Testimony by

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Mr. Chairman and other members of the Committee, I appreciate this opportunity to discuss the Federal Reserve's conduct of monetary policy. As required by law, we have already delivered to the Congress our formal report detailing the performance of the economy and the implementation of policy. In my remarks this morning, I will summarize that discussion and expand further on some of the key factors bearing on monetary policy.

Recent Developments

Nineteen-ninety-four was a good year for the American economy. Economic growth quickened, with real gross domestic product expanding 4 percent over the four quarters of the year. In manufacturing, industrial production advanced nearly 6 percent. We now have enjoyed over three years of relatively brisk advance in the nation's output of goods and services, and this economic progress has been shared by many Americans. Payrolls swelled 3-1/2 million last year, and the unemployment rate closed 1994 at 5-1/2 percent, more than a percentage point below its level one year ago. And workers were producing more on average. Output per hour in the nonfarm sector increased about 1-1/2 percent over the four quarters of last year, suggesting some tilting up to the underlying trend of labor productivity that promises sustained and substantial benefits in the coming years.

The data that have been published in the first weeks of 1995 have offered some indications that the expansion may finally be slowing from its torrid and unsustainable pace of late 1994. While hours of work lengthened in January, employment growth slowed from its average of recent quarters and the unemployment rate rose. Moreover, recent readings on retail sales suggest a more moderate rate of increase, and housing activity has shown some softness. Nonetheless,
the economy has continued to grow, without seeming to develop the types of imbalances that in the past have undermined ongoing expansion.

Of crucial importance to the sustainability of the gains over the last few years, they have been achieved without a deterioration in the overall inflation rate. The Consumer Price Index rose 2.7 percent last year, the same as in 1993. Inflation at the retail level, as measured by the CPI, has been a bit less than 3 percent for three years running now—the first time that has occurred since the early 1960s. This is a signal accomplishment, for it marks a move toward a more stable economic environment in which households, businesses, and governmental units can plan with greater confidence and operate with greater efficiency.

As I have stated many times in Congressional testimony, I believe firmly that a key ingredient in achieving the highest possible levels of productivity, real incomes, and living standards is the achievement of price stability. Thus, I see it as crucial that we extend the period of low inflation, hopefully returning it to a downward trend in the years ahead. The prospects in this regard are fundamentally good, but there are reasons for some concern, at least with respect to the nearer term. Those concerns relate primarily to the fact that resource utilization rates have already risen to high levels by recent historical standards. The current unemployment rate, for example, is only a bit above the average of the late 1980s when wages and prices accelerated appreciably. The same holds true of the capacity utilization rate in the industrial sector.

Clearly, one factor in judging the inflationary risks in the economy is the potential for expansion of our productive capacity. If "potential GDP" is growing rapidly, actual output can also continue to
grow rapidly without intensifying pressures on resources. In this regard, many commentators, myself included, have remarked that there might well be something of a more-than-cyclical character to the evident improvement of America's competitive capabilities in recent years. Our dominance in computer software, for example, has moved us back to a position of clear leadership in advanced technology after some faltering in the 1970s. But, while most analysts have increased their estimates of America's long-term productivity growth, it is still too soon to judge whether that improvement is a few tenths of a percentage point annually, or even more, perhaps moving us closer to the more vibrant pace that characterized the early post-World War II period. It is fair to note, however, that the fact that labor and factory utilization rates have risen as much as they have in the past year or so does argue that the rate of increase in potential is appreciably below the 4 percent growth rate of 1994.

Knowing in advance our true growth potential obviously would be useful in setting policy, because history tells us that economies that strain labor force and capital stock limits tend to engender inflation instabilities that undermine growth. It is true, however, that, in modern economies, output levels may not be so rigidly constrained in the short run as they used to be when large segments of output were governed by facilities such as the old open-hearth steel furnaces that had rated capacities that could not be exceeded for long without breakdown. Rather, the appropriate analogy is a flexible ceiling that can be stretched when pressed, but, as the degree of pressure increases, the extent of flexibility diminishes. It is possible for the economy to exceed "potential" for a time without adverse consequences by extending workhours, by deferring maintenance, and by forgoing longer-term improvements. Moreover, as world trade
expands, access to foreign sources of supply augments, to a degree, the flexibility of domestic productive facilities for goods and some services.

Aggregative indicators, such as the unemployment rate and capacity utilization, may be suggestive of emerging inflation and asset price instabilities. But, they cannot be determinative. Policy makers must monitor developments on an ongoing basis to gauge when economic potential actually is beginning to become strained—irrespective of where current unemployment rates or capacity utilization rates may lie. If we are endeavoring to fend off instability before it becomes debilitating to economic growth, direct evidence of the emerging process is essential. Consequently, one must look beyond broad indicators to assess the inflationary tendencies in the economy.

In this context, aggregate measures of pressure in labor and product markets do seem to be validated by finer statistical and anecdotal indications of tensions. In the manufacturing sector, for example, purchasing managers have been reporting slower supplier deliveries and increasing shortages of materials. Indeed, firms appear to have been building their inventories of materials in recent months so as to ensure that they will have adequate supplies on hand to meet their production schedules. These pressures have been mirrored in a sharp rise over the past year in the prices of raw materials and intermediate components. There are increasing reports that firms are considering marking up the prices of final goods to offset those increased costs. In that regard, January’s core CPI posted its largest gain since October 1992, perhaps sounding a cautionary note. In the labor market, anecdotal reports of "shortages" of workers have become more common. To be sure, increased
wages are a good thing if they can be achieved without commensurate acceleration in prices, but they are not beneficial if they are merely a part of a general pickup in inflation. A hopeful sign in this regard, however, is that to date the trends in the expansion of money have remained subdued, and aggregate credit is growing moderately. These developments do not suggest that the financial tinder needed to support the ongoing inflation process is in place.

That kind of ongoing process also would be expected to involve a different expectational climate than seems to prevail today. Despite the marked improvement in consumer confidence overall, the survey readings on consumers' views of whether jobs are easy to get fall far short of the previous cyclical peak in 1989. Moreover, there is some evidence that the number of people voluntarily leaving their jobs is subnormal currently. This suggests that deep-seated job insecurity has not fully dissipated despite strong job growth recently.

Some analysts attribute this phenomenon to workers' concerns about losing health insurance and, for some, pension coverage if they change jobs. Whatever the cause, the lingering sense of insecurity doubtless has been a factor damping wage growth and overall labor costs. Since the latter, on a consolidated basis, accounts for roughly two-thirds of overall costs in our economy, slower wage growth combined with strong cyclical productivity growth has restrained increases in unit labor costs and hence in prices of final goods and services.

However, as overall output growth of necessity slows in an environment of high resource utilization, so will cyclical productivity growth. Moreover, if labor market tightness assuages job insecurity, pressures to raise wages might well intensify and unit
labor costs could accelerate. In the later stages of previous business cycles, declines in profit margins absorbed some of the increases in unit labor cost, but some were passed through into final goods prices and inflation picked up. Thus far in the current cycle, price increases have been muted, not only by subdued unit labor costs, but also by a prevailing concern among firms that, despite capacity pressures, enough slack remains in the system to foster competitive inroads on those who try to price above the market. But this form of discipline may also become less effective if pressures on resources persist. Consequently, it may be that these pressures will lead to some deterioration in the price picture in the near term, but any such deterioration should be contained if the Federal Reserve remains vigilant.

**Policy Action and Financial Markets**

It was to preserve and to extend the gains associated with low and declining inflation--and to avoid the instabilities and imbalances attendant to rising inflation--that we began the process of tightening one year ago. Our view at the time was that the accommodative policy stance we had adopted in earlier years to contain the effects of financial strains on borrowers and lenders was no longer appropriate once their balance sheets had been greatly strengthened. In these changed circumstances, absent policy action, pressures on capital and labor resources could build to the point where imbalances would emerge and costs and prices would begin to accelerate, jeopardizing the durability of the current expansion. In the event, the strength in demand and the potential for intensification of pressures on prices were even more substantial than envisioned when we started down that road. As we thought might be possible at this time last year, a significant upturn in inventory
investment induced a stronger economy than was generally anticipated. Additional strains on capacity became increasingly evident in higher prices at early stages of production processes.

Moreover, in financial markets, the effects of the policy firmings were muted to an extent by an easing of terms and conditions on bank loans and by a drop in the foreign exchange value of the dollar. In these circumstances, the Federal Reserve needed to take further steps to head off potential instabilities that would threaten the economic expansion. Over the past year, including our most recent action, we have raised money-market interest rates seven times, pulling the federal funds rate up 3 percentage points to 6 percent. Four of these actions were associated with increases in the discount rate. The discount rate now stands at 5-1/4 percent, or 2-1/4 percentage points higher than it was at the onset of tightening.

A stronger track for economic activity, higher credit demands, and a revival of inflation fears pushed up yields on securities with intermediate- to longer-term maturities from 1-1/2 to 3 percentage points over the past year. Most of that rise was posted in the first three quarters of 1994. As Federal Reserve action—particularly the 3/4 percentage point move in November—came to convince most market participants that policy would sufficiently restrain excess aggregate demand, those inflation fears and uncertainty premiums subsided a bit. This change in attitude, reinforced by signs of moderating demand, has helped to trim interest rates on long-term Treasuries and fixed-rate mortgages more than one-half of a percentage point from their peaks in November.

The adjustment in financial markets to rising interest rates was not, by any means, smooth. At the beginning of this process of tightening, many members of the Federal Open Market Committee (FOMC)
shared a concern that some market participants, made complacent by the relatively high and stable returns on long-term assets that had prevailed for a considerable stretch of time, had taken on substantial risk in their portfolios as they reached for yield—in some instances leveraging heavily. Taking account of this, our first three steps were small—with each translating into a 1/4 percentage point rise in the federal funds rate—to allow market participants an extended opportunity to readjust their portfolios in light of rising short-term rates. As markets became accustomed to the new direction of short rates, the FOMC picked up the pace of firming. Measures of bond-price volatility, both actual and those inferred from options prices, moved higher when monetary policy first began to firm, but rolled back much of that run-up as the year progressed.

While securities markets were turbulent from time to time in general, they remained quite resilient and performed their economic function of allocating credit quite well. Indeed, in some respects, credit has apparently been easier to get, likely in reflection of the improved assessment of financial prospects for borrowers and the larger capital cushions of many lenders. In many securities markets, quality spreads, when measured by the difference between rates on private and Treasury instruments of comparable maturities, have been quite thin. Commercial banks trimmed their own lending margins—effectively absorbing some of the rise in market interest rates before they got to borrowers—and exhibited a renewed aggressiveness in competing for loans. Bankers themselves reported to us further easing of terms and standards on business loans over the course of 1994 and into 1995. The pickup in total borrowing by nonfinancial businesses was focused primarily on bank loans and other shorter-term sources of funding. This shift toward shorter maturities, no doubt, importantly
resulted from the substantial run-up in longer-term interest rates over the year, but there probably was some role played by banks' efforts to make more loans and interest income, especially as trading income declined.

Households also increased the pace of their borrowing Double-digit annual growth of consumer credit helped to fund considerable outlays for durable goods, especially autos. This, too, may have been related, in part, to the eagerness of commercial banks to make consumer loans. And a wide menu of mortgage instruments gave home buyers some flexibility in coping with the rise in interest rates. The increasing share of mortgage originations at flexible rates--often involving concessionary initial terms--and, perhaps, some easing of loan qualification standards permitted some buyers who otherwise would not have been able to obtain financing to go ahead with their home purchases. All told, improved access to credit provided important support to spending.

Some Recent Lessons

Events of the past two months have taught us once again that the global nature of trade in goods, services, and financial instruments exerts an exacting discipline on the behavior of central banks. Technology has defeated distance by slashing the costs of gathering information and of transacting. Advances in computing and financial engineering during the past ten or fifteen years have enabled investors and speculators to choose among a wide array of investment instruments, allowing them to manage risks better and, when they chose, to exert their notions about future market movements forcefully through the use of leverage. The former, improved risk management, has done much to make markets more resilient, while the
latter, easier recourse to leverage, may add to the volatility of financial prices at times.

These developments have freed up the flow of international capital, thus potentially improving the efficiency of the allocation of the world's resources and raising world living standards. They have also permitted markets to respond more quickly and with greater force to a country's macroeconomic policies. This puts a special burden on the Federal Reserve, because the U.S. dollar is effectively the key reserve currency of the world trading system. In that role we enjoy an increased demand for our financial instruments. However, this role also heightens the share of the demand for dollar assets that is related to more volatile portfolio motives. The new world of financial trading can punish policy misalignments with amazing alacrity. This is a lesson repeated time and again, taught most recently by the breakdown of the European Exchange Rate Mechanism in 1992 and the plunge in the exchange value of the peso over the past two months. In the process of pursuing their domestic objectives, central banks cannot be indifferent to the signals coming from international financial markets. Although markets can be harsh teachers at times, the constraints that they impose discipline our policy choices and remind us every day of our longer-run responsibilities.

While there are many policy considerations that arise as a consequence of the rapidly expanding global financial system, the most important is the necessity of maintaining stability in the prices of goods and services and confidence in domestic financial markets. Failure to do so is apt to exact far greater consequences as a result of cross-border capital movements than might have prevailed a generation ago.
The Economic Outlook

Looking ahead to the prospects for the U.S. economy, we must remember that the nation has entered 1995 with its resources stretched. We do not now have the substantial unused capacity that made possible the especially favorable macroeconomic outcomes of 1993 and 1994—rapid real growth and stable or declining inflation. As a result, the likely performance of the economy in 1995 almost surely will pale in comparison with that of the previous two years. The growth in output arguably must slow to a more sustainable pace and resource utilization settle in at its long-run potential to avoid inflationary instabilities. Inflation, itself, is unlikely to moderate further and may even tick up temporarily. But overall, the performance of the economy still should be good. We expect growth to continue and inflation to be contained.

The Federal Reserve for its part will be attempting to foster financial conditions that will extend that good performance through 1995 and beyond. Our policy actions will depend on an ongoing assessment of a number of forces acting on the economy. One is the effects of the rise in interest rates that have occurred over the past year. The effects of higher interest rates on spending are difficult to pinpoint with any precision, because they occur with a lag and have a diffuse influence on the behavior of households and firms throughout the economy. Data rarely point in one direction, and the available information on spending fits this rule. As yet, the performance of the economy suggests a slowing in interest-sensitive spending, but mostly concentrated in housing activity. Our reading of the historical record is that the cumulative effect of higher interest rates should lead to a significant deceleration in spending. But, to
date, the jury remains out on whether the slowing that is in train will be sufficient to contain inflation pressures.

That judgment also rests importantly on a reading of business cycle developments more generally—cycles which often relate to the interaction of physical stocks and flows. These dynamics are most clearly seen in inventory investment, which has always been an important swing factor in the post-war era. In 1994, the increase in inventory investment in real terms added almost one percentage point to GDP growth. It appears most unlikely that business people will wish to build their stocks at the pace they did in 1994. But whether their actions with respect to inventories will turn that plus for growth last year into a significant minus in 1995 remains to be seen.

Incoming information does not suggest that a substantial inventory correction is imminent. Standard inventory-sales ratios remain on the low side of historical experience. Those ratios look even lower compared with historical experience if one subtracts wholesale and retail markups from the published inventory investment figures to get a better handle on the underlying physical units of stocks. Moreover, even if there were a swing in inventory investment, it would have a more muted effect on domestic production than the inventory cycles of just a few years ago. Rough estimates suggest that, currently, perhaps a quarter of the nominal value of all wholesale and retail stocks are imported whereas the share was substantially less as recently as the late 1970s.

Similar stock-flow interactions should be at work in spending for consumer durables. Large increases in real outlays for consumer durables over the past three years, partly financed in recent quarters by unsustainably rapid growth in the volume of credit, may well have
exhausted most of the pent-up demand that had accumulated when the economy was sluggish in the early 1990s.

In another area, actions of this Congress regarding the federal budget deficit will have important consequences for the economic outlook. A credible program of fiscal restraint that moves the government's finances to a sounder footing almost surely will find a favorable reception in financial markets. That market reaction, by itself, should serve as a source of stimulus that would help to offset in whole or in part the drag on spending that otherwise would be associated with reductions in federal outlays and transfers over time. It is also important to remember that a larger issue is at stake during these deliberations on the federal budget. Too much of the small pool of national saving goes toward funding the government to the detriment of capital formation. By trimming the deficit, those resources will likely be put to more productive uses, leading to benefits in the form of improved living standards.

Federal Reserve policy makers had to weigh these factors and more in determining their individual forecasts. As is detailed in the semiannual Monetary Policy Report, the central tendency of the forecasts of the Board members and the Reserve Bank presidents was that real GDP would grow at a rate of 2 to 3 percent over the four quarters of 1995. This slowing from last year's unsustainable pace was viewed as sufficient to bring output growth more in line with that of its potential, helping to stabilize the unemployment rate in the range of the past few months, near 5-1/2 percent. The governors and the Reserve Bank presidents forecast some edging up of consumer price inflation in 1995, with the central tendency of their forecasts bracketed by 3 and 3-1/2 percent. If we are to do our part in helping the economy operate at its fullest potential over time, we need to
remain watchful to ensure that this cyclical upswing in the inflation rate expected for 1995 does not become firmly entrenched.

**Monetary and Credit Aggregates**

In discussing these matters at its meeting earlier this month, the FOMC determined that the provisional ranges it had chosen for the monetary aggregates and domestic nonfinancial debt in July 1994 remained consistent with its current outlook for economic activity and prices. Moreover, these ranges conform to the projected deceleration in nominal income that is associated with our efforts to contain inflation and keep the economy on a sustainable path. The 1-to-5 percent range for M2 provides a reasonable benchmark for longer-run growth of this aggregate that could be expected if the behavior of its velocity was to return to its historical pattern under conditions of price stability. This would not be true for M3, however, which historically has grown faster than M2, but which has been depressed in recent years by a number of factors, including the difficult financial adjustment of banks and thrifts. If the broader aggregate M3 returns to its previous alignment, its range of 0 to 4 percent would have to be adjusted upward. At 3 to 7 percent, the monitoring range for the growth of total domestic nonfinancial debt is centered on the actual growth of that aggregate over the past three years, but is one percentage point lower than the monitoring range in 1994. While the performance of the monetary and debt aggregates compared with these ranges will continue to inform the FOMC's deliberations, the uncertainties about the behavior of their velocities will necessitate careful interpretation of their behavior and a watchful eye toward a wide variety of other financial and nonfinancial indicators.
Information Release

One final point. To make our policy intent as transparent as possible to market participants without losing our flexibility or undermining our deliberative process, at its latest meeting, the FOMC decided to preserve the greater openness of its policy making that it established last year. To that end, all decisions to change reserve market conditions will be announced in a press release on the same day that the decision is made.

The debate surrounding each policy decision will be reported, as is currently the practice, in comprehensive minutes of the meeting that are released on the Friday following the next regularly scheduled meeting of the FOMC. For students of monetary policy making, those minutes will be supplemented by lightly edited transcripts of the discussion at each FOMC meeting. Transcripts for an entire year will be released with a five-year lag. Continuing our current practice, the raw transcripts will be circulated to each participant shortly after an FOMC meeting to verify his or her comments and only changes that clarify meaning, say to correct grammar or transcription errors, will be permitted. A limited amount of material will be redacted from these transcripts before they are released, primarily to protect the confidentiality of foreign and domestic sources of intelligence that would dry up if their information were made public. A complete, unredacted version of the transcripts of each FOMC meeting will be turned over to the National Archives after thirty years have elapsed, as required by law.

After careful consideration, the FOMC believed that these steps, which essentially formalize the procedures that we have been using over the past year, strike the appropriate balance between making our decisions and deliberations accessible as soon as feasible.
and retaining flexibility in policy making, while preserving an unfettered deliberative process.

**Challenges Ahead**

I and my colleagues appreciate the time and the attention that the members of this Committee devote to oversight of monetary policy. Our shared goal—the largest possible advance in living standards in the United States over time—can be best achieved if our actions ultimately allow concerns about the variability of the purchasing power of money to recede into the background. Price stability enables households and firms to have the greatest freedom possible to do what they do best—to produce, invest, and consume efficiently.

But the best path to that long-run goal is not now, and probably never will be, obvious. Policy making is an uncertain enterprise. Monetary policy actions work slowly and incrementally by affecting the decisions of millions of households and businesses. And we adjust policy step by step as new information becomes available on the effects of previous actions and on the economic background against which policy will be operating. No individual step is ever likely to be decisive in pushing the economy or prices one way or another—there is no monetary policy "straw that broke the camel's back." The cumulative effects of many policy actions may be substantial, but the historical record suggests that any given change in rates will have about the same effect as a previous change of the same size.

Because the effects of monetary policy are felt only slowly and with a lag, policy will have a better chance of contributing to meeting the nation's macroeconomic objectives if we look forward as we act—however indistinct our view of the road ahead. Thus, over the
past year we have firmed policy to head off inflation pressures not yet evident in the data. Similarly, there may come a time when we hold our policy stance unchanged, or even ease, despite adverse price data, should we see signs that underlying forces are acting ultimately to reduce inflation pressures. Events will rarely unfold exactly as we foresee them, and we need to be flexible—to be willing to adjust our stance as the weight of new information suggests it is no longer appropriate. That flexibility, Mr. Chairman, applies to the particular stance of policy—not its objectives. We vary short-term interest rates in order to further the goals set for us in the Federal Reserve Act, namely promoting over time "maximum employment, stable prices, and moderate long-term interest rates."

Achieving those goals has become increasingly more complex in the nearly two decades since they were put into the Federal Reserve Act, as a consequence of technology-driven changes in financial markets in the United States and around the world. Suppressing inflationary instabilities—a necessary condition of achieving our shared goals—requires not only containing prevalent price pressures, but also diffusing unsustainable asset price perturbations before they become systemic. These are formidable challenges, which will confront policy—both fiscal and monetary—in the years ahead. It is, of course, unrealistic to assume that we can eliminate the business cycle, human nature being what it is. But containing inflation and thereby damping economic fluctuations is a reasonable goal. We at the Federal Reserve look forward to working with the Administration and Congress in meeting our common challenges.