Good morning! It is an honor to be a part of the Great Lecture Series, and I am pleased to have this opportunity to talk to future business leaders about the work of the Federal Reserve System and the challenges the Fed faces in today's global economy. The recent turbulence in the stock market has reminded all of us of the vital role of our nation's central bank in undergirding the safety and soundness of our financial system. While financial markets exhibited great depth and resiliency in the midst of great price volatility, the Fed played a crucial complementary role by ensuring adequate liquidity in a time of turmoil. Although less visible, the Fed's roles in "normal" times—which is to assure the safety and soundness of the banking systems, promote the smooth functioning of payments for the exchange of goods and services, and influence the supply of money and credit so as to foster economic growth while guarding against inflation—are also critical. Aside from underscoring the vital role of the Fed, the recent market gyrations also point out something that is of increasing importance to our nation's central bank, namely, the globalization of markets. Today I would like to address the challenges posed to the Fed by international as well as other developments. To do so, I will start with a brief overview of the Fed's structure and activities because these are not widely understood. Then I will turn to changes both within the System and in the banking and economic environment. Finally, I will give my views of how the Fed should adjust to those changes.

Overview of the Fed: Structure and Functions

Many consider the Fed Chairman, now Alan Greenspan, to be the second most
powerful person in Washington. Yet a surprising number of people know little about the Fed beyond the fact that it is our nation's central bank. The structure Congress gave to the Fed made it a rather unique central bank but one very much in keeping with American political traditions. Like our political system, the Federal Reserve has some functions that are concentrated in a centralized body—the Board of Governors—and some that are handled in a decentralized manner at the regional level. The Board's seven members are appointed by the President and approved by Congress, and employees there are part of the civil service. In contrast, the District Banks are organized and managed more along the lines of private corporations. Each bank has its own Board of Directors. These boards are made up of local business and banking leaders as well as representatives of various segments of the economy like agriculture, labor, and small business. This simultaneous public and private nature makes the Federal Reserve System one of a handful of quasi-governmental central banks in the world today. In most countries the central bank is an arm of the government. The greater relative autonomy of America's central bank is consonant with with our tradition of separation of powers. The Fed's structure internally and vis-à-vis other parts of the government insulates it somewhat from political pressures of the moment.

Its decentralized features are also typically American, paralleling the strong ties to local constituencies in our elective process, which contrasts with the parliamentary and party systems prevailing in most other democracies. The Federal Reserve's strong grassroots representation resides primarily in its 12 district Federal Reserve Banks and their 25 branches scattered in larger cities all across the United States. The Fed's decentralization offers numerous advantages, but probably the most important is the input offered by the Banks' directors. Through the boards of directors of various branches and head offices, each Bank has access to first-hand reports of current economic conditions and developments throughout its region—an important supplement to
national data releases, which are typically at least a month old if not more. Directors also make direct contributions to monetary policy by recommending discount rate changes. Each Bank maintains a staff of economists who analyze regional and macroeconomic data and give detailed reports to their presidents prior to meetings of the Federal Open market Committee (or FOMC). With this special information in hand, Bank presidents help set monetary policy through the deliberations of the FOMC, thereby assuring that the various regions of the country have a direct voice in economic policy decisions.

This "independence" and extensive grass-roots input does not mean that the Fed is unaccountable to the national government, however. I've already noted that the Board of Governors is appointed by the President with the advice and consent of Congress. In addition, the Chairman of the Board of Governors is required to report to Congress twice each year on monetary policy in a process known as Humphrey-Hawkins testimony. The appointments of district Bank presidents are also politically accountable since they must be approved by the Board of Governors.

Why do we have a central bank? To answer this question, I think it is helpful to glance back at U.S. economic history. Legislation enacted during the Civil War had solved some of the problems that existed earlier in the nineteenth century when there was essentially no uniform currency. This legislation corrected the sometimes confusing situation that obtained when banks and even railroads companies issued "notes" of their own. Nonetheless, temporary strains in liquidity continued to plague the American economy and caused periodic financial panics. These led to bank failures and, in turn, to business and personal bankruptcies. After an especially serious financial panic in 1907, Congress became convinced that a central bank was needed to improve on the existing monetary system in three respects: it should provide a more elastic money supply to
meet the needs of a growing economy, a payments mechanism with greater flexibility to accommodate commerce, and more effective supervision of banking. To accomplish these objectives, Congress founded the Federal Reserve System with the Federal Reserve Act of 1913. While at first the Fed's main responsibilities were to maintain a smoothly functioning system of paying for the exchange of goods and services and to ensure the safety and soundness of the banking system, before long the Fed's areas of concern were extended to include the rate of growth of the economy, the level of employment, the dollar's purchasing power, and foreign trade transactions through what we now know as monetary policy.

Thus the Federal Reserve is in three businesses: providing financial services to banks and the U.S. Treasury; supervising and regulating banking activities; and the formulation and implementation of monetary policy. Financial services entail the Fed's involvement with currency, checks, and other payments mechanisms. The Fed's role as a "bankers' bank" has also become a chief source of income since 1980 because Federal Reserve Banks now "sell" these services to depositories. We do not print money or mint coins. The U.S. Treasury does that, but we do, on behalf of Treasury, supply cash and coins to the banking system and maintain the condition of cash in circulation by culling out worn, torn, and counterfeit currency as it passes through our processing machines. At the Atlanta bank alone we shred about five tons of unfit currency a week. Checks represent an even larger quantity of money than cash, and the Federal Reserve System processed around 19 billion checks in 1986. Payments can also be carried out electronically through the Fed in two ways. One is through the automated clearinghouse, commonly called ACH, which replaces checks with a series of electronic impulses transmitted over data links, magnetic tapes, or floppy disks. Many people use the system today by having their employers deposit paychecks or Social Security checks directly into their bank accounts or by paying insurance premiums through electronic withdrawals.
The other electronic payment method the Fed offers is wire transfers, usually large dollar transfers between financial institutions. Another form of electronic activity is the safekeeping and transfer of Treasury and government-agency securities which are no longer in paper form. The Fed performs many of the same "bankers' bank" functions as a bank and fiscal agent for the federal government. Tax payments, fees, and other federal revenues flow into the Fed through commercial banks and thrift institutions. These revenues are credited to the Treasurer's general account at the Fed and are available for Treasury use. The Fed also handles the issuance, servicing, and redemption of Treasury securities.

Supervision and regulation is the Fed's second business, and through it our central bank's responsibility for bank supervision and regulation also helps maintain the nation's money supply by protecting the health of the commercial banking industry. As a bank regulator, the Fed, within the bounds of laws passed by Congress, decides on the product lines banks may offer, can mandate capital requirements, and must approve or oppose proposed bank mergers and acquisitions. Regulation cannot prevent individual banks from failing, however, or it might remove one of the ultimate sanctions of the marketplace, and in so doing, reduce the benefits which come from competitiveness in the banking industry. Our concern is the industry as a whole rather than single institutions—except, of course, when the failure of a single institution could pose some risk to the entire system.

Our third function is monetary policy. People must not only have confidence that a dollar will be accepted in payment for goods and services but also that it will have essentially the same value next month, when delivery is made, as it does today, when an order is placed. The economy also needs enough money and credit to enable businesses to expand and consumers to make purchases on credit for items like houses and cars.
Determining the optimal balance between inflation and growth, particularly when other factors such as the federal deficit also influence the economy, is one of the most difficult challenges we face at the Fed. Because monetary policy is a macroeconomic tool affecting various sectors and regions of the economy in different ways, the Fed's complex structure is especially appropriate, even though it might be confusing to outsiders. Our combination of centralized and decentralized powers ensures both insulation from political pressures and input from the representatives of all parts of the economy at each policy juncture.

Changes within the System

In the last few years there have been some important internal changes at the Fed, particularly on the Board of Governors. Most people are aware that Alan Greenspan has replaced Paul Volcker as Chairman, and I am often asked what this holds for the future. Frankly, I think it is impossible to answer this question because so many of Chairman Greenspan's leadership options will be affected by the events in the external economic and banking environments to which he must respond. I would also like to point out that the Chairman, while enormously powerful, does not act alone. Most policy decisions are made either through the FOMC or the Board of Governors. In that regard it is important to point out the current Board is also almost entirely "new," the longest tenure being three years in the case of Martha Seger. Given these conditions, Reserve Bank presidents are in a position to play an even more influential role, especially in FOMC decisions. Thus in gauging where the Fed is headed, I think we can "forecast" better by focusing on changes in the environment, not in the leadership at the Board, since it has much less collective experience than in many years.

External Changes and the Challenges They Present

Therefore, despite the almost overwhelming rush of events in the economic and
financial world, I would like to address what I consider to be the major themes that run through the current situation. In the payments system one of the major challenges in the Fed's history—the 1980 legislative mandate to price our services in competition with other market providers—is really behind us. I am glad to report that we dealt with that fundamental change in our culture successfully. Right now the issues that we are dealing with like daylight overdrafts on our funds wire transfer service—while serious—seem relatively minor by comparison—and we are addressing the risk posed by this situation.

In the monetary policy area the challenges involve primarily constraints on our options and effectiveness. Internationally, we have found that we cannot act alone. Perhaps we never could, but we have become much more cognizant of that fact recently. In the past two years, for instance, we have been pressuring the Germans and Japanese to pursue more stimulative domestic policies to help reduce imbalances in world trade flows, especially our huge trade deficit. While Japan and, of late, Germany have, thankfully, begun to implement such changes, their slow response is one reason our trade balance has not narrowed much even though the dollar has declined on a bilateral basis against the Deutschemark and the yen almost to levels where it stood before our trade accounts began to go into the red.

At the same time that we have come to appreciate the need for international policy coordination, our domestic situation has heightened awareness of the importance of the monetary and fiscal policy mix. Our massive federal budget deficit caused interest rates to rise in the early 1980s, and foreigners increased their purchases of dollars to take advantage of those higher interest rates. Concomitantly, the dollar began an appreciation that reached a peak in early 1985. Relatively expensive dollars led to unprecedented trade imbalances. As this situation continued, the Fed's generally accommodative policy designed to address the domestic economic situation had the
positive side-effect of lowering the dollar. While the dollar declined and U.S. exports began to improve as a result, in the absence of lasting progress toward reducing the deficit, monetary policy eventually reached the limits of its ability to deal with the situation. In an environment where the United States is dependent on capital inflows from abroad to finance its borrowing needs, an interest rate differential is essential to maintaining the attractiveness of dollar-denominated assets to foreigners. Thus the Fed is essentially backed into a corner in terms of how much easing it can do as long as federal budget deficits continue and foreign central banks are unwilling to maintain the interest rate differential by loosening their reins on money and credit in concert with the United States.

It might seem that we are in a new ball game in the wake of the stock market's Black Monday, with the dollar dropping to all time lows and the Fed stating publicly that we will provide ample liquidity. But this situation is our response to the immediate crisis and, as such, is impermanent. The resulting drop in interest rates, is predicated upon our perception of these events as "special." The fundamental problem of the federal budget deficit remains, and what we can do to "help" the economy will depend very much on how well Congress and the Administration succeed in their negotiations regarding federal spending and revenue. If they are not successful, the U.S. economy will be shouldered with an imposing debt burden that will fall largely on your generation's shoulders to repay. Like many heavily indebted LDC's today, the United States will have to export more and more of what we produce abroad rather than consume it domestically in order just to meet the interest payments. There is little that monetary policy makers can do about this except "jawbone."

Turning finally to the supervisory area, we see again the effects of a global marketplace, but they are masked by the rapid pace of change in the financial services
industry generally. Banking has become far more competitive in the last decade or so as nonbank firms have begun offering more and more services once in the exclusive domain of banks—but without being subject to the regulatory structure under which banks must operate. Naturally banks asked for relaxation of these restrictions, and legislators and regulators have agreed to many of their requests. Interest rate ceilings have been phased out, and some new "products" like discount brokerages, for example, have been permitted. There has even been considerable lifting of geographic restrictions.

However, the pressures have not ceased. Banks want still more deregulation. I think some of this should be granted—and soon. We especially need to move toward nationwide interstate banking. The hodgepodge of regional compacts not only presents a challenge to regulators like the Fed but it also deprives consumers of the full benefits that further geographical deregulation would bring. On the other hand, our ability to achieve one basic regulatory mandate—the safety and soundness of the nation's financial system—would be impaired if we were to go too far in granting banks new powers without first fixing some of the "leaks" in our present regulatory approach. In most other sectors of the economy, we could easily say that the strong would survive and the weak fail and so be it, but we cannot really do this in banking. The main reason we cannot is that we are committed to insuring smaller deposits, and we have often acted as if we are essentially insuring all creditors of banks, save the stockholders. We must directly deal with the question of what we will and will not insure—the boundaries of the safety net—before we should permit banks to enter new areas of business.

In particular, deposit insurance creates an incentive, albeit unintended, to bank managers to take excessive risks, especially when earnings are declining. The problems of the FSLIC are an object lesson in how quickly this "moral hazard" problem can get out of hand. We also need to do a better job as regulators of incorporating measures of an
institution's riskiness into aspects of regulation. One way to deal with the problems of
deposit insurance as well as risks posed to the system by certain other practices would be
risk-based capital requirements. In fact, we have proposed some changes which would
mandate levels of bank capital to measure up better to the riskiness of their loans and
other activities. Such reform of capital requirements could also address the problem of
off-balance sheet items. Because they understated the amount of risk relative to capital,
the proliferation of products like standby letters of credit, interest rate swaps, and so
forth could lead to insolvency, not only of institutions immediately involved but of their
insuring agencies and depositors as well. Adequate capital to back off-balance-sheet
items would limit inappropriate risk taking. Again, international dimensions are involved
in this problem, since banks around the world are placing more emphasis on off-balance-
sheet products as sources of income. Thus, to be effective, coordination among world
bankers is needed. Otherwise, financial institutions will simply go offshore to avoid
domestic regulations. The coordination between American and British regulators that led
to the currently proposed guidelines on off-balance-sheet items has been a welcome
initiative. I would hope to see such efforts expanded to encompass other advanced
economies.

Behind these specific issues that we already recognize and understand fairly well is
the rapid pace of change itself that will continue to present challenges as we move into
the future. A number of proposals have recently been put forth to revamp our entire
approach to regulating the financial services industry. The problems in such a massive
reform are twofold. First, we do not fully understand the systemic risk potential of
many of the new instruments and transactions being brought on stream so quickly.
Second, some segments of the industry, like the S&Ls, are in a weakened position, and
dramatic regulatory changes could prove overwhelming. Therefore, we must proceed
with caution. Yet we cannot wait too long. Otherwise, events may move so far ahead of
policy and regulation that competitive forces push banking issues to some kind of resolution—but not the one we as a society would have chosen.

**Conclusion**

All of these problems make the work of the Federal Reserve System interesting and challenging. Each of the businesses in which we engage confronts some unique situations in its dealing with its constituents, and the entire financial community is passing through a transition of unprecedented scope. I certainly do not want to paint a dark picture, however. Over the long term, the Fed's structure has proved its mettle, most recently in helping calm the jitters of the stock market but before that over the experience of three-quarters of a century. I am confident that the structures we have in place will continue to address the challenges I have described today, both here at home and in the global marketplace.