SOME CAUSES AND CONSEQUENCES OF FINANCIAL INNOVATION

Remarks by

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before

The Securities and Exchange Commission's
Conference on Major Issues Confronting the Nation's
Financial Institutions and Markets in the 1980s

Washington, D.C.
October 7, 1982

INTRODUCTION

I am pleased to be here tonight to comment on the many changes that are taking place in the banking system as a great wave of innovation sweeps through the industry. I will attempt to provide some perspective on innovation and its causes, and will discuss some of the consequences of the changes we are experiencing. Because many of the issues being discussed at this conference are clearly products of the innovations occurring in the financial industry, I will touch on some of the related regulatory problems.

THE CAUSES OF INNOVATION

Lest we think that the current period of financial innovation is unusual, note that innovation is an unique and integral part of the free market economic system. The drive to maximize profits in the long run creates an incentive to innovate. The lack of a similar mechanism to encourage the development of new products and methods of production is a frequently cited criticism of the centrally planned economies and bureaucracies.

In his analysis of various types of economic systems, Joseph Schumpeter, the Austrian-born Harvard economist, placed great emphasis on the role of innovation in the free market economy. He advanced a theory of creative destruction of old products and methods in favor of new and improved goods and means of production.

Schumpeter pointed out that change often comes from firms in related fields, or even from outside the industry, rather than from within an industry. The impact on the banking system of money market funds is quite consistent with Schumpeter's analysis.

Moving beyond the normal competitive forces, we can identify other factors that are somewhat more specific to current innovations in the financial industry. Certainly persistently high and fluctuating interest rates have played a leading role, as the spectacular growth of the money market mutual funds so vividly demonstrates.

Yet, by themselves, high interest rates are not a unique cause of change. Rather, innovation has been generated by the combination of high market interest rates and the Regulation Q ceilings. The traditional depository institutions have been prevented from paying market rates on deposits and a profit making opportunity was created for money funds and other investments. In other countries, where institutions were not similarly constrained, high interest rates did not lead to the development of new nonbank financial products.

In analyzing the roots of financial innovation, we must also mention the impact of technological change. Innovations have been facilitated by the revolutionary developments in data processing and communications. For example, the electronics revolution is making possible the rapid expansion of new financial service delivery systems, such as automated teller machines and point of sale terminals, Fedwire, Bankwire, Clearing House Interbank Payments System (CHIPS) and Society of Worldwide Interbank Financial Telecommunications (SWIFT). McLuhan's global village is here.

There are very few barriers to the introduction of new technology for the provision of lower cost or different, but equal cost, financial services. The innovations are not destroying the economic value of older capital investments, but are expanding the markets in some ways. Unlike innovations in manufacturing, which have resulted in enormous quantities of the U.S. "plant" becoming economically obsolete before it is physically obsolete, the financial services delivery revolution is occurring in an area of the industry that has not been capital intensive. Computers are being reprogrammed to provide new types of accounts or new services. New delivery vehicles, such as ATMs, can replace functions of brick and mortar branch offices. The decision of bank management to maintain extensive branch networks to maintain market share in "retail" banking has become the most important strategic decision.

In summary, we have a wave of innovations resulting from the confluence of a series of factors. In addition to intra- and interindustry competition, innovation is propelled by high interest rates, altered law and regulation, perceived high profit opportunities, technological developments and the low barriers to the deployment of new technology.

THE CONSEQUENCES OF INNOVATION

Having considered some of the causes of financial innovation, let us consider some consequences in the areas of financial change, structural change, regulatory change, and monetary policy.

Innovation and Financial Change

The list of financial changes resulting from innovation seems virtually endless when we compare the present to the early 1960s. We are all familiar with the rapid increase in the types of financial instruments now available to consumers and the benefits consumers have received from the development of new financial services, such as sweep accounts, NOW accounts and money fund accounts. The consumer has also benefited from the availability of more financial services from the thrift industry and nonbank financial firms.

Also on the positive side for consumers, innovation has brought the return on savings to a market determined level. Freed by the money market mutual funds from the artificially low interest rate ceilings imposed by banking law, small savers can obtain a market rate of interest. The subsidization of borrowers by savers, which occurred when market interest rates exceeded Regulation Q ceilings, is being wiped out by innovation and deregulation.

Consumers will also be impacted by a significant change in mortgage financing mechanisms. Home financing costs, which tended to be the beneficiary of the low interest rates paid to small savers, will be in a less advantageous position as the returns to savers rise to market levels. Obviously, the loss of this subsidy from savers will not be popular with borrowers. But, if society wishes to subsidize home ownership, society in general should assume more of the cost. I don't think that the subsidy should come only from the savers.

While interest rates were low and stable and consumers had few savings options, the thrifts could borrow short from depositors and lend long to home owners. But, that system resulted in the thrifts assuming massive amounts of interest rate risk. Now that interest rates are very high, the yield on their mortgage portfolios is less than their cost of obtaining funds and thrift institutions are suffering massive losses of capital. In the future, there must be a greater sharing of interest rate risk between the mortgage lender and the borrower. This is not a welcome change for the borrower. But, it is probably necessary if we are to have both a viable system of long term home financing and a set of financially stable thrift institutions.

Business firms have also experienced expanded financial service options, especially in the area of cash management techniques. The incentives provided by high interest rates have led to the development of new ways for the business firm to minimize its idle balances. These changes have led to a restructuring of their competitive position by several banks with a few banks deemphasizing their consumer business in order to specialize in servicing business customers, while others are emphasizing service to specific consumer markets. I would expect more of these specialization experiments as banks attempt to find their own niches in the market.

Turning to a second area of financial change, it appears that innovation is converting the source of bank funds from traditional core deposits into purchased money. Many institutions that once operated on a stable supply of locally-generated deposits are now being forced to compete for funds against the national money markets. To obtain funds, banks will have to pay market interest rates on an increasing proportion of their liabilities.

Increasingly sophisticated suppliers of funds will place a premium on bank liquidity and soundness. The bank that is perceived to be weak or poorly managed either will not be able to raise funds or will have to pay premium rates.

The final financial factor that I will cite is the likelihood that more banks will experience fin^ncial strains in the future. I say this not to create alarm, but to point out that by opting for deregulation, we have also opted for a riskier banking system. This is part of the price that we pay for a competitive free enterprise system. A highly competitive system paying market determined rates of interest is going to experience more financial strains than a system protected by barriers to competition and paying below market interest rates.

We might conceivably have chosen to maintain the old system by extending regulation to all the new financial services and financial firms. By not extending regulation, we implicitly decided that the social cost of more and more regulations on more and more firms was likely to be higher than the social cost of resolving more problem institution situations. The die was probably cast with our decision not to regulate the money market mutual funds' interest rates or investment characteristics. If the money funds and the other nonbank financial firms had been brought within the scope of bank regulation, it might have been possible to maintain the old system longer. However, a tightly regulated banking system subject to Regulation Q could not coexist with unregulated nonbank firms. Once the decision was made to permit the continuation of the unregulated sector, the pressures to deregulate the banking system increased.

In the more competitive future environment, the regulatory efforts of the supervisory agencies will be supplemented by the discipline of the market. The partial loss to the uninsured depositors in Penn Square has already made the suppliers of funds more aware of their responsibility for evaluating bank quality. The information for making these evaluations is available. Therefore, agency examinations, early warning monitoring systems and the discipline of the marketplace should combine to discourage institutions from taking the excessive risks that lead to financial difficulty.

When all systems within the banking sector fail, the FDIC is adequately capitalized to protect the small depositor, and the Federal Reserve System functions as a lender of last resort, when it is appropriate for it to do so. The key, of course, is that the confidence engendered by the FDIC's existence prevents the spread of panic, as I think was demonstrated pointedly by the Penn Square experience.

Structural Changes Resulting from Innovation

Moving on from the unpleasant subject of financial problems, let us look at some changes in the structure of the financial system. Except for the thrift industry, there has been less structural change than most observers were forecasting twenty years ago.

Beginning with commercial banking, the bank holding company movement has been part of the process of change. The one bank holding company permitted the expansion of banking organizations into permissible nonbank financial activities. Because these activities were customary and usual practices in banking already, very little real product diversification was achieved by this route. In terms of geographic diversification, the one bank holding company did allow organizations to expand their activities on an interstate basis. While a bank cannot operate banking offices in other states, its sister holding company affiliates in mortgage banking or consumer finance can expand without regard to state boundaries.

The multibank holding company offered the route around restrictive branching laws in some states. In other states, it was the transition vehicle between a unit banking system and statewide branching. Now, in a movement that will probably not become a major short run trend, three states have chosen to permit entry by out of state bank holding companies. The 1975 recodification of the Maine banking code allowed entry by bank holding companies headquartered in states extending reciprocal entry rights to Maine bank holding companies. Recently, New York and Alaska adopted interstate banking legislation. Alaska's law, the most liberal yet, does not require reciprocal entry rights.

Each of these three states appears to have had a different motivation for interstate banking legislation. In Maine, the goal was to attract new funds for economic development. Alaska's bill appeared to be an attempt to get ahead of the rest of the nation, while New York's law seemed to be inspired by the expansion desires of the large New York City banks.

I hope that the interstate expansion resulting from these laws will be procompetitive and result in an increased number of organizations competing in each state. There would appear to be few consumer benefits if interstate banking simply means the acquisition of a large local firm by a large out of state firm.

A second major structural innovation is the rapid development of local and regional ATM networks. We appear to be nearing the establishment of a number of nationwide networks of teller machines. While not providing full interstate banking, the ATM networks will permit the consumer to obtain funds from his bank accounts while he is outside the market area of his bank. The legal and antitrust issues posed by these networks are not fully resolved as yet, but this development could represent the start of a movement toward more extensive interstate banking activity.

Some observers have predicted that the innovations of recent years will lead to a consolidation of the financial system into a relatively small number of very large nationwide financial organizations. But, there has not been any demonstration of the need for this potential reshaping of the banking system. The services and technology that the smaller banks cannot develop on their own are available from outside vendors. While very few banks have the capacity to expand on a nationwide basis, there is nothing to preclude a system of various size banks, such as now exists in California. While the largest organizations will compete in many markets on a national or regional basis, they will have to compete with local institutions in each of those markets.

The restructuring effects of innovation have been much greater in the thrift industry than in commercial banking. Even with the thrift assistance provisions of the Garn bill, some further restructuring will probably take place. In the long run, if there is to be a stable set of thrift institutions, I doubt the industry can ever return to its traditional operating procedures. The mismatching of asset and liability maturities that was possible in a highly regulated system simply is not viable in a deregulated environment.

The expanded lending powers of the thrifts and the gradual consumer acceptance of variable rate mortgages will enable the thrifts to increase the yield responsiveness of their portfolios to changes in market interest rates. But, the thrifts must also extend the average maturity of their deposits, if they are going to resume their historic role in home financing. The longer average maturity of thrift assets permits them to offer a longer maturity fixed rate deposit instrument. I think that the thrifts should develop attractive long term consumer savings plans because, unless longer term fixed rate deposits are secured, thrift earnings will continue to vary widely over the interest rate cycle.

The final structural change that I will mention here is the provision of financial services by nonfinancial firms. Much has been written about the nonbank financial firms. Being unregulated, they do have some advantages over banks and thrifts. But, by virtue of their desire to avoid regulation, they cannot provide all of the products of the full service commercial bank. In addition, do they have expertise equivalent to that accumulated by the banking system? Will they be able to persuade consumers to buy their stocks where they buy their socks? While there is certainly a reasonable fear of these new competitors, they have a long way to go before they will be able to establish a track record that will endanger the competitive position of the banking industry.

On a more general level, the entry of nonbank firms into the provision of bank type services raises the issue of the separation of banking and commerce. We should not give up this traditional separation without a careful reexamination of the original reasons for the policy and the implications of commingling banking and other lines of commerce.

The money market mutual funds clearly are different than many of the nonbank suppliers of financial services. The funds were established by existing financial organizations, many of which already operated a variety of mutual funds. They had the expertise and operating systems necessary to attract billions of dollars from the banks and thrifts. Yet, much of their success is based on exploiting the regulation of deposit interest rates. When the banks are able to offer a competitive instrument and deposit insurance as well, the the money market funds may lose a good deal of their current attractiveness. I would expect there to be at least a partial flow of funds back to the banking system when the phase out of Regulation Q is completed.

Regulatory Changes Resulting from Innovation

Moving to the topic of regulation, I would like to say a few words about the impact of innovation on bank regulation. Although we are deregulating and trying to maintain the competitive position of the banking industry, we must not lose sight of the fact that the public expects the banks to be a safe haven for their funds, and expects the bank regulatory agencies to make sure that the banks are living up to that obligation. Thus, as we deregulate and produce a somewhat more risk-prone banking system, the responsibilities of the regulators increase. At the same time, however, we want to reduce the total burden of regulation, only some of which is associated with bank soundness. Balancing all of these objectives is going to be difficult.

While both the banks and the bank regulators want to avoid financial difficulties, each new problem teaches everyone a new lesson about risks to be avoided. For instance, the problems arising from the mismatching of asset and liability maturities have caused the development of new monitoring techniques. Simple computer programs are now available to assist bank management in controlling this type of risk exposure. All of us must attempt to anticipate the development of new problems and learn new solutions to those new problems.

From today's conference agenda, I know that you have heard many specific issues of financial regulation discussed. The changes and innovations in the financial marketplace do necessitate a rethinking of the regulatory process.

As the memorandum for this morning's first panel discussion noted, we do have a large number of federal and state agencies regulating specific segments of the total financial industry. This has always been the case, however, and I would not assert categorically that this diversity of regulation is all bad, even though it may not conform to a neat functional organization chart. For example, it may well be worthwhile for an activity to be regulated differently when it is performed by a bank than when it is performed by a nonbank.

Much of the current justification for regulatory change is probably based on the commonly held view that the financial industry is going to become increasingly homogenized in the near future. By this popular view, all financial firms will soon produce all financial products. While a few firms will indeed produce nearly all financial products, I am not convinced that all firms will produce all products. In ten years, I think that we will find that most banks are still basically providing traditional banking services, just as most insurance companies will still basically provide insurance. Having these reservations about the homogenization hypothesis, I would hesitate to make sweeping recommendations about the reorganization of regulation along functional, rather than institutional, lines. This caveat, however, does not justify the clear regulatory inequities that may occur because of divided regulatory responsibilities.

As a final point on regulation, I would suggest that in your deliberations you should not overlook the potential role of the marketplace as a regulator of financial activity. Given the freedom to operate and the appropriate information, the market can be the most efficient regulator of all. It will reward those who manage well and punish those who do not. While it does not require any regulatory structure, the market is still the best arbitrator of economic performance and will ultimately determine the extent to which the predicted homogenization of institutions will take place.

Monetary Policy

Innovation has undoubtedly complicated the process of conducting monetary policy. The development of new payment instruments, both inside and outside of the banking system, requires periodic redefinitions of the various money supply measures and loosens the relationship between money and spending. The shifting of funds between types of payment accounts causes particularly difficult problems of interpretation during transition periods. Technological improvements to the payments system tend to increase the velocity of the money supply and permit a smaller money supply to support a larger volume of payments. The behavior of the monetary aggregates still seems to me to be the best monetary policy guide available, as long as one is cognizant of the propensity for fluctuations and short run distortions of the aggregates.

Innovations in payments systems and savings instruments also complicate economic forecasting. Econometric models, used by the Board and other forecasters, are based on past relationships among variables and changes in those relationships reduce the reliability of forecasts. Old relationships may no longer be relevant, or the magnitude of mathematical relationships among variables may change. For example, interest rate fluctuations in recent years have been much greater than in the years on which most models are based.

Before leaving the topic of monetary policy, I'd like to comment briefly on some current initiatives in Congress which would explicitly require targeting interest rates as a monetary policy goal. Some versions would have us focus on so-called real interest rates, that is, interest rates adjusted for inflation expectations. In addition to a multitude of technical problems--like defining the appropriate rate and managing to control it--it seems to me that these suggestions generally have more fundamental and dangerous flaws. Importantly, we must ask whether in today's environment the Fed can simply push interest rates down without running a serious risk of stimulating inflationary monetary growth. The answer clearly is no. These proposals no doubt reflect a genuine and understandable wish to lower the cost of credit. One must be extremely careful, however, to distinguish between serious technical discussions about monetary targets and recommendations that would merely shift current policy objectives toward easy money.

CONCLUSION

To summarize, I have tried to emphasize the important role of innovation in our economy in general and in our financial system in particular. Perhaps we will pass through the current wave of change and things will settle down again. But, in the meantime, we must attempt to cope with all of this change. Each new development must be analyzed in terms of its potential effects on the total financial system, including the maintenance of a viable and competitive banking system.