Inflation Hawk = Employment Dove

Center for the Study of American Business
Washington University in St. Louis
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I start with a confession: my title this morning reflects personal frustration over the public debate concerning a critically important monetary policy issue. The issue concerns the relationship between monetary policy and unemployment. My frustration reflects the fact that I am often called an "inflation hawk," with the implication, at least as it touches my thin skin, that I care little about unemployment. Further, the implication seems to be that those urging the Federal Reserve to keep pushing interest rates lower and lower are the true friends of the unemployed. I reject this analysis completely, and I'll tell you why. Low inflation, far from being the enemy of the unemployed, is a friend.

Let me outline this argument, which I'll then develop in more detail, step by step.

- First, economists of all stripes agree that over the long run there is no significant tradeoff between the average rate of inflation and the average rate of unemployment. Therefore, on average over time, an easier monetary policy does not yield lower unemployment but does yield higher inflation, all other things being equal. By the same argument, a tighter monetary policy does not yield higher unemployment, but does yield lower inflation.
- Second, so long as the inflation rate remains low, policy actions changing the federal funds rate up or down should be expected to have little effect on bond yields in the long run. In particular, a higher fed funds rate that heads off incipient inflation is friendly to bond investors.
- Third, in the short run, there may be effects that bring criticism on the inflation hawks—a higher interest rate might increase unemployment, and a lower interest rate might reduce unemployment. But, given the long-run relationship already discussed, analyzing short-run issues requires special care to be sure that the short run is linked correctly to the long run.
- Fourth, we need to examine issues of variability around the averages. I believe there is a compelling case that both inflation and unemployment are more variable when the average inflation rate is higher. I also believe that Fed policy can contribute to employment stability while keeping inflation low, but this belief is more of a conjecture than something I can demonstrate.
- Fifth, and finally, I insist that the only reasonable way to think about monetary policy is in the context of uncertainty. Policymakers have to play the odds. A fair assessment of the performance of policymakers requires a Friday view, not a Monday-morning view after the game has been played. In an inherently uncertain environment, policymakers should not be criticized for being unable to guess what shocks the future will bring, only for making bad bets *before* the future arrives.

Before proceeding, I want to emphasize that the views I express here are mine and do not necessarily reflect official positions of the Federal Reserve System. I thank my colleagues at the Federal Reserve Bank of St. Louis for their comments, but I retain full credit for errors.

THE LONG RUN

Let's begin the analysis with a discussion of long-run relationships. The issue here is the relationship between variables on the average over a substantial period, such as a decade. The calendar period must be long enough, depending on the relationship being examined, that adjustments to transitory events, or shocks, are complete.

Thirty years ago, macroeconomists were embroiled in a spirited debate as to whether there was a long-run tradeoff between inflation and unemployment. On the one side were economists who believed that the economy could generate lower unemployment on the average if society were willing to accept higher inflation, at least up to a point. Practically speaking, the debate centered around the possibility that the U.S. economy operating permanently at, say, 5 percent annual inflation would generate lower average unemployment than would the economy operating at an annual inflation rate of, say, 1 percent.

Economists who believed in the long-run tradeoff believed that experience in the United Kingdom and the United States supported their view. They also believed that that there were some theoretical reasons for believing in the tradeoff. Economists on the other side of the debate believed that markets are fundamentally regulated by well-informed, profit-making firms and well-informed, utility-maximizing households. In such an economy, we should not expect that ongoing inflation could "buy" lower unemployment. The central reason is that everyone should, at least eventually, see through the fiction of rising wages and prices. Nothing "real" should be affected by ongoing inflation. Why, for example, should anyone work more hours per week, or delay retirement, when wages and prices are rising at 5 percent per year than when wages and prices are rising by 1 percent per year?

By the mid-1970s, this issue was decided. Mainstream macroeconomists across the spectrum of professional opinion, except at the very ends, agreed that neither theory nor evidence justified the view that there could be a long-run tradeoff between inflation and unemployment. Thus, a government policy that yielded permanently higher inflation would not buy lower unemployment. Nor would policies yielding lower long-run inflation cost higher unemployment on average over the long run.

In the context of long-run analysis, the outstanding issue came to be the numerical estimate of what some called the "natural rate of unemployment," and what others called the "non-accelerating inflation rate of unemployment," or NAIRU. (I'll skip over the esoterica of possible differences in the meanings of these two terms.) If the inflation rate settled down to a steady 5 percent per year, or 8 percent per year, or 1 percent per year, what would be the equilibrium rate of unemployment in the labor market? The profession converged on a number in the neighborhood of 6 percent, although some thought the estimate should be higher and some lower.

Although many involved in this debate thought their estimates of the natural rate were secure, others believed that such estimates carried a high degree of imprecision. Most believe that today the natural rate is lower than it used to be, although I do not intend to dig into this subject this morning.

The important point is that the profession did converge on the proposition that the rate of unemployment would not be lower in the long run if society accepted a higher rate of inflation. The upshot of this argument is my first and most important point this morning: The proposition that a hard line on inflation will yield higher unemployment is simply not accepted in the economics profession. Except at the fringes, economists who are politically liberal or politically conservative on a wide variety of other issues agree on this proposition.

I think, in fact, that on the average in the long run it is possible that *lower* inflation, all other things equal, may be associated with lower unemployment. Moreover, I believe there is a compelling case that lower inflation, all other things equal, is good for economic growth. A market economy works more efficiently, and fiscal and regulatory distortions are less serious, when the inflation rate is low and stable. The Federal Reserve can contribute to maximum sustainable economic

growth by pursuing policies leading to price stability, or very low and stable inflation if you prefer to state the goal this way.

Over the long run, however, rates of unemployment and economic growth are determined primarily by nonmonetary conditions. It is easy to demonstrate this point by comparing U.S. and Eurozone experience. Both areas have had similar inflation rates over the last 15 years or so, but unemployment in major continental European countries has been far higher than in the United States. France, for example, has had an unemployment rate above 9 percent every year since 1984.

Although my focus this morning is on monetary policy and unemployment, I should comment briefly about the implications of my argument for interest rates. Over the long run, the average level of nominal interest rates is determined primarily by the average rate of inflation. The higher the rate of inflation is on the average, the higher average interest rates will be. A successful monetary policy that maintains price stability, therefore, is not only employment-friendly but also interest-rate-friendly. I do not know what policy actions will be appropriate later this year, but I want to emphasize that it is simply not true that increases in the funds rate cause lasting increases in bond rates. For example, the Fed raised the federal funds rate significantly over the course of 1994, but by December 1995, the 30-year Treasury bond rate ended up *lower* than it had been in January 1994. From reading the financial press over the last couple of weeks, it seems that bond investors are jittery over the possibility that the Fed might raise the federal funds rate later this year. Investors ought instead to be *reassured* that the Fed will, if necessary—and I emphasize the *if*—raise rates to keep inflation low. Bond investors have far more to fear from a sustained rise in the rate of inflation than they do from the ups and downs of the federal funds rate required to keep the economy on an even keel.

To summarize, higher inflation does not buy lower unemployment; if anything, price stability yields the lowest possible unemployment rate, all other things being equal. Moreover, price stability contributes to achieving maximum sustainable economic growth. Economists can and do argue about the magnitudes of these employment effects, but broadly agree on their direction. Finally, maintaining low inflation on the average will be bond-investor-friendly.

THE SHORT RUN

If there is no long-run tradeoff such that unemployment is lower when inflation is higher, then perhaps the matter at issue concerns a short-run tradeoff. What might be involved here?

There are several different ways to examine the short-run logic. Suppose, for example, we consider a hypothetical experiment in which a central bank has been pursuing a policy for a long time that yields 2 percent annual inflation. Now suppose the central bank changes its policy to one that yields a long-run rate of inflation of 2.5 percent per year. During the transition to the higher rate, the more expansionary monetary policy might for a time bid down the unemployment rate. But given the fact that there is no long-run tradeoff, the decline in unemployment will be temporary. The net result is that the easier monetary policy yields a temporary reduction of unemployment and a permanent increase of inflation.

Another version of this argument goes something like this: Suppose a favorable disturbance—such as a technological change that raises the rate of productivity growth—impacts the economy. If the central bank maintains monetary policy as is, perhaps the inflation rate drops from 2 percent per year to 1.5 percent per year. A somewhat more expansionary policy, on the other hand, might keep the inflation rate at 2 percent per year but yield a temporary bonus: reducing the unemployment rate for a time. In this case, the unchanged monetary policy "buys" a permanently lower inflation rate in exchange for an unchanged rate of unemployment; the alternative monetary policy keeps the inflation rate unchanged but yields a temporarily lower unemployment rate. These two cases are essentially the same except that the end result is a different inflation rate. The cases are the

same because the marginal influence of monetary policy per se, ignoring other things going on such as the change in productivity growth, is the same in both examples.

I have no doubt that excessive Fed tightening would raise the unemployment rate. To use an absurd example, if the Fed were to raise the federal funds rate from its current level of 5 percent to 10 percent tomorrow and keep it there, the unemployment rate would rise substantially. Some people seem to reason that if a big increase in the funds rate would cause a big increase in the unemployment rate, then a small increase in the funds rate would logically cause a small increase in the unemployment rate. But that argument is flawed. When economic conditions are shifting, as they almost always are, small adjustments in the federal funds rate, one way or the other, may be required to maintain price stability and prevent the development of inflation or deflation, either of which would destabilize employment.

To summarize the short-run argument, under some conditions it is true that a more expansionary monetary policy might yield temporarily lower unemployment, and a less expansionary monetary policy might yield temporarily higher unemployment. There may be times when the Federal Reserve will have to make an explicit choice about whether to pursue, or permit, these temporary effects. It is also true that a major policy mistake could quickly have major effects on unemployment. The problem is to figure out how to avoid mistakes by making timely adjustments in the federal funds rate to keep the economy on a smooth, noninflationary track.

LOW INFLATION AND EMPLOYMENT STABILITY

I believe that the traditional analysis of both the long run and the short run is correct and important. Economists have also noted another important point that bears directly on today's policy issues—the higher the average rate of inflation, the more volatile the economy seems to be. The variability of both inflation and employment is statistically higher when the average rate of inflation is higher. The recessions of 1973-75 and 1981-82, which were quite severe, were a direct consequence of rising inflation and rising inflation expectations. Between 1965 and 1985, unemployment may have averaged around 6 percent, but it swung between 3.5 and 9.7 percent on an annual average basis. If we compare two economies, both with the same average unemployment rate, everyone will agree that the economy with the more stable unemployment rate is preferable to the one with a widely fluctuating unemployment rate.

The correlation between a fluctuating inflation rate and a fluctuating unemployment rate is far from accidental. Uncertainty by businesses and households about the inflation rate leads them to make decisions that turn out, willy-nilly, to be mistaken in the light of subsequent events. It is simply very difficult to plan efficiently when prices in the aggregate are changing rapidly. Sometimes the mistakes are on one side, and sometimes on the other side. The net result of an unstable inflation environment is that swings in the business cycle become unavoidable. Therefore, my personal conviction is that the central bank must not take chances with the inflation rate; if inflation gets away from us, a recession will not be far behind. It is for this reason that I consider my stance as a so-called inflation hawk to be that of a friend of the unemployed, or potentially unemployed, should there be a recession.

My conjecture is that timely policy actions can help to stabilize employment without affecting either the long-run average rate of unemployment or average rate of inflation. For example, I believe that timely Fed action last fall helped to prevent financial market disturbances following the Russian default from feeding into the real economy. Still, I believe that we know so little about these issues on a systematic basis that the proposition needs to be offered as a conjecture. And because our knowledge is so limited, we have to be careful as policymakers that efforts to cushion short-run shocks do not turn into policy actions that inadvertently are more expansionary or contractionary than is consistent with the paramount long-run objective of price stability.

PLAYING THE ODDS

An essential feature of policymaking under uncertainty is that the policymaker must play the odds. Of course, we want to stack the odds as much in our favor as possible, but having done everything we can to improve the odds, we must still make some bets based on probabilities. This view of the policy problem is not peculiar to monetary policy, but prevails in all areas of public and private decisionmaking where actions today must be taken in the context of uncertainties about the future, and even about the current situation.

One of the frustrations I feel as I read all the policy advice directed the Fed's way is that some commentators fail to analyze which risks are worth taking and how to calculate the odds. A comprehensive policy analysis requires that we consider all possible scenarios and their probabilities. The next step is to consider various policy options and the likely economic outcomes under each of the scenarios. That's how I approach policymaking. Of course, I also take account of the fact that policy is not etched in stone but can be adjusted over time, that policy actions yield policy effects with a lag, and so forth.

It is easy to see that the exercise becomes complex pretty quickly, but that is what must be faced in any comprehensive policy analysis. I myself am convinced that a significant increase in inflation, especially if accompanied by growing concerns in the marketplace about the future rate of inflation, would adversely affect economic outcomes. It is important to understand that policy depends on both the desired outcome and the flow of data about the economy that affects the probabilities of various scenarios. It is therefore not just unwise but impossible for me to forecast my own position at the next FOMC meeting, because that position is subject to revision based on new information.

ENDPIECE

I'll finish by drawing the threads of this argument together, but in a way that is a bit different than my argument above. The Federal Reserve's contribution to maximum sustainable economic growth is to pursue monetary policy focused on price stability, to maintain an efficient and reliable payments system, and to foster a safe banking system. The central bank is not responsible for other key drivers of economic growth. These include, in no particular order, the education system, the maintenance of public safety, the efficient allocation of resources through governmental tax and spending programs, the culture of entrepreneurship, invention and technical progress, and so forth.

Suppose the central bank were successful in achieving low and steady inflation through a control mechanism based on regulating of the amount of money in the economy. Then interest rates—which by assumption are not directly controlled by the central bank—would fluctuate up and down as various events and shocks occurred. In fact, the Federal Reserve does use the federal funds rate as its short-run policy instrument. A successful policy requires, therefore, that the Fed adjust the funds rate up and down as necessary to be consistent with price stability. What actions are necessary is never perfectly clear, and mistakes are always possible. But it simply cannot be the case that every federal funds rate increase is worker-unfriendly. If that were the case, then we should expect a policy yielding price stability and full employment to be accompanied by a permanently declining trend to interest rates, a nonsensical expectation.

Finally, a policy yielding price stability will also yield a flat trend around which the federal funds rate will fluctuate. The long bond yield, which reflects the average of expected short rates over the life of the bond, should fluctuate relatively little in this environment. Timely Fed action to raise the funds rate when required to maintain price stability is, therefore, not only worker-friendly but also bond-investor-friendly.

I've said my piece, and hope that from now on the press will refer to me as an "unemployment dove." But I doubt it!