Mr. Chairman, I am pleased to appear before this Subcommittee to testify on House Joint Resolution 409. I strongly support your resolution directing the Federal Reserve System to make price stability the main goal of monetary policy. Ultimately, the price level is determined by monetary policy. While economic growth and the level of employment depend on our resources and the efficiency with which they are used, the aggregate price level is determined uniquely by the Federal Reserve.

Efficient utilization of our nation's resources requires a sound and predictable monetary policy. H.J. Res. 409 wisely directs the Federal Reserve to place price stability above other economic goals because price stability is the most important contribution the Federal Reserve can make to achieve full employment and maximum sustainable growth.

The Benefits of Price Stability

Price Stability Leads to Economic Stability. An important benefit of price stability is that it would stabilize the economy. High and variable inflation has always been one of the prime causes of financial crises and economic recessions. Certainly, U.S. experience since World War II reaffirms the notion that inflation is a leading cause of recessions. Every recession in our recent history has been preceded by an outburst of cost and price pressures and the associated imbalances and distortions.

A monetary policy that strives for price stability, or zero inflation, as mandated by H.J. Res. 409 would help markets avoid distortions and imbalances, stabilize the business cycle, and promote the highest sustainable growth in our economy.

Price Stability Maximizes Economic Efficiency and Output. A market economy achieves maximum production and growth by allowing market prices to allocate resources. Money helps make markets work more efficiently by reducing information and transactions costs, allowing for better decisions and improved productivity in resource use. Stabilizing the price level would make the monetary system operate more efficiently and would result in a higher standard of living for all Americans. Money is a standard of value. Much of our wealth is held either in the form of money or in claims denominated in and payable in money. Money represents a claim on a share of society's output. Stabilizing the price level protects the value of that claim, while inflation reduces it.

When we borrow, we promise to pay back the same amount with interest. When we allow unpredictable inflation, we arbitrarily take from the lender and give to the borrower. When this condition persists, we create an environment in which interest rates rise once to accommodate expected inflation and...
again to accommodate the increased risk involved in dealing with an uncertain inflation. When inflation rises and becomes uncertain, people are forced to develop elaborate, complicated, and expensive mechanisms to protect their wealth and income, such as new accounting systems, markets for trading financial futures and options, and cash managers who spend all their time trying to keep cash balances at zero. It would be inefficient to allow the length of a yardstick to vary over time, and it is inefficient to allow inflation to change the yardstick for economic value.

While the evidence that price stability maximizes production and employment is not as direct or as extensive as I would like, it is persuasive to me. One source of evidence can be found in the comparison of inflation and real growth across countries. A number of studies find that higher inflation or higher uncertainty about inflation is associated with lower real growth.

Inflation adds risk to decision-making and retards long-term investments. Inflation causes people to invest scarce resources in activities that have the sole purpose of hedging against inflation. Inflation interacts with the tax structure to stifle investment incentives.

More evidence comes from the extreme cases, the cases of hyperinflation. There we see that economic performance clearly deteriorates with high inflation. Both specialization and trade decline as small firms go bankrupt and people return to home production for a larger share of goods and services.

Even a relatively predictable and moderate rate of inflation can be quite harmful. During the seven years of our economic expansion since 1982, inflation has averaged between 3 and 4 percent. While that is low by the standards of the 1970s, the purchasing power of the dollar has been reduced by about 25 percent. Interest rates continue to include a premium for expected inflation and a premium for uncertainty about inflation.

Research at the Federal Reserve Bank of Cleveland indicates that a fully anticipated inflation, with no uncertainty about future inflation, would reduce the capital stock through taxes on capital income. Using 1985 as a benchmark and using conservative assumptions, we have estimated that the interaction of an expected 4 percent inflation rate with the tax on capital income leads to a present value income loss in the American economy of $600 billion or more. This is an amount much greater than the output loss typically associated with recessions. This estimate is from a policy of a perfectly anticipated 4 percent inflation and includes only the welfare loss associated with the failure to fully index taxes on capital income. It ignores the greater damage done to market efficiency by making our monetary yardstick variable.1

Even beyond these costs, I believe that inflation diminishes productivity growth. Because the worldwide slowdown in productivity growth occurred simultaneously with the acceleration in inflation and the oil price shocks, the evidence is very difficult to sort out satisfactorily. But if I am correct in believing that inflation inhibits productivity growth, the present value of lost output from even a very small reduction in the trend of productivity growth would far exceed the adjustment costs associated with the transition to price stability.

The Crystal Ball Syndrome The limitations of economic forecasting are well-known. Analysis of forecast errors has shown that we often don't know that a recession has begun until it is well under way. At any point in time, the range of uncertainty around economic forecasts of business activity for one quarter in the future is wide enough that both expansion and recession are plausible outcomes.

The people who make forecasts and those who use them often get a false sense of confidence because forecast errors are not distributed evenly over the business cycle. When the economy is doing well, forecasts that prosperity will continue are usually correct. And when the economy is performing poorly, forecasts that the slump will continue are also usually correct. The problem lies in predicting the turning points. However, the turning points are the things we must forecast to prevent recessions.

The policy mistake was the excessive monetary growth of the 1970s, which allowed accelerating inflation and rising interest rates and ultimately led to the need for disinflationary monetary policies. The disinflationary policies were necessary to get our economy back to an acceptable level of real activity. Yet even today, we are apt to blame the recessions on policies that reduced inflation instead of blaming the policies that created the inflation to begin with. While recessions will occur even under an ideal monetary policy, they will not be as frequent or as severe. With price stability, we would not have recessions induced by inflation and the subsequent need to eliminate it.

Even if we thought that eliminating the business cycle was a desirable and healthy long-term goal, I believe it is impossible to do so. There are several reasons that prevent us from using monetary policy to offset nonmonetary surprises. First, we cannot predict recessions. Second, monetary policy does not work immediately or predictably; it works with a lag, and the lag is variable and poorly understood.

The Limitations of Monetary Policy

A Fallacious Trade-Off: Inflation for Prosperity Unfortunately, over the years we have come to believe that we can prolong expansion, or avoid recession, with more inflation. A look at recent history reminds us that there is no trade-off between inflation and recession. Although we don’t understand recessions completely, we have seen that they can be caused by monetary policy actions as well as by nonmonetary factors.

In the early 1980s we had recessions caused by monetary policy mistakes.

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Monetary Policy's Long and Variable Lags - We don't know exactly how a particular policy action will affect the economy. Macroeconomic ideas about monetary policy and its effect on real output have changed profoundly in the last decade as we have recognized that the effect of monetary policy depends importantly on how economic agents form and alter expectations about policy.

Even if we could predict recessions and wanted to vary monetary policy to alleviate them, we still face an almost insurmountable problem — monetary policy operates with a lag. Moreover, the length of the lag varies over time, depending on conditions in the economy and on public perception of the policy process. The effect of today's monetary policy actions will probably not be felt for at least six to nine months, with the main influence perhaps two to three years in the future. The act of trying to prevent a recession may not only fail, but may also create a future recession — via an inflation — where otherwise there would not have been one.

Economic agents, businessmen and consumers alike, do not act in a vacuum. The political forces operating on a central bank make inflation always a possibility. Uncertainty about future inflation adds risk to future investments. Uncertainty about future inflation will raise real interest rates, drive investors away from long-term markets, and delay the very adjustments needed to end the recession. The more certain people are about the stability of future monetary policy, the more easily and quickly inflation can be reduced and the economy can recover.

Lessons We Should Have Learned - If we have learned anything about economic policymaking in the last 20 years, we ought to have learned to think about policy as a dynamic process. To claim that "in order to reduce inflation, we must have a recession," is a wrongheaded notion that completely ignores the ability of humans to adapt their expectations as the environment changes.

People do their best to forecast economic policies when they make decisions. If the central bank has a record of expanding the money supply in attempts to prevent recessions, people will come to anticipate the policy, setting off an acceleration of inflation and misallocation of resources that will lead to a recession.

An economy often goes into recession following an unexpected burst of inflation because people have made decisions that were based on an incorrect view of the future course of asset prices and economic activity. The central bank can help prevent the need for such adjustments by providing a stable price environment. Moreover, price stability will be the optimal setting for adjustments in business inventories and bad debts, should such adjustments be necessary.

- The Importance of Adopting House Joint Resolution 409

Sound Policies Minimize Uncertainty

Economic policies must have clear objectives, verifiable outcomes, and rules that are consistently adhered to in order to minimize uncertainty. Predictable, verifiable policies ensure that long-term planning and resource allocation decisions will be efficient. Sound policy thus requires a resolute focus on the long term and resistance to policies that, while expedient in the short run, introduce more uncertainty into an already unpredictable world. If enacted, H. J. Res. 409 would make a valuable contribution to this important objective.

In the long run, inflation is the one economic variable for which monetary policy is unambiguously responsible. The zero inflation policy called for in H. J. Res. 409 satisfies the key requirements of sound policy: it is clear, it is verifiable, and it has consistent rules. Unlike other rates of inflation, zero inflation is a policy goal that will be understood by everyone.

Responding to Multiple Goals - The Federal Reserve Reform Act of 1977 amended the Federal Reserve Act so that it now requires the Federal Reserve "...to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." However, it is the Federal Reserve's responsibility to decide how best to pursue those goals.

Because of the multiplicity of goals established by Congress for the Federal Reserve, the Federal Reserve can choose which goal it emphasizes at any moment. Such discretion increases the likelihood that political and special-interest groups could try to influence the Federal Reserve to pursue the policy that is currently important to that group.

In this respect, the Federal Reserve's situation is different from that of West Germany's central bank, which is also independent. More than one goal is specified by law for that bank, but West German law states that the goal of price stability is to be given highest priority whenever another goal might conflict with maintaining price stability. This is a major reason why West Germany's price level only doubled between 1950 and 1988, while the U.S. price level quadrupled.

Since current law requires the Federal Reserve to promote maximum employment, stable prices, and moderate long-term interest rates, the Federal Reserve must choose a viable strategy to accomplish this mission. Two approaches seem plausible.

One approach would be for the central bank to try to achieve a balance among
its three Congressionally mandated objectives. The Federal Reserve could use its own judgment about what balance among the objectives to pursue, and could change that balance from time to time, depending on its view of how the economy works and what course is broadly acceptable to the public. In essence, this is the practice that the Federal Reserve has followed. It has strived to balance desirable economic conditions such as full employment, economic growth, and low long-term interest rates with low rates of inflation. But the major drawback to this approach is its feasibility. To strike a balance among the mandated goals requires that they be reliably linked to one another. Furthermore, monetary policy would need to be capable of influencing simultaneously all these economic dimensions in the desired directions and quantities.

While monetary policy is capable of influencing the economy in the short to intermediate run, over long periods of time monetary policy can only affect the rate of inflation. The rate of inflation, in turn, affects all dimensions of economic performance, including output, employment, and interest rates. Maximum production and employment and low interest rates can be achieved only with price stability.

By its very nature, a balancing act among complex economic goals causes substantial confusion about the Federal Reserve’s intentions. Such confusion could be avoided to a large degree if Congress or the Federal Reserve assigned priorities to the goals.

A more promising approach is to select one objective — the only one that the Federal Reserve can influence directly. Under the provisions of H.J. Res. 409, the Federal Reserve would seek to maintain a stable price level over time. Price stability is defined as an inflation rate so small that it does not systematically affect economic decisions. The definition may appear less specific than some would like, but I believe that the decisions of economic agents will be very important in monitoring success in achieving price stability.

In practice, the size of the inflation premium estimated to be found in long-term interest rates, surveys of the public’s inflation expectations, and other market-generated measures of inflation expectations can be very useful. If policy is credible, both the inflation component and the inflation uncertainty-risk premium would be eliminated from interest rates. Temporary and unforeseen factors will cause the price level to deviate from the desired course. It would be a mistake to try to keep some inflation index on target each and every quarter, or even each and every year.

Price stability can be achieved by holding the money supply (as measured by M2) on or close to a path which is consistent with price stability over long periods. The relationship between money and the price level over long periods of time is stable and strong. However, the link between money and the economy over periods perhaps as short as a year is loose enough to afford the Federal Reserve considerable leeway in responding to problems and crises — as long as economic agents believe that the future value of money will be stable. Clearly, this resolution would not prevent the Federal Reserve from providing liquidity in times of financial crises, such as the stock market crash in 1987.

Announcing a Commitment to Price Stability. Announcement of a commitment to price stability, as embodied in H.J. Res. 409, would enhance the ability of Congress to hold the Federal Reserve accountable for achieving the goal. Central-bank accountability is appropriate in a democracy and, in fact, Congress has the ultimate authority to change the Federal Reserve’s goal.

A legislative commitment to price stability would also enhance the Federal Reserve’s independence from political pressures; it would pursue that goal. A commitment by Congress to price stability would reduce the effectiveness of political pressure to deviate from that goal. Thus, a distinction can be made between a central bank that is accountable for long-run performance and a central bank that can be influenced to pursue short-run goals that might be incompatible with desirable long-term economic performance.

The commitment to price stability supported by a legislative mandate would foster the credibility of the Federal Reserve. Improving the Federal Reserve’s credibility would strengthen the expectation that prices will be stable, and would contribute to price and wage decisions that would make price stability easier to achieve and maintain.

Arguments Against Adopting House Joint Resolution 409 Are Weak

What About the Transition Costs? A commitment by Congress and the Federal Reserve to achieve price stability would entail adjustment costs. Adjustment costs would arise from two sources: contractual obligations and the credibility problem, or uncertainty about whether price stability would be achieved and maintained. The contractual costs can be alleviated with an appropriate adjustment period. H. J. Res. 409 recognizes that abrupt policy changes can be disruptive and provides a phase-in period to help reduce adjustment costs.

Much of our day-to-day economic activity is conducted under contracts and commitments that extend over longer periods of time and that embody the expectations of a continuing moderate inflation rate. Most of these contracts will expire in the next few years. The disruption to business and the arbitrary wealth redistribution of an abrupt adjustment to price stability would be greatly reduced by an appropriate phase-in period. H. J. Res. 409 gives us five years to get to price stability — a period long enough to reduce substantially the transition costs.
The second set of adjustment costs emanates from the expectations of economic agents. As the Congressional Budget Office points out in its recent *Economic and Budget Outlook*, if everyone believed that inflation would be reduced to zero, and planned accordingly, these costs would be very low. The Federal Reserve has stated that it intends to reduce inflation to zero or to low levels, but it has not committed to a specific timetable for eliminating inflation. Consequently, the result is that the public in general and the markets in particular wonder just how serious we are in those intentions, or whether we will switch our priorities to some other goal, as we have in the past.

Large-Scale Econometric Model Estimates of the Transition Cost
Economists have not made much progress in estimating the transition costs of eliminating inflation. Frequently, econometric models that embody a large number of complex relationships and variables are used to estimate the adjustment costs.

For manageability, econometric models are built with many simplifying assumptions, one of which is the presumption that economic agents are backward-looking in the way they form and change expectations. In these models, expectations, which in effect determine adjustment costs, are formed from past experience, and are changed only slowly as the future unfolds.

The presumption that expectations change only slowly inevitably generates estimates of high transition costs. The real question about a change in policy as specified by H. J. Res. 409 is how forward-looking economic agents would behave under a fully credible and fully understood policy change. Backward-looking models are relatively useless in answering this question.

In almost every case, such models are constructed to display the effects that are consistent with the model builder’s theories and biases. Almost all of the large models are based on the dual notion that the only way to eliminate inflation is to raise the unemployment rate. Naturally, these models will find that eliminating inflation is very costly. Economists have not made much progress in estimating the transition costs. Frequent exercises have been conducted many times in the past, and they have consistently overestimated the costs of eliminating inflation and ignored the benefits of doing so. I might also observe that those who really believe the analytical structures contained in these models logically should advocate an acceleration of inflation because the models would predict great benefits from doing so.

One member of the Council of Economic Advisers, an expert on such matters, has developed large econometric models with sluggish resource adjustment induced by labor contracts. Even in these models, there is almost no short-run cost to eliminating inflation with a credible policy change. The reason is simply that, in these models, people are assumed to change their behavior in response to the policy change.

As the CBO study states, "...inflation could be reduced relatively painlessly by lowering inflationary expectations." A commitment by the Congress and the Federal Reserve would enhance credibility and convince economic agents to begin to base decisions on gradual elimination of inflation over a five-year period. The transitional costs presented elsewhere in the CBO study then would be grossly overestimated.

A consistent commitment to a long-run policy goal of price stability is important. One of the worst things we could do is to eliminate inflation for a while and then return to high inflation later. H.J. Res. 409 would contribute to an important change in the policy process, focusing it toward consistent long-run goals and away from reactions to each new report of economic activity. Each policy action would become part of a policy process that is consistent with long-run price stability.

Fiscal Policy Is No Obstacle to Price Stability
Federal budget deficits should not compromise either the Federal Reserve's goal of price stability or the adoption of a specific timetable to achieve it. I do not mean to suggest or imply that current fiscal policy is ideal, appropriate, or the result of bad monetary policy. Savings are too low, at least partly because of budget deficits, and measures to address our savings shortfall must include measures to reduce the deficit. However, while we strive for better fiscal policy, we should recognize that monetary policy cannot offset whatever harm may result from fiscal policy; indeed, it can only add to those costs.

We are all familiar with the argument that large federal budget deficits cause high interest rates, forcing the Fed to ease monetary policy in order to keep interest rates at levels consistent with full employment. This argument ignores the fact that both the federal budget deficit and, more important, government spending, at least measured relative to the economy, have been falling for the past several years and should continue to do so.

There is, of course, legitimate concern that the progress in deficit and expenditure reduction might cease or even be reversed, for any number of reasons. How should such a reversal influence monetary policy? Even if fiscal policy choices were to put upward pressure on interest rates, and there is little consensus among economists that this is the case, it is far from clear that the Federal Reserve can do anything to alleviate the economic consequences of that problem. Ultimately, it is real interest rates that affect the consumption and production decisions of individuals and businesses and the allocation of resources over time. Real rates of return are based on the productivity of labor, capital, and other real assets in a society, and have very little, if any, connection with monetary policy.
In an inflationary environment, nominal rates of return include an inflation premium to compensate lenders for being repaid in money of reduced purchasing power. The correlation between monetary policy and nominal interest rates that dominates discussion in the financial press tells us next to nothing about the relationship between monetary policy and the real interest rates that govern the allocation of resources over time. Every movement in the federal funds rate does not produce equivalent changes in real interest rates, in the productivity of our capital stock, or in any of the other important real variables that affect economic activity. The fact that monetary policy exerts relatively direct control over the federal funds rate does not imply that real interest rates can, similarly, be controlled by monetary policy.

It is unnecessary and undesirable for sound monetary policy choices to await sound fiscal policy choices. Sound fiscal policy decisions, like sound private economic decisions, require the stable inflation environment that H.J. Res. 409 would direct the Federal Reserve to provide. The tax-related distortions and economic complexities associated with even stable, positive rates of inflation argue strongly for price stability.

- Conclusion

If H. J. Res. 409 is enacted and the Federal Reserve commits to an explicit plan for price stability, the transition period will soon be over, and any costs that arise because of this policy change will be outweighed by the benefits. These benefits will be large and permanent, and will far outweigh the costs of getting there.

H. J. Res. 409, if enacted, would be a milestone in economic policy legislation because it would shift the focus of monetary policy away from short-term fine-tuning to the long term, where it belongs. It would enforce accountability for the one vital objective that the Federal Reserve can achieve. It would officially sanction those sometimes unpopular short-run policy actions that most certainly are in our nation’s long-term interest. It would make clear that the Federal Reserve cannot achieve maximum output and employment without achieving price stability. I fully support House Joint Resolution 409.

- Footnote