

# Coping with Monetary Policy Risks

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**E**ven a casual reader of the newspapers these days knows that the outlook for the U.S. economy is less certain than it seemed only a month or two ago.

Perhaps the single most visible sign of greater uncertainty is the reported decline in auto sales and production. Also highly visible are declines in equity prices since their peaks last March, publicity concerning problems faced by many of the dotcom companies and power problems in California.

Those who do not follow monetary policy issues closely probably have the sense that everything was going smoothly before, whereas just recently everything has instead become highly uncertain. In fact, those of us who live and breathe monetary policy know that the uncertainties are always there. The subject I will discuss today is how we should think about the problem of managing monetary policy knowing that various risks are always in the picture.

As with many business problems, there are useful ways of thinking about risks that can help to design policies that make good sense. It would be a mistake to push the analogy too far, but there are common elements in managing monetary policy risks and managing business risks. For example, at the Federal Reserve we are acutely aware of risks in our cash operation, where employees handle large amounts of currency and we have potential vulnerabilities that arise when armored trucks come into Federal Reserve buildings to receive or disgorge cash. Careful and continuous monitoring of risks when things are going well is an important part of assuring that things continue to go well.

I'm going to talk about monetary policy risks under four major headings. First, we need to be clear about the objectives of monetary policy. Second, we need to identify various sources of risk. Third, we need to examine various options for mitigating the risks we face. And finally, we need to examine the cost of risk mitigation.

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 responsibility for errors.

## OBJECTIVES

The most fundamental objective of monetary policy is to contribute to maximum sustainable economic growth for the United States. The principal contribution that monetary policy can make to economic growth is to maintain low and stable inflation. High inflation is inevitably also variable inflation; such conditions clearly interfere with the efficiency of business planning and often provoke public policy responses, such as price controls, that damage efficiency. The United States experienced such a period during the 1970s; inflation was on average rising from 1965 to 1980 and was quite variable year-to-year. Productivity growth was relatively low, and the United States experienced two severe recessions in 1973-75 and 1981-82. Clearly, the 1965-80 inflation was quite costly; this was a period during which U.S. monetary policy did not cover itself with glory.

Maintaining low and stable inflation is the most important monetary policy goal. Only the

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central bank can deliver success on this front; other government policies can make life more or less easy for the central bank, but at the end of the day sustained inflation cannot occur unless a central bank permits it.

Suppose the central bank delivers on low and stable inflation. Can it also contribute to reduced fluctuations of employment and output? I believe the answer is yes.

It is important to be very clear about this point, and so I'll discuss it carefully. First, both economic theory and actual experience make clear that the central bank cannot reduce the average rate of unemployment by accepting higher inflation. In fact, low and stable inflation may contribute to an unemployment rate that is on the average lower than it would otherwise be at a higher rate of inflation. The evidence is not clear on this issue, so let me adopt the assumption that the average level of unemployment is independent of the monetary policy being pursued, at least within a significant range. The question at hand, then, is this: If the central bank cannot reduce the average level of unemployment, can it reduce fluctuations of unemployment around the average level? The answer, I believe, is that timely adjustments in monetary policy can indeed, within limits, help to stabilize employment and output growth. However, the central bank does not have the power to prevent all fluctuations in output and employment; trying too hard could lead to destabilizing the inflation rate, which would create additional problems. Most importantly, rising inflation historically has been associated with significant recessions, as was true in 1973-75 and 1981-82.

## SOURCES OF RISK

To understand how monetary policy responses can stabilize employment and economic growth, we need now to turn to the sources of risk. One extremely important source of risk to monetary policymakers is incomplete knowledge, including especially an inadequate understanding of how the economy works. The Federal Reserve has a long-standing research program that is

intended to strengthen knowledge of the economy. Fed researchers may also contribute their expertise in designing new surveys and data collection programs to enable us to track current economic developments better.

One outcome of economics research over the past 30 or 40 years is that we have a much clearer understanding of long-run relationships than we did before. We know enough now to say with reasonable confidence that sustained long-run inflation is not inevitable or beyond central bank control. Moreover, we know that accepting higher long-run inflation will not raise employment and economic growth, and may well compromise success on these and many other important economic objectives. However, improved understanding of short-run dynamics has not accompanied our improved understanding of long-run relationships. In fact, what I think I've learned from research on short-run dynamics is that no claimed short-run regularity is reliable. Perhaps this statement is too strong, but the common idea 30 years ago that we could say with some confidence was that, for example, 25 percent of the ultimate effect of higher money growth on GDP would appear in the first quarter, another 20 percent in the next quarter, and so forth, has largely disappeared from discussion. We know that the economy's speed of response depends on lots of things, and it just isn't possible to be confident about how fast things will happen.

In addition to the Fed's important longer-run efforts to improve knowledge, the Fed employs staff all over the country to obtain the latest possible information about the current state of the economy. For example, the research division at the Federal Reserve Bank of St. Louis maintains an extensive list of contacts in the business community and surveys these people in the weeks just before an FOMC meeting. In addition, I make some phone calls myself and host luncheons at the Bank for business executives knowledgeable about the current state of the markets in which their firms work. The boards of directors of the St. Louis Fed and its three Branches in Memphis, Little Rock, and Louisville are also important sources of current intelligence on what is going

on in the economy. This information often leads to the developments that show up later in formal statistical information collected by the Bureau of Labor Statistics and other government statistical agencies.

A second source of risk is shocks of various kinds that simply cannot be foreseen. An excellent recent example was the Russian default in August of 1998 and the financial market disruption in many Asian countries that followed. At various times, the U.S. economy has been buffeted by unpredictable energy price shocks, both positive and negative, a familiar story to all of us at this very time.

Another type of risk we face arises from market misperceptions. The aggregate U.S. economy is the sum of all of the individual parts of the economy. Market participants make decisions based on their perceptions of their own situations and of likely future events. Sometimes the markets develop misperceptions about the situation and as a consequence make mistakes of various kinds. These mistakes are often only clear in retrospect.

Another source of risk is financial instability. A dramatic example was the stock market crash in 1987. Less dramatic instabilities have also been important from time to time in the past. In the fall of 1998, policymakers had to contend with significant problems in the U.S. securities markets. Historically, the United States has suffered from financial instability following bank failures. I would not want to say that market economies are prone to instability, but it is certainly true that instabilities of various kinds do arise from time to time.

There is no need to extend this list of examples. The message should be clear: Policymakers always face the risk that unexpected developments will tend to push the economy off track. Insofar as possible, we need to design monetary policy with these risks in mind.

## MITIGATING RISK

I have already mentioned briefly the importance of long-run research and information

gathering in mitigating the risks that arise from incomplete knowledge. I would add the observation that the Federal Reserve's role is not by any means the only or the largest effort in this area. Economics research in universities and other government agencies is extremely important. Federal statistical agencies provide most of the data we rely on. Unfortunately, these agencies are all too often affected by budget pressures that do not pay adequate attention to the payoff to our society from a firmer statistical base upon which to make policy decisions. Those of us with policy responsibilities need to explain how adequate resources for statistical agencies can help to reduce the risks we face.

A critically important aspect of mitigating risk over time is to understand that monetary policy must be viewed in the context of a behavioral regularity on the part of the central bank and not in terms of individual policy actions. That is, we must view individual policy actions as reflecting an ongoing policy that in principle is derived from rule-like behavior on the part of the central bank. The markets ought to be able to predict with substantial accuracy how the central bank will respond to various circumstances that may arise. In the absence of such predictability, central bank responses to events will often take the market by surprise; analysts will think that central bank policy is random, idiosyncratic, unpredictable, mysterious, and any of a variety of other adjectives that might be applied. Clearly, such a state of affairs is not desirable.

An implication of viewing central bank policy in terms of rule-like behavior is that every individual policy action ought to fit, or be consistent with, the policy rule or regularity. Policy actions that are irregular in some sense necessarily have precedent value. Whether the Federal Reserve acts or fails to act in any given set of circumstances not only affects the outcome for the economy in the near term but also affects the future, as market participants in the years ahead will naturally look back on the Federal Reserve's past behavior to provide clues as to likely policy responses. So, a policy of mitigating risks over time requires

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that the central bank view its policy actions in a long-run context and not just case by case by case.

This dynamic aspect of monetary policy is quite similar to the problem faced in many business contexts. For example, in deciding whether to settle a case out of court, a company always must consider the precedent value of the current action. A company might well decide to take a particular case to court even though the case at hand would involve legal costs in excess of the cost of settling simply because settling might generate more cases in the future involving similar demands. In conducting monetary policy, as with many business problems involving risk analysis, this dynamic aspect of the connection between present actions and future economic behavior and expectations is a critical part of getting the analysis right.

I am often struck by the assumption that many seem to have that the Federal Reserve has some special insight into the future that no one else has. In fact, the Fed finds itself often surprised by shocks of various kinds. These shocks are simply impossible for the Fed or anyone else to forecast. However, the effects of shocks on the economy depend critically on the extent of financial robustness. It is extremely important that we maintain a financial system that is able to withstand the inevitable shocks and surprises. As a banking regulator, the Federal Reserve has direct responsibility in this area for the banks it supervises; and, the Fed contributes importantly to the overall design of banking regulation and supervision through its advice to the Congress on banking legislation and its cooperative work with the other federal banking regulators—the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation. The Fed also works closely with state banking authorities.

Issues of financial robustness, however, extend far beyond the areas of direct Federal Reserve jurisdiction. For example, an issue I discussed at some length in a lecture in December concerned the ambiguity about federal support for government sponsored enterprises, or GSEs. The market prices debt obligations of GSEs as if there is a federal guarantee of these obligations,

and yet legally no such guarantee exists for most of these enterprises. Should there be an unpredicted shock of some sort to one of these firms, the likely outcome is substantial market disruption as a consequence of the uncertainty over the government's role. This vulnerability in our financial system can be and should be repaired; Congress ought to make clear the extent of its willingness to underwrite or guarantee the obligations of the GSEs, and if the guarantees are to be made explicit, Congress ought to examine carefully whether the GSEs are managing their affairs in a way that is consistent with the inherent risks they face.

One of the sources of risk I noted earlier concerns market misperceptions of various kinds. Market misperceptions of the way in which monetary policy is conducted are from time to time a problem. In recent years, the Federal Reserve has paid considerable attention to the issue of clarifying its policy. I have devoted quite a bit of effort in my speeches to explain how Fed policy works and what the major issues are. The issue of policy clarity is not one that can be fixed permanently, for conditions change and memories falter. Thus, I believe that it is extremely important that those of us involved in monetary policy spend as much time as possible talking with audiences to explain what the Fed is doing and why.

One of the sources of risk that I mentioned was that there are shocks or surprises of various kinds that cause difficulties in the markets. One such class of surprise is the policy surprise itself. I believe that Federal Reserve policy should be as regular and predictable as the inherent uncertainties of the situation permit. I think it fair to say that in recent years most policy surprises have really not been policy surprises per se but instead policy responses to surprises in the economic environment. When economic conditions appear to be changing rapidly, a policy response may well be appropriate. In this sense, the policy action may be a surprise from the perspective of what was anticipated several months earlier.

Avoidable policy surprises arise when sudden policy U-turns occur that were not predictable on the basis of anything observable. The most

significant such policy surprise I can remember during my professional life was the imposition of wage and price controls on August 15, 1971. Almost as surprising was the sharp turn towards monetary policy restraint on October 6, 1979. That policy surprise, however, was the inevitable consequence of replacing the failed monetary policy of the 1970s with a firm commitment by the Federal Reserve to a new policy that would end the inflation. In general, when policy is on track, it will work most effectively if the markets fully understand the situation and therefore are able to predict Fed policy actions with a high degree of accuracy.

An important part of mitigating risk is for policymakers themselves to develop a thorough understanding of unavoidable risk tradeoffs. It is often the case, even typically the case, that risk mitigation can never be absolute. Reducing one risk almost always entails accepting greater risk somewhere else. Monetary policy is no different in this respect from any standard business problem.

Economists have long understood that, all other things being equal, a more expansionary monetary policy has initial effects of stimulating economic activity and employment and delayed effects tending to increase the rate of inflation. All is well if the central bank is able to apply monetary stimulus to offset other forces tending to reduce employment and economic activity. If the depressing forces dissipate, the monetary stimulus can be withdrawn; then, the net effect is that the central bank cushions what would otherwise be a disturbance to output and employment without creating a lasting effect tending to raise the rate of inflation.

That is the general principle, but the problem of identifying economic forces tending to move the economy off its desired track and calibrating a monetary policy response to have the appropriate effect is by no means easy or without risk. When the central bank believes that it has identified disturbances calling for a monetary policy response, the issue is how to calibrate that response to create the desired outcome without an undue risk of increasing inflation.

My own view on this matter is that the Fed, to the maximum possible extent, should rely on market forces to create the desired effects. When market participants have confidence in the long-run outlook for inflation, as they have had for some years now, those participants will move interest rates in response to various pieces of information day by day. Thus, the Federal Reserve can concentrate on establishing the stable long-run framework of a policy consistent over time with low inflation, and allow market interest rates to adjust actively without the central bank having itself to respond on a day-by-day or even quarter-by-quarter basis. Eventually, the developing situation becomes clear enough that the Federal Reserve can adjust the intended federal funds rate to maintain a policy stance consistent with long-run price stability and with the shorter run needs of economic stabilization. However, between the Federal Reserve policy actions, market adjustments have accomplished much of the stabilization work.

## **COSTS OF RISK MITIGATION**

As should be clear by now, in the analysis of monetary policy, the issues are almost always those of what tradeoffs exist—how the mitigation of one risk may add to risks in other dimensions. Let me now take up a couple of specific items not yet discussed.

I talked briefly earlier of the problem of financial instability arising from shocks of various kinds. The fragility occurs when shocks put financial firms under stress, perhaps even threatening failure. The United States has a long history of banking instability; the most dramatic such crisis arose in the early 1930s, and the end result was closure of a large fraction of U.S. banks. Similarly, over the course of the 1970s and 1980s, the financial position of many savings and loan associations (S&Ls) became weaker and weaker. The eventual closure of a large number of S&Ls and reorganization of the federal deposit insurance structure was a consequence of a similar process, which fortunately did not create a generalized

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financial crisis but did end up costing U.S. taxpayers something in the neighborhood of \$150 billion dollars to make good on the federal deposit insurance guarantee.

Banks and many other financial institutions operate on a fairly narrow capital base. In the United States today, regulated banks are required to maintain capital in the neighborhood of 10 percent of assets. That capital provides a cushion in the event that assets go bad; shareholders bear the cost of bad bank lending decisions. Many other types of financial institutions may have capital that is somewhat lower or somewhat higher than the approximate 10 percent capital for commercial banks. Clearly, for any of these institutions, we run the risk that the losses on assets will erode capital to the point of raising doubts about the financial viability of the firm. When a hard-pressed firm is very large, or when there are a considerable number of smaller firms in the same situation, then the impact on the financial markets as a whole may be severe.

The risks of financial instability can be reduced by requiring that firms hold more capital. Moreover, law and regulation can more tightly control what financial institutions do and the nature of the risks they assume. However, the greater the regulatory intervention, the less efficient these firms are likely to be in the long run. There is substantial evidence to support the proposition that competitive market processes lead to more efficiency, a wider variety of financial instruments, and more innovation over time than is the case in heavily controlled markets. Moreover, in today's world where capital and information flow freely across national borders, the prospect is that tight regulation may simply push certain financial activities abroad out of reach of U.S. regulators.

This is not the place to enter into an analysis of financial regulatory issues. My point is simply to emphasize that what might seem to be an obvious method of reducing risk—imposing tighter regulation on financial firms—has potential problems that are not trivial or easy to overcome.

On a related issue topic, we should also be aware of the problems that may arise from dealing

with a financial crisis by bailing out firms facing possible failure. A bailout may calm a particular situation of market turmoil; however, bailouts must always be analyzed with due regard to the moral hazard problem. Whenever a firm is bailed out, the danger is that, in the future, firms and investors will expect similar treatment. Expecting bailouts, investors may well assume more risk than they should; today's bailout, therefore, may increase future financial instability. The issue of public policy toward bailouts is really a specific example of the more general issue that policy needs to be thought of in terms of a long-run regularity of government behavior, and not just case by case.

Let me finish my discussion of the cost of risk mitigation by talking briefly about a topic on which relatively little is known on a systematic basis. The question is this: Is there a moral hazard problem to the central bank creating a more stable economy? That is, if the Federal Reserve continues to be as successful as it has been over the last decade in offsetting disturbances of various kinds and maintaining a continuing economic expansion uninterrupted by recession, will the more stable economy create growing imbalances that create ever greater vulnerabilities? For example, will households free of concerns about unemployment save less and accumulate more debt? Will businesses unconcerned about recession manage their operations in such a way that they become ever more vulnerable to even minor setbacks?

This topic is actually an old one in economics, but it has renewed interest now precisely because the current economic expansion has continued for such a long time. As I am sure everyone knows, the current expansion, which began in March 1991, is the longest expansion on record.

I am inclined to answer my question by saying that I believe that the moral hazard risk to continuing economic expansion is minimal. The reason is that in our dynamically competitive economy the macroeconomic risk to individual firms and households is small relative to the microeconomic risk. Every individual household and every individual firm is operating in a highly competitive environment in which there are risks

and opportunities created by growth and decline of individual firms, professions, and industries. Thus, at least until we know more about this subject, I think there is a compelling case for the central bank to continue to search for ways to improve overall economic stability while encouraging a full operation of a highly competitive market system.

## **CONCLUDING OBSERVATIONS**

Throughout almost my entire professional career I have analyzed monetary policy as a problem of decisionmaking in the face of risk. I wrote my first professional paper on the subject in 1967, a paper eventually published in 1970. Today, I've emphasized the importance of Federal Reserve success in maintaining a long-run environment of low and stable inflation, and responding to short-run developments when possible, but only to the extent consistent with the long-run objective. That is the way, I believe, that the Fed can minimize risks.

There is a corollary to this proposition that is sometimes not appreciated. Consider an analogy: Suppose a firm conducts a careful analysis of

whether to self-insure or buy fire insurance for a factory and concludes that it would be best to buy insurance despite the high cost. If there is no fire, did the firm make a mistake? The answer is that it did not in the relevant ex ante sense, if its analysis was as complete and accurate as existing knowledge permitted. Similarly, the firm did not necessarily make a mistake if it decided to self-insure and then had a fire. Business decisions should not be judged by the standard of the Monday-morning quarterback. Nor should monetary policy decisions be judged by the standards of the Monday-morning quarterback. I am not claiming that the Fed always gets things right, but I do insist that the appropriate standard for judging what we do is the set of conditions as the game is being played and not by what we all know happened after the fact.

I close with this observation because, as I noted in my opening sentences, we face increased uncertainty at present. I think a lot about how best to respond to the risks we face, and I've shared with you some of my thinking.