounted to almost $140 billion in the third quarter of 1998. Some of the larger mergers in 1998 included Travelers Group and Citicorp; SBC Communications and Ameritech; NationsBank and BankAmerica; AT&T and Tele-Communications, Inc.; Bell Atlantic and GTE; British Petroleum and Amoco; Norwest and Wells Fargo; Banc One and First Chicago; Berkshire Hathaway and General Re; American International Group and SunAmerica; Washington Mutual and HF Ahmanson; McKesson and HBO; and USA Waste Services and Waste Management. On November 23, 1998, mergers worth $40 billion were announced or were in the process of being negotiated. On December 1, 1998, Exxon was taken over by Mobil. This "would put back together the two biggest pieces of the Standard Oil empire that was broken up in 1911."[11] That merger was an $80 billion transaction and would, at least for a time, lay claim to being the largest merger in history. Later, Chevron and Texaco would agree to merge.

In March of 1999, Comcast announced that it was buying MediaOne in a transaction that was valued at $53 billion. Mergers and acquisitions around the world totaled $3.1 trillion by the beginning of December 1999. Europe was leading the United States in merger activity. Foreign companies made $256 billion in acquisitions of U.S. companies in the first nine months of 1999. At that time, United States companies bought foreign entities valued at $121.9 billion. Americans bought numerous Canadian companies in 1999. In the first three-quarters of the year, Americans bought 181 Canadian companies with a total value of $24 billion. GE Capital announced in November of 1999 that it planned to create a $2.8 billion fund with Sumitomo Bank and Daiwa Securities to finance mergers and acquisitions in Japan. GE Capital had acquired about $17 billion of assets in Japanese operations by December of 1999. The role being played by the banks' extended investment banking abilities was illustrated by Allied Waste's acquisition of Browning-Ferris Industries, Inc., which was managed by Citibank Salomon Smith Barney. This financing included $7 billion in bank financing, $2.5 billion in bridge financing, $2 billion in high-yield debt instruments and $100 million in equity investments.

American Home Products and Warner-Lambert were planning a merger that would create the world's largest pharmaceutical company, valued at $70 billion. After that announcement, Pfizer engaged in an $84 billion all-stock takeover of Warner-Lambert. Pharmacia & Upjohn, Inc., and Monsanto Co. agreed to a $27 billion merger in December of 1999. Glaxo Wellcome merged with SmithKline Beecham in January of 2000 in a transaction valued at $75.7 billion. This created the world's largest drug company. MCI announced that it was buying Sprint in a $115 billion share swap. A merger between United Airlines and US Airways was blocked by antitrust authorities. An even larger merger was initiated by Vodafone AirTouch, a mobile phone operator in England, which made a hostile bid of $117 billion for Mannesmann A.G., a German telecommunications company. The takeover was fiercely resisted by Mannesmann. But in the end the company succumbed. AOL announced a $117.8 billion merger with Time Warner, that encountered some initial antitrust objections from the Justice Department.

Consolidation continued in financial services. In February of 1999, Aegon N.V., a Dutch insurance company, announced that it was taking over TransAmerica Corporation for $9.7 billion. At the time, TransAmerica was the sixth largest life insurer in the United States. Providian Corporation of Baltimore was added to the Aegon stable, which made it one of the largest insurance companies in the United States, trailing only Prudential Life Insurance and Metropolitan Life Insurance. Insurers were merging in Japan. Mitsui, Nippon, and Koa announced an agreement to merge to become Japan's biggest casualty insurer, with assets of $57.9 billion. In March of 1999, Prudential, the British assurance company, was seeking to purchase M&G Group, an asset manager. This would make Prudential the largest mutual fund manager in Britain. Fortis, a European insurance and banking operation, announced that it was buying American Bankers Insurance Group in Miami, Florida. The American Bankers Insurance Group and the American Security Group, which was also owned by Fortis, had a 30 percent market share in credit insurance on credit card balances and large-ticket consumer items. A bidding war was conducted over the National Westminster Bank in England in October of 1999. The banks vying for that acquisition were the Bank of Scotland and the Royal Bank of Scotland. Commonwealth Bank of Australia and Colonial First State, a "bancassurer," two of Australia's oldest financial institutions, were merging. Among other activities, the group would be managing funds and offering online retail brokering and banking business.

The steel industry in America was in trouble at the close of the century. Large steel companies such as USX, the successor to the U.S. Steel Company that was created by J.P. Morgan at the turn of the century, were rapidly losing market share and having difficulty competing with small "minimills" and foreign companies. Railroad wars were occurring that harked back to that earlier era. CSX Corp. and Norfolk Southern Corp. waged a $10 billion fight over control of Conrail, Inc., in 1997. Norfolk Southern was victorious in that fight, and the twenty-two-year reign of Conrail over railroad systems in the Northeast was ended. The biggest railroad merger in history occurred when the Union Pacific bought the Southern Pacific Rail Corp. That merger combined 53,000 employees, 7,000 locomotives, 155,000 freight cars, and 36,000 miles of track. After the merger, freight service nearly collapsed, causing enormous transportation problems in the United States. Efforts to straighten out this mess continued between 1997 and 1998. Another giant railway merger took place in December of 1999. This was a $6 billion combination of the Burlington Northern Santa Fe and the Canadian National Railway Co.

The larger American companies at the end of the century included Ford Motor, Wal-Mart, Exxon, IBM, Citigroup, Philip Morris, Boeing, and AT&T. In September of 1999, Microsoft Corporation was valued at $500 billion. Then Microsoft's stock was recovering after the monopoly decision by the district court. When Microsoft announced that it was preparing to issue its Windows 2000 software program, its stock price increased 10 percent. Nevertheless, Cisco Systems passed Microsoft as the highest valued company in the world in March of 2000. Another large American corporation was the Intel Corporation, valued at $290 billion. General Motors had led the country in 1972 with $30 billion in gross sales. It was still in the lead in 1998 with $178 billion in sales, but the company remained in decline. In June of 1999, General Motors spun off its Delphi Automotive Systems by giving to GM shareholders seventy shares of Delphi Automotive Systems for each 100 shares of General Motors stock they owned. The automobile industry was undergoing a massive consolidation. Ford agreed to buy Land Rover from BMW. General Motors bought a stake in Fiat and in Subaru. Ford had also acquired Mazda, Jaguar, and Volvo, and Daimler Chrysler bought a one-third stake in Mitsubishi Motors.

General Electric Company was valued at $400 billion in September of 1999. Its value had risen by $300 billion since its management was taken over by John F. Welch Jr. in 1981. General Electric made a bid for Honeywell, but the merger was blocked by the European Union. MetLife was the largest United States insurance company. It would have the highest number of shareholders of any company in America when it completed its demutalization plans. Another insurance company, John Hancock Financial Services, raised $1.7 billion from an IPO for its stock. This changed the company, which had been a mutual company for 137 years, from a mutual structure into a corporate one. AT&T announced in March of 1999 that it was preparing to raise $10 billion for acquisitions. To carry out that program, AT&T proposed an $8 billion issue of bonds, which was billed as the largest corporate bond offering in history. The instruments issued in this offering were for varying lengths of time and included different interest rates. Included were $3 billion worth of thirty-year notes that paid 6.5 percent interest. The notes sold at a discount. The price was 98.936 percent per note. The joint book-running managers were Merrill Lynch & Co. and Salomon Smith Barney. Also participating in the underwriting were Blaylock & Partners, BNY Capital Markets, J.P. Morgan & Co., NationsBank Montgomery Securities, First Chicago Capital Markets, and Deutsche Bank Securities.

AT&T did not hold claim to the largest bond offering for long. Ford Motor Company and its credit subsidiary announced that they were selling $8.6 billion in bonds in July of 1999. Fannie Mae responded with the largest global bond offering in history in January of 2000. It was for $10 billion in benchmark notes. Over $1 billion dollars of orders for this offering were generated over the Internet. The joint bookrunner for this offering was Morgan Stanley Dean Witter. The United Parcel Service company made an initial public offering on November 10, 1999. It was the largest IPO in U.S. history and raised $6 billion. Included among the underwriters was E*Offering. The DuPont Company separated its chemical business from its pharmaceutics, agricultural chemicals, and certain other products. DuPont issued a new security that tracked the performance of the latter group of businesses, which it referred to as life sciences. This "tracking" stock, sometimes called lettered stock or targeted stock, allowed investors to invest in the performance of a specific portion of this diversified company's business. DuPont announced an "inaugural" global debt financing of $2 billion in October of 1999. Of that amount, $1 billion was to be raised through 6.75 percent notes that were due on October 15, 2004. Another $1 billion were in longer-term notes.

Finance and Commerce

More than 70 million Americans were using the Internet at the end of the century. In 1999, 22 million Americans bought something online through the Internet. This was creating a new Web-based economy or "e-commerce." America Online agreed to merge with Time Warner at the beginning of January 2000. This was a record-setting merger in terms of size. It was valued in excess of $117 billion. Companies based on Internet services were attracting intense market interest. An early sign that the Internet was going to become a popular market item had occurred in 1995 when Netscape Communications went public. Many more Internet companies followed. They included Ticketmaster, which rose 300 percent in its first day of trading; America Online, which provided Internet access; Yahoo, the Internet portal company that had a price/earning ratio of 735 by December of 1999; Amazon.com, the online bookstore whose founder, Jeff Bezos, became worth $7 billion after his company went public; and eBay, the Internet auction site whose stock value went to $27 billion before the company made a profit. The Red Hat company from Durham, North Carolina, went public in 1999 at a price of $14 and traded up the same day to $52. This was one of the largest one-day gains in stock market history. It was followed by VA Linux, which set a record with its initial public offering. The stock rose from $30 to $239.25, a gain of 698 percent. The "largest IPO in Silicon valley history" was conducted for Agilent Technologies in December of 1999.[12] That offering was for $2.16 billion.

The new e-commerce firms found that financial services were a natural adjunct to their business. Amazon.com announced in November of 1999 that it was offering credit cards with NextCard. NextCard was issuing cards such as Visa and MasterCard on the Internet. E-commerce also intruded into the financial services industry through direct start-up companies. In February of 2000, two investment firms invested $300 million in a start-up company called efinanceworks. It was to engage in banking, insurance, and securities activities through loan syndications and credit processing. Merrill Lynch announced the "largest Internet financing ever" in December of 1999.[13] The offering was for $1.431 billion of common stock and nearly $1 billion of additional financing. Investors had other choices. They could, for example, invest in Intimate Brands, which owned Victoria's Secret, a chain of shops selling intimate women's clothing, directly through IBInvest Direct. This offer was made through a full-page advertisement in the *Wall Street Journal* showing a model wearing nothing but a few of the company's rather revealing products. In one stock offering in October of 1999, Sycamore Networks, Inc., made an initial public offering priced at $38 but it quickly traded up to $270.87. That price dropped to $184.75 at the close of trading on its opening day.

Salomon Smith Barney conducted a $2.2 billion equity-linked offering of convertible subordinated notes in December of 1999. Lehman Brothers was the lead underwriter for 26 million Premium Income Exchangeable Securities (PIES) for the MediaOne Group, Inc. These were 7 percent exchangeable notes that could be exchanged into American depository receipts (ADRs) for the ordinary shares of Vodafone AirTouch. Included in the underwriting group were Tucker Anthony, CIBC World Markets, Edward D. Jones & Co., Muriel Siebert & Co., and A.G. Edwards & Sons. In May of 1999, MapQuest.com offered 4.6 million shares of common stock at $15 per share. Its underwriters included BancBoston, Robertson Stephens, Dain Rauscher Wessels, U.S. Bancorp, Piper Jaffray, and Thomas Weisel Partners. Comps.com offered 4.5 million shares of common stock at $15 per share in May of 1999. The lead underwriter for that offering was Volpe, Brown, Whelan & Co. Other members of the syndicate included Everen Securities, Inc., Needham & Co., Hambrecht & Quist, and ING Barings. Cheap Tickets, Inc., an Internet seller of airline tickets, announced a common stock offering of $15 per share for 3.5 million shares. The underwriters included William Blair & Co.; Dain Rauscher Wessels; Hambrecht & Quist; Adams, Harkness & Hill, Inc.; and C.E. Unterberg, Towbin. In March of 1999, United Pan-Europe Communications, N.V. was making a global offering of 44.6 million ordinary shares or American depository receipts. Among the underwriters were Goldman Sachs, Morgan Stanley Dean Witter, Paribas, Cazenove & Co., and MeesPierson, N.V.

More than ninety cents of every investment dollar raised in the United States in 1999 was through bond sales rather than equity. The euro was involved in 45 percent of all international bond issues in 1999. In contrast, only 40 percent of bond issues were dollar bonds. The top-ranked manager for global stock and bond issues was Merrill Lynch. Goldman Sachs held the lead in U.S. stock issues. DLJ led the underwriters in high-yield debt offerings. Chase Manhattan was a leader in 1999 in syndicated loans. Goldman Sachs, Morgan Stanley, and Merrill Lynch each acted as advisers on more than $1 trillion in mergers and acquisitions in 1999.

Government Finance

The new gold-colored Sacagawea coin was being issued by the Treasury Department. It was to replace the Susan B. Anthony dollar, which was unpopular because it was often mistaken for a quarter. The United States Mint created some controversy when it began initial distributions of Sacagawea through Wal-Mart, thinking that this would be a more efficient method than through the slower banking system. This upset some banks. In the meantime, the Treasury was issuing a new series of quarters featuring individual states on one side of the coin.

Thirty-six primary dealers were still maintaining a market in U.S. government securities in 1998. One of those firms, Eastbridge Capital, Inc., announced that it was discontinuing its operations. Foreigners held 40 percent of United States government securities in December of 1999. The entire bond market in America was valued at $5.27 trillion at the end of the century. This included Treasuries, corporate bonds, municipals, and mortgage-backed securities, but the bond market was experiencing its worst drop in almost nineteen years. The price of fixed income securities had been falling since October of 1998, the longest decline since 1981. The good news was that the federal government experienced its first surplus in almost thirty years in 1998. The government predicted a budget surplus of almost $40 billion. The Treasury Department then began changing its borrowing activity by cutting back on three-year Treasury notes and reducing five-year note issues from monthly to quarterly. The good news continued. The federal government had two years of back-to-back surpluses as the century closed. That was the first time that had occurred since 1956 and 1957. As the surplus grew, the Treasury disclosed in January of 2000 that it was considering dropping its thirty-year bond issues and cutting back further on its auctions. Shortly afterward, the Treasury announced that it was reducing publicly held debt by almost $170 billion over the next two quarters. This was to be the largest debt reduction in U.S. history. This change in direction resulted in large losses in the bond market. The debate continued over the use of the surplus. President Clinton had stated that he wanted the entire national debt paid off by the year 2015, but he and other Democrats were proposing numerous new programs to increase spending. The Republicans wanted to return the surplus to the taxpayers through tax cuts. Politicians were finding ways to exploit the Internet for their own benefit, and campaign contributions were high on their list. Bill Bradley, a Democratic presidential candidate, announced that he had raised $1 million through the Internet. A GOP candidate raised $500,000. The wealthy were under attack by the Democrats in the 2000 presidential campaign. Vice President Al Gore wanted to increase the tax burden of the rich. There was some question as to who fell into this group. Estimates varied for inclusion in this elite group from those individuals making more than $250,000 to those making over $400,000. In any event, critics of the Democrat's proposals contended that most of these individuals were from poor or middle-class backgrounds, had earned their money through hard work, and that less than one-third of this group purchased jewelry or other luxury items. Only 18 percent of this superwealthy class owned or planned to purchase a second home. Most of them kept their wealth invested. The Republicans also pointed out that these individuals were already carrying a disproportionate share of the tax burden. Candidate George W. Bush also wanted an across-the-board tax cut.

America was in its ninety-fifth month of expansion in February of 1999. This was the longest such period experienced by the country during peacetime. In April of 1999, the jobless rate was at 4.2 percent, the lowest level since 1970. Still, the hunt for a money trust on Wall Street continued. The federal government investigated underwriting arrangements in May of 1999. Underwriting fees for initial offerings were almost always set at 7 percent, and the government was trying to prove that this was the result of collusive price setting by the leading underwriters. Among those investigated were Morgan Stanley Dean Witter; Merrill Lynch; Crédit Suisse; First Boston; Lehman Brothers; Donaldson, Lufkin & Jenrette; and Salomon Smith Barney. The federal government had its own house put in order by Congress. The Internal Revenue Service was restructured in 1988 and an Oversight Board was created to supervise the IRS and its administration of the internal revenue laws. This action was taken as the result of complaints from taxpayers that the IRS was becoming too heavy-handed in its enforcement activities and acting unfairly in seizing taxpayer property.

Raising Capital

Dividend reinvestment programs (DRIPs) were being used in 1999. They allowed investors to purchase shares directly from a company without being charged brokerage fees. DRIPs allowed investors to buy fractional shares. Purchases were often made with small payments of $10 to $25 a month. Sometimes a small fee was charged. Usually the DRIP programs required the investor to buy an initial amount of shares in the company through a brokerage firm. By 1995, some fifty companies allowed an initial purchase to be made directly from the company. DRIPs were receiving competition from electronic trading as the century closed. Electronic trading allowed more flexibility, and its low cost removed much of the advantage of a DRIP. Fewer American corporations were paying dividends as the century ended. In the 1950s, nine out of ten American companies paid dividends. At the end of the century, only one in five paid dividends.

A surging stock market proved to be too tempting for Goldman Sachs. Its partners voted to become a publicly held company. That offering was expected to raise $2.5 billion or more, but a drop in the market caused the offering to be postponed until the summer of 1999. Goldman Sachs then announced an initial public offering of $3.657 billion for 69 million shares of common stock. Goldman Sachs was the global coordinator of its own offering. Some 150 firms were involved in this underwriting. One earlier Goldman Sachs investor, the Bishop Estate, was at the center of a scandal. It was set up to aid native Hawaiian schoolchildren and was worth $6 billion. Charges were made that the trust was being misused, that kickbacks were paid, and that sexual misconduct was occurring. Four of the five trustees of the charity were removed and the fifth resigned after the IRS threatened to revoke the trust's tax-exempt status. The trustees had been paid about $1 million each annually.

Exchange Trading

The options exchanges were censured in September 2000 for agreeing not to multiply list options for the securities of the same company. Those exchanges were also facing competition from the International Securities Exchange, which was trading online. The Chicago Board of Trade (CBOT) saw its seat prices fall to a twenty-year low as it continued to face competition from electronic exchanges abroad and from over-the-counter derivatives. The CBOT announced in August 2000 that it would conduct electronic trading side-by-side with its open outcry system in the pits. The Commodity Futures Trading Commission (CFTC) implemented the new regulatory system that would lift much of the regulatory burden off transactions involving only sophisticated traders.

The Canadian stock exchanges, which included the Toronto Stock Exchange, the Montreal Stock Exchange, the Vancouver Stock Exchange, the Alberta Stock Exchange, and the Canadian Dealer Network, reorganized into a new system of trading. The Toronto Stock Exchange became the leading center for securities trading, and the Montreal Exchange acted as a derivatives exchange. Vancouver, Alberta, and the Canadian Dealer Network formed a Pan-Canadian Exchange.

A seat on the Chicago Stock Exchange sold for $135,000 in February of 1999. The previous high price for a seat on that exchange had been $110,000 in August of 1929. The Chicago Stock Exchange had, in the interim, evolved into the Midwest Stock Exchange, which then changed its name back to the Chicago Stock Exchange. That exchange was enjoying success because it was trading NYSE-, AMEX-, and Nasdaq-listed stocks through the Internet. This was attracting business from online brokers. The Chicago Stock Exchange announced in August of 1999 that it planned to begin two-hour evening sessions in several New York Stock Exchange and Nasdaq stocks. The Chicago Stock Exchange was then trading about 50 million shares a day. Nasdaq, thereafter, announced that it was expanding its trading hours to allow evening trading sessions.

Nasdaq had trouble in 1999 with so-called locked markets, in which spread quotes were inverted, displaced, or otherwise out of kilter. Concern was expressed that volume was reaching such levels that processing problems would increase, impairing the handling of securities transactions. A greater concern was that electronic communications networks (ECNs) were capturing about one-third of the volume in Nasdaq stocks. The auction returned as a price-setting mechanism at the end of the century. Auctions were used through the Internet to sell a variety of goods and were reintroduced into the financial markets through electronic trading systems. W.R. Hambrecht used auctions in 1999 to sell initial public offerings of shares. Investors submitted secret bids and the price was set in a "Dutch auction" at the highest level at which all the shares could be sold. The shares were then allocated at that price to everyone who bid that amount or more. Online auctions of municipal bonds were conducted in December of 1999. Online auctioning of securities raised some interesting questions. The Comptroller of the Currency sought to determine whether a Pennsylvania law requiring auctioneers to be licensed applied to bank auctions over the Internet for certificates of deposit. Freddie Mac sold bonds internationally through the Internet in an offering that was to total as much as $6 billion. In March 2001, Freddie Mac announced a $10 billion note issue to raise funds for its activities. This was the largest note offering in history. In November of 1999, Pittsburgh sold $57 million in bonds directly to investors over the Internet. Ford Credit sold bonds online in January of 2000, the first U.S. firm to do so.

The specialist firm of Bear/Hunter was representing almost 150 companies on the NYSE in 1999. But the specialist was under attack. The NYSE found itself, once again, falling behind market changes. The continuing use of specialists and floor brokers on the floor was out of line with the development of electronic systems such as Nasdaq. The NYSE was one of the few large stock markets in the world that continued to use live traders on a floor. The NYSE announced that it was preparing to spend $1 billion for a new trading floor, but more was needed. Some 120 stock markets were operating around the world in 1999. That competition was affecting seat prices. In February of 1998, a NYSE seat sold for $2 million. In January of 1999, the price for a seat was $1.2 million. Despite competition from ECNs, NYSE specialists were enjoying record profits. In 2000, Spear, Leeds & Kellogg, a specialist firm, had profits of $16 million per partner. An SEC study also concluded that execution prices for investors were higher through the market maker system on Nasdaq than through the NYSE specialists. The spread for smaller orders was five to eleven cents higher on Nasdaq on average.

The NYSE was having difficulty adjusting to the new electronic trading environment. It was caught between its floor members and large broker-dealers such as Merrill Lynch, Morgan Stanley Dean Witter, and Goldman Sachs Group. The latter sought to increase the use of electronic trading, but floor brokers and specialists saw themselves endangered by such systems. In February of 1999, the NYSE was examining methods by which it could trade the stocks listed on Nasdaq. Those stocks were the most volatile and heavily traded in the early part of 1999 and had experienced rapid growth in the preceding years. The NYSE was under renewed pressure from the SEC to drop the restriction in Rule 390 that continued to prohibit members from trading certain listed stocks in the OTC market. Finally, on December 2, 1999, the NYSE board conceded defeat and dropped that restriction.

Financial Information

The financial data industry was valued at $7 billion in March of 1999. Reuters then had 445,000 screens in brokers' offices around the world, Bridge Information Systems had 300,000, and Bloomberg had 111,000. Bridge Information Systems was offering Telerate Plus after it bought Telerate from Dow Jones. Bridge Information would later experience difficulties and be placed in bankruptcy. In May of 1999, Dow Jones and Reuters announced that they planned a joint venture for their interactive business services and databases. It would be the third largest provider of such information. The first two were LexisNexis and Dialog Corporation in England. Dun & Bradstreet, in trouble because of falling revenues, announced that it would spin off Moody's in December of 1999.

The *Wall Street Journal* had the second-largest circulation of any newspaper in the country at the end of the century. Over 100 new business and finance magazines were published in 1999. This was triple the number at the beginning of the decade. The financial cable network CNBC was viewed by 7 million homes and numerous other outlets. Financial information firms were receiving competition from the Internet. Some 7,500 Web sites were dedicated to investment issues. Online underwriting was still in the developmental stages in the summer of 1999, but the role of individual traders in the securities markets was increasing. This was due in part to trading by "e-traders" on the Internet. The number of online trading firms increased from zero to 200 between 1996 and 1999. Online trading was not always smooth. In January of 1999, reports continued to surface of difficulties in executing trades, and system problems were costing investors money. E*Trade was among the firms encountering trading shutdowns on the Internet. In February of 1999, Schwab had computer problems that left customers stranded in their Internet trading.

Day Traders

SOES bandits had morphed into something called "day traders." The day traders used electronic trading systems to rapidly enter orders at reduced commission rates. Day traders were particularly interested in e-commerce and other technology stocks. By 1998, thousands of day traders were using electronic trading systems supplied by discount brokers. They added volatility to the market and raised a host of regulatory problems, including concerns with excessive use of margin. Customers were borrowing from friends and individual brokers in order to support their trading, sometimes resulting in large losses. Some day traders engaged in short selling in apparent violation of SEC regulations. This included sales in violation of the tick test that restricted short sales and the selling of stock that the day traders did not own or had not arranged to borrow properly. Rumors were flying among e-traders on the World Wide Web. The Internet was becoming a home for stock touts as well as a convenient means for distributing legitimate market commentary.

State administrators soon labeled day trading as akin to gambling. They found that some 4,000 to 5,000 investors from over sixty firms were engaging in this activity in August of 1999. Customer turnover was rapid and 70 percent of traders were losing money. Only three accounts were found to have made money consistently. Another survey found that more than 90 percent of day traders lost money. A Senate investigation revealed in February of 2000 that the average day trader had to generate a trading profit of $464 per day or $111,360 per year, in order to break even after paying commission costs. Another Senate report six months later reached similar conclusions.

SEC commissioner Laura Unger issued a report in November of 1999 on issues raised by online trading. Her report questioned how SEC suitability requirements would apply to such trading. The commissioner noted that broker-dealers were not allowed to recommend unsuitable transactions for customers, but that it was difficult to determine what constituted a recommendation for online trading. For example, some firms provided "push" and "pull" techniques for personalizing Web site content. With pull technology, the customer states his or her preference, and the broker-dealer sends information tailored to those preferences. With push technology, the broker-dealer develops a user profile based on the client's online behavior or transaction history. The commissioner was further concerned that broker-dealers did not always assure that they were providing the best execution for customers. She thought that broker-dealers could consider speed as well as price in determining whether the best execution should be made.

Tragedy struck when Mark (the Rocket) O. Barton, a forty-four-year-old day trader, killed twelve people before he took his own life. He had lost $145,000 day trading over the prior few months. More violence occurred when two online stock promoters were killed in New Jersey in October of 1999. One of them was a government informant. Prosecutors speculated that they may have been victims of organized crime. Another day trader tried to kill his wife by throwing her off a balcony and then strangling her in order to collect on a $500,000 life insurance policy that he wanted to use to pay off his trading debts.

Day trading firms offered investors software that allowed them to execute trades faster than they could through an online broker. As the century closed, the discount brokers increased their capabilities in order to capture some of the day trading business. The stock of Charles Schwab rose 40 percent in one five-day period in April of 1999 as the result of the massive interest in trading online in Internet stocks. The stock of Ameritrade doubled in that five-day period. Schwab thereafter announced that it was buying CyberCorp, a day trading firm in Austin, Texas, for $488 million.

The old-line firms could no longer ignore these upstarts. Goldman Sachs announced in March of 1999 that it planned to acquire a 22 percent ownership interest in Wit Capital Group, an Internet broker-dealer. A few months later, Goldman Sachs acquired Hull Group, Inc., an electronic trading firm, for $531 million. Toronto-Dominion Bank was selling shares in its global discount brokerage firm, known as Waterhouse Investor Services, Inc. Donaldson, Lufkin & Jenrette, Inc., sold a class of tracking stock in its DLJ

Direct, an Internet trading unit. The holders of the stock received the right to earnings in that subsidiary. Financial firms sought to partner with e-commerce firms in selling mutual funds. ING Group's mutual fund unit sought to forge alliances with Web retailers, including booksellers, to use their Web sites to sell mutual funds.

ECNs

Financial services were becoming a commodity. Sony, the company made famous by video games and the Walkman cassette player and radio, announced that it was planning to enter into a joint venture with an online brokerage firm. Sony would be offering Internet banking as well, and J.P. Morgan planned to join that online bank venture. Toyota Motor Corp. was planning to offer online securities brokerage services through the Internet. Toyota was creating new subsidiaries to market financial products, including mutual funds, insurance, and credit cards. The firm planned to sell casualty and life insurance, to make car and consumer loans, and to offer asset management services through the Internet.

Instinet Corp., the largest ECN, processed 170 million shares per day. Twenty million of those trades were executed after traditional trading hours. To increase its trading, Instinet partnered with online brokers, such as E*Trade Group, the online discount broker. In August of 1999, Instinet, Merrill Lynch, Goldman Sachs, Salomon Smith Barney, Morgan Stanley Dean Witter, and Bernard L. Madoff Investment Securities formed Primex Trading N.A. It was to be an electronic trading system for stocks listed on the NYSE, the AMEX, and Nasdaq. Primex was to begin operations in 2000 and would be pricing stocks in an auction market using decimals. This system was to be available for broker-dealers, institutional investors, market makers, and exchange specialists. Primex was to be used to obtain securities at prices better than posted prices in other markets.

In June of 1999, J.P. Morgan & Co. announced that it was investing in an electronic trading network. Charles Schwab, Fidelity Investments, DLJ Direct, and Spear, Leeds & Kellogg announced plans to develop an electronic communications network for trading in Nasdaq stocks. Charles Schwab and Citigroup entered into alliances with America Online (AOL), the Internet provider, in order to increase access to their financial services. In August of 1999, an electronic trading system, MarketXT, Inc., in New York, was planning an evening trading session. It was to trade the 200 largest stocks on the NYSE and Nasdaq. Tradepoint, a British operation, was allowed to set up electronic trading in the United States. The SEC ruled that no more than 10 percent of the turnover on the London Stock Exchange could be conducted through Tradepoint in the United States.

Among the electronic communication networks operating in the summer of 1999 were Archipelago, Wit Capital, OptiMark, and Easdaq. The SEC adopted changes in its regulations to allow alternative trading systems to become stock exchanges. Island ECN, Inc., sought to become an exchange under this regulation. It allowed traders to execute trades for one-quarter of a cent per share. This firm had some nineteen employees and was executing 95 million shares per day, which was about 10 percent of the daily volume in Nasdaq stocks in February of 1999. It automatically matched customer buy and sell orders. Island ECN later began trading stocks listed on the NYSE. Morgan Stanley Dean Witter created a system that gave investors global access to the Internet for the distribution of high-yield bonds. Bridge Trader was allowing Internet institutional order entry. Orders could be routed to multiple brokers through its trading network. This information system was also providing quotes, watch lists, and order book market data.

The chairman of the SEC, in somewhat of a panic, declared in 1999 that electronic trading should be centralized so that all orders would be displayed and available to everyone. The SEC was concerned that fragmentation of the market could result in inefficient markets and executions for customers at less than optimal prices. The SEC had been seeking such a centralized marketplace since the 1970s. Critics of the central market system pointed out that concerns with market fragmentation were really an indication that the government did not trust competition as the best method for assuring market efficiency. After all, that fragmentation was just a reflection of new centers of competition. The SEC chairman, however, had cause for concern for the existing structure. ECNs were reducing the market share of both the New York Stock Exchange and Nasdaq. Nasdaq responded to this threat by developing its own electronic system to compete with those systems. This was to be done through OptiMark Technologies, Inc., which was owned by several Wall Street firms, including Dow Jones & Co. OptiMark had a supercomputer that matched orders automatically. Nasdaq was additionally considering whether it should develop an Internet trading system and was meeting with Instinet to discuss centralizing the trading of Nasdaq stocks. Nasdaq announced in December of 1999 that it was entering into an agreement with Primex Trading to adopt an electronic auction market system to trade its issues and those of stock exchanges. Nasdaq planned to expand its electronic systems to allow the display of quotes from electronic communication networks so that investors would have more information on available prices.

ECNs and Internet trading were causing an upheaval at the stock exchanges. The NYSE was among the exchanges that considered becoming a publicly owned company. This would permit the exchange to raise capital and provide a better structure to meet competition. Other exchanges, such as the Chicago Board of Trade and the London Stock Exchange, announced similar plans. The NASD announced that it planned to sell its interest in the Nasdaq Stock Market through a private placement that was expected to raise $1 billion. This restructuring was intended to make the Nasdaq market more competitive and provide greater access to the markets for capital. Nasdaq was marketing itself more. It erected a 14,000-square-foot sign in Times Square for a cost of $25 million to publicize its facilities. Nasdaq also planned to expand to Europe and Japan. The European exchanges responded to this threat with an effort to create a linked electronic exchange.

Online Banking

At the end of the century, some 6 million customers were banking online, which was relatively few in view of the 5.1 million online stock traders. Even so, some 10 percent of consumers were banking online. One of the largest Web banking sites was Wells Fargo. Bank of America was another leader. Citigroup was having trouble establishing its online business. The Internet brokerage firms were moving into banking. Charles Schwab announced in July of 1998 that it was planning to begin online banking, including an online checking account that could be used to pay bills. Schwab acquired U.S. Trust in January of 2000 in a transaction valued at $2.9 billion. U.S. Trust was an asset manager that had begun business in 1853. It managed assets for wealthier clients. Schwab was trying to extend its client base through this banking facility. E*Trade Group was providing online loan applications and ATM access at 8,800 locations. Other Internet brokers provided insurance as well as loans online. "This is the biggest single threat that the commercial banks face right now."[14] E*Trade announced in December of 1999 that it was buying Telebank Financial Corp., the leading online S&L in America, for $1.8 billion. E*Trade began offering interest-paying checking and savings accounts through Telebank. American Express announced that its online bank was going to be offering additional products, including a federally insured checking account and a money market account. Online services were allowing consumers and small businesses to obtain loans over the Internet. Consumers could bid for mortgages and negotiate their terms without appearing at a bank. In October of 1999, LoanWise offered online business loans that would take only five minutes.

In October of 1998, Prudential, the English life assurer, began a direct banking operation. Egg, the Internet bank of Prudential, was valued at $4 billion in February of 2000, even though it was expected to announce a loss of £250 million. Prudential PLC later announced a merger with American General. The combined assets of these financial services firms totaled $336 billion, and they were servicing 22 million customers.

Residential mortgages were offered online through the Internet by several companies. E-Loan, an online mortgage company, made a public offering of its securities in June of 1999. The banks responded in kind to these threats. Wachovia Bank in North Carolina announced in 1997 that its customers could purchase stock, view checking account balances, and obtain stock quotations from the bank over the Internet. Later, Merrill Lynch began offering federally insured savings accounts to its brokerage customers, expanding its online mortgage business.

Merrill Lynch and HSBC, the international banking group, created an online bank for their wealthy customers, who were to be given access to a number of investment centers that would allow them to manage their investments online. Merrill Lynch later withdrew from this joint venture.

Mutual Funds

The rising stock market continued to attract mutual fund investors. The total amount of net assets in mutual funds in 1972 was about $60 billion. That number increased to $5.7 trillion in 1999. The Vanguard Group of mutual funds that had been formed in 1974 by John C. Bogle was the second largest mutual fund company, behind Fidelity Investments. As the century closed, the Vanguard 500 Index Fund was vying with the Fidelity Magellan Fund as the world's largest mutual fund. Bogle has been given credit for creating the indexed mutual fund. Vanguard had $500 billion of investor money under management in 1999. The Magellan Fund was bigger than all of the stock mutual funds available in 1984 and bigger than the entire industry in 1979. PaineWebber announced in December of 1999 a $2.1 billion "strategy fund" that would seek long-term capital appreciation. Fidelity Investments, the largest mutual fund company at the end of 1999 and also the third largest Internet broker, allowed its customers to trade after regular market hours. Fidelity also offered its customers other financial services, including an American Express gold card and a Visa debit card. One of Fidelity's chief competitors for online brokerage services and mutual fund customers was Charles Schwab Corp.

5 Into the Millennium

The Market Bubble

The Dow Jones Industrial Average reached a new high of 9,500 on January 6, 1999. The Dow closed at just over 10,000 on March 29, 1999, but the market had retreated after reaching intraday highs in excess of 10,000 a few days earlier. The Dow then surged through the 11,000 mark on May 3, 1999. This milestone was a part of the longest bull market in U.S. history. Between August of 1982 and March of 1999, the Dow had increased by 1,095 percent. It had taken sixty-six years for the Dow to increase from 100 to 1,000. It took only fifteen years for the Dow to move from 1,000 to 10,000. The Dow continued to set records. On July 16, 1999, it reached 11,209.84 and on August 23, 1999, it hit 11,299.76. Historians expressed concern that there was "an extraordinary element of the profit-making imperative in the last decade of the twentieth century—the predominance of greed, and the imbalance of monetary values."[15] The *Economist*, an English magazine, had claimed that the American stock market was reaching "bubble" proportions in April of 1998. The stock market and the American economy shrugged off that criticism and continued their growth. The *Economist* continued its warnings and even had a cover story on the dangers of the American bubble in September of 1999.

A speculative boom was, indeed, occurring in e-commerce stocks, and Internet stock volatility was causing concerns in the stock market. The prices of those stocks jumped up and down rapidly as the result of what appeared to be an inflated view of their values. The brokerage firms were forced at one point to raise their margin requirements in order to dampen speculation in Internet securities. Many of these stocks were issued by small, untested companies in the Nasdaq market. But the interest in those securities was such that in January of 1999, the Nasdaq's dollar volume exceeded the NYSE for the first time. The Dow Jones Industrial Average changed its makeup in 1999 to reflect the growth of new businesses. Microsoft, Intel, SBC, and Home Depot were added to the index while Chevron, Goodyear, Sears, and Union Carbide were removed.

Alan Greenspan. As head of the Federal Reserve Board, Greenspan sought a soft landing for what he viewed as an overheated economy as the twentieth century closed. (Courtesy of Archive Photos.)

The Fed tried to put a damper on the party going on in the stock market by raising interest rates on June 30, 1999, and again on August 25, 1999. The rate set in August was 5.25 percent. These were the first increases in more than two years. They had two effects. Stock price increases slowed and the bond market dropped. Junk bonds and leveraged loans were particularly hard hit. The amount of junk bonds being underwritten in 1997 and 1998 set new records, but underwritings fell off after the Fed raised rates. The Dow was still able to set a record on August 23 when it reached 11,326.04. On October 4, 1999, the Nasdaq Composite Index was up 27.5 percent for the year, but it was down from a record close in the prior month in which gains had exceeded 30 percent for the year. On October 14, 1999, Chairman Alan Greenspan advised investors that they should look closely to determine whether they had underestimated the risks in trading securities. His warning set off a stream of complaints from investors who thought he was trying to kill a good thing. Concern was raised that the chairman's actions threatened a repeat of what happened seventy years ago when the Fed's policies created uncertainty in the market and, perhaps, precipitated the stock market crash of 1929.

The stock market did appear to be facing another October setback in 1999. Fear was expressed that a bear market could be developing. The Dow was hovering around the 10,000 mark. The Dow fell 630.05 points during the week of October 11, 1999. This was the worst ever drop for a calendar week for the Dow. The Dow was down 11.53 percent from its August 23 high on October 18, 1999. But the Dow rose by 450.54 points during the following week. The stock markets were rallying on October 29, 1999, seventy years after the great crash on Wall Street. Over 1 billion shares traded on the New York Stock Exchange. The Dow Jones was at 10,729.86.

The Fed raised interest rates again in the middle of November of 1999. This was the third such increase in five months. That action had little immediate effect on the market. The Dow continued to advance, on November 18, 1999, passing through 11,000 again. The Dow set a new record of 11,476.71 on December 28, 1999. Even the Russian securities markets were staging a recovery in December of 1999. The S&P 500 Index was at a record level. E-commerce and other technology stocks became the focus of intense speculation. The Nasdaq Composite Index rose to 2,915.95 points in October of 1999. This was a new record, but it continued to climb. The Nasdaq Composite Index finished above 3,000 for the first time on November 3, 1999. That index had been started in February of 1971 for small stocks traded on Nasdaq. It had taken twelve years to triple to 300 from its beginning point at 100. Included in the index were Microsoft and other high-technology companies. The Nasdaq Composite Index experienced an 85.6 percent increase during 1999. This was the largest gain in the index ever. It closed the century at a record 4,069.31. The Dow closed the century at a record 11,497.12, having increased 26,130 percent during the twentieth century.

The number of stock options traded in the United States in 1999 was almost 508 million. Daily volume exceeded 2 million contracts per day, up from 1.41 million in 1997. In December of 1999, equity mutual funds were approaching records for net cash inflows. Investors were injecting over $30 billion in those funds. Other records were being set. More capital was raised by the securities industry in the 1990s than the combined total raised during all of U.S. history. Daily average share volume on the NYSE during 1999 was 801 million. Nasdaq daily volume was 1.04 billion. Their combined volume in 1999 was up 25 percent over that of 1998 and six times over that of 1990. A record 1.35 billion shares were traded on the NYSE on December 17, 1999. There were eighteen days in 1999 when volume on the NYSE exceeded 1 billion.

The bond market in 1999 suffered its second worst year since 1973, but the decline was not as bad as the 1994 market decline. Defaults on corporate and government debt reached a new record in 1999. Banks increasingly relied on their securities activities for profits. Citigroup had fourth-quarter profits of $2.6 billion at the end of 1999, an increase of 287 percent from the prior year. Bank failures were rising at the end of 1999. Losses were expected to be the highest since the banking crisis in the early 1990s. The First National Bank of Keystone in West Virginia failed in September of 1999. It was expected to result in losses of as much as $750 million to the federal insurance fund. This made it one of the ten largest bank failures since the Great Depression. Two officers of the bank were charged with hiding three truckloads of bank records by burying them on a ranch.

Glass-Steagall Falls

Congress finally reached agreement in October of 1999 on the passage of legislation to repeal the Glass-Steagall Act. It was expected that this would result in a further consolidation of financial services[16] and that banks would acquire more insurance companies. Even before the repeal, Centura Bank in North Carolina purchased Moore & Johnson Agency, Inc., a large independent insurance agency in the North Carolina Research Triangle Park area. The statute repealing Glass-Steagall imposed restrictions on commercial firms that sought to enter the banking business by buying or chartering thrifts. This was directed at stopping Wal-Mart from buying or chartering a thrift or from operating Wal-Mart brand banking operations in its stores. Why Congress wanted to exclude such a heavily capitalized firm from the banking business had nothing to do with economics and everything to do with lobbying. That protection and the repeal of the Glass-Steagall Act was not cheap. Financial industry lobbyists and affected companies spent an estimated $300 million to lobby Congress in 1997 and 1998 on this legislation.

Fraud and Finance

The Virginia Supreme Court threw out a $100.5 million judgment against Nationwide Mutual Insurance Company for redlining practices in denying home insurance in poor neighborhoods. The court found that the plaintiff in that case did not have standing to bring the suit. Blank check offerings were experiencing a revival in 1999. The top investment scams in 1999 included Internet fraud; investment seminar get-rich schemes; affinity group fraud, in which religious or other groups were targeted for investment scams, abusive sales practices, and telemarketing fraud; scams involving promissory notes and movies and other entertainment; Ponzi schemes; and illegal franchise offerings. In September of 1999, a rogue trader at Kaufman & Broad Home Corporation, a home builder, lost $18.1 million as the result of unauthorized mortgage trading. In December of 1999, Plains All American Pipeline lost $160 million in unauthorized trading that involved bets on oil prices. Anthony Shen, a bond trader at New York Life, was discharged for allegedly taking kickbacks from several brokerage firms to trade bonds at off-market prices.

The CBOT fined one of its traders $1 million because of his affiliation with Jay Goldinger, who ran a Beverly Hills firm called Capital Insight and lost $100 million in 1995 and 1996 as a result of improper trading practices. Frederick C. Brandau was extradited to the United States from Colombia. He had been indicted in the United States for defrauding investors of $115 million in connection with viatical investment scams, in which investors purchased future life insurance benefits from terminally ill individuals. The payments were usually about 65 percent of the value of the policy. People with AIDS were often the targets of this scheme. Brandau had taken money from investors but failed to buy the life insurance policies. Instead, he spent the proceeds on cars, jets, helicopters, and mansions. In another scandal, it was discovered that several insurance companies were still charging some black policyholders higher premium rates than whites. Rates in the 1960s for blacks had been as much as 25 percent more than for whites, but that disparity was dropped in new policies after civil rights protesters discovered this practice. Some of the insurance companies, however, failed to reduce the premiums for existing policies, and those payments continued right into the year 2000. Regulators in Florida investigated those companies and sought a global settlement.

The Foundation for New Era Philanthropy was defrauding the rich in the 1980s. Among its victims were Laurence Rockefeller and former Secretary of the Treasury William Simon. The New Era group claimed that it could double the charitable gifts of the wealthy. A former employee of Nichiei, a large Japanese loan company, was given a suspended jail sentence for demanding that a customer sell his eyeballs or kidneys in order to repay a loan. The SEC charged InverWorld with defrauding clients in Mexico of $475 million. Patrick Bennett was convicted in 1999 of criminal violations in connection with one of the largest Ponzi schemes in American history. He had defrauded investors of $700 million by selling securities for nonexistent office equipment leases. Another popular fraud was promissory notes issued by companies that would then abscond with customers' monies. Many of these operations were Ponzi schemes. State securities administrators in thirty-five states had received complaints of such activity. North Carolina officials announced the arrest of members of a gang that had been traveling across the United States conducting a massive kiting operation involving counterfeit paychecks. A scam uncovered in February of 1999 involved the sale of railroad bonds issued by a railroad company that had failed in 1876. It was claimed that the bonds had not been redeemed and were valuable. Regulators estimated that investors had been bilked of some $12 million through the sale of these bonds.

A fraud at Cendant Corp. involved inflated earnings on the company's records totaling more than $500 million. It cost investors $19 billion and was said to be the biggest accounting fraud ever, which caused some embarrassment to the company's auditors—Ernst & Young. Eighty-five stockbrokers were indicted on charges of manipulating securities prices in June of 1996. In one case it was charged that investors had been defrauded of over $100 million. In August of 1999, the SEC filed cases against eighty-two defendants across the United States in microcap fraud schemes. Among those charged were lawyers and accountants who were assisting the firms. Principals in the firm of A.S. Goldman & Co., in Naples, Florida, were indicted for defrauding investors of over $100 million. Duke & Co. was another brokerage firm that failed. Criminal charges were brought against Victor Wang, the chairman of that firm, and seventeen employees.

Organized crime was involved in the manipulation of the stock price of HealthTech International, Inc. One of the individuals pleading guilty in this proceeding was a capo of the New York Genovese crime family and another was a member of the Bonanno crime family. The Gambino crime family sued their investment adviser for fraud. The adviser, Mohammad Ali Khan, had stolen millions of dollars from his customers, including some members of the mob. In June 2000, DMN Capitals Investments and 120 individuals were indicted under RICO, the federal racketeering statute, for manipulating stocks and defrauding thousands of investors. Prosecutors charged that the firm was controlled by figures from five organized crime families who used violence and intimidation to carry out their fraudulent activities. In another case, a former member of Walt Disney's Mickey Mouse Club was convicted of securities fraud. This Mouseketeer, Darlene Gillespie, had engaged in a free-riding scheme in which she bought stocks without having the funds to pay for them. In such schemes, investors hope to keep the profits if the price of the stock increases. The Mouseketeer used bad checks to make her purchases.

Bear Stearns agreed to pay a total of $38.5 million to the SEC and state authorities in connection with its clearing activities for A.R. Baron, an introducing broker that failed. The SEC charged that Bear Stearns knew of unauthorized trading by the introducing broker but facilitated such transactions by removing money from the customers' accounts in which the unauthorized trading was being conducted. The former chairman of Benihana Japanese Steak Houses pleaded guilty to insider trading in the stock of Spectrum Information Technologies, Inc. He had made profits of $346,000. The SEC filed thirty cases involving accounting fraud in September of 1999. Another case included charges against Fran Tarkenton, a former National Football League quarterback.

Federal prosecutors charged in October of 1999 that a stock promoter had engaged in a $300 million Ponzi scheme. Twenty boiler rooms were raided on December 17, 1998. The government announced that over the past two and a half years, state and federal authorities had charged over 1,000 telemarketers with fraud. The spread of high-pressure securities sales operations gave rise to a Hollywood movie entitled *Boiler Room*, which was based on the activities of such firms. Regulators contended that microcap fraud at the end of the century amounted to $2 billion a year. In February of 1999, the SEC charged thirteen individuals and companies with fraud in promoting stocks through the Internet. The SEC charged another twenty-six companies and individuals with fraud through the Internet in June of 1999. In one instance, an employee of a company was charged with fraud for creating a fictitious news story about a takeover and spreading the rumor through the Internet. The price of Emulex, a fiber optics producer, dropped from $103 to $45 in fifteen minutes on August 26, 2000, after a false press release reported that the company was restating its earnings and that its chief executive had resigned. Other cases involved "prime bank" claims. These prime banks were supposedly trading in financial instruments that were unknown to the U.S. government.

The SEC assigned 200 lawyers and analysts to a "cyberforce" to police securities activities on the Internet. By that time, the SEC had filed eighty cases involving Internet fraud. The SEC expressed concern that advertisements by online brokerage firms exaggerated the profits that could be earned and promised quick riches. The SEC decided to increase restrictions on firms engaging in online trading to require them to make sure that such trading was suitable for their customers. The SEC was receiving criticism because of its inability to deal with fraud through the Internet. The SEC's search methods for online fraud were considered rather crude and behind the times. The SEC did not have the funds to adopt more sophisticated search mechanisms. Additional concerns were raised that the SEC's surveillance over Web sites and chat rooms to detect securities fraud was an invasion of personal privacy. Crime on the Internet was growing despite such intrusions. Cyber crime was expected to reach $266 million in 1999.

Fraud continued. In March of 2000, the SEC brought an enforcement action against some Georgetown law students and one of their mothers for an Internet trading scam. The students had been buying cheap stock and then pumping up the stock through rumors on the Internet. After the stock price went up, they would sell. The students also created a stock tip sheet known as FastTrades.com for which they had more than 9,000 online subscribers. The students made almost $350,000 in trading on four stocks. The SEC filed a group of Internet fraud actions in March 2001 that it described as "scheme du jour" cases. One of these complaints involved an ex-roofer who was falsely claiming that he was a successful stock adviser. Two individuals were indicted in February of 2000 for promoting penny stocks through thousands of e-mail messages. The securities were worthless, but the defendants were pumping up the value of the stock in order to profit. A fifteen-year-old boy in New Jersey was charged by the SEC in September 2000 with manipulating stock prices through another "pump and dump" scheme on the Internet. He agreed to return $285,000 in profits. A district court dismissed a SEC action that sought to stop the operations of a "virtual stock exchange" that sold "virtual" shares in nonexistent companies, some of which had been programmed to return large profits. The court held this was a game and not a security that the SEC could regulate. That decision was reversed on appeal.

An SEC official said that "the Internet is rapidly becoming the boiler room of the new century."[17] A worldwide sweep was undertaken in twenty-eight countries to track down persons committing fraud on the Internet. Government agencies participating included the Office of Fair Trading in England, South Korea's Fair Trade Commission, and the Federal Trade Commission in the United States. Another sweep by state and federal authorities was conducted against the promissory note schemes that were targeting elderly investors. Callable certificates of deposit (CDs) were another problem. These were long term (fifteen-year) CDs that paid higher rates than short term CDs but were callable. Some unsophisticated investors mistakenly thought that the call feature entitled the holder to redeem the CD without penalty. Edward Jones & Co. was disciplined by the NYSE for selling $3 billion of these instruments without properly supervising their sale to assure they were suitable for the purchasers' investment goals.

Financial Developments

Deutsche Bank and Dresdner Bank announced that they were merging in March of 2000. The merged firm would have had assets of over $1.2 trillion, but the merger was called off after a dispute over the sale of an investment banking unit. HSBC merged with Crédit Commercial de France in April of 2000. HSBC was then the world's second largest bank by market capitalization. Citigroup, Inc., was the first. National Commerce Bancorp and CCB Financial Corp. merged in a transaction valued at $1.95 billion. Wells Fargo bought First Security in a transaction valued at $3.2 billion in April of 2000. The insurance industry continued to broaden its financial service offerings. MetLife planned the operation of a full-service bank. Thirty other insurers had acquired S&L charters and were offering checking accounts and other traditional bank services.

Securities underwriters were vying for the role of "book-runner"—that is, the leading firm in an underwriting. They organized road shows for institutional investors, determined the offering price, and allocated stock to other members of the underwriting syndicate. It was becoming common to use joint book-runners in offerings by 2000. Some century-end advertisements illustrated just how far finance had advanced in the United States. Bank of America announced in a two-page advertisement in the *Wall Street Journal* that the bank and its affiliates had engaged in $1 trillion in debt and equity capital raising and advisory activities. The bank and its affiliates were acting as joint book-running managers for senior reserve debt notes; it was involved in a future flow remittance securitization as adviser and lead manager; it was the sole lead arranger for a senior credit facility; it was the arranger, book-runner and principal for lease intended as security; it acted as a comanager on an initial public offering; it conducted equipment lease financing as principal and arranger; it was the lead manager and sole book-runner for $850 million in senior secured notes for one company; it acted as a private placement arranger for senior notes; it was a mergers and acquisitions adviser in numerous transactions; it was the principal in an equity collar arrangement; it was the principal and arranger for a cross-border lease financing; it was the lead arranger and book-runner for project financing in Malaysia; it was the structurer and arranger of a credit card portfolio acquisition facility; it was the joint lead arranger for a construction and term loan facility in Australia; it was the sole book-runner and joint lead manager for a senior 144-a offering; and it was the comanager for senior public notes.

First Union Securities' real estate activities in 1999 included lender and originator for permanent financing, comanager for senior unsecured notes, comanager for preferred stock offerings, colead manager and administrative agent and arranger for secured and unsecured "revolvers," administrative agent and arranger for enhancement financing, synthetic leases, and debt underwriter for a sale and leaseback. First Union would fight a battle with SunTrust

Banks over control of the Wachovia Bank in 2001. That merger would catapult First Union back into the ranks of large banks.

Investment bankers sought to use the Internet to conduct IPOs for firms in which they had invested. The firms planning such offerings included Durlacher Corporation, Witt Capital, and NewMedia Spark. Sakura Bank in Japan planned to create an Internet portal with other financial firms including Nomura Securities, Nippon Life Insurance Group, and Mitsui Marine and Fire Insurance. Through this arrangement, these firms would be able to offer their financial products to the public through the Internet. Chase Manhattan Corporation and Deloitte Consulting created a joint venture in February of 2000 that would allow corporations to purchase goods and services over the Internet. At that time, Chase had an $8.95 billion portfolio of Internet companies. PricewaterhouseCoopers opened a site for business-to-business transactions (B2B) and Andersen Consulting set up a venture capital unit for Internet business activities. Brick-and-mortar finance was not dead yet, however. Commerce Bancorp was offering fast-food-style convenience in financial transactions to attract customers and was enjoying success with that approach.

All was not harmony on the Internet. EuroMTS, the largest electronic trading system for European government securities, claimed that banks were trying to sabotage its system by entering fake price proposals that slowed it down. Hackers shut down a number of Internet sites in February of 2000. The victims included eBay, Inc., and Yahoo! Those attacks were followed by assaults on E*Trade Group, which said that 20 percent of its customers were affected by the resulting problems. Shills were being used to pump up auction prices on eBay. A hedge fund fraud scheme involving Manhattan Investment Fund, which was run by Michael Berger, resulted in estimated losses of $350 million. Tiger Management, the large hedge fund that had suffered astonishing losses at the end of the century, announced that it was closing its doors. Management at the $8.2 billion Quantum Fund was replaced by George Soros after suffering more losses.

Freddie Mac and Fannie Mae were criticized in Congress for the special advantages they received over other lenders. Those two entities financed more than 70 percent of all fixed-rate mortgages extended to middle-income families in 1999. Critics claimed that lending standards were being lowered to the danger point and that mortgages were made with as little as 3 percent as a down payment. Bankers also complained that Freddie Mac competed unfairly in its online mortgage processing, which was carried out with an entity controlled by Microsoft, Chase Manhattan, Norwest Mortgage, and General Motors. Critics also claimed that Freddie Mac was seeking to intimidate them into silence. After the “Battle of Seattle,” protesters attacked the World Bank and the IMF in Washington, D.C., in April of 2000. More protests occurred at the World Economic Forum in Davos, Switzerland and a Group of 7 meeting in Genoa, Italy. Jose Bove, a French farmer, became famous for his attack on a

McDonald's restaurant in opposition to globalization. It was not clear what the protesters were expressing except a general annoyance with world trade. But globalization was continuing. American International Group (AIG) had been founded in 1919 in Shanghai. By the end of the century, it had operations in 130 countries and almost $260 billion in assets.

Exchanges and Trading

The new millennium witnessed the appointment of Catherine Kinney as the first woman president of the NYSE, but she had to share that post with a male colleague. Volume was then exceeding 2 billion shares daily. Archipelago agreed to form a fully electronic stock market with the Pacific Exchange, the fourth largest stock exchange in the United States on the basis of trading volume. The new market planned to match buyers' and sellers' orders. The Pacific Exchange announced that it would close its trading floors in San Francisco and Los Angeles but continue its options market. The evening exchanges of the Civil War era were back in the form of electronic communications networks. An SEC staff study revealed wide price disparities in transactions conducted in after-hours trading. Congress held hearings on whether legislation was needed to protect investors from markets fragmentation resulting from the creation of more and more ECNs. The SEC also sought the public's views on how the market should be structured and whether fragmentation was a threat to competitive executions. Large brokerage firms, including Merrill Lynch, Goldman Sachs, Morgan Stanley Dean Witter, and Crédit Suisse First Boston, wanted a centralized system to assure that investors got the best price available in any market when engaging in transactions through a central limit order book (CLOB).

Critics claimed that the large firms merely wanted to retain their middleman role while at the same time internalizing at least a portion of their order flow. Another issue of concern was that market makers on the exchanges were seeing customer orders before market openings. This information permitted them to determine market direction and strength. This informational advantage allowed market makers to profit from their order flow when they traded for their own account. The NASD was also looking at "spoofing," a practice in which orders would be placed and then canceled before execution in order to attract market interest. The Internet was further merging financial services into e-commerce. J.P. Morgan announced in March of 2000 that it was creating a special department with an annual budget of $1 billion for Internet businesses. J.P. Morgan began offering online trading to its customers on a discount basis. A new venture called myCFO was trying to develop an online program that would consolidate financial services, including accounting, taxes, investment, insurance, and trusts and estates for wealthy individuals. Large securities firms banded together to form e-commerce companies that would link their Web sites for bond research and price quotes. Participants included Goldman Sachs, Morgan Stanley Dean Witter, and Salomon Smith Barney.

Goldman Sachs announced in April of 2000 that it was planning to create an online real estate site that would bring together parties in commercial real estate leasing and sales. Merrill Lynch and HSBC Holdings joint venture for wealthy investors was to be offered in twenty-one countries and was to operate as an online supermarket for banking and investment products. In another joint venture, Merrill Lynch, Goldman Sachs, and Morgan Stanley created an online bond exchange for corporate and municipal fixed income securities. They were already handling over one-third of bond underwritings. Merrill Lynch invested in an online investment bank for small and medium-size businesses. Merrill also offered B2B Internet HOLDRs, depository receipts representing undivided beneficial ownership in U.S.-traded common stock of twenty business-to-business firms that conducted business with other companies on the Internet. These instruments were to be offered on a continuous basis. Exchange-traded funds were providing increasing competition to the mutual funds. Those instruments, which were initially called "spiders," allowed traders to close out a position intraday. Mutual funds are settled only at day's end. Calls were being made for the introduction of single stock futures contracts, but their trading was barred by the jurisdictional turf war between the Commodity Futures Trading Commission (CFTC) and the SEC. Congress removed that bar in December 2000. The use of such instruments would again allow difference trading, which had been stamped out with the regulation of the markets.

One firm, NetCurrents, provided a service for companies that would alert them to damaging rumors on the Internet that could affect their stock values. Fidelity Investments sought a competitive advantage in online trading by introducing wireless Internet access. Seven large firms, including Morgan Stanley, J.P. Morgan, Bank of America, and Goldman Sachs, were developing an electronic online foreign currency trading system for their clients. Citigroup, Chase Manhattan, fifty other international banks, and several large companies, including Microsoft and General Electric, announced the creation of Atriax, an Internet foreign exchange trading system. The NYSE was reported to be in talks to create a global twenty-four-hour market through linkages with ten exchanges around the world. The linked market was to be called "GEM," for Global Equity Market.

Market Volatility Continues

Optimism was in the air with the new millennium, but so was market volatility. Books on the market were titled *Dow 36,000* and *Dow 100,000*. Stanford University economist Robert Hall stated in January of 2000 that "we've developed a much more stable financial system—based almost entirely on markets rather than banks."[18] Although the stock market dropped after the new year 2000 began, it bounced back. Alan Greenspan warned again on January 16, 2000, that a rising stock market could be one of history's "euphoric speculative bubbles." In response, the market rose sharply, but the Dow dropped 243 points on January 24, 2000. Two days later, Chairman Greenspan renewed his warnings of a speculative bubble in the stock market, expressing concern that margin trading might be contributing to speculative excesses. The Dow proceeded to bounce back to 11,000 on February 1, 2000.

That day, February 1, 2000, was marked as the point at which the U.S. economy reached the longest boom in its history, with 107 months of expansion. The world markets gave another vote of confidence in the U.S. economy when the euro closed below parity with the United States dollar for the first time on January 27, 2000. There was some bad news. Consumer savings had fallen to a record low. The Dow Jones Industrial Average was bouncing about and had posted its worst performance in January since 1990. The Nasdaq Index dropped 3.2 percent in January. February was marked by a bomb that exploded on Wall Street. There were no injuries but windows were broken. Perhaps worse, the Fed increased interest rates by one quarter of a point on February 1, 2000. Greenspan was confirmed for a fourth term as chairman of the Fed, and he continued his warnings that the stock market was overinflated. Of course, the chairman's credentials as a prophet were questionable by this point. Greenspan had been worrying that the stock market was overheating as early as 1994, three years before he began making public statements expressing that concern. Apparently to assure that his prophecies of a stock market crash would be fulfilled, Chairman Greenspan indicated that the Fed would continue to raise interest rates until the stock market was cooled off and consumer spending brought to heel. The Nasdaq Index continued to rise despite that particular warning, but there was cause for concern that inflation could resume. Unemployment in the United States fell to a thirty-year low in January of 2000. More alarms were being sounded. The chairman of the SEC, Arthur Levitt, warned investors in February of 2000 that they should beware of risky investments. He was concerned that investors were borrowing funds to engage in margin trading in order to leverage their profits in a rising stock market. Margin debt rose to a record $243.5 billion in January of 2000, up 36 percent from September of 1999.

The Nasdaq market hit a new record on February 8, 2000, when it reached 4,427.50. The Dow continued to fluctuate in February. It dropped 218.4 points on February 11, 2000, but then recovered before falling again a week later. The Dow fell below 10,000 on February 24, 2000. It dropped 374.47 points on March 7, 2000, after Procter & Gamble saw its share prices drop 31 percent as the result of a lower earnings report for the quarter. Procter & Gamble lost almost half of its market value in two months. Meanwhile, the Nasdaq market made a new record, reaching 5,000 for the first time on March 9, 2000, but it then began to drop. On March 16, 2000, the Dow jumped by 499.19 points, the largest gain ever by the Dow on any one trading day.

The Nasdaq Composite Index slipped in the middle of March 2000 while the Dow rose, reaching 11,000 again on March 23, 2000. This reflected a widening difference between the two indexes: The Nasdaq index was weighted with e-commerce firms while the Dow contained mostly traditional "brick-and-mortar" operations. The Fed had raised interest rates by another quarter point two days earlier on March 21, pushing short-term rates up to 6 percent. Stocks and bonds rallied, having anticipated that action. By the end of March, however, the Nasdaq Composite Index had fallen almost 12 percent from its record high. Stock markets were extremely volatile on April 4, 2000. The Nasdaq index was down a record 574.57 points during the day before bouncing back. The Dow Jones dropped over 500 points but also recovered significantly during the day. The markets were rocked by news that a settlement of the antitrust claims against Microsoft by the United States government had fallen through, and the United States District Court judge entered findings that Microsoft had violated the law. The Nasdaq jumped on Friday, April 7, 2000, by a record amount. The Nasdaq Composite Index and the Dow Jones Industrial Average then experienced their largest point drops ever on Friday, April 14, 2000. The sell-off was triggered by a report that inflation was increasing.

The Nasdaq market dropped 25 percent in one week in April. Yet it experienced a dramatic recovery on Tuesday, April 18, with its biggest point gain ever. The Nasdaq was said to be exhibiting "manic behavior" in the form of seven "huge up and downs" during the month of April.[19] That volatility carried over into May as the Fed and the Justice Department continued to threaten the market. A Yale economist published a book warning that the boom reflected past market upswings, including the one in 1929, just before they broke. In the meantime, unemployment fell to 3.9 percent. Shortly thereafter, the Fed raised interest rates for the sixth time, pushing them to a level not seen since 1991. The stock market dropped in the wake of that assault. By the end of May, the Nasdaq index was down 36 percent from its high in March, but it then jumped a record 7.94 percent. Economic data began to suggest that the economy was finally cooling. The rise in Internet stocks was said to have been one of history's biggest bubbles. Those stocks dropped nearly 40 percent in price during the first half of 2000. At the end of July 2000, another sell-off occurred and the Nasdaq average dropped 14 percent over nine trading days. By the third quarter of 2000, concern was raised that the stock market would suffer a loss for the year. Volatility remained. The Nasdaq average was 37 percent below its March high on October 11, 2000, and a spike in oil prices was causing economic concerns.

The bull market celebrated its tenth year on October 11, 2000. Volume on the NYSE and Nasdaq was over 2.6 billion shares on this anniversary date. The following day, volume was again heavy as the Dow plunged 379.21 points. The Nasdaq index also dropped again. That drop was followed by a rally, but stock indexes were down across the board for the year and volatility continued. The Nasdaq index was off 18.5 percent for the year. On October 18, 2000, the Dow closed below 10,000 for the first time since March. Individual stocks were taking a hammering. Amazon.com shares fell 20 percent on a single day in June 2000 as investors fled Internet stocks. Apple Computer's stock price was cut by more than 50 percent on a single day after it issued a profit warning in October. Motorola lost $9 billion in value, dropping 15 percent, after a profit warning on slower demand for mobile phones. Other mobile phone companies also took large hits to their stock prices. The price of Lucent stock dropped 30 percent, losing $32 billion in value, when it announced reduced earnings. Home Depot shares dropped more than 25 percent after quarterly earnings were three cents per share less than expected. All the news was not bad. A record $72.3 billion in new issues had been sold during the year. The Dow had risen by 347 percent during this bull market, and the Nasdaq index had exploded by 931 percent. Over 50 percent of all American households owned stock and had shared in that run-up. Wall Street had truly arrived on Main Street, but Middle America was now even more closely tied to the vagaries of the market.

A proposed new bankruptcy act sought to limit the ability of borrowers to escape their debts. This resulted in an increase in bankruptcy filings as debtors sought to obtain the advantages of the existing statute before its amendment. They were right to be concerned. The market's back had finally been broken by the end of 2000 as a result of the Fed's onslaught of interest rate hikes and a slowing economy. Despite sporadic and sometimes record breaking one-day jumps, the year was the worst in the stock market for almost twenty years. Sales of new securities dropped by 8 percent. Hedge funds were exiting the market, and household wealth had fallen by the end of 2000 for the first time in fifty-five years. Consumer spending and business investment were decreasing, while energy prices were on the upswing. Banks were reducing lending and tightening credit requirements. The dot-com companies were suffering the most as their stock price plunged, capital sources dried up, and layoffs mounted. Their share decline was being referred to as a "meltdown," which was not too much of an exaggeration since Nasdaq shares were reflecting a loss of equity totaling $5 trillion. Red Hat, the open-source software company, saw its stock rise almost $100 per share to $151 after it went public in August 1999 and then fell to $5.22. Priceline.com saw its shares drop from $162 to $2. Yahoo! experienced a decline of 92 percent in its share prices. The shares of Scient, an Internet consulting company, went from $10 to $133.75 and back down to $1.75. The shares of InfoSpace dropped 98 percent, Ariba was down 94 percent, and Broadcom 88 percent. Mortgage.com ceased lending and laid-off most of its workforce. Several other Internet firms also failed. The slowdown then began spreading to other sectors and abroad.

The Nasdaq Internet stocks were taking the worst beating, but the Dow Jones Industrial Average was also experiencing weakness. The Fed finally noted the slowdown in the economy in December. It then hinted at rate decreases but chose to do nothing. The market continued its downward spiral, having a particularly bad day on January 2, 2001. Recognizing that its desire to stop the market's growth by raising interest rates had gone too far, a surprise rate reduction was hurriedly announced by the Fed on January 3, triggering a massive rally. The market then began to fall again. President Bush was seeking a tax cut as a way to add funds and spending power to the market, but he was meeting resistance, and most agreed that the effects of any cuts would take some time, even years, to become effective. The Fed announced another rate cut on January 31. This too did not stem the tide.

By March, the Nasdaq index was off 62 percent from its high of a year earlier. European markets were also weakening, but the week of March 11, 2001, was one of the worst in history for the American stock markets, with major indexes dropping by more than 6 percent. The Dow Jones Industrial Average experienced its largest one-week point drop ever, falling below 9,800. The Fed responded with another rate cut of one-half a point on March 20, but concerns were being expressed that this belated move was once more too little, too late. The markets promptly dropped with the Dow falling below 9,400, almost 20 percent below its high of 11,722 that had been reached in January 2000. Employers were shedding thousands of employees as profit warnings mounted. Procter and Gamble cut 25,000 from its workforce, and Motorola announced it was eliminating several thousand positions. Charles Schwab announced a 13 percent reduction of its workforce as Internet trading declined. Schwab's stock dropped by 65 percent, and its stock valuation fell to less than one-half that of Merrill Lynch.

The Fed responded with a series of additional rate cuts, a total of six by the end of June 2001. Those actions and other favorable events would rally the market for a time, but the stream of bad news continued. Company after company announced profit warnings that sent the market plunging. Over five hundred dot.com companies imploded altogether. Superior Bank, a subprime lender, failed resulting in what could be hundreds of millions of dollars of losses. Nortel Networks was facing a record $19 billion loss and announced plans to lay off 30,000 employees. Lucent Technologies lost $3.2 billion in a quarter and laid off over 20,000 employees. A study by the Fed found that the slowdown in the economy was widespread across the nation. Economic indicators were falling, and the country seemed to be headed toward a recession. History, it appeared, was proving once again that markets inevitably go down as well as up.

Economic conditions in the new millennium worsened as the economy continued its decline. President Bush's tax-cut proposals were watered down and extended over several years by Congress, but taxpayers were given up to $600 in tax rebates; it was hoped this action would rally the faltering economy. Social Security reform proposals continued to meet resistance, particularly as the budget surplus began to shrink as a result of declining revenues caused by the economic downturn. Microsoft was declared to have a monopoly in computer operating systems by a federal court of appeals on June 28, 2001. The appeals court, however, removed the district court judge, Thomas Penfield Jackson, from the case after finding that he had engaged in judicial misconduct by meeting with the press before ordering Microsoft to be broken up. The matter was remanded and assigned to a new judge for a determination of appropriate sanctions. The Justice Department thereafter announced that it would not seek a breakup of Microsoft.

The Fed authorized a series of interest rate cuts in an unsuccessful attempt to repair the damage caused by the crippling rate hikes it imposed the previous year. The Dow Jones Industrial Average, which was above 11,000 in May, began to fall off steadily. The Nasdaq Composite Index also declined. The Fed stepped up the rate of its interest rate cuts, but they were having little effect. On September 10, the Nasdaq Composite Index closed at 1,695 and the Dow at 9,605. Tragedy struck in the financial district in New York on the following day, September 11, 2001, when a group of terrorists flew two hijacked airliners into the World Trade Center. The towers struck by the airliners collapsed onto the other five buildings in that complex. Financial firms located in the World Trade Center included Salomon Smith Barney, Credit Suisse First Boston, Aon Corp., and Fuji Bank. Fred Alger Management; Keefe, Bruyette and Woods Inc.; and Carr Futures lost employees as well as offices. The office of the New York Board of Trade was destroyed. Morgan Stanley (which had dropped Dean Witter from its name) lost the 1 million square feet of office space used by several thousand of its employees, six of whom died in the attack. The firm hardest hit was Cantor Fitzgerald Securities, a bond broker that accounted for about 70 percent of trading in the more liquid United States Treasury bonds. More than 700 of its employees died when the first of the hijacked airliners struck the World Trade Center's North Tower on the floors that housed the firm's headquarters.

The regional office of the Securities and Exchange Commission in New York was buried in the rubble of the World Trade Center. Merrill Lynch's old office at 1 Liberty Plaza was also wrecked in the attack, and members of the firm had to flee its new headquarters in the World Financial Center. All four of the buildings in the World Financial Center were heavily damaged and had to be abandoned, at least temporarily. American Express, Lehman Brothers, and Nomura Securities were among those businesses that lost their offices in that complex. Many of the affected firms transferred their operations to alternate emergency sites that had been created in the wake of the 1993 World Trade Center bombing. Dell Computer aided this effort by shipping 5,000 computers overnight by truck.

In total, more than 15 million square feet of office space was lost or severely damaged in the September 11 assault. Thirteen tons of gold and 30 million ounces of silver valued at $230 million, which were stored in 4 World Trade Center, were buried when the building collapsed. Yet these concerns were nothing when compared to the stunning loss of human life. Several thousand individuals, including several hundred firemen, policemen, and rescue workers, perished at the site that would soon be known as "ground zero" in New York. An associated attack on the Pentagon and a plane crash in Pennsylvania caused by a thwarted attack on Washington, D.C., claimed even more casualties. The financial district in New York was cordoned off after the attack, and the stock and commodity markets were closed for one of the few times in history. Markets around the world plunged in response to this devastating act.

The Fed immediately pumped billions of dollars into the banking system to maintain liquidity. It was aided by similar operations in Japan and the European Union. The temporary nationwide grounding of aircraft disrupted payments systems for checks and other paper-based transfers, but the Fed's liquidity measures served to prevent a financial breakdown. Nevertheless, the nation's economy was already reeling, and the September 11 attacks inclined the country further toward a recession.

An unprecedented number of airline bookings were canceled. Midway Airlines, already in bankruptcy, stopped all further flights. Swissair shut down its flight operations, stranding thousands of passengers, until it received a $280 million rescue package from the Swiss government. Belgium's national airline, Sabena, declared bankruptcy. Airlines in America, facing $5 billion in losses, laid off 90,000 employees and cut their flying schedules by 20 percent. Congress reacted with a $5 billion dollar rescue package for the airlines that included an additional $10 billion in loan guarantees. Another $40 billion was voted in disaster relief for those affected by the attacks.

Hotels and travel-related businesses saw sharp declines in patronage in the wake of the assault. Insurance industry losses were estimated to be as high as $40 billion, causing concern that many reinsurance companies could be badly damaged. Unemployment claims rose to 528,000, an increase of 71,000 in a single week. GE Aircraft announced that it was eliminating 4,000 jobs. Nortel Networks, facing a $3.6 billion third quarter loss, cut another 20,000 jobs, bringing its total staff reduction to 45,000. Boeing cut 30,000 employees from its payroll. Corning laid off a further 4,000 employees. The firms most directly affected by the attacks were also reducing their work forces. Credit Suisse First Boston dropped 760 employees from its investment banking staff. Morgan Stanley released 200 investment bankers.

The commodity markets opened for limited trading on September 13. The securities markets reopened on September 17, despite the fact that dust remaining in the air was so thick that several workers on the New York Stock Exchange floor found it necessary to wear dust masks. A sharp sell-off occurred after trading resumed. The Dow Jones Industrial Average fell 684 points on the first day of trading. This was the largest drop ever on a single day, exceeding the prior mark of 617, which was set on April 14, 2000. The Dow lost 14 percent of its value in the week after trading recommenced. This was its worst single-week loss in percentage terms since May 1940, when the Dow was trading around 120, and France fell to the German invaders. Between September 17 and September 22, 2001, the Dow fell a total of 1,369 points—the largest one-week drop in total value in the 105-year history of the Dow. Losses in value totaled $1.4 trillion. Airline and insurance company stocks suffered the most, but other companies also saw their stock values being decimated.

The market rebounded on the following Monday and appeared to have stabilized. Although only about 25 percent of the prior week's losses had been regained, further substantial gains were made in subsequent trading sessions. Stock buy-back programs of issuing companies aided the market recovery, an action that had also helped rally the market after the 1987 crash. The market experienced a further rally on October 3, 2001: the Dow rose to 9,123; the Nasdaq Composite Index experienced its largest gain in six months, rising to 1,580, but that was still far below its record high of 5,048 set on March 10, 2000; the Dow was 22 percent below its record high of 11,722 set on January 14, 2000. The overall market was valued at $5.64 trillion, down 33 percent from its high of $16.96 trillion set on March 24, 2000.

The Fed helped stabilize the market with more rate cuts. A cut of fifty basis points was made on September 17, 2001, and a further cut in that same amount was made on October 2. This was the Fed's ninth interest rate cut for the year. The October 2 rate cut pushed federal funds rates to 2.5 percent, the lowest rate since May 1962, when President John F. Kennedy was in office. The Fed's discount rate was an even lower 2 percent. A further rate cut by the Fed of fifty basis points was made on November 6, 2001, but the economy continued its plunge, and the longest period of expansion in American history ended. Central banks abroad were also slashing their rates. Congress was seeking to help through increased government spending, and introducing proposals for accelerating tax relief. An increase in the minimum wage was being packaged with the proposals as a way to bring liberal Democrats on board. More tax rebates were being sought, and proposals to increase spending threatened to put the government's budget back into a deficit position. Industrial production dropped at the end of October for the thirteenth straight month. A decline of such duration had not been experienced since the Great Depression.

American finance was engaged directly in the war on terror that had been declared by Congress after the September 11 attacks. Wall Street was one of the terrorists' principal targets, but the financial system was also being used to track and frustrate the perpetrators of the September 11 attack. The object of that hunt was Osama bin Laden, a terrorist operating from Afghanistan, who had masterminded earlier bombings against American embassies in East Africa and the Navy ship *USS Cole*. President Bush ordered a freeze of the bank accounts of suspected terrorists in bin Laden's al-Qaeda network. Foreign banks and financial institutions that refused to freeze those accounts or to cooperate with United States authorities were warned that their own accounts would also be frozen. A Foreign Terrorist Asset Tracking Center was assigned the task of tracking terrorist funding. Concern was also raised that there may have been insider trading by the terrorists or their supporters shortly in advance of the attacks on the World Trade Center. Unusual trading in put options and increased short selling had occurred. Trading in the securities of thirty-eight companies was under investigation by the SEC and its new chairman, Harvey L. Pitt. This list included stocks of companies with offices located in the destroyed World Trade Center towers, as well as airline and insurance company stocks. Suspect trading in five-year United States Treasury notes was another concern. That activity included a single trade valued at $5 billion. The SEC also asked Canada to examine suspect trading activity in its markets. Suspicious trading in German equities was under investigation by authorities in that country.

The fact that the terrorists made Wall Street a center of their attack was an unwelcome acknowledgment of the important role American finance plays in the world's view of our power and economic success. Like the Pentagon, the World Trade Center towers were viewed as symbols of the country's strength. Both were targets of the terrorists. Yet, despite the intensity of the suicide missions directed against it, Wall Street survived and continued its mission. The reopening of the New York Stock Exchange on September 17 gave fair warning that American finance remains resilient, steadfast, and strong, and that even as the market measures its losses, it regains strength and continues to rebuild.

Conclusion

The roller coaster ride experienced by investors in the stock market as the millennium began reflected a sometimes frightening volatility. It also reminded us once again that markets go down as well as up. The economic prosperity of the last decade of the twentieth century gave rise to claims that finance and economics had finally overcome the business cycle. Sadly, history suggests otherwise. The cyclical nature of finance is a lesson that history has driven home time and time again. The succession of bubbles, recessions, downturns, and depressions following periods of economic growth has been a constant in American finance. The government has long sought to cushion or avoid these downturns with little success. Most recently, the Fed's efforts to moderate economic growth through increased interest rates has had dubious effects.

On a brighter note, history teaches us that the economy will eventually recover even when the inevitable setback occurs. Recovery may take years, but it will come.

Although there has been much folly and inherent ups and downs, the American financial system has provided Americans with a vast amount of wealth and made the nation a world power without equal. While not evenly distributed, that wealth and its effects reach far down into American society. Yet, despite this success, Americans have long harbored deep suspicions of the financiers and businessmen who have done so much to create the framework for the generation of that wealth. Thomas Jefferson's distaste for the Northern merchants, Andrew Jackson's war against the Bank of the United States, the populist movement, and the hunt for the money trust are well woven into the American political fabric. John D. Rockefeller, J.P. Morgan, Michael Milken, and William Gates have all been attacked by the government and pilloried in the press. Irony abounds. Standard Oil, the classic monopoly, is even now being reassembled without even so much as a titter. J.P. Morgan is resuming its role as an investment banker while its commercial banking operations diminish in importance. Michael Milken's junk bonds are now a conventional part of finance.

History is revealing vast changes in our financial landscape. Financial services are congregating into giant financial supermarkets. The banking, securities, insurance, and derivatives industries (as well as their accountants, consultants, and lawyers) have become so integrated that they are now virtually a single seamless web. They are all rushing to consolidate their product lines. Those businesses might more accurately be identified in a few years generically as financial service firms. Banks, insurance companies, and stockbrokers as we have known them are disappearing in a cloud of mergers and expanded services. This raises some dangers. A failure in a single financial segment now presents the very real threat of spreading a firestorm throughout the economy. Adjustments will have to be made, and undoubtedly costly mistakes will result. Globalization heightens that danger. The American financial markets are now so interrelated with international finance that a quiver in the most far-flung locale will have immediate effects on financial centers in America.

Does history provide any insights on what the future holds for American finance in the next century? Some events are safely predictable. Certainly, there will be more folly and fraud. Money attracts those who will risk all and commit gross fraud. The sameness of the schemes employed by these individuals over the course of history is surprising. Ponzi schemes, market manipulations, and false promises of large profits all recur with an almost predictable regularity. Equally amazing are those who manage to accumulate massive amounts of wealth through great risk and then lose it with equal rapidity. To most people, the acquisition of a large sum of money would breed caution rather than accelerated risk taking. Not so in many financiers, and we constantly ask ourselves what is the motivation of these titans as they fall one after the other.

Even more disturbing are the dramatic episodes of violence on Wall Street. The bombing of J.P. Morgan & Co. in 1920 and the terrorist attacks on the World Trade Center in 1993 and 2001 were separated by years, but the intensity of those actions raises real concerns as to the danger they present to the financial system. Wall Street is clearly a symbol of American power and also a target for the disaffected. The nation must take steps to guard this valuable resource.

We must recognize that one of the most innovative periods in American finance arrived in the last quarter of the twentieth century. Financial engineering became a key aspect of our markets. New instruments were developed by the thousands. Derivatives are no longer an instrument used mostly in the agricultural sector. Today, institutions in every sector of the economy are using derivatives to hedge risks and enhance trading opportunities. In the future, consumers may even be given access to derivatives that will allow them to protect themselves from an increase in interest rates from their variable mortgage payments and other financial risks. Would not many retirees like a derivative instrument that would guard them from a decrease in the value of their retirement portfolio, a drop in the return on their investments, and the ravages of inflation?

The Internet has spurred a revolution in the way in which financial services are delivered and accessed. Even mighty Merrill Lynch had to cave in to competition from the Web and introduce online trading. The Internet raises the issue whether branch banking, over which so much debate raged for so many years will soon be obsolete. Smart cards, credit cards, and debit cards are replacing cash. In Finland, portable cell phones are already being widely used as a substitute for credit cards, allowing charges to be made and billed through the phone. Insurance is delivered over the phone and through the Internet. The independent insurance agent is finding those delivery mechanisms to be tough competition. The market is disturbed by the differences between the brick-and-mortar economy of yesteryear and the new dot-com companies. The sometimes conflicting movements of the Nasdaq and Dow Jones indexes typify the struggle between those forms of commerce. The arrival of increased bandwidth will only acerbate their differences. Even now, derivatives for bandwidth development are being sold for those who need to protect themselves from its dangers or who wish to anticipate its advantages.

We have certainly come a long way since Columbus began his search for wealth in the "Indies." The Microsoft monopoly charges are also a far cry from the sassafras monopoly that Sir Walter Raleigh pursued in Virginia by quill and ink. Let us once again remind ourselves that the colonists settling America were sent here by businesses for financial reasons. The joint stock companies and the merchants of Great Britain financed their transport to America in the hopes that they would discover vast sources of wealth. That goal was achieved; it just took longer than anyone envisioned. The American wilderness proved to be a treasure-house for finance and business in every form. The conquest of America and its inhabitants is a tale of itself, but finance was present at every battle and at every expansion of our borders.

It is fascinating to look back from the perspective of our modern society and recall that the early colonists had no money, that they literally had to create it using such crude things as barter, crop notes, and bills of credit. Our founding fathers laid the groundwork for a great nation despite the handicaps and many setbacks they faced. The process of building the world's greatest financial system could certainly lay no claim to elegance, but it was done. The Revolution led to the creation of our stock markets and banking system, even when the country was bankrupt. The bank war led by President Jackson was a setback for finance, but the country found it could survive even a national panic such as the one that occurred in 1837. The Civil War nearly derailed our national aspirations, but the result was the building of an even stronger financial system. Although this financial structure was flawed in some respects, the stock and commodity markets emerged from that conflict stronger. The derivative markets were given a jump start, and groundwork was laid for a national bank system. Citizens on both sides of the conflict were widely exposed to securities offerings in the form of notes and bonds. Great national enterprises—the railroads—were financed after the Civil War, often through international offerings. From them flowed other great enterprises and financial strength, again not without folly and fraud. From the Crédit Mobilier to the failures of Jay Cooke and Grant & Ward, the process proved to be anything but smooth. Yet those scandals and the era of the robber baron soon gave way to the investment bankers. J.P. Morgan and his ilk formed the giant combinations that turned a number of local economies into a single, unified financial system.

The Panic of 1907 sent a shudder through America that gave rise to governmental efforts to control the economy. In retrospect, that event was only a temporary aberration, but the result was the creation of the Federal Reserve System, which now dominates our finance. The outbreak of World War I gave evidence that the balance of power in the world of finance had shifted to America. The American financiers were responsible for funding a great deal of the cost of that war, which they did with seemingly little effort. By then, the securities markets were becoming a part of daily life in America. The Liberty bond campaign made us a nation of investors. The speculative excesses of the 1920s were only a recognition of that fact. The stock market crash of 1929 was alarming, but nothing in that event could justify the Great Depression that followed. Only World War II would save the economy and allow the financiers to resume their role in advancing the economy.

Following the war, the economy generally rose upward with only periodic, relatively short-term dips. The government was given a setback in its efforts to control the financiers by Judge Medina in the *United States v. Morgan* case. The run-up in the stock market in the middle of the 1950s led to the cry that another crash was coming, but that proved to be a false alarm. The Bretton Woods agreement was causing difficulties as the 1960s arrived. Gold simply would not complacently agree to maintaining its price at the artificial figure set by that agreement. Like other commodities, its price and value fluctuated. Richard Nixon relieved that problem by taking the United States off the gold standard. This resulted in floating exchange rates in which the value of a country's currency was determined by how well its economy was performing and not by an artificial gold price.

By the time Nixon acted, another government-inspired problem had arisen in the form of inflation. The Vietnam conflict and unlimited government spending on social programs combined to send the economy into an inflationary spiral. The effects of that war and the resulting inflation would do much to create an aura of animosity that would help destroy the presidencies of Lyndon Johnson, Richard Nixon, Gerald Ford, and Jimmy Carter. George Bush would also be felled by the effects of a downturn in the economy. Inflation exposed other cracks in our financial system. The artificial Regulation Q interest rate ceilings led to disintermediation, which meant that the banks were being drained of deposits as consumers moved their funds into investments that allowed a greater return. Most frequently, this meant money market funds. The banks and thrifts responded by seeking funds from other sources such as euro dollars. They then began making investments that offered a higher return, which was needed to meet their increased borrowing costs. Higher return means higher risks, and the result was massive losses. The savings and loan debacle was a repeat of that cycle but was much enhanced by a great deal of fraud.

President Reagan offered a new program. Deregulation became a watchword of his administration, and tax cuts set the stage for growth. Financiers were not considered as an enemies of the people during the Reagan administration, but it would take a sharp recession to tame the raging inflation generated by years of unchecked government spending. The spiraling government deficit threatened the nation's future, and the Reagan administration added to its dimensions. Gradually, the economy stabilized and prosperity returned. George Bush continued the process of removing government from finance, with some moderation ("read my lips"), but was thrown from office when a recession appeared to be in progress. From there, the mantle was passed to Bill Clinton. Although he raised taxes and threatened another Johnsonian Great Society spending spree in the form of a national heath service, Clinton was stalemated by the Republican majority in Congress. The result was that the massive increases in government spending that was fueling inflation were curbed, and surpluses began to roll into the Treasury. Unprecedented prosperity followed.

The 1990s were a time of innovation in finance. The arrival of derivatives was first viewed as a threat after large losses were incurred by firms who either did not understand them or chose to use them for speculation. Despite concerns that they would cause a collapse of society, those losses were absorbed and the use of derivatives continued. Those instruments provided a mechanism, heretofore unknown, that allowed businesses to protect themselves against financial risks. The agricultural community had learned their benefits years before: the farmer could lock in a price for his crop through the futures markets and assure a profitable season even when a surplus occurred. Now the real estate developer could hedge in the same manner against increased funding costs. A lender could even hedge against default risks. Dealing with risk became more of a science and less of a gamble. Let us not forget that it was the speculators cum gamblers that first dealt with risk as a separate part of finance, and it was those sometimes despised individuals that turned the management of risk into a scientific endeavor.

Day traders were roiling the markets and competing with the professionals for time and place advantage as the millennium began. They were the new bogeymen of finance, whose excesses fueled the flames of animosity against the money trust. Yet it was the day traders that forcefully pushed the markets into the new millennium. The exchanges were forced to realize that specialist posts would have to compete with electronic markets. ECNs were threatening the New York Stock Exchange and other traditional marketplaces. Volume on the Eurex electronic market overtook the Chicago Board of Trade's open outcry system, a vestige of the Civil War. The traditional exchanges were in a frenzy as they tried to demutalize and merge to meet the electronic threat. The SEC was caught flat-footed by these changes. It had for years sought the creation of a centralized market system that would assure the "best execution" of customer orders. This seems strange when the rest of the government was attacking the centralization of business activities. Elsewhere in the economy, competition is viewed as assuring the best price.

Other regulatory anomalies exist. As the century closed, the Gramm-Leach-Bliley Act (GLB) repealed the Glass-Steagall restrictions on commercial banks engaging in securities activities. GLB adopted a "functional" regulatory system that allows banks to engage in a broad range of financial activities, but they will be regulated by the traditional regulators in those areas, rather than bank regulators. This functional regulatory structure seems to be badly out of date in the present environment of unified financial service providers. A large financial services firm such as Bank of America or Citigroup will be overseen by a host of regulators that will include all of the state insurance commissions, bank and securities regulators, the SEC, the CFTC, the stock and commodity exchanges, the NASD, the NFA, the Comptroller of the Currency, the FDIC, the Fed, the Justice Department, and even the Federal Trade Commission. This regulation will not be efficient or coordinated. The SEC has for years engaged in various jurisdictional battles with the CFTC and bank regulators. The states have variously proved to be inadequate regulators of financial services (sometimes requiring federal intervention) or too intrusive (sometimes requiring federal preemption). This overlapping regulation does not seem in any way to be functional. The merging of financial services and the blending of products has created a much different "functional" system of distributing financial services than what is represented by the current regulatory structure.

Finance will continue to evolve. Cash will undoubtedly diminish in importance. Palm-size combination computer and cell phones are even now allowing transfers of funds almost instantaneously. Bills are increasingly handled electronically through computers, and cyber-banking will continue to grow. Groceries and most household items can now be purchased through the Internet. Increased bandwidth will allow consumers to visit showrooms in virtual reality. Purchases will be delivered by FedEx, UPS, and other courier services; at the same time, their traditional overnight mail services will become obsolete as e-mail attachments replace hard copy transfers. Congress is giving recognition to electronic signatures that will facilitate electronic finance.

Efforts underway to reform the Social Security system by allowing investments in market return instruments are gaining favor. At the same time, the terms "bank," "insurance company" and "stockbroker" are well on their way to becoming anachronisms. Integrated financial service firms are supplying financial services across industry lines. A development to await with interest is the expansion of industrial companies into financial services. Undoubtedly, Wal-Mart and its like will be supplying consumers with a home mortgage, a line of credit, mutual funds, life insurance, a retirement annuity, and a host of other financial services, as well as their fishing gear.

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