
Chapter 10

**Future Scenarios for the
Financial Service Industry, 1990-95**

Contents

	<i>Page</i>
Scenario 1: Extension of Present Trends.	252
Scenario Z: Piecemeal Regulation	255
Scenario 3: The Global Financial Services Industry.	258
Scenario 4: Prosperity and Innovation.	261

Future Scenarios for the Financial Service Industry, 1990-95

The future of the financial service industry will be determined by a multiplicity of factors. Any attempt to enumerate them all would be futile and the number of combinations in which they can occur is large. Further, if such enumeration were possible within a reasonable time and commitment of resources, the volume of data generated would be so great that it is doubtful that the results would be useful to anyone concerned with either the operation of the industry or the development of public policy relevant to it.

Scenarios are not predictions of what will happen in the future nor do they necessarily enumerate the most likely of the possible alternatives. Rather, they can be used, as they are in the pages that follow, to illustrate the interplay of variables under specific sets of assumptions. In this application, neither the assumptions on which the scenarios are based or the conclusions drawn are sacrosanct. In fact, the reader is encouraged to suggest alternatives for both and to develop the logic that flows from those that are identified.

Scenarios also serve to bound a problem in that they can be used to indicate what may realistically happen in an extreme but unlikely case. Because they enumerate the countervailing forces that operate in a given situation, scenarios tend to eliminate from consideration some of the simplistic and extreme arguments both the proponents and opponents of a policy may make in support of their respective positions. For example, even a rudimentary analysis of the examples that follow will show that the forces shaping the financial system are such that precipitous changes that could disadvantage significant groups within society in the immediate future are extremely unlikely. However, these same models indicate that some of the changes that may materialize over several years could be detrimental to some,

and therefore should command the attention of policy makers.

The scenarios that follow are written from the perspective of an observer of the financial service industry looking back over the 10 years, 1985 to 1995. They are not mutually exclusive, nor are there sufficient parallels between them for the reader to draw conclusions about the effect of changes on the industry in any one variable, such as the rate at which automated systems for delivering financial services are accepted in the market. Rather, each highlights selected areas and suggests one set of outcomes that could result from the confluence of forces described.

Yet, by looking at the issues raised in the several scenarios, the reader should be able to develop an overall sense of the major considerations that will be faced by the financial service industry between now and the middle of the next decade. The goal has been to highlight for the reader the range of variables that will affect the development of the financial service industry in the future and suggest implicitly some of the policy issues that may have to be addressed. These, then, provide a background for considering the policy issues and alternatives that are addressed elsewhere in this report.

The issues of interest from either the operational or the policy point of view vary from scenario to scenario. If, for example, one is concerned with the evolution of the financial service industry in the international arena, the variables that determine the rate of acceptance of new, technology-based services by the American public are of only secondary interest. Conversely, the salient factors that affect policy decisions dealing with the market for consumer financial services have little, if anything, to do with those that determine the

patterns of activity in international markets for financial services.

The first of the scenarios portrays an extension of the present environment in which there are no major changes in the legal/regulatory structure governing the financial service industry. Included is the implicit assumption that the public will generally accept financial services delivered through applications of advanced information processing and telecommunication technologies. On the one hand, the technologies have been applied to accommodate differences between groups within the population. On the other, some have become less well off because of the postulated changes. On balance, however, the financial service industry and its relationships with its customers have not changed radically from what they are today.

The second scenario is postulated on the premise that there are changes in regulation, but they take place piecemeal. Generally, they are developed in reaction to events in the marketplace that either have to be ratified or to effects which have to be mitigated for one reason or another. For the most part, consumers have rejected or have shown only very limited receptivity to financial services delivered through the application of advanced technologies. However, the contraction in the number of depository institutions has continued

as customers move their funds to alternative investment vehicles offered by other types of institutions. The contraction of loanable funds has made it difficult for some to meet their needs for credit.

Systems for delivering financial services internationally are the focus of the third scenario. Attention is drawn to the problems of competition between providers of services in international markets, the movement of foreign providers into American markets and of U.S. providers overseas. World trade has blossomed and national economies have become highly interdependent. The financial service industry worldwide has been called on to provide the required supporting services.

In the fourth scenario, Congress has taken steps to completely overhaul the legal/regulatory framework governing operations of the financial service industry. Most of the regulatory functions of the States have been preempted so that both providers and users of financial services operate in an environment that is uniform nationwide. It is a time of general prosperity and rapid economic growth. The acceptance of technology-based financial service delivery systems has been great, but among the key issues of concern are those relating to personal privacy and the security of financial service systems.

Scenario 1: Extension of Present Trends

The Economy .—Business as usual, continuity and change. A mature economy with an improving position in world trade, but some continuing problems with balance between inflation and stagnation.

Policy .—Deregulation: minimum Federal intervention consistent with maintaining the integrity of national payments and transactions; existing consumer protection regulations (1983) retained; the Zeros Bill of 1985 voided most existing Federal provisions regulating services, pricing, and such.

The Scenario.—The financial service industry has been largely deregulated; consumer protection laws passed in the 1970's and 1980's have been retained.

There is continuing experimentation and innovation in information technology with emphasis on network management, development of intelligent media, dispersed delivery of services, and automation of lower value transactions. Driven by the need to control costs, financial institutions have reduced the number of manned branches, and the primary vehi-

cle for delivering financial services is the shared automated facility through which the customer can interact with a number of service providers. Retailers have invested heavily in point-of-sale (POS) equipment and have aggressive programs to encourage customers to make payment by ordering immediate debit of their accounts. This reduces the merchants' costs and reduces the total amount of consumer debt, but it also tends to reduce spontaneous or impulse buying.

Given the multilingual population (Hispanic Americans alone constitute about 12 percent of the population, and another 5 percent are Oriental), automated systems have been designed to provide financial services and information in any one of several languages. The newer voice-response terminals just coming into widespread use are also being supported with multilingual systems.

The United States is a fully "post-industrial" society. Over 60 percent of all jobs are classified as information handling. Automated equipment is used in virtually all aspects of human activity, including nearly all manufacturing, and the great majority of the population under 55 has received at least a high school education that includes considerable coursework to develop computer literacy. Despite the fairly high levels of unemployment that are blamed at least in part on increased automation, there has never been any strong public resistance to automation, certainly not to automated financial services. A public that enthusiastically embraced Pacman and other video games was not likely to object to automated teller machines (ATMs) and POS terminals.

However, some elderly people (about 12 percent of the population) and the reading-disadvantaged are uncomfortable with the new technology. These are also the people least able to pay for personal service representatives (what used to be called tellers, insurance agents, etc.). Some banks, savings and loans (S&Ls), and others have instituted special teller windows that can be used without charge by these people and by people who only want

to draw out government payments made by direct deposit. These windows are popularly known as "charity lines" and many people—especially senior citizens, who are mostly women, therefore refuse to use them.

Although there are many unemployed and an increasing number of retired people, there are also many single people and a great many households with dual incomes. People in these situations are becoming increasingly affluent and well-educated and like to take an active role in asset management. With a mind-boggling number of options in choosing financial services and investment opportunities that can be tailored to their needs or to their special interests, asset management has become a popular hobby. Financial management software proliferates with its own best-seller list, and friends get together with portable terminals to argue the latest rage in investment strategies. Marital counselors and divorce lawyers report that people are as likely to fight over money management as over child custody, even though most couples have "his," "her," and "their" accounts.

Financial service providers offer technology-based services tailored to the needs of various groups within society. For some, the service packages do not differ markedly from those available today. For others, providers negotiate custom-tailored packages of financial services individually with their clients. Among the elements of a package, for example, may be mortgage loans, investment accounts, transaction services, and lines of credit. The terms of each of the services in a package reflect the priorities of the clientele. For example, an individual may be willing to accept a lower rate on a line of credit in exchange for a lower one on a money market fund.

The proliferation of accounts and relationships with financial institutions is in fact striking. Even though financial supermarkets constantly stress the advantages of "one-stop shopping," customer loyalty to one institution is rare, and customers shift funds rapidly from one location to another as new gimmicks in financial services are touted. One defensive

strategy is the bundling of services, especially if the combination can be made to include an account that falls under Federal deposit insurance.

About 20 major remote banking systems are available nationwide. A number of smaller remote financial services exist but are only marginally profitable at best. Most combine financial services with a variety of information and entertainment services. Among the dominant institutions in this field are major long-distance telecommunication carriers, newspaper and book publishers, and entertainment companies. Financial services are delivered using conventional telephone, direct broadcast satellite, and two-way television cable.

The newnions ("new unions," representing professional, administrative, and office workers) have in many companies negotiated programs in which employees have the option of being paid daily with a credit to an account held by the employer. Employees can access these accounts through debit cards or in some cases paper drafts (checks), which are processed through a cooperating financial institution where the employer maintains a zero-balance account to cover debits as they are presented.

Because financial markets are heavily automated and information is rapidly distributed, both the issuers and buyers of debt and equity securities operate in a national and, in some cases, an international arena. Funds flow to those areas where they can earn the best return at an appropriate level of risk. Regions with sparse or declining populations, regions with obsolete industry and old infrastructure, communities that were left isolated when a new highway was built, old farm market centers and rail crossroads that no longer have rail service, find it much more difficult to attract new capital. Rural banks can no longer afford to make a loan to carry the struggling family farm until the crop comes in. The Federal Government is under increasing pressure to provide new social programs to help these communities.

Relatively few large retailers, security brokers and dealers, insurance companies, and oil distributors have established nationwide distribution systems for financial services heavily based on existing customer relationships, tele communications, and information-processing technology. On the other hand, because some legislation restricting interstate operations is still in force, no commercial bank is among the leading financial supermarkets. Some commercial banks use networks to deliver services nationwide in competition with the giants, but laws in some States prevent them from accepting deposits, which puts them at a significant disadvantage. Mergers of several of the larger regional S&L operations have resulted in two nationwide S&Ls being among the top 20 financial service giants. Although credit unions operated by the newnions serve professional and office workers nationwide, charter restrictions keep them from becoming financial supermarkets.

Many small financial institutions are still doing well. They depend on shared networks and access to wholesale services ranging from data processing to transactions processing to compensate for their small size. Their wholesale suppliers sometimes compete with them for a retail market, and there are increasing complaints from the small firms about rising costs of wholesale services and networks. Problems in gaining access to shared networks is probably one major reason that there are fewer new entrants into the financial service sector each year.

Insurance companies have nearly all changed their marketing and distribution processes; generally those functions are handled by other institutions.

The U.S. Agency for Family Services has asked Congress for authority to monitor financial accounts to identify and track missing or delinquent parents owing child support.

One State has passed a law requiring financial institutions to make automatic payment of public housing rents from the accounts of

tenants receiving State or Federal assistance checks.

The 1994 Los Angeles earthquake disrupted all communication with that region for 3 days as surviving communications channels were preempted by emergency management teams. The Financial Services Association estimates that the total cost to investors, financial institutions, and others of that interruption was approximately \$4.8 billion.

In spite of these problems, and the slow but gradual decline in the number of financial service institutions, both large and small financial service institutions are generally healthy and generally responsive to the needs of the communities they serve, as well as to the needs of the Nation. Even though there are clearly some barriers to entry, a firm usually develops to respond to the unmet needs of a local population. Mortgages are still available from depository institutions in most communities, but most are sold in secondary markets to insurance companies and retirement funds that use them to balance their long-term liabilities with long-term assets. However, the dynamic of the financial marketplace has caused the long-term, fixed-rate mortgage to all but disappear. Young people and people on fixed incomes are often reluctant to undertake an obligation that has changeable dimensions. Home ownership is tending to decline. Developers hesitate to

begin projects that they may not be able to sell immediately if interest rates go up just when the development is completed.

Nevertheless, the financial service industry, now a combination of comparatively small specialized service providers and giant financial supermarkets, is using technology to provide an efficient national payments and transactions system and to facilitate redistribution of financial resources, the primary functions of the financial service industry.

Statistics:

Banks: 13,800; decline in decade—8 percent.

Thrifts: 4,400; decline in decade—12 percent.

Automated transactions: 20 percent by number, 87.5 percent by value.

ATMs: 48,000.

Home banking systems: 20, used primarily by corporations.

POS terminals: proliferating; deployed by 49 percent of depository institutions.

Direct deposits: 64 percent of Federal payments.

Percent of households with no depository account: 12 percent.

Technology: growing use of debit cards, voice-activated ATMs.

Outstanding issues: privacy, systems security.

Scenario 2: Piecemeal Regulation

The Economy .—Gradual recovery from recession; continuing large Federal deficits dampen economic activity, keep interest rates high, and cause a continuing high rate of unemployment.

Policy .—No thorough revision of regulation. Piecemeal changes occur, generally to recognize structural changes that have already occurred in the industry. Many legal/regulatory provisions have merely lapsed because technology has provided a way around the restrictions.

The Scenario.—The events of the past decade have resulted in a hodgepodge of laws, amendments, and regulations, as Federal policymakers and regulators tried to keep up with rapid changes in the financial service industry that constantly made old laws and regulations ineffective. Only a few legal specialists can now sort out what rules apply to which services. A great many provisions today are cumbersome without being effective.

While Federal laws tend to recognize changes that have occurred and therefore are more per-

missive than in the past, States still play a dominant role in regulation of financial services, and their regulatory strategies vary widely. Some States, for example, still forbid branch banking; others require that any network must be open to any financial institution that wants to participate. Financial service institutions have tended to migrate toward States with permissive laws. A great many local depository institutions have been bought up by larger organizations. Loopholes in Federal laws allowed banks to be converted into "nonbanks."

In some States, both banks and S&L associations have become virtually financial service supermarkets; in other States, depository institutions are limited to a few traditional services and may neither own, nor be owned by, any other kind of institution. Neither extreme seems to be ideal for banks. There have been a number of messy bank failures, where banks have participated in a broad range of new ventures and taken some questionable risks. The Federal Deposit Insurance Corporation (FDIC), which is now burdened with insuring quasi-deposits held by a variety of institutions that include insurance companies, investment brokers, and retailers, is stretched to the utmost in trying to salvage as many of these institutions as possible in order to prevent further drain on the insurance funds. Usually that salvage is done through mergers, and the number of depository institutions is slowly but steadily shrinking.

Many thrift institutions have been bought up by, or been allowed to merge with, other institutions. Some of these have essentially abrogated any real commitment to housing finance and have become much like other general-purpose, widely diversified, financial institutions.

In States where banks are strictly limited and protected as having a unique role, they have seen their resources dwindle as customers remove funds to invest them through institutions that can operate across State lines. States that adopted this strategy generally did so in order to protect local banks, especially

farm-oriented banks, but they now find that the banks have little money to lend. S&L associations in the same States are generally regulated with a view to preserving their commitment to housing finance, but they are also having trouble attracting money. Federal depository institutions have widely diversified, and some of the largest have almost become financial supermarkets.

There is, overall, less competition within the industry, as the number of viable institutions slowly shrinks. Competition is declining in other ways, as well. After the period of bold experimentation, when there was rapid proliferation of new kinds of accounts and all kinds of financial services were constantly elaborated and modified, things began to settle down in the mid-1980's. It became apparent that most customers were satisfied with a few more-or-less-traditional services and had neither the time nor the desire to try to sort out the scores of services with fancy names, exaggerated claims, and marginal differences that almost no one could understand. Most people have all they can do to stretch their paychecks from one payday to the next and realistically have little hope of using their limited cash to make more money.

As a result, the growth in financial services has been much slower than some experts predicted a decade ago. The information technology used for financial services was very quickly standardized after the big institutions had made their basic hardware decisions, and there has been relatively little innovation in the last few years.

Large-value transactions were easy to automate, but lower value transactions—the 82 percent of transactions that together account for only about 12 percent of all the dollars changing hands—have proven to be much more difficult. Consumers have not accepted direct debit from the point of sale and home banking and information services as expected. As a result, the paper burden has not been lightened as much as the financial service industry hoped it would be. Another factor slowing the rate of innovation in financial services

has been the great differences between State laws and regulations that keep large institutions from developing markets of the breadth necessary for supporting new service offerings. A sluggish economy has reduced the amount of money people are able to save or invest and, hence, their demand for new services.

Part of the problem was unanticipated customer resistance to a perceived increase in risk. As banks and thrift institutions broadened their activities and began to expose themselves to more risky ventures and fiercer competition, there were many near-failures. Most of these were prevented, although at the cost of a heavy drain on FDIC, but a very few highly visible institutional collapses, coupled with several highly publicized electronic thefts, were enough to shake public confidence. Some banks and S&Ls had to close their doors abruptly because they had used poor judgment, overextending themselves when a rapid turnover of assets, twice-daily settlements, very thin reserves, and dwindling corporate deposits made them very vulnerable.

Many people were disgruntled because they saw—usually in advertisements—people with a little more discretionary income collecting high interest rates and multiplying their assets by using glamorous new services, while they themselves seemed to be losing out on the opportunities and paying for services they once thought of as free.

Many people are in fact put off by the kinds of records they get from computer-based transactions of any kind. They are afraid that they will not recognize errors, or know how to get them corrected. The whole process seems cold and faceless, and they are afraid of being victimized. Most people over 50 have never felt comfortable with electronic information technologies. They are afraid of looking silly if they make mistakes or if they challenge the computer's mistakes. All in all, it is more comfortable to deal with a friendly face at the teller's window or the familiar insurance man with his thick black book.

One mark of growing disaffection with financial institutions is an increasing number of consumer lawsuits, something almost unheard of a few years ago.

Local banks play on these sentiments by emphasizing their hometown image, stressing the comfort of friendly personal service, and being community boosters by sponsoring local sports teams and advertising their sympathy for local small businessmen and farmers. They rely more and more on small savers and old customers. Large corporations find financial service institutions that can help them manage their funds more profitably, and young affluent customers put their funds in money market accounts with checking privileges.

Home banking and home information services are limited to the largest metropolitan areas; despite their name, they are almost exclusively used by large companies. Timemeasured local communication costs, which have risen steadily, make them unattractive for most households. These services might have caught on if women had continued to enter the work force at the rapid rate of the 1970's and early 1980's, but continuing high unemployment has defeated such hopes, and many homemakers have plenty of time to pay their bills the old-fashioned way.

POS terminals are another technology that failed to spread rapidly despite a very promising start. One problem was the failure to resolve the technical problem of dealing with three different technologies—magnetic stripe, uniform product codes, and optical scanners. With plenty of fairly well-educated people looking for work, there was less incentive to automate the retail sales sector, and all but the very large retail corporations hung back waiting to see how the technology would shake down. Besides, customers seem to prefer the more familiar, slower payment process of charge accounts, credit cards, or checks. Psychologically, they probably feel that it lets them hold onto their money a little longer and gives them a little bit of protection against merchants who sell inferior goods or make mistakes in their charge accounts.

There is also continual disquiet about pressure—whether real or perceived—from employers and from governments to agree to direct deposit of paychecks, Social Security checks, assistance checks, and the like. Many people see it as a great convenience, and safer than having checks left in mailboxes or carrying them home from the office. But many people don't want their boss—or “Big Brother”—knowing where they bank, or don't want to bank at all, because they distrust large institutions. Employers who want to save money on their paperwork are inclined to suspect that such employees are trying to evade taxes or child support payments or are in the country illegally. Nevertheless, direct deposit is not growing as much as expected, and many large organizations have stopped trying to push it.

The securities market has not grown significantly in the last 6 years. This is generally attributed to the maturing of the economy, the generally declining size of business enterprises, and the aging of the society. There has been very low growth in the gross national product (GNP) for most of this period, and America's position in world trade has generally declined. Securities increasingly tend to be held by pension funds, insurance companies, and other large institutional investors, and there is much less marketing to individuals than there was a decade ago.

The outstanding characteristic of the financial service industry today is, in short, that its growth is slow and that it is troubled with more turbulence and uncertainty. The outstanding characteristic of the financial service market today is that it is bifurcated. Large-value transactions are automated completely,

and large institutional investors—big corporations, pension funds, insurance companies—enjoy options that cannot be profitably extended to the average-income person. Large firms offer a variety of services to institutional users nationwide and smaller institutions are strongly oriented toward local and regional markets and individual or small business customers. With the continuing dispersion and reconcentration of people and business over the last 20 years, there is plenty of room for small, community-oriented institutions, but the large institutions dominate the economy and the general long-range trend seems to be toward greater consolidation of financial resources.

Statistics:

Banks: 13,000; decline in decade—13 percent.

Thrifts: 4,050; decline in decade—19 percent.

Broker/dealers: 4,000; decline in decade—20 percent.

Transactions automated: 18 percent by number, 88 percent by value (1983 = 15 percent, 85 percent).

ATMs: 37,000.

Home banking systems: 6, in very large metropolitan areas.

POS terminals: deployed by 9 percent of depository institutions.

Direct deposit: 46 percent of Federal payments.

Percent of households with no depository accounts: 16 percent.

Technology: innovation slowed or stopped, service options declining.

Outstanding problems: depository institution failures; consumer litigation.

Scenario 3: The Global Financial Services Industry

The Economy.—Accelerated growth in world trade, with an increasing division of labor worldwide. The United States has a strong position in high-technology products—especially biotechnology, new-generation computers,

specialty chemicals—and in services and agricultural commodities.

Policy.—Recognition that efficient financial service is a cornerstone of international trade;

cooperation with other nations to regularize and encourage an orderly world market.

The Scenario.—The volume of world trade continues to increase. Both industrialized and industrializing nations compete for raw materials, energy, and markets. Many Third World countries, especially around the Pacific rim, have become increasingly industrialized, and other small countries in South America and the Middle East are also making progress. Trade among Third World countries continues to increase. Heavy industry has tended to move from the older advanced nations to take advantage of lower costs for land, labor, raw materials, and regulatory compliance in developing countries. Bulk chemical production for international markets, for example, has largely been taken over by Third World countries. A global division of labor is evolving, and it may eventually narrow the gap between rich and poor countries by providing a viable niche for everyone, as Herman Kahn predicted 20 years ago.

The United States has increased its share in world trade, with nearly all of the growth in export of services; high-technology (biotechnology, intelligent systems, specialty chemicals, photovoltaics); and agricultural and forest products. Services now account for the largest share of U.S. exports.

Multinational corporations (of which only about one-third of the 500 largest are now predominantly American-owned) play a major role in all countries. Meeting their needs for financial services has significantly contributed to a standardization of financial services and associated technology in the industrialized nations. The advanced countries all have a well-developed, highly integrated, financial service industry, with heavy dependence on information technologies. The newly industrialized nations are following the same path. Poor countries that lack the capital and the communications infrastructure to automate their transactions systems find that this is a significant disadvantage in building indigenous industry and in trying to enter world trade.

Since most countries have a state-owned central bank, their governments would have to bear the costs of building or modernizing their financial service infrastructure, and this has tended to add to the burden of debt of Third World countries.

U.S. corporations are heavily committed to international operations and have become heavy users of automated cash management services that show treasurers the status of financial resources worldwide and facilitate the movement of funds across national boundaries to match requirements for funds with availability of funds.

In most countries, trading and financial activities now operate on a 24-hour basis. Many international information services use satellite communications. Traditional communications links, such as telephone and telegraph cables, are highly vulnerable to the political instability, terrorism, and local wars that have been the curse of the last two decades, as well as to governmental restrictions on the transborder flow of data. As it is, there are continuing international disputes over freedom of financial data. With international trade and transactions critical to the economic welfare of all nations and an increasingly dominant factor in every national economy, financial data is a valuable commodity. That fact continually tempts national governments and international thieves to try to control, capture, or manipulate it to their own advantage.

The reluctance of the United States, in the 1980's, to cooperate with other countries in setting up mutually acceptable safeguards for the transborder flow of data resulted in some diplomatic problems and a regrettable loss of national prestige as well as some damage to U.S. trade positions. The major holdout among Western nations against international agreements guaranteeing transborder data flow has, however, been Switzerland. As an ironic result of clinging to its sacrosanct privacy laws, Switzerland has lost much of its preeminence in international banking, although it remains a haven for secret bank accounts.

All of this means that national economies, national markets, national currencies, and national transactions systems are closely tied to one another. In most situations, the continual adjustment and settlement between currencies and within world markets seems to provide additional stability. But any perturbation affecting one national currency or commodities market immediately affects others, and the failure of a major bank anywhere in the world has repercussions in nearly every country. Occasional excursions in markets reveal this vulnerability to instability under sudden shocks. This occurred several times during the late 1980's when Third World countries defaulted on large debts.

In these instances, governments and financial institutions were able to act quickly and cooperatively to dampen the reactions, in large part through using the highly developed information systems and financial networks between countries. Since then, these networks have been used more systematically to monitor and control international debt exposures, debt management, and repayment schedules. But setting up mechanisms to allow this to happen has entailed complex diplomatic negotiations and an elaborate structure of international agreements that was hard for some countries, such as the United States, to accept.

Because of the large volume of international transactions and the velocity with which funds move between countries, national monetary policies are much less effective, and most countries, certainly those that are not centrally planned economies, have much less control over the stock of money in the country. In the United States, there are now many foreign-owned financial institutions; in fact, most of the largest financial institutions, including major banks, have some foreign ownership. Many U.S. banks also have branches or affiliates in other countries.

Many experts, both within and outside of the government, worry about the effect of these developments and see them as an erosion of national control over U.S. domestic economy and external relationships. Through

translational investments and mergers, most of the world's large financial institutions have become multinational corporations. Many of them have far more financial resources than most national governments, and inevitably this gives them great political power. If they ever acted together, they would very nearly constitute a world government.

The realization of the close relationship between multinational corporations, especially financial institutions, and national governments has made these institutions a prime target for political dissidents, guerrilla movements, displaced populations, and terrorists of all kinds. The British-owned Barclay Bank in New York was bombed by the Irish Republican Army in 1986, with 34 fatalities and 109 serious injuries. Overseas protection for facilities, information banks, communications links, satellite ground stations, and especially for personnel is costly. Hostile actions against Americans and American-owned facilities have several times involved the United States in dangerous political situations in other countries. In 1992, 10 Americans were held hostage by rebel forces in the Union of South Africa for 12 days. A year later a Mexican mob protesting the treatment of illegal immigrants crossing the U.S. border attacked a U.S. bank in Mexico City. The administration, which had been elected with the strong support of the Black and Hispanic Political Coalition, was nearly torn apart in its efforts to deal with these situations.

Despite these severe problems, there can be little doubt that the United States' full participation in world trade demands U.S. cooperation with and leadership in the continuing development of a worldwide financial service industry. Further, in the development and sales of advanced financial information systems, the United States is rivaled only by France, the originator of the smart card, which is now revolutionizing consumer services, and can potentially revolutionize all forms of recordkeeping throughout the economy and society. The American financial service industry accounts for a significant share of the export

of services, the fastest growing sector of U.S. international trade for over a decade, and supplies most of the financial services needs of many small countries.

The growth and integration of the world economy in the long run may well be the most significant force for world peace. It could be the source and wellspring of the gradual development of a world political order based not on unenforced charters or on military power, but on the economic self-interests of the nations of the world.

Statistics:

Banks: 15,750; increase in decade—5 percent.

Thriffs: 5,100; increase in decade—2 percent.

Percent of U.S. financial institutions with some foreign ownership: 13 percent.

Percent of U.S. financial institutions with international branches or affiliates: 17 percent.

Automated transactions: 35 percent by number, 91 percent by value.

Direct deposit (international payments): 97 percent of Federal payments.

Outstanding issues: control of terrorism, monitoring and control of Third World debts.

Scenario 4: Prosperity and Innovation

The Economy .—Booming prosperity. The United States has a commanding lead in several high-technology industries and a strong role in international trade. An era of innovation and economic growth is well under way.

Policy .—Regulation by objective, aimed at preserving competitiveness in the financial services sector while reducing risks to provider institutions and to consumers.

The Scenario.—Rapid advancements in the biological sciences are spawning new industries, just as advancements in chemistry did following World War II. Computer-assisted design and manufacturing (CAD/CAM) and industrial robotics have significantly lowered manufacturing costs and have automated batch or custom manufacturing. Continued strong growth in the services sector, especially in export markets, has kept unemployment at reasonably low levels in spite of the new wave of automation.

Recognizing that a strong national economy demands efficiency and reliability in nationwide transactions, and also demands that all regions and communities participate productively in that national economy, Congress took

decisive steps in 1985 to revamp laws and regulations pertaining to financial services. Most aspects of financial service delivery were decisively preempted to prevent State laws from distorting the legal and institutional infrastructure necessary for an efficient national payments system. Prohibitions on interstate banking were removed, but banks were allowed to engage in diversified financial services only by carefully segregating them from traditional depository-lending activities.

Only certain kinds of demand accounts qualify for Federal depository insurance, and they are subject to special regulatory supervision regardless of the institution offering the service. Other kinds of accounts are carefully distinguished from insured accounts by time-related and other requirements and must clearly inform users of the differences. All financial service regulation is focused on the nature of the service and its risks and returns rather than on the nature of the institution providing the service or the mechanisms through which it is delivered. The exception to this rule is that institutions providing certain basic "lifeline" services or committing specified proportions of their resources to a

few specified social priorities (e.g., education loans, housing development, ecological protection, small entrepreneurship) are granted incentives sufficient for encouraging those activities.

Administration and enforcement of Federal financial service laws and regulations has been largely centralized and rationalized under a special agency, the Federal Investment and Savings Trustee—popularly known, inevitably, as “Tight FIST.”

Information technologies have allowed all economic sectors to improve their productivity, to operate more efficiently, and to be decentralized, yet well-coordinated. The proliferation of information technologies and systems has been comparable to the spread of electrification in the 1930's and 1940's. The thrust in financial information technology has been toward automation of lower value transactions and the development of intelligent media—the smart card and its descendants.

ATMs are now being replaced by automated resource control centers (ARCCS) that not only dispense currency but automatically transfer funds between accounts. Most stores, gas stations, and the like, have POS terminals, although people do a great deal of their shopping through their home computers. Merchants disagree about whether video shoppers or onsite shoppers are more likely to make impulse purchases; some have concluded that it is the less affluent shoppers that come to the store (the poor, the elderly, and those just browsing for entertainment), and they no longer make much of a special effort to attract them. This hurts the very small shops that cannot afford to be on television and that depend on passers-by drawn to the malls by larger stores.

With computers almost as common as the telephone and with communication costs low, home banking is common. There are many licensed brokers and general-purpose financial advisors fiercely competing for customers. The brokers work on coremission; the financial advisors charge by the hour and are supposed to be more disinterested. But there are some

shoddy operators in both groups in spite of the watchdogging of both the consumer interest groups and FIST. Some institutions and some brokers offer special-interest asset management programs that cater to the customer's special interests or pet causes—investment in such things as the arts, community self-sufficiency projects, alternative energy development, or opportunities for new markets. These programs also provide opportunities for conflicts of interests, if not downright scams, although most of them are probably useful and effective.

Businesses have established powerful telecommunication networks that are used for a variety of purposes. Some groups of firms where the members both buy from and sell to the others have established procedures for electronically settling accounts between and among themselves with little if any involvement of the financial service industry. Interest is paid on credit balances in accounts receivable. Members of the clearing community have generally agreed to settle a credit balance in an account receivable in good funds on demand. Only when there is a cash settlement of either a receivable or payable is the conventional payment mechanism operated by the financial service industry used.

Similarly, some have found off-market trading of securities to be in their interest. Electronic bulletin boards are used by both businesses and individuals to post bid or ask prices for securities, and the transaction is executed by the principals without the involvement of a broker. Electronic messages bearing the computer signatures of both buyer and seller are sent to the transfer agent and securities depository instructing them to make the appropriate entries in their records.

Protection of customer privacy and security of all elements of the financial service delivery system have been major thrusts of congressional action in recent years, but these two problems are not completely solved. Federal law prohibits the use of any financial data for any purpose not specifically approved of by the subject of the information. These are

known as informed consent laws, but in practice these laws are difficult to enforce because it is hard for victims to detect and prove secondary use of data from a given source. Federal laws also specifically forbid government agencies to have access to such data for other than narrowly defined purposes (i.e., tax levy), but civil libertarians point out that this is no protection at all—he who makes a law can violate it—and indeed there are frequently proposals in Congress to allow access to financial data for socially useful purposes such as crime detection and military intelligence.

Security is another important problem for several reasons. Because the financial service system is so highly networked nationwide, the potential gain from a successful theft is almost unlimited. Also, because of the national networking, any disruption or violation of the integrity of the payments system, whether it stems from natural, technological, or human causes and whether it is deliberate or accidental, can have major effects on the whole economy. And because financial transactions are so central to the economy, and economic stability is central to national security, financial information systems become a target for all of those, inside or outside the country, who have reason to attack the U.S. Government.

The Federal Bureau of Investigation has greatly expanded its capability to control computer-based crime and has elaborate related training programs for State and local officials. However, with computers and telecommunications so firmly linked, almost all computer-based crime, especially directed at financial services, is now considered a Federal responsibility (for both legal and technological reasons).

Protection of financial information and transaction mechanisms in the event of natural disasters or military attack is also a Federal responsibility. The Federal Government has developed standards and requirements for both backup systems and redundant data banks, but the industry protests that the costs

are excessively burdensome, many technical experts question the adequacy of the standards, and civil libertarians fear that redundant records provide another opportunity for violations of privacy.

Most financial services are marketed nationwide. A large volume of transactions appears necessary for assuring an institution's viability in this fiercely competitive market. The Federal laws requiring financial institutions to direct a percentage of resource investment to certain high-priority social programs are a continuing political issue. There is constant dispute between those who want to add new social priorities to the list of preferred investments (which carry definite tax advantages) and those who see each new addition as a further step toward a centrally planned economy.

Despite these problems, there is general agreement that the national payments and transaction system is healthy and efficient and plays a major role in the general prosperity and in America's strong position in world trade.

Statistics:

Banks: 16,500; increase in decade—10 percent.
 Thrifts: 5,200; increase in decade—4 percent.
Automated transactions: 35 percent by number, 91 percent by value.

ATMs and ARCCS: 77,000.

Home banking systems: 70, broadly dispersed, wide coverage.

POS terminals: deployed by 63 percent of depository institutions.

Direct deposit: 91 percent of Federal payments.

Percent of households without depository accounts: 7 percent.

Technology: development of intelligent media, ATMs that automatically transfer funds between accounts.

Issues: requirements for preferred social investments, growing computer-based theft.