\gerry\jj011895
D R A F T January 12, 1995

Anti-Inflation Monetary Policy Is Pro-Growth

Jerry L. Jordan
President and Chief Executive Officer
Federal Reserve Bank of Cleveland

Downtown Dallas Rotary Club
Union Station
400 South Houston Street
Dallas, Texas

Wednesday, January 18, 1995
Noon

Introduction

Thank you for welcoming me. I am very pleased to have this opportunity to address the Rotary Club of Dallas.

I want to talk about some timely and important ideas: inflation, what does and does not cause inflation, and why inflation is harmful. In particular, I want to explain why the Federal Reserve System's efforts to prevent inflation are good for economic growth, not bad for growth.

The Media Say the Fed Wants to Restrict Economic Growth

Numerous media reports in 1994 asserted that the Federal Reserve is trying to **reduce** the growth rate of the economy. The articles were prompted by increases in both the discount rate and the federal funds rate. As you may know, the Fed controls the discount rate and has a strong influence on the federal funds rate.

If the media are correct, we are to believe that the Fed wants less growth so that there will be less inflation.

The New York Times stated in September that "...reports [of vigor in housing and employment] fanned fears that overly rapid growth could revive inflation."[1]

At the same time, *The Wall Street Journal* reported that "the Fed's current goal is to slow the economy to an annual growth rate of about 2.5% to avoid a significant acceleration of inflation."[2]

Actually, they have it backwards; the Federal Reserve wants ***less*** inflation so that there will be ***more*** growth.

Monetary policies of the Federal Reserve reflect the belief that maintaining price stability does not require high interest rates and less growth, but rather that price stability will promote lower interest rates, faster real economic growth, and higher standards of living.

Sources of the Myth that Price Stability is at Odds with Growth

Why do so many people believe that price stability is at odds with rapid real economic growth?

Some acquire this mistaken notion merely because it is repeated so often. However, just because many people say something is true does not make it so. There was a time, we all know, when most people said the earth was flat.

One origin of the mistaken belief that rapid real growth causes inflation is probably the economic concept known as the "Phillips curve." The Phillips curve incorrectly indicates an inverse relationship between the inflation rate and the unemployment rate. That is, to get unemployment down, you have to let inflation go up, and vice versa.

When people believed that there was a tradeoff between inflation and unemployment, they reasoned that elected officials could choose from among the various possible combinations of these two measures to get the one that was best for the nation. If policymakers wanted a little less unemployment, they could "buy" it by accepting or inducing somewhat more rapid inflation.

Today, few economists think that there is any **long-run** tradeoff between inflation and unemployment. Instead, they believe there is a natural rate of unemployment, and no

amount of inflation can permanently hold unemployment below that rate.

Of course, there may be a **short-run** tradeoff between inflation and unemployment, but it occurs only when people are surprised by an increase in inflation. An unexpected increase in inflation causes workers' current wages to have less real purchasing power than they had before prices went up. In economists' jargon, real wages have fallen. This makes workers more of a bargain for employers, causing an increase in hiring. Thus, the unemployment rate might be pushed lower than its natural rate, temporarily.

However, workers will soon realize that inflation is eroding their real earnings. When they do, they will demand bigger wage increases. Barring any further unexpected increase in the inflation rate, real wages will be restored to their previous level, workers will no longer be such a bargain to businesses, and unemployment will return to its previous level, even if inflation remains at its new, faster pace.

What I'm saying is that any short-run tradeoff between inflation and unemployment can be exploited only with ever-higher rates of inflation. And, when workers come to expect ever-higher rates of inflation, if they can be surprised at all by inflation, it would only be with inflation rates that increase explosively into hyperinflation.

Clearly, persistent attempts to reduce unemployment through an inflationary monetary policy would inflict long-term damage to the economy.

Reasons Why Inflation Is Harmful

Although inflation can't give us any permanent increases in employment, it can and does harm the economy in several ways. It causes inefficiency in the marketplace,

discourages saving and investment, and shifts investment toward short-lived capital goods. It also redistributes wealth and income, leading to wasteful uses of productive resources. Let me now elaborate on how those four harms occur.

First, inflation hampers market efficiency by reducing the clarity of price signals. When a price or wage rises during inflation, it is often unclear how much, if any, of the increase is a relative increase, and how much merely reflects the rise in the general level of prices.

This lack of clarity lowers the efficiency with which decisions can be made by individuals about occupations, employment, and consumption; and by businesses about output levels, materials, and equipment-labor ratios. To reduce these inefficiencies, individuals and companies incur the costs of shopping around for current price information.

In contrast, price stability enables markets to work more efficiently. History shows that countries tend to prosper when they allow their markets to work. One need look no further than the differences in prosperity between South Korea and North Korea, between the former West German and East German republics, and between Taiwan and the Chinese mainland to see the effects of preventing markets from working efficiently.

Second, uncertainty about future rates of inflation increases the risk of investments. Lenders respond by adding a risk premium to interest rates. In turn, the higher rates suppress investment and shift it toward shorter-lived capital goods.

The third problem is that inflation interacts with the U.S. tax code to discourage saving and investment. Saving is discouraged because interest earned on savings placed in financial assets is fully taxable, even though part of the interest is merely an inflation

premium -- additional interest intended to compensate for the fact that inflation erodes the purchasing power of principal. Investment is discouraged because business profits are overstated and therefore overtaxed -- the result of a tax code that allows depreciation only of the original purchase cost of capital equipment, not of its current, inflation-boosted replacement cost. These disincentives are a drag on economic growth.

Fourth, one of the biggest problems with inflation is that when it is unanticipated -- which is usually the case -- inflation unfairly redistributes wealth and earned income. Wealth is shifted from lenders to borrowers because inflation reduces the purchasing power of the dollars used for repayment. Real income is shifted from people on fixed incomes to those who are able to raise their wages or prices faster than the rate of inflation.

Redistribution of wealth and income is harmful to the economy as well as unfair to individuals. To illustrate how inflation harms the economy, it helps to distinguish between the level of output and the standard of living. Imagine an increase in thefts in an economy that is at full employment. There is likely to be a decline in production of some other goods and services so that production of door locks and car alarms can be increased, in an effort to prevent the redistribution of wealth from honest people to thieves. Although there is no change in the level of real output, the new mix of output yields a lower standard of living.

Similarly, inflation leads to socially wasteful but personally necessary activity to avoid loss (or to obtain gain) from the resulting redistribution of wealth. For example, families hedge against inflation by buying houses, land, and nonproductive assets such as gold, for which they would otherwise have no need. Firms increase their inventories, and analysts sell forecasts to help people anticipate inflation.

Another hedge against unexpected inflation that we are all familiar with is that financial institutions develop products like adjustable-rate mortgages. Most people who refinanced a mortgage in the last few years spent a substantial amount of time evaluating the relative merits of fixed- versus adjustable-rate mortgages. A key part of that evaluation involved trying to guess how interest rates would change in the future -- in essence, trying to forecast how much inflation there would be.

Although these activities are sensible for the firms and people who engage in them, they are socially wasteful because they merely alter the pattern of inflation's redistribution of wealth, rather than adding to wealth. Even if this activity involves no reduction in the **level** of real output, the changed **mix** of output yields a lower standard of living.

Why the Fed Wants Price Stability

The Fed want to prevent inflation so as to prevent all of inflation's harms to the economy. That is, the Fed wants price stability, not for its own sake, but because it fosters prosperity.

Price stability does not require that all, or even any, prices remain the same. There will always be changes in prices of individual goods and services in response to changes in supply and demand for each of those products and services. As some prices go up, others go down, and still others remain unchanged.

Price stability, then, means price **level** stability, a state in which individual prices change, but the average of prices -- the price level -- does not. The price level is usually measured by some index of prices, such as the Consumer Price Index, which is a weighted

average of prices for a large number of items that are important to consumers.

Price level stability means no inflation. More precisely, it represents an inflation rate that averages zero over time and has only small and offsetting deviations from zero. It is an inflation rate so negligible that it does not affect economic decisions. With price stability, people can make decisions regarding the future without concern about an erosion of the purchasing power of money. When the price level is stable, the dollar's value remains essentially constant over time.

Causes of Inflation

Milton Friedman, one of the most noted economists of this century, has described inflation as "always and everywhere a monetary phenomenon."[3] His point is that it is always caused by excessive growth of the money supply, not by individual price increases, rising interest rates, dollar depreciation, or, as is currently bandied about, by economic growth. I am in total agreement, so I want to take a few minutes to talk about four things that some people mistakenly believe are causes of inflation.

First, Roger Blough, who used to be the president of U. S. Steel Corporation, once said that "Steel prices cause inflation like wet sidewalks cause rain."[4] He meant, of course, that individual price increases, even for important products, do not cause inflation.

With supply and demand changes, the price of a particular product can increase. Buying that higher priced product then absorbs more purchasing power, leaving less to spend on other products. As demand for other products falls, prices of those products also fall, leaving the overall price level unchanged. This **must** happen unless the public's total

(nominal) purchasing power is increased through an expansion of the money supply.

Inflation occurs when money supply growth allows the public's purchasing power to rise faster than the supply of goods. Since price increases for individual items cannot compel any change in total purchasing power, they cannot cause inflation.

Second, high interest rates are not inflationary. Instead, inflation -- more precisely, expectations of inflation -- causes lenders to demand (and borrowers to acquiesce to) higher interest rates. Lenders want interest rates to be increased by an amount large enough to compensate them for the expected inflation. This "inflation premium" is necessary because, when there is inflation, loans are repaid with dollars that have less purchasing power than the dollars that were loaned. Inflation premiums in interest rates add to the cost of borrowing, but only enough to offset the loss of purchasing power that is expected from inflation.

Higher interest rates do add to production costs, but those cost increases are not inflationary, just as other production cost increases are not inflationary. Rising interest costs pressure producers to reduce some of their other production costs, or to raise prices. If some producers do boost their prices, some other prices must fall so that the average of all prices remains unchanged -- unless monetary policymakers allow the money supply to expand at an inflationary pace. As explained earlier, increases in individual prices do not cause inflation.

Third, dollar depreciation does not cause inflation. When the dollar depreciates against foreign currencies, as it did against the Japanese yen and the German mark during 1994, the depreciation is likely to be accompanied by price increases for some imported goods. However, increases in individual prices do not cause inflation. Unless monetary

policy itself is inflationary, those individual price increases must be offset by declines in other prices.

Instead of dollar depreciation causing inflation, inflation sometimes is the cause of depreciation. That is, dollar depreciation is one of the channels through which an inflationary monetary policy causes prices to rise.

However, dollar depreciation can have causes other than inflationary monetary policy in the United States. For example, dollar depreciation would be likely even with U.S. price stability, if other nations are experiencing **falling** prices. Similarly, U.S. inflation can be accompanied by dollar **appreciation** if other nations have more inflation than we do.

The best way for monetary policy to promote exchange rate stability is to achieve price stability, while recognizing that this provides no guarantee against dollar depreciation or appreciation.

Finally, and perhaps most important, economic growth does not cause inflation. At first glance, it seems strange to even expect that increasing the output and availability of goods will cause the prices of goods to rise. An increase in supply tends to **reduce** prices.

However, suppose that some manufacturers and other producers incur higher costs, perhaps for overtime wages, as they attempt to push output beyond the normal limits of their productive capacity. If those producers then raise their prices to cover their extra costs, other prices must fall and the average of prices must remain unchanged, again, unless policymakers allow the money supply to expand at an inflationary pace.

One reason for the mistaken belief that growth causes inflation stems from confusion over real growth versus nominal growth of the economy. Real growth occurs when there is

an increase in the physical volume of goods and services produced. Nominal growth, on the other hand, is an increase in the dollar value of output, whether that rise involves greater real output, a higher price level, or both. If nominal growth exceeds real growth, there **must** be inflation. However, achieving price stability does not require less **real** growth. Rather, it requires that nominal growth be no greater than the amount of real growth.

The key point is that real growth does not cause inflation and, in maintaining price stability, monetary policy will not restrain real growth. Rather, by avoiding inflation, the Fed's monetary policy will **enhance** real economic growth.

Monetary Policy Should be Used to Prevent Inflation

Monetary policy is the only means for preventing inflation. Since inflation is always and everywhere a monetary phenomenon, and since the Fed is responsible for controlling the growth of the nation's money supply, only the Fed has the ability to prevent inflation and erosion of the purchasing power of the dollar.

Moreover, producing price stability is the most important task that can be assigned to monetary policy. A largely discredited idea is that, whenever the economy goes into recession, it has a natural tendency to stay there and so monetary and fiscal policy actions are needed to get us back to full employment. This so-called stagnation view of the economy has been largely displaced by the view that the economy is inherently resilient.

That is, if an unexpected shock results in an increase in unemployment, the inherently resilient economy will naturally move back toward full employment without any policy stimulus. This will happen because unemployed workers and owners of idle productive

resources have an obvious incentive to lower their wages and prices, or increase their skills and efficiency, so that they can again earn income. Since the economy is inherently resilient, monetary policy does not need to be used for stimulative purposes and can instead be directed toward maintaining price stability.

Using monetary policy to maintain price stability is consistent with the goals that Congress has established for the Federal Reserve System. The underlying purpose of the congressional mandates is to promote improvement in the standard of living. Since economic growth leads to higher living standards, and since price stability promotes economic growth, a monetary policy that fosters price stability is fully consistent with congressional intent.

Price Stability Does Not Require High Interest Rates

[NOTE: This section probably should be omitted to shorten the speech.]

Achieving price stability is not dependent on high interest rates. In fact, stable prices produce lower interest rates by eliminating the necessity for interest rates to include premiums that compensate lenders for inflation expectations and inflation rate uncertainty.

There are many interest rates. Their differences are determined by risk, maturity, liquidity, administrative costs, and the tax treatment of interest earnings and payments. The general level of interest rates is determined by the demand for investment funds, the public's willingness to save, inflation expectations, and uncertainty about the inflation rate.

The Fed does not determine all interest rates unilaterally. It has substantial influence on short-term rates, but its influence on long-term rates is mostly through its impact on the public's expectations about inflation.

The Fed controls its own discount rate for funds borrowed through the Fed's "discount window," but that rate's effect on other rates is minimal because the amount of funds loaned through the discount window is small, and because Fed policymakers generally do not allow the discount rate to affect the federal funds rate. The federal funds interest rate has a larger impact on the economy because market forces anchor other short-term interest rates to it. The Fed controls the federal funds rate by controlling the supply of federal funds. Currently, the Fed pursues its monetary policy goals by keeping the federal funds rate at a level it considers consistent with those goals.

Long-term interest rates, which are much more important than short-term rates for decisions about investment and consumption, include an inflation component and a real component. The real component reflects the interaction of the demand for investment funds and the public's willingness to save. When the economy expands, as it did in 1994, the pressures to invest and consume increase, reducing the incentive to save and increasing the incentive to borrow. This results in a higher real component in interest rates. It is likely that a large portion of last year's rise in long-term interest rates was a result of this process. There is no way of knowing whether the inflation premium in long-term rates increased or decreased.

Throughout 1994, lenders and borrowers directed a great deal of their attention to guessing whether the Federal Reserve would cause (or allow) an increase in the federal funds rate. While some of this attention came from people concerned about how their borrowing costs might change, much of it stemmed from uncertainty about the Fed's commitment to price stability. In the economic conditions of 1994, if the Fed had not allowed or caused the

federal funds rate to rise, lenders would have seen that as a lack of commitment to restrain money supply growth to a rate compatible with price stability. Such a perception would have prompted prudent long-term lenders to insist on higher interest rates on bonds to compensate for increased inflation expected during the terms of the bonds.

If they were confident that the Fed would maintain price stability, long-term lenders would have little interest in the short-term tactics used to achieve that goal. Unfortunately, full confidence is lacking that the Fed will remain faithful to price stability. One reason is that the central bank has never received a clear mandate from Congress to give primary attention to maintaining stable prices.

Another reason for lack of full confidence is that the Fed has not backed up its oft-stated assertion that its goal is price stability by issuing a timetable for achieving that objective. A firm timetable, coupled with a clear definition of how price stability will be measured, would set a standard by which the Fed's performance could be monitored and would enable the central bank to gain credibility by continuously meeting that standard. Anything less allows skeptics to continue to wonder: "Does the Fed really mean it?"

Almost Is Not Enough

The current U.S. inflation rate of about 3 percent seems quite low to many people, especially when compared with the high inflation rates of the 1970s and early 1980s. Some even think it is low enough. Although the inflation rate has improved, full and permanent price stability remains an important goal.

When we have inflation, even at a low rate, the purchasing power of money is being

eroded. It is hard to imagine why that would be preferable to stable purchasing power for the dollar, just as it is hard to imagine how it could be desirable to have the length of an inch or yard shrink from one year to the next. So many things are measured in dollars that having a measuring stick that shrinks in size each year is a large and unnecessary inconvenience.

A low rate of inflation will substantially erode the purchasing power of money over time. For example, it now takes nearly $15 to purchase what $1 would have bought when the Federal Reserve System was organized in 1914, even though annual inflation since then has averaged only 3.4 percent. If inflation were to continue at the 3 percent average annual rate of the last three years, prices would double in less than 24 years.

Conclusion

Since the rate of inflation is already low, stabilization of the purchasing power of money is within reach. This is an especially good time, as the popular phrase says, to "go for it." Only the Federal Reserve System has the policy tools needed to achieve price stability, and achieving that goal is the greatest contribution that the Fed can make to the growth of national prosperity.

If there is time, I'll be glad to answer a few questions.

ENDNOTES

1. "New Signs of Growth Fan Inflation Fears," *The New York Times*, September 30, 1994, page 1.

2. David Wessel, "Fed Decides against a Rise in Rates Now," *The Wall Street Journal*, September 28, 1994, page A2.

3. Milton Friedman, Wincott Memorial Lecture, London, September 16, 1970.

4. Roger Blough, quoted in *Forbes*, August 1, 1967.