Mr. Ferguson gives his views on exercising caution and vigilance in monetary policy in the United States Remarks by Mr. Roger W. Ferguson, Jr., a member of the Board of Governors of the US Federal Reserve System, on the occasion of the Distinguished Speaker Series, held at the Federal Reserve Bank of Atlanta on 9/7/98.

## Introduction

These are fascinating times for monetary policy. As we progress through the eighth year of the current economic expansion, economic growth has continued at a robust pace with unemployment reaching a 28-year low, while inflation has remained remarkably subdued. To be sure, not all recent developments have been altogether positive, especially considering the current situation in Asia. Nonetheless, the performance of the American economy in recent years has exceeded expectations in a rather extraordinary fashion.

But recent developments have challenged our understanding of the workings of the macroeconomy. Although the recent surprises of both low unemployment and well-behaved inflation have been quite favorable, they have been surprises nonetheless and not easily reconcilable with each other based on old relationships and our earlier assessment of the economy's potential.

These developments have increased the uncertainty about the economic outlook and about the appropriate response of monetary policy in general to new developments. I want to take this opportunity to discuss some implications of this increased uncertainty for the conduct of monetary policy.

Before starting, let me remind you that these views are personal and do not necessarily reflect the views of other members of the FOMC or the Board of Governors.

# Objectives and Strategy for Monetary Policy

To evaluate the proper strategy for monetary policy, we must first understand the Federal Reserve's policy objectives and then recognize the parameters within which policy operates in attaining these objectives.

The long-run goal of monetary policy is straightforward. The Federal Reserve Act mandates that we promote price stability and maximum employment. Sometimes this dual objective is misunderstood, with the misconception that these inflation and employment goals cannot be attained simultaneously -- that there is a tradeoff in the long run between one and the other. It is worthwhile repeating what I am sure all of you already understand well: the long-run goals of price stability and maximum employment are not mutually exclusive. Not so long ago, mainstream macroeconomists thought that employment and growth were by and large independent of inflation in the long run. But the evidence accumulating in the 1990s seems to suggest that low inflation contributes to real economic performance in ways not fully appreciated before. If anything, our approach to price stability, by reducing uncertainty and making long-run savings and investment decisions easier, seems to have enhanced the growth of productivity, real GDP, and employment.

This indirect benefit, of course, reinforces the price stability goal. It is the rate of inflation that monetary policy determines in the long run, and this means that price stability in a straightforward way is elevated to the status of the primary long-run goal of monetary policy.

Where a tradeoff can appear, and this I think is the source of occasional confusion, is over shorter periods. In the shorter run, inflation may rise and fall depending on where the economy is operating relative to its potential. When the economy has become overextended, with output exceeding the economy's potential, employment beyond sustainable norms, and production surpassing normal capacity limits, then prices have tended to increase at an ever faster rate. Likewise, when aggregate demand has fallen short of the economy's potential, inflation has tended to fall.

And this is where the short-run setting of monetary policy comes into play. By moving short-term interest rates, monetary policy can affect other financial conditions and end up exerting a substantial influence on aggregate demand. Decisions by businesses about investment and by households about housing and consumption are altered by changes in interest rates and other credit conditions. Monetary policy also can indirectly impinge upon other components of aggregate demand. As a result, in the shorter run, monetary policy can play an important role in stabilizing the economy from undesired fluctuations in economic activity and inflation. The strategy for monetary policy geared towards these shorter-run concerns can be briefly described. It is to restrict monetary conditions when the economy seems on the way to becoming overheated and inflation is threatening and ease monetary conditions when signs of weakness in demand appear on the horizon. But it is important that we pursue these short-run goals keeping in mind our primary long-run goal of price stability.

Of course, other forces besides the state of the economy relative to its potential can influence inflation in the short run. Even prior to the anomalous experience of recent years, which I will discuss later in detail, supply shocks, such as a sudden hike in oil prices, have dramatically affected inflation. Such forces can also cause short-term fluctuations in the economy that are, at least in part, beyond the control of monetary policy. However, active stabilization policy may still have a role to play as a buffer, helping the economy to absorb such disturbances in the short run, while counteracting any persistent deviations from price stability.

But monetary policy operates with a long lag, with a policy change exhibiting material effects on the economy (excluding the immediate impact on financial markets) only several quarters after its implementation. By some estimates it may be almost a year before the brunt of the effect of an interest rate change is felt on aggregate demand, although the influence appears sooner in some sectors of the economy than in others. And it may generally take longer still for a policy change to alter the course of inflation.

Consequently, active stabilization policy is most successful when it is pre-emptive, responding to early warning signals or forecasts of unfavorable developments on the inflation and employment fronts. In this regard, by identifying past regularities in relationships among economic variables and understanding their conceptual underpinnings, we can use the most recent economic data to update forecasts of where the economy is headed. Based on these forecasts we can then take steps to adjust the stance of monetary policy as necessary, in accordance with our objectives.

#### Uncertainties: Old and new

To be useful for monetary policy, forecasts of the future health of the economy need to be reasonably reliable. Good forecasts rest on theories about empirical regularities that can be confidently relied upon to provide guidance.

Regrettably, accepted theories are found lacking at times, empirical models break down, and forecasts based on them prove unusually inaccurate. If monetary policy were naively to follow guidelines based on past regularities that are increasingly failing to reflect new realities, it would unintentionally introduce undesirable gyrations in the economy. Thus, heightened uncertainties regarding the workings of the economy pose an additional source of stress in policy design.

To ascertain the appropriate framework for policy analysis we must first be aware of some key sources of uncertainty. In recent years, traditional views of the economy perhaps have been most challenged by the phenomenon of declining inflation despite increasing tightness in labor markets as evidenced by reductions in the unemployment rate to its lowest level in almost three decades. Many believe that there is an unemployment rate, the non-accelerating inflation rate of unemployment (the "NAIRU"), that would be consistent with a stable inflation rate, once other short-run influences on inflation dissipate. To these economists, inflationary pressures tend to increase when unemployment remains below the NAIRU and tend to decrease when unemployment stays above the NAIRU. For many years proponents of this view considered 6 percent a reasonable estimate of the NAIRU. Since 1995, however, the unemployment rate has been below this level, and substantially below of late, while inflation has continued to progress toward our price-stability objective. In response, over the past few years, many observers have revised their estimates of the NAIRU down by half a percentage point or more. Yet considerable uncertainty remains about the confidence with which the new estimates can be relied upon for evaluating inflationary pressures.

The NAIRU never was measured with precision; statistical inference has always provided a distribution of likely values around a point estimate. And several factors, for instance the demographic composition of the labor force, have long been known to introduce systematic variation in its value over time. Nonetheless, the uncertainties about how structural forces may be changing the NAIRU seem unusually large at present and cannot be ignored. And for some the present uncertainties have called into further question the basic usefulness of the concept, or at least of a point estimate held with any confidence.

A related uncertainty concerns the underlying trend growth of labor productivity. Until fairly recently, this trend had seemed to have been about constant since the mid 1970s. But there are many that believe that a pickup may have occurred in the last few years, and a faster productivity trend would help to explain the unexpectedly favorable economic growth-unemployment-inflation nexus in recent years. Unfortunately, much as with the NAIRU, our understanding of the forces that drive the productivity trend is less than perfect. Certainly, the investment boom of the current expansion has raised the amount of capital for each worker and contributed to an increase in labor productivity, and it may be that advancing technology is making the capital stock and workforce more productive. However, some of the recent pickup in productivity is the normal response to the faster output growth of late, so the degree to which there is a new higher trend remains an open question.

Another difficulty in assessing the current amount of slack in the economy, and a third uncertainty, concerns the divergent patterns in alternative measures of excess demand. Capacity utilization in manufacturing and the rate of unemployment have historically moved together over the cycle. Unexpectedly, they have diverged in the current expansion, in part as the surge in investment has kept capacity utilization in the manufacturing sector near its historic average while labor markets have become tighter and tighter.

Recent developments in South-East Asia also have contributed to uncertainty about the current monetary policy environment. One place where the effect of the crisis is being felt is in the prices of primary commodities. Since such commodities are traded on world markets, lower demand from Asia is reflected in lower prices world-wide, which benefit US producers that use commodities as inputs. This development serves as a short-run boost, a positive supply shock, to the US economy, one that also helps contain inflationary pressures, as does the more general decline in import prices as the US dollar appreciates.

But the Asian crisis can be expected to continue to have an adverse impact on trade-sensitive industries. Some evidence of a deterioration of our trade balance with the region's economies has already appeared. With little historical guidance to draw from, however, considerable uncertainty prevails regarding the extent to which the present Asian situation may contribute to slower US growth as well as the timing of such a slowdown. For instance, despite expectations that the crisis would have contributed to a slowdown in economic activity earlier this year, the economy's growth in the first quarter of this year exceeded even the remarkable performance of 1997. However, more recent data reflecting developments in the second quarter, including survey information, do give some evidence of a slowing in the overall economy, especially the manufacturing sector, perhaps due to Asian financial turmoil. As you might suspect, we will continue to watch incoming data quite closely as the year progresses to get a better handle on this situation.

To be sure, uncertainties such as these have loomed large at times in the past, and we can learn much from those experiences. The uncertainties faced by policymakers during the 1970s about the economy's potential provide an enlightening perspective on the present situation.

Following a period of rapid productivity gains during the 1950s and 1960s, the economy's performance during the 1970s appeared out of line with previous experience. Starting in 1973, in particular, inflation rose more than expected, at times considerably'so, while economic growth tended to disappoint expectations for a number of years. At first, it appeared reasonable to assume that the observed productivity'slowdown was temporary. Reflecting this assumption, for instance, the Council of Economic Advisors gave a 4 percent estimate of potential output growth in the 1974 Economic Report of the President, as would have been consistent with the earlier trends.

Increased uncertainty regarding this estimate was evident in the 1975 and 1976 Reports, but not until 1977 was the point estimate of potential output growth revised downward, to 3.6 percent. As the economy's performance continued to disappoint, further downward revisions followed, to 3 percent in 1979 and to 2.5 percent to close the decade in 1980. Only several years after the fact was a trend break in productivity recognized as likely to have occurred in 1973. And even today our understanding of the forces contributing to the slowdown is not entirely satisfactory.

As inflation accelerated as the 1970s continued, critics blamed the Federal Reserve's operating procedures for placing too little weight on money growth and too much on interest rates in the conduct of policy. In response, the Federal Reserve in late 1979 put added emphasis on monetary growth targets. But the FOMC abandoned the strict regime of targeting M1 through reserve quantities in 1982 once evidence accumulated that the character of M1 demand had been altered by the spread of interest-bearing NOW accounts. Later, the break in the behavior of M2 velocity during the early 1990s from its earlier historical pattern undercut the indicator properties of that aggregate as well. In 1993, the FOMC de-emphasized the role of the broader aggregates in policymaking. Despite recent tentative signs that the relationship between M2 velocity and the cost of holding M2 assets may be returning to its earlier historical norms, uncertainty persists regarding the continued stability of this relationship.

In terms of the performance of inflation and unemployment, the experience of the past few years has not been unlike a mirror image of the 1970s. While the consequences are a lot more pleasant, unexpectedly low inflation and unemployment do raise some complicated issues for monetary policy.

### Strategy in Uncertain Times: Caution and Vigilance

This account of the sources of uncertainty that we face in designing the proper course of monetary policy should not leave the impression that our task is so daunting that the policy waters are unnavigable. But such an account does serve a valuable purpose in reminding us that in designing policy we should recognize our ignorance as well as trust our knowledge.

For instance, we need to recognize the difficulties of inferring the true structure of the economy by interpreting incoming data. How do we know whether unexpected developments are just temporary moves away from stable longer-run relationships or are manifestations of changes in the underlying economic structure? In many cases this judgment is difficult to make with much confidence until considerably after the fact. In the meantime, we must bear in mind that the statistical relationships we work with are only loose approximations of underlying reality, which is constantly evolving, at least to some extent, in response to changes in technology, consumer preferences, and government policies. Our vision is always obstructed by some haze. But sometimes the picture is clearer than at other times.

Because of these difficulties in assessing the situation, a balanced judgment is required in evaluating whether historical regularities are indeed changing significantly and are not just subject to temporary aberrations. I believe that one should guard against holding to old truths that may no longer be valid, but one should also be cautious about declaring that permanent changes have occurred, for there are too many examples of proclaimed "new eras" that did not in fact come to pass. Erroneously dismissing the continued validity of old truths could result in bad policy just as easily as failing to correctly recognize new realities when change occurs.

What should be done when uncertainties seem particularly acute? When we suspect that our understanding of the macroeconomic environment has deteriorated appreciably, as evidenced by strings of surprises difficult to reconcile with our earlier beliefs, I think that the appropriate response is to rely less upon the future predicted by the increasingly unreliable old gauges and more upon inferences from the more recent past, weighing incoming data more heavily relative to more distant data in trying to discern the new environment.

Even for those of us who take this more pragmatic approach, there are challenges. Recent data, on which our understanding of the new reality is based, are subject to revision as more reliable or more complete sources become available. Moreover, there are often several indices for measuring underlying economic circumstances, requiring one to consider various measures simultaneously.

In the current context, the considerable uncertainty regarding our previous estimates of the capacity of the economy and its sustainable rate of growth in my judgment suggest the need to downplay forecasts of inflation based on those earlier assessments. By necessity, I believe heightened reliance needs to be placed on more recent observations of inflation and costs for inferring future inflationary pressures. We are not precluded from acting pre-emptively if new information were to tip the balance of risks in the outlook toward higher inflation, but are naturally a little more cautious in acting on forecasts as long as substantial uncertainty persists.

As a consequence, the lead times for pre-emptive action are likely to be shorter. And, in my judgment, we may have to rely more on measures other than apparent excess demand to get reliable indications of pending changes in inflationary pressures. For instance, unit labor costs may have to be watched especially closely, and the rate of unemployment perhaps less closely than we are used to. But a pattern of unsustainable growth characterized by a continuously declining unemployment rate still may increasingly suggest greater inflation risk. Even if the limits of the economy's growth potential have moved, there are still limits that need to be respected.

The increased uncertainty also implies that continued strong economic growth with low inflation is not outside the realm of possibility, and by adopting a cautious policy posture we may learn more clearly if that possibility is likely or remote. It should be clear that the creation of new jobs, by itself, is a welcomed development. There are benefits to all from the skill building that occurs on the job. It is important, however, that these jobs be the result of sustainable growth, and not the result of excesses and imbalances.

However, caution can be excessive, running the risk that inflation may in fact reappear and require a more wrenching readjustment than if it had been anticipated. Uncertainty should not induce paralysis. We need to be willing to move, even if cautiously, knowing that we may have to reverse our action if subsequent developments differ from our expectations. Moreover, we must be willing to act forcefully if information suggesting a threat to our goal of price stability becomes available. Inflation is an insidious tax on all of our citizens, perhaps impacting low and moderate-income citizens more than others because there are fewer ways available to them to protect their income and their assets against an erosion of purchasing power. If evidence of an incipient rise in inflation were to appear, decisive action would provide a counterweight to minimize the building of a temporary inflationary aberration into inflation expectations, which could be disruptive. And this is why caution and vigilance go hand in hand under these circumstances of increased uncertainty.

Moreover, it is at uncertain times such as these that the wisdom underlying the institutional structure of the FOMC becomes most apparent. A committee with broad representation can bring a variety of perspectives and analyses to bear on difficult economic problems. In addition, the real-time reports the presidents of the Federal Reserve Banks bring from their districts are especially valuable in the decision-making process at times like these because they afford a contemporaneous sense of what is going on in the economy. Such diversity

of information sources becomes particularly useful when our earlier assessment of the economy's potential has been drawn into question by surprises, even pleasant ones.

### Conclusion

A string of favorable surprises yielding strong growth, high employment and low inflation is by far the most pleasant environment under which to come to the realization that our understanding of the workings of our complex economy is not infallible. A sound economy with subdued inflation makes dealing with the greater uncertainty much easier indeed!

The Federal Reserve has an important trust to help safeguard the health of the United States economy. What we should do in the face of some uncertainty is to act cautiously while remaining vigilant, to take measured steps when necessary, and to adjust to the occasional unforeseen change. In this way we will raise the odds of achieving our goals of stable prices and maximum employment, not only providing benefits to Americans, but also a stable anchor for a volatile world economy.