

Best Guesses and Surprises

William Poole

I have a simple message today—that anyone interested in monetary policy should spend less time on economic forecasts and more time on implications of forecast surprises. If you are in the forecasting business, it makes good sense to write at length about the forecast and the analysis behind it. For the rest of us, the forecast provides the baseline for examining the most important policy issues. The true art of good monetary policy is in managing forecast surprises and not in doing the obvious things implied by the baseline forecast.

I'll proceed by outlining the consensus outlook and then will discuss how I view the job of dealing with surprises. I'll emphasize that the key issue is that monetary policy responses to surprises ought not to be random, but as predictable as possible. There are some principles of good responses that make it easier for students of monetary policy to predict what the Federal Reserve will do.

Before digging into the substance of my subject, I want to emphasize that the views I express 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—especially Bob Rasche, senior vice president and Director of Research, who provided special assistance. However, I retain full responsibility for errors.

CONSENSUS OUTLOOK TODAY

What is the consensus outlook for the U.S. economy today? Numerous forecasts are in the public domain, from government and private sources.¹

¹ A partial list includes *Blue Chip Economic Indicators* (published each month); *Survey of Professional Forecasters* (compiled quarterly by the Federal Reserve Bank of Philadelphia); *Wall Street Journal Forecasting Survey* (published early January and July of each year); Congressional Budget Office, *Budget and Economic Outlook* (published each February and August); Council of Economic Advisers economic outlook

Direct comparison of these forecasts is not straightforward, as there are differences among the variables for which the forecasts are presented, differences in the forecasting time horizons, and differences in averaging, with some forecasts presented on a fourth-quarter to fourth-quarter basis and others presented on an annual-average over annual-average basis.

Nevertheless, at present a remarkably uniform picture from a perusal of these various sources emerges for the major economic indicators. Real gross domestic product (GDP) is forecast to grow in the 4 to 4½ percent range from the fourth quarter of 2003 to the fourth quarter of 2004. Inflation as measured by the consumer price index (CPI) is forecast in the 1½ to 2 percent range and as measured by the GDP chain price index is forecast in the 1 to 1½ percent range over that horizon. The unemployment rate is forecast to be around 5½ percent by the fourth quarter of 2004.

My colleagues around the Federal Open Market Committee (FOMC) table are on average slightly more bullish than the above picture: The midpoint of the range of forecasts of real GDP growth included in the *Monetary Policy Report to the Congress* submitted two weeks ago is 4½ percent for the fourth quarter of 2004 over the fourth quarter of 2003. The midpoint of the range of inflation forecasts (measured by the chained price index for personal consumption expenditures) in that report is 1.13 percent, and the midpoint of the forecast for the unemployment rate in the fourth quarter of 2004 is 5.38 percent. I'll refer to this forecast as the "FOMC members' forecast." The forecast reflects a survey of FOMC members,

(published each February in the *Economic Report of the President* and updated each July); and Federal Reserve System, *Monetary Policy Report to the Congress* (published each February and July), containing the economic projections of the Federal Reserve governors and Reserve Bank presidents.

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but is not an FOMC forecast per se because the Committee does not debate and vote on the forecast to make it a Committee forecast as such. Nor is it the Board of Governors staff forecast prepared for each FOMC meeting and reproduced in the Greenbook; the Greenbook is released with the FOMC meeting transcript only after a five-year lag.

Those forecasters who risk interest rate forecasts (the *Wall Street Journal Forecasting Survey*, the *Blue Chip Economic Indicators*, and the Congressional Budget Office *Economic Outlook*) expect Treasury bill rates around 1.2 percent, and ten-year Treasury bond rates around 4.6 percent either on an annual average basis or at the middle of 2004. I should note that FOMC members do not make public forecasts of interest rates.

HOW RELIABLE IS THE CONSENSUS OUTLOOK?

The small dispersion among forecasts today is not unusual and should not be interpreted as a measure of likely forecast accuracy. Over the years, numerous studies have investigated the forecast accuracy of private forecasters. More recently several studies have compared the accuracy of both the FOMC members' forecasts and the Greenbook forecasts with those of private forecasters. One recent analysis was produced by William Gavin and Rachel Mandal in the Research Department at the Federal Reserve Bank of St. Louis. Their paper was published last year in the *International Journal of Forecasting*.² Because of the lag in releasing the Greenbook, this study analyzes the Greenbook forecasting record up through 1996. The other comparisons include forecasts through 2001.

The authors compared the Blue Chip forecasts, the Greenbook forecasts, and the FOMC members' forecasts against a naive, same-change forecast beginning in 1980 for both real output growth and inflation. Three different forecasting horizons were examined: six, twelve, and eighteen months.³ Not surprisingly, the accuracy of the forecasts deteriorates as the forecasting horizon is lengthened. For a one-year-ahead forecast, the root-mean-squared forecast error (a measure of the dispersion of the forecasts around the realized value) for real output growth is on the order of 1.4 percentage points for

all the three sets of forecasts considered. The root-mean-squared forecast error for the naive forecast is considerably larger, on the order of 2.2 percentage points.

Clearly, the forecast accuracy of the forecasters is substantially better than that of the naive forecast, but still leaves a lot of room for surprises. To make this point clear in today's context, if for convenience we say that the GDP growth forecast is 4 percent over the four quarters ending 2004:Q4, then one standard error leaves us with a forecast band of 3 to 6 percent growth over this period. If we were to have a 3 percent outcome, everyone would fear that the recovery is faltering; if we were to have a 6 percent outcome, the most likely characterization would be that we have a boom on our hands.

Moreover, keep in mind that one standard deviation on either side of the expected value does not by any means exhaust the range of possible outcomes. As a rough approximation, one time out of three, the one-year-ahead forecast of real output growth will fall outside a range of plus or minus 1.4 percentage points of the stated forecast number. Assuming a symmetrical distribution of forecast errors, which seems reasonable, there is a probability of about 0.16 that real output growth over the next four quarters will exceed 6 percent and a probability of about 0.16 that output growth will fall short of 3 percent.

Clearly the range of error associated with the current state of the forecasting art fails to distinguish between a really strong expansion—a boom—and a faltering recovery. And the accuracy of inflation forecasts is not much better. On a one-year-ahead forecasting horizon, the root-mean-squared error of inflation forecasts is in the range of 0.75 to 0.9 percentage points. This forecasting record is not much better than would have been achieved with a naive forecasting model. As with real GDP, there is a significant probability that the outcome could fall outside the one-standard-deviation band. And it is also true that an inflation outcome outside the band would create considerable concern.

Published forecasts are repeatedly updated on ever shorter and shorter forecasting horizons. The results reported by Gavin and Mandal indicate that as the horizon becomes shorter the uncertainty surrounding the forecast realization is reduced—though, perhaps surprisingly, not by a particularly large amount. Their analysis suggests that for real

² William T. Gavin and Rachel J. Mandal, "Evaluating FOMC Forecasts," *International Journal of Forecasting*, 2003, 19(4), pp. 655-67.

³ Details can be found in Tables 4 and 5 of Gavin and Mandal.

GDP growth the root-mean-squared forecast error on an eighteen-month horizon is between 1.5 and 1.9 percentage points while at a six-month horizon it is reduced to only 1.3 percentage points. For inflation, the root-mean-squared forecast error at the eighteen-month horizon is between 1.1 and 1.3 percentage points but is substantially reduced to around 0.5 percentage points at a six-month horizon.

As we go through the year, the forecast for 2004 will be updated as results for each quarter come in. An example of this process is provided by the monthly *Blue Chip* consensus forecast for 2003. The initial release of the *Blue Chip* forecast for last year was in January 2002; thus, we have a record of 24 successive *Blue Chip* forecasts for 2003. The initial forecast was for a year-over-year growth rate of 3.4 percent. Through the first half of 2002 the consensus forecast was revised up slightly, reaching a peak of 3.6 percent in June. Thereafter the consensus was fairly steadily revised downward over the next year, reaching a trough of 2.3 percent in August 2003. The final forecast, in December 2003, was 3.1 percent, which is the currently published number for real growth in 2003 over 2002. The initial release of the consensus CPI inflation forecast for 2003 over 2002 in January 2002 was 2.4 percent. This forecast changed very little over the following 24 months, increasing to 2.5 percent in mid-2002 and then settling down at 2.3 percent, the CPI inflation rate that was realized for 2003 over 2002.

The relatively low variability of the consensus forecast for 2003 masks the heterogeneity among the individual survey respondents that reflects the inherent uncertainty of economic forecasts. In early 2002, the range of forecasts for real growth in 2003 across the *Blue Chip* respondents was 2.0 to 6.0 percent. By the beginning of 2003 this range had narrowed to about 2.5 to 4.5 percent. Only after the middle of 2003, when data from six of the eight quarters involved in the computation of a year-over-year growth rate were available, did the range of individual forecasts drop below 1 percentage point.

A similar dispersion is observed among the individual forecasts of CPI inflation for 2003. At the beginning of 2002 the range of forecasts was from less than 1.0 percent to almost 4.5 percent. By early 2003 this range had narrowed to less than 1.5 to slightly more than 2.5 percent. It was only after September 2003 that the range of forecasts shrunk to less than 1 percentage point.

SOME EXAMPLES OF FORECAST SURPRISES

Forecast surprises, or forecast errors, are a standard part of the policy landscape. It is very easy to criticize forecasts and extremely difficult to come up with better forecasts. The fact is that good forecasters produce state-of-the-art forecasts. Policy-makers must deal with forecast surprises. What are the sources of those surprises?

The difficulty of forecasting turning points in economic activity is most significant. Whatever creates a recession also creates a forecast surprise. For example, the October 2000 *Blue Chip* consensus for real growth over the five quarters ending 2001:Q4 was for a very steady quarter-to-quarter expansion in real GDP in the range of 3.3 to 3.6 percent at an annual rate. The business cycle dating committee of the National Bureau of Economic Research later dated a cycle peak in March 2001 and a trough in November 2001. Actual quarter-to-quarter real growth during this period ranged from -1.3 to 2.1 percent. Thus, five months before the onset of the 2001 recession, the *Blue Chip* consensus forecast missed the recession completely!

My point here is not to pick on the *Blue Chip* respondents. My colleagues on the FOMC had no greater foresight. In the minutes of the FOMC meeting in October 2000 we can read that, “[l]ooking ahead, they [FOMC members] generally anticipated that the softening in equity prices and the rise in interest rates that had occurred earlier in the year would contribute to keeping growth in demand at a more subdued but still relatively robust pace.”⁴

A second noteworthy example is October 2001. In the immediate aftermath of the 9/11 attacks, forecasters turned extremely bearish on the near-term prospects. The *Blue Chip* consensus for real growth in 2001:Q4 in the October 10, 2001, survey was -1.3 percent, with a range of forecasts from -3.2 to 0.8 percent. The *Blue Chip* respondents were particularly pessimistic about prospects for the manufacturing sector; the consensus was for growth of -3.1 percent, with a range from -7.4 to 0.6 percent. We now know that in 2001:Q4 the economy rebounded to a 2.1 annual rate of growth in real GDP, led by an all-time record rate of light vehicle sales. Keep in mind that this GDP growth rate was above the forecast of every single one of the 50 plus *Blue Chip* respondents at the beginning of the quarter.

⁴ Minutes of the FOMC Meeting of October 3, 2000, *Federal Reserve Bulletin*, January 2001, p. 23.

A third example is the history of real growth and inflation forecasts in the second half of the 1990s after the now-apparent increase in trend productivity growth. Consider the midpoint of the range of forecasts of real growth and inflation by FOMC members prepared each February for the four quarters ending in the fourth quarter of each year from 1996 through 1999. On average these forecasts underestimated real growth by 2.1 percentage points for these four years. The range of forecast errors was from 2.4 to 1.9 percentage points. The errors were all in the same direction and all of significant size. During the same four years the CPI inflation forecast error averaged 0.0 percent—right on the button. However the forecast errors for the individual years ranged from -1.2 to 0.6 percentage points.

The reasons for forecast errors are many. Some reflect incomplete understanding of how the economy works, such as the errors in projecting productivity growth, or consumer behavior right after the 9/11 terrorist attacks. Some reflect unpredictable shocks, such as a sharp change in energy prices or the 9/11 terrorist attacks themselves. Some reflect financial disturbances, such as the 1987 stock market crash. Whatever may be the reasons for forecast errors, they are a fact of life.

THE POLICY SIGNIFICANCE OF FORECAST UNCERTAINTY

What are the implications of the documented uncertainty surrounding forecasts of future economic activity? Some dismiss forecasts altogether and view them as irrelevant for policy because their errors are so large. To me, that response is completely wrong. Instead, policy needs to be informed by the best guesses incorporated in forecasts and by knowledge of forecast errors. Forecast errors create risk, and that risk needs to be managed as efficiently as possible. And the surprises that create forecast errors also create the need for policy changes that cannot be anticipated in advance because the surprises cannot be anticipated.

Given the size of forecast errors, we will frequently observe the economy evolving along a substantially different path from that portrayed by consensus forecasts only a short time earlier. With newly available information, forecasters will adjust their prognostications, and policymakers, such as the FOMC, will adjust their view of the appropriate policy stance. If the revised view of the appropriate policy stance is sufficiently changed, policymakers

can and should implement the changes in policy settings, such as the intended federal funds rate, that they believe are consistent with the new information.

Such policy actions should be implemented whether or not they will come as surprises to market participants and the general public. Here it is important to be clear about the distinction between a *policy* and a *policy action*. A policy should be viewed as a rule or response regularity that links policy actions, such as adjustments in the intended federal funds rate, to the state of the world. A policy is like a decision to drive 65 miles per hour; given that policy, a policy action is the adjustment of the accelerator to maintain the target speed. If the effects of wind and hills on speed cannot be anticipated, then neither can the policy actions of accelerator adjustments. A good policy requires clarity about policy objectives and as much precision as possible as to how policy actions will respond to new information to best achieve the policy objectives.

In the monetary policy context, anticipated policy actions are naturally tied closely to the forecast. To maintain the policy of achieving low and stable inflation, unanticipated policy actions must often accompany forecast surprises. Should an inflationary shock hit the economy, for example, that shock and an increase in the FOMC's target federal funds rate would both be surprises.

On numerous occasions I have stated my view that the FOMC should communicate its intention about monetary policy as precisely as possible to get markets in "synch" with policy. My view should not be interpreted to imply that the FOMC can only act after it has "prepared" market participants for a change in the intended federal funds rate. There will be times when significant unforeseen economic news will be revealed very suddenly—events that can be appropriately described as "shocks." If, in the judgment of the FOMC, such news calls for policy actions even though market participants could not have been forewarned of such actions, the FOMC would be derelict in its responsibilities if it failed to act. *Given* the shock, the FOMC's action ought not to be a surprise. The real surprise would arise if the FOMC were to do nothing in the face of a shock calling for action.

A couple of examples are illustrative. Consider the Asian debt crisis, the Russian default, and the collapse of Long Term Capital Management (LTCM) in August-September 1998. No one foresaw this combination of events, nor was the impact of these events on the liquidity of major financial markets

predictable. At the time of the FOMC meeting on August 18, 1998, federal funds futures for contracts as far out as December 1998 were trading within a couple of basis points of the prevailing 4.50 percent intended funds rate. Nevertheless, by the conclusion of the FOMC meeting on November 17, 1998, the intended funds rate had been reduced in three steps by a total of 75 basis points, including a cut of 25 basis points at an unscheduled conference call meeting on October 15.

These rate cuts in the fall of 1998 were a surprise from the vantage point of early August. But the real surprise would have been if the FOMC had totally ignored the Russian default and collapse of LTCM. Holding the intended funds rate constant given the market turmoil would not have been consistent with the Fed's responsibility to contribute to financial stability.

I could walk through numerous other examples to drive home the point that a key feature of monetary policy is measured and appropriate responses to the constant stream of surprises. In discussions of monetary policy, I would like to see much more emphasis on appropriate policy responses to surprises and potential surprises and much less emphasis on forecasts. An overemphasis on consensus forecasts may lead market participants to a false precision in their views about the federal funds rate going forward. It is much more productive to think through the sorts of things that might happen and the appropriate response to such events. A careful analysis of risks helps to prepare the mind for dealing with surprises when they occur. Market participants and the FOMC should not focus on the predictability of a particular path for the funds rate, but instead on the predictability of the response of the FOMC to new information about the economy.

PRINCIPLES OF FOMC RESPONSES TO "SHOCKS"

For at least 40 years, economists have been trying to develop a quantitative characterization of FOMC policy actions—a policy reaction function.⁵ A review published in 1990 analyzed 42 published examples of attempts at characterizing FOMC behavior.⁶ Since 1993, the prevalent framework to

quantify FOMC action is the "Taylor rule."⁷ None of these efforts have achieved their objective.⁸ In my judgment, it is not possible at the current state of knowledge to define a precise reaction function of the FOMC, and perhaps it never will be possible.

It is possible, however, to describe some general principles that guide FOMC behavior and that can be applied by market participants to form expectations about how the FOMC will respond to new and unexpected information. I believe that these principles are fairly widely accepted, but different FOMC members will apply them in different ways at different times. And the principles always involve a degree of judgment.

The first principle is that the FOMC will not respond to "shocks" that are seen as very transitory. Policy should only react to "shocks" that are longer lasting—highly persistent. The reason for this principle is quite straightforward—nothing that the FOMC can do will offset the impact on the economy of a "here today, gone tomorrow" event. While economists continue to debate exactly how "long and variable" the response of the economy is to a policy action, there is a consensus of professional opinion that it takes at least several months before the economy responds. Of course, judgment is always necessary to determine whether any particular shock is likely to be transitory.

Some transitory shocks occur because "news" does not provide accurate information. Many data releases are subject to several revisions, and often the revised data reveal a different picture than that portrayed by the initial release. Quarterly GDP data are revised twice until the "final estimates," and these "final estimates" are subject to annual benchmark revisions and comprehensive revisions at roughly five-year intervals. For a recent example of significant data revisions, initial measurement of the 2001 recession suggested negative real GDP growth in the second and third quarters of 2001, whereas the currently available data measure negative real growth as early as the third quarter of 2000 and for the first three quarters of 2001.

ation Search," in Thomas Meyer (ed.), *The Political Economy of American Monetary Policy*, New York: Cambridge University Press, 1990, pp. 27-50.

⁷ John B. Taylor, "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, 1993, 39(0), pp. 195-214.

⁸ An illustration of the deviations of the predicted from actual funds rate from a Taylor rule with a constant target inflation rate over the past decade can be found in Federal Reserve Bank of St. Louis, *Monetary Trends*, p. 10, available at <http://research.stlouisfed.org/publications/mt/>.

⁵ An early analysis is William G. Dewald and Harry G. Johnson, "An Objective Analysis of the Objectives of American Monetary Policy, 1952-61," in Deane Carson (ed.), *Banking and Monetary Studies*, Homewood, IL: Richard D. Irwin, 1963, pp. 171-89.

⁶ Salwa S. Khoury, "The Federal Reserve Reaction Function: A Specifi-

The monthly payroll employment data are revised in the two months following the initial release and are revised again at the beginning of the following calendar year to incorporate benchmarks to the unemployment insurance system records. With the initial release of the payroll employment numbers for October 2003 at the beginning of last November, the measured monthly increase of 126,000 workers generated the hope that the transition from the two-year “jobless recovery” to a period of rapid employment growth was at hand. The October data as currently revised indicate an increase in payroll employment of only 88,000 workers. We now believe that only in January 2004 did month-to-month payroll employment growth exceed 100,000 jobs—and only an anemic 112,000 at that.

The presence of measurement error in individual economic data series, particularly in the initial releases of such data, requires that analysts and policymakers examine multiple data sources for a consistent picture of the underlying trends in economic activity. There is no way to generalize about this issue. Different series have different sources of error and different frequencies of large revisions. Some series are more subject to special disturbances, such as bad weather, than others. The Federal Reserve has tremendous staff expertise and access to statistical agencies that permit it to form the best judgments possible on these tricky issues.

As an aside, let me offer another observation. Currently, the Federal Reserve enjoys very high credibility. Among other benefits, that credibility enables the Fed to react to its best judgment about what incoming data mean. The Fed does not have to act to maintain appearances. For example, my impression is that there were times in the 1970s when the Fed failed to react to accumulating evidence of economic weakness for fear that to react before inflation declined could be interpreted as a lack of inflation-fighting resolve. Policy actions designed primarily to attempt to affect expectations, even though contrary to the fundamentals, ultimately increase uncertainty as it becomes clear that the action did not fit the fundamentals. Success in bringing down inflation and keeping it down means that the Fed can ignore a surge in price indices or any other troubling information if its best judgment is that the data reflect a statistical aberration or a transitory event.

I’ve argued that the Federal Reserve must analyze the data for potential statistical problems and that

it must do its best to sort out transitory disturbances from longer lasting ones. Another dimension of the problem is that a central part of making such judgments is to collate information from a variety of sources. Employment data provide an excellent example. The establishment and household surveys are quite distinct statistically, as the surveys’ coverage and methods do not overlap. Data on initial claims for unemployment insurance supplement the message from the two main surveys. In addition, the Federal Reserve accumulates a wealth of anecdotal information on the labor market from contacts across the country; much of this information appears in the Beige Book. When data from diverse sources point in the same direction, confidence in the direction indicated is increased. Conversely, when the signals are conflicting, there is often good reason to reserve judgment and delay policy action. Analysis of the strength of household demand, business investment demand, inflationary pressures, and all other key elements of the picture can and does proceed the same way.

Once FOMC members have reached a conclusion on where the economy is and where it is heading, there are situations where the decision on the appropriate policy response is straightforward and other cases where the appropriate response is problematic. Consider some examples of easy cases first. Suppose the economy has shown robust growth with low inflation for a period of time, and information accumulates that leads to a reasonable interpretation that both real growth and inflation pressures are increasing, or both decreasing. Faced with such information, central bankers with a dual mandate (such as the FOMC) are likely to respond by raising or lowering, as appropriate, the nominal interest rate target. When credibility is high, moreover, the decision need not be a quick one. But when the issue is clear, the central bank must act vigorously enough to ensure maintenance of a non-inflationary equilibrium.

Indeed, such responses are, qualitatively, exactly those predicted by the Taylor rule. Under these conditions, market participants and private agents can likely accurately anticipate the direction, if not the timing and magnitude, of FOMC actions. The FOMC practice since February 1994 of generally restricting changes in the intended federal funds rate to regularly scheduled meetings and making changes in multiples of 25 basis points has demonstratively improved the predictability of the timing

and magnitude of changes in the intended funds rate in such cases.⁹

The appropriate policy response in other cases is less clear. Suppose the economy has shown robust growth with low inflation for a period of time and information arrives that leads to a reasonable interpretation that real growth is decreasing and inflation is increasing. A historical episode of this sort is the “oil shock” in late 1973 and 1974. Here, one component of a “dual mandate” signals a policy action in one direction and the other component in the opposite direction. This is a dilemma case in which the behavior of the economy is pulling the policy-makers to be both easier and tighter. A weighting of objectives and careful attention to long-run concerns is necessary. Even if a central bank were to follow a Taylor rule approach to implementing policy changes, in the absence of disclosure of the exact reaction function, outside observers would be unable to predict the policy action. It is unrealistic to believe that a central bank can provide the transparency required for outsiders to accurately predict policy actions in all such circumstances.

Predictability in the dilemma cases can be improved and the appropriate policy response facilitated when a central bank has a credible commitment to maintaining low inflation in the long run. In these circumstances, the central bank can likely pursue short-run stabilization objectives without significant influence on expectations of long-run inflation. In current parlance, inflationary expectations are “well anchored.” In such environments, policy actions aimed at short-run stabilization are likely to be more effective. Under conditions of high credibility, policy actions are likely more predictable.

The Federal Reserve has policy responsibilities beyond a narrow interpretation of the “dual man-

date.” In particular, a fundamental responsibility envisioned by the architects of the Federal Reserve Act was that the new central banking structure avoid recurrence of episodes of financial instability and banking panics such as those that occurred regularly in the late 19th and early 20th century. The Great Depression was a Federal Reserve policy failure of the first order. Recent episodes, such as the 1987 stock market crash, the financial market upset in the fall of 1998, Y2K, and 9/11 provide evidence that the Federal Reserve has learned lessons from the 1930s well and can deal effectively with systemic threats to financial stability.

It is important to understand, however, that concerns about financial stability require that the Federal Reserve sort out shocks that raise such concerns from those that do not. Not every large event creates risks for the financial system as a whole. The large stock market decline that started in early 2001 did tend to depress economic activity but, unlike the crash of 1987, never raised issues of systemic stability.

CONCLUDING COMMENT

Forecast uncertainty is a fact of life. Forecasts are like newspapers. Just as last week’s newspaper is of little value in understanding today’s news, last month’s forecast is of little value in determining today’s policy stance. Old newspapers and old forecasts are primarily of historical interest.

The obvious fact that we insist on using the most up-to-date forecast available indicates that forecasts change, sometimes substantially, with new information. Forecasts are valuable in formulating monetary policy, but it is of critical importance that we not allow today’s policy settings to become entrenched in our minds.

⁹ William Poole, Robert H. Rasche, and Daniel L. Thornton, “Market Anticipations of Monetary Policy Actions,” *Federal Reserve Bank of St. Louis Review*, July/August 2002, 84(4), pp. 65-93; and William Poole and Robert H. Rasche, “The Impact of Changes in FOMC Disclosure Practices on the Transparency of Monetary Policy: Are Markets and the FOMC Better ‘Synched?’” *Federal Reserve Bank of St. Louis Review*, January/February 2003, 85(1), pp. 1-9.

