

Great Expectations: Monetary Policy in Today's Economy

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Good afternoon. I am here to discuss expectations and monetary policy. I put "great expectations" in the title of my talk to emphasize how important people's expectations are, and how far-reaching the impact of changes in expectations can be to the national economy.

Expectations are at the heart of virtually every economic decision people make. As a former finance professor, I am intimately familiar with the investment decision process. It is, to a large extent, a process of expectations. Businesses routinely try to project future gains that can be derived from investments made today. This is fundamental to capital budgeting, a subject I taught too many MBA students over the course of too many years!

Likewise, when individuals make consumption and savings decisions, expectations play an important role. For example, when people determine the appropriate amount to save for retirement, they must project annual rates of return in future years -- again a matter of expectations.

International economic decisions are likewise affected by expectations. Decisions about imports and exports, foreign direct investment and foreign financial investment are all tied to the future value of currencies. Exchange rates are driven by the expectations surrounding countries' economies and their political future.

In short, when it comes to making economic decisions, expectations matter. And, as events over the past several years have demonstrated, expectations can quickly change, dramatically altering aggregate demand, and exerting a powerful influence on the economy's overall performance. The point I want to emphasize today is that acknowledging this important role of expectations is fundamental to effective monetary policymaking.

Expectations about the Fed

As you know, the goal of monetary policy is to create financial conditions that foster maximum sustainable growth. The Federal Reserve, as the nation's central bank, makes two important contributions in this regard. First, we provide essential price stability. Second, we lean against the wind, offsetting as best we can, shifts in aggregate demand that push the economy away from its potential.

These goals are essentially compatible, but receive different emphasis as the situation warrants.

If you consider how price stability contributes to maximum sustainable growth, you quickly realize it is not simply a matter of today establishing a stable price level, but of establishing the expectation of a stable price level for the foreseeable future.

For the market economy to achieve peak performance, it must generate efficient resource allocations and savings-investment decisions. This requires not only a stable overall price level in the near term, but the expectations of stable prices over the long term. So, as essential as price stability is, public confidence in our commitment to price stability is an equally important goal of Fed policy.

For the past twenty-two years, the Fed has focused on the goal of price stability and has been relatively successful in achieving it. Equally important, as the downward trend in market interest rates attests, we have succeeded in reducing inflation expectations.

Market participants not only see stable prices today, they also expect stable prices to persist into the future. This has been evident from a number of sources. Our own Bank's [Survey of Professional Forecasters](#) indicates that long-term inflation expectations have held steady at about 2.5% in the CPI since early 1999.

Central banks' need to establish a reputation for price stability has become a familiar theme among macroeconomists.

Yet, their need to establish a reputation for fostering economic stability is less frequently discussed. But it is important, especially in times such as these, with the economy in recession.

Perhaps economists do not think about central banks' reputation for fostering economic stability because our theories linking monetary policy to economic activity are not as tight as our theories linking it to the price level. Most economists would agree that while the long run behavior of the price level is completely in the hands of monetary policy makers, the pace of economic activity is not.

When it comes to short run fluctuations in the pace of economic activity, monetary policy is clearly not the only influence, and often not even the predominant one.

A second reason may be that economists do not believe that in practice counter cyclical monetary policy works all that well. I alluded a moment ago to our Bank's *Survey of Professional Forecasters*. A study of the forecasts from that survey, reported in the most recent issue of our Bank's *Business Review*, shows that forecasters tend to under-predict the impact of monetary policy actions on economic activity.

This resonates with the kinds of comments that we often hear during periods such as this, when monetary policy actions have been taken and the response from the economy has not yet fully materialized. It seems that the lesson that monetary policy works with long and variable lags must be relearned at least once every business cycle.

In any case, the fact remains that monetary policy actions have a significant impact on the economy. Yet, the impact is not instantaneous. Rather, it arrives, as I noted, with long and variable lags. But, it always arrives.

And, the more people believe in its effects, the more effective it will be. If people are relatively confident that a downturn will be short-lived, they will be more willing to spend into it, taking advantage of temporarily low prices, including low interest rates.

Auto manufacturers' recent price reductions, presented as an offer of zero percent financing on new car purchases, is a classic example of this phenomenon. The response of the car buying public was dramatic. Auto sales rose from 15.8 million units at an annual rate in September to a record 21.1 million unit pace in October. Key to that dramatic response was a conviction that the financing offer was temporary.

It represented the combination of low interest rates provided by the Fed's aggressive counter-cyclical monetary policy, and price concessions in the form of additional financing subsidies from auto manufacturers. People recognized that neither was likely to last. If you wanted a new car, this was the time to buy.

Like the auto market, the housing market has been notably resilient in this downturn for much the same reason. With consumers convinced that the downturn will be brief, and their income relatively secure, the opportunity to borrow at relatively low interest rates has seemed too good to pass up.

These are strong counter-examples to the Japanese experience, where interest rates at or close to zero have elicited little response. The difference is confidence in the future. In Japan, people do not foresee an immediate turnaround, hence any increase in interest rates on the horizon. So, they have no incentive to rush to take advantage of the current low rates.

The other aspect of Japan's unfortunate experience that has attracted some attention is its persistent price deflation. The question has arisen whether the United States could also slip into a deflationary spiral. The essence of such a spiral is that soft demand induces cascading price declines.

Ordinarily, when businesses cut prices this helps increase demand and begins to generate an economic turnaround. Once the turnaround begins, prices stabilize and return to normal.

Indeed, it is the expectation of the price rebound that induces consumers to respond positively to the price cuts in the first place. But, if people see the initial price declines as a harbinger of continued weakness and additional price declines, demand slackens, leading to even less economic activity, and a continuing downward spiral. Again, expectations are at the heart of economic decisions and the impact of price changes.

There is little reason for the US to worry about such a downward spiral. Though CPI inflation in the United States dipped below two percent in 2001, as I mentioned a few moments ago, long-term inflation expectations have remained relatively stable at 2.5 percent. And the price cuts and discounts offered by retailers over the past holiday season seem to have been effective in boosting sales. Consumers saw these bargain opportunities as temporary.

There is one last item concerning expectations and public confidence that warrants some attention. With payroll employment still in decline, and the unemployment rate still on the rise, consumer confidence, as measured by both the Conference Board and Michigan surveys, continues to improve. This is evidence that people believe in the economy's resilience and that the current downturn will be a relatively brief and mild one.

Of course, confidence is borne of many factors, not just the effectiveness of monetary policy. Nonetheless, I think confidence in the Fed's effectiveness as an aggregate demand manager is part of the mix. In short, expectations about the Fed's performance figure into the public's behavior. Likewise, maintaining public confidence in both the stability of prices and economic growth help the Fed achieve its mission.

There is another dimension in which expectations about the Fed figure into the effectiveness of its monetary policy. This concerns the financial markets' expectations about the Fed policy stance. In this dimension, the effectiveness of Federal Reserve policy is enhanced by our clarity and transparency.

Financial markets must have clear and accurate expectations about the future direction of monetary policy for short-term interest rates to transmit our policy actions to the economy.

When you come right down to it, the Fed directly influences just one market interest rate -- the overnight rate on Fed funds.

Therefore, for the Fed's policy actions to affect economic activity, they must ripple out into other short-term interest rates. How and to what extent is a matter of expectations.

When the Federal Reserve changes its Fed funds target, financial markets make an assessment as to how persistent that change will be, what it signals about the future path of Fed funds rate targets, and the economy's reaction to the policy.

This alteration in market expectations, in turn, drives changes in other short-term interest rates. It is the markets' anticipation today of future Fed actions that extends the impact of a funds rate change throughout the short end of the term structure.

The effect of a monetary policy action by the Fed will also ripple out to the long end of the term structure. Thus, the change in the short rate, a single Fed action, affects the entire pattern of interest rates. Research suggests that Federal Reserve near-term policy actions are pretty well anticipated by financial markets, though the precise timing and magnitude of rate changes are not.

At times, long rates move in concert with short rates. This generally occurs in the early stages of the business cycle, when the market foresees both greater economic weakness and more Fed easing ahead.

Other times, long rates move in the opposite direction from short rates. This generally occurs toward the end of the cycle, when the market foresees both a stronger economy and a reversal of Fed easing ahead. The market's reaction to the Fed's more recent moves can be interpreted in this light.

Thus, to the extent that the market clearly foresees the future actions of the Fed and the economy, the response of long-term interest rates supports the achievement of the Fed's goals. It accentuates the impact

of Fed stimulus early in the cycle, and moderating it toward the end of the cycle. The more clearly the markets can foresee the Fed's future course of action and its results, the more effective monetary policy will be.

Expectations about the economy

So, expectations are important. Public expectations about the Fed and its policies are a crucial determinant of the Fed's effectiveness. More broadly, public expectations about the future of the economy are an important determinant of the economy's performance.

As recent events have demonstrated, expectations about the economy evolve in ways we cannot always predict. They are also subject to dramatic shifts that we cannot always anticipate.

Consequently, they impart an inevitable element of instability to the economy. But, before I discuss how I think monetary policy should deal with this reality, let me reflect for a moment how we think the public forms its expectations.

Economists' understanding of the expectations formation has evolved substantially over the past 30 years. In the early days of macro-econometric modeling, we modeled people's future expectations as mechanical extrapolations of their recent experience. The rational expectations revolution of the 1970s changed our whole approach. We began to model expectations about the future as the forecast of an accurate structural model of the economic environment.

Now we are evolving to what I consider a more realistic approach. We are modeling expectations as the outcome of an intelligent and well-informed, but occasionally mistaken, learning process. The marketplace eventually weeds out expectations based on poor information and erroneous thinking, but this can take a considerable amount of time.

In the meantime, the economy can move away from its long run potential, and asset prices, which are particularly sensitive to shifts in expectations, can change dramatically.

In broad strokes, the current recession was precipitated by two episodes that involved shifts in expectations. The first was the boom and bust in the technology sector; the second was in response to the September 11 attacks.

In essence, the boom and bust in technology represented the marketplace groping to understand, evaluate, and exploit the power of new and inexpensive information processing and communications technologies.

The economic implications of such a significant technological change are hard to predict. Macroeconomists, trying to get a handle on the implications of this "new economy" for aggregate productivity, abandoned their usual focus on data from the past few business cycles.

Instead, they began reaching back to economy-transforming events like the invention of the electric motor, the telephone, or the automobile.

Likewise, people in the marketplace began to consider how newly available technologies could revolutionize various business segments. Speculation about the possibilities drove the market up. Then, the realization that many of those possibilities would not materialize drove the market down.

All the while, economic agents, households and business firms, had to come to grips with the impact of current asset values on their future and current spending levels.

If the end of the bull market had a powerful impact on people's expectations about their economic future, the impact of the attacks on September 11 was even more sweeping. These events were a shock to our expectations about virtually everything. In those first few hours after the airplanes hit, I think we all felt a rare degree of uncertainty about our future.

What would happen next? The uncertainty froze us in place. Air travel ceased. Concerns about physical security took precedence over all others on a personal level and in the workplace.

In the days and weeks that followed, we began to assess the implications of these events for our future, social and political as well as economic. As we followed developments and learned more about our situation, we put the new risks in better perspective and began to fold them into our economic decision making.

Financial markets already seem to reflect those adjustments. The real economy is still moving through this process.

Thus the current cycle is, in broad strokes, the manifestation of revisions to expectations that themselves represent episodes of learning about everything from technological innovation to global politics.

Implications for monetary policy

Considering the breadth of factors that go into the formation of expectations, and their profound impact on the economy, setting appropriate monetary policy may seem an intractable problem. Certainly it is a challenging one. Still, I believe there are some basic principles that can guide us.

Begin by remembering the basic objective of monetary policy is to create financial conditions that foster maximum sustainable growth. As a practical matter, this means identifying and responding to shifts in aggregate demand that seem to be at variance with the economy's supply capabilities. Such shifts may be caused by actual events, or by a substantial change in expectations about the future.

On occasion, a change in expectations decisively creates an imbalance between aggregate supply and demand. In such cases, the Fed can act quickly to maintain economic stability.

Good examples of such situations are the Federal Reserve's decisions to ease monetary policy within the first few days and weeks after September 11. It was clear that the uncertainty generated by that event would put a damper on spending by households and firms at a time when the economy was clearly operating below its potential. The Fed reacted to that impending weakening of aggregate demand.

On the other hand, the Fed did not respond aggressively in the mid-1990s when stock prices began to rise so dramatically, signaling an upward revision in people's long-run expectations about profitability and productivity. Nor did it take immediate action in early 2000 when the stock market correction signaled a downward revision to those expectations.

Though both episodes were important, in neither case was it evident these changes in expectations would create a clear imbalance in the real sector.

Of course, shifts in expectations are not usually as dramatic as the ones we have recently experienced. It will often be difficult to assess whether these shifts will produce significant imbalances in the economy. Accordingly, the Fed must respond to such episodes at a measured pace. Since monetary policy's impact comes with a considerable lag, it is also important to remember that the power of monetary policy to offset the impact of shifts in expectations is limited.

Put another way, counter-cyclical monetary policy cannot completely insulate the economy from the impact of shifts in demand, caused by expectations or the myriad other factors that effect the economy.

Under the circumstances, it might be tempting for the Fed to take some action simply to influence public expectations or bolster public confidence. But any such attempts to manage expectations would be futile and potentially destabilizing to the economy. Ultimately, markets develop rational expectations.

So the Fed must pursue policies designed to consistently deliver stable prices and growth at the economy's full potential. Over time, people will come to expect these results. This will, in turn, make Fed policy all the more effective in achieving them, as I have argued here today.

Trying to manage public expectations about the future is not only futile; it may be misguided. It is a simple truth that when these swings in expectations are observed, the ultimate impact of the economic phenomenon causing the shift in expectations remains uncertain.

New developments, new ideas, and new technologies take time to mature. In the interim, their lasting effects on the economy, its potential supply, or its new demand level are uncertain.

Given this uncertainty, pooling information is likely to be a better approach. In pursuit of its objectives, the Fed can harness the financial markets by sharing its information with market participants. Information about the Fed's policy goals, its assessment of the current economic situation, and its strategic direction will influence financial markets' expectations, and move market interest rates in alignment with appropriate Fed policy.

In recent years, the Fed has indeed been moving toward more sharing of useful information. The statements now released after every FOMC meeting are important in this regard. They not only report our decisions concerning immediate action, but our sense of the key factors driving near term economic developments, and the strategic tilt to our actions going forward.

Conclusion

As I said at the outset this afternoon, expectations are at the heart of virtually every economic decision people make. The public's expectations about factors affecting the economy, including monetary policy, have a powerful impact on the economy's overall performance.

At the end of the day, the effectiveness of monetary policy hinges on public confidence that the Fed has the commitment and the capacity to maintain stable prices and foster maximum sustainable economic growth.

Establishing this confidence is not easy, particularly in a world where shifts in public expectations can themselves create episodes of economic instability. But, ultimately the key to creating stability lies in demonstrating stability: focusing on the ultimate objectives, pursuing those objectives persistently, and communicating them forthrightly. I believe the Fed is on that path.

Thank you. I'll be happy to respond to any questions you have.