The FOMC versus the Staff:
Where Can Monetary Policymakers Add Value?

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A key issue in monetary policymaking is the appropriate division of labor between the professional staff of the central bank and the appointed policymakers. Lars E. O. Svensson (1999) argues that the appropriate role of a policymaking group, such as the Federal Open Market Committee (FOMC) in the United States, is to make judgments about social welfare, taking as given the likely outcomes of different policies as estimated by the staff. In this division, the staff is relied upon to assess current and prospective economic conditions and to forecast the effects of different policies. Policymakers' only role is to decide which of the various options should be chosen.

The obvious alternative is for policymakers to also play a role in forecasting and in predicting the consequences of policy actions. In this division, policymakers supplement the staff's analysis with their own information about likely economic developments and the effects of policy. Their choice of a particular policy then reflects their views not only of desired outcomes, but also of prospective developments and of the working of the economy.

Which of these divisions of labor is best clearly cannot be determined from first principles. It depends on the relative skill of the staff and the policymakers in forecasting and understanding the economy. As a result, the answer may vary across times and places.

In the United States, policymakers certainly appear to believe they have useful information to add to the staff's forecasts and estimated policy

multipliers. Perhaps the strongest evidence of this comes from the transcripts of FOMC meetings. A significant portion of each meeting is devoted to the economic "go-around," where each member of the FOMC gives his or her own view of prospective conditions. Likewise, much of the discussion of appropriate policy focuses on the likely outcomes of actions, rather than on the desirability of one outcome over another.

In this paper, we test whether US policymakers do, in fact, have useful information in one particular area—forecasting. The Board of Governors staff makes a detailed forecast before each FOMC meeting. In conjunction with two of these meetings each year, the Federal Reserve reports information about the forecasts of members of the FOMC for key macroeconomic variables. We compare these staff and policymaker forecasts for the period 1979–2001 with actual data to see if the FOMC forecasts contain useful information. We find that, for the most part, they do not.

We also investigate the possible consequences of the FOMC's misguided information. In particular, we examine whether differences between the FOMC and staff forecasts help predict monetary shocks. We find suggestive statistical and narrative evidence that they do. This may indicate that the FOMC's attempts to add information to the staff forecast are not just unsuccessful, but may lead to inappropriate actions.

I. Forecast Data

The FOMC prepares forecasts twice a year, in February and July. The forecasts are contained in the *Monetary Policy Report* (*MPR*) submitted to Congress as required by the Humphrey-Hawkins Full Employment and Balanced Growth Act. We examine the forecasts of inflation, unemployment, and real growth. The forecasts in February are for inflation and growth over the four quarters ending in the fourth quarter of the

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current year, and for the unemployment rate in the fourth quarter of the current year. The forecasts in July are for the same variables for both the current year and the next year.

The members of the FOMC first prepare their forecasts before the FOMC meeting preceding the release of the *MPR*. In preparing these forecasts, members have access to the staff forecast. At the meeting, the staff presents its forecast and summarizes the members' forecasts, and the members discuss their views about the economic outlook. After the meeting, FOMC members have about a week to revise their forecasts.

The first FOMC forecasts are those in the July 1979 *MPR*. The forecasts of each variable are usually presented in terms of a range and a central tendency. The range shows the lowest and the highest forecasts of the individual members. The central tendency shows the lowest and highest forecasts after removal of the extremes (typically the three lowest and three highest). We use the midpoint of the central tendency as our figure for the FOMC forecast. When the central tendency is not reported, we use the midpoint of the range.

The exact variables forecast have evolved over time. For inflation, the forecasts are for the GNP implicit price deflator until July 1988, the CPI from February 1989 to July 1999, and the chain-type price index for personal consumption expenditures thereafter. For growth, the forecasts are for real GNP through July 1991 and real GDP thereafter.

The staff forecasts for the same variables are contained in the "Greenbooks" prepared roughly a week before each FOMC meeting. The Greenbooks are available only with a five-year lag. Our sample therefore ends in 2001.

When the forecasts are for variables in the National Income and Product Accounts (NIPA), such as GDP, we measure outcomes using the so-called "final" estimates, which are released roughly three months after the end of the quarter. These slightly revised data are likely to correspond most closely to what the FOMC and staff were trying to forecast. For non-NIPA variables, such as unemployment, which are not subject to consistent, immediate revisions, we measure outcomes using the data as originally released. We typically take these non-NIPA series from the Greenbook for the meeting following the release.

Further details about the data, as well as the data themselves, are available in an appendix available on the AEA Web site (http://www.aeaweb.org/articles/issues_datasets.php).

II. Does the FOMC Have Value Added in Forecasting?

To see if the FOMC forecasts contain useful information relative to the staff forecasts, we estimate regressions of the form

$$(1) \qquad X_t = a + bS_t + cP_t + e_t,$$

where X is the realized value of some variable, such as inflation, and S and P are the staff and policymaker (FOMC) forecasts of that variable. Our main interest is in whether c is positive. That is, conditional on the staff's forecast, does the variable being forecast on average turn out higher when the FOMC's forecast is higher?

The structure of the forecasts suggests that the residuals in (1) are unlikely to be i.i.d. The forecast horizons range from less than six months to well over a year, and not all realized values for earlier forecasts are known when a forecast is made. Thus, the residuals are likely to exhibit both heteroskedasticity and serial correlation.

We therefore estimate the regression in two ways. First, as a baseline, we use ordinary least squares (OLS) and compute conventional OLS standard errors. Second, we employ weighted least squares (WLS). The variance of e is allowed to depend on whether the forecast is a February forecast, a July forecast for the current year, or a July forecast for the next year; the three variances are estimated from the data. For the WLS estimates, we compute Newey-West standard errors with three lags (which is the maximum lag at which one would expect any serial correlation).

The results are given in Table 1. The most striking finding is for inflation. The OLS estimates suggest that someone trying to predict inflation who had access to both the staff and FOMC forecasts should put a coefficient of 1.10 ($t = 2.82$) on the staff forecast and a coefficient of -0.10 ($t = -0.28$) on the FOMC forecast. This suggests that the FOMC forecast does not contribute useful information. Indeed, the fact that the coefficient on the FOMC forecast is negative (albeit not significantly so) suggests that someone trying to forecast inflation should

Table 1—Role of Staff and FOMC Forecasts in Predicting Actual Values

	Constant	Staff forecast	FOMC forecast	R^2
Inflation				
(1) OLS	−0.20 (0.22)	1.10 (0.39)	−0.10 (0.37)	0.86
(2) WLS	−0.26 (0.11)	1.40 (0.25)	−0.38 (0.25)	0.93
Unemployment				
(3) OLS	0.26 (0.41)	0.97 (0.38)	−0.03 (0.40)	0.79
(4) WLS	0.21 (0.38)	0.78 (0.37)	0.17 (0.34)	0.89
Real growth				
(5) OLS	0.43 (0.36)	0.25 (0.49)	0.63 (0.52)	0.44
(6) WLS	0.52 (0.58)	0.17 (0.88)	0.67 (0.90)	0.50

Notes: The dependent variable is the actual value of the variable being forecast. Standard errors are in parentheses. The weighted least squares regressions use Newey-West standard errors.

move away from the FOMC forecast, not toward it. Taking into account the likely heteroskedasticity and serial correlation of the residuals only strengthens the results. The WLS estimates with robust standard errors show that the weight on the staff forecast in predicting inflation is 1.40 ($t = 5.54$) and that on the FOMC forecast is more negative and close to significant.

The results for unemployment are similar to those for inflation. In this case, the OLS estimates suggest putting a weight of essentially one ($t = 2.52$) on the staff forecast and a weight of virtually zero on the FOMC forecast. The estimates using WLS and robust errors raise the weight on the FOMC forecast slightly, but it remains small and very far from significant.

For real growth, the results are slightly supportive of the FOMC having useful information. The OLS estimates indicate weights of 0.25 on the staff forecast and 0.63 on the FOMC forecast. Neither weight, however, is statistically significant. Correcting for heteroskedasticity and serial correlation has little effect on the point estimates, but makes the standard errors considerably larger.[1]

In largely failing to add value to the staff forecast, the FOMC is in good company. Romer and Romer (2000) find that someone trying to

forecast economic outcomes who had access to both the Greenbook and a range of high-profile commercial forecasts should put little or negative weight on the commercial forecasts. FOMC members, however, have a key advantage over commercial forecasters: access to the Greenbook. Thus, at the very least, they could make forecasts that differed only trivially from the staff's. In this case, the FOMC and staff forecasts would be nearly collinear, and the coefficients could not be estimated with any precision. To a considerable extent, this is what is occurring with the forecasts of real growth.

The FOMC should be able not just to match the staff, however, but to do better. Because policymakers are allowed to revise their forecasts after the FOMC meeting where the forecasts are discussed, they have a potential data advantage of up to two weeks. Likewise, FOMC members are less constrained than the staff in what they can assume about future policy actions. The fact that for inflation and unemployment, the coefficient on the staff forecast is large and significant while that on the FOMC forecast is effectively zero implies not just that FOMC members fail to add information, but that their efforts to do so are counterproductive.

Finally, we check for the importance of outliers. We find that there are actually fairly few influential observations.[2] One observation that

[1] Splitting the sample after July 1990 provides a way of testing whether the usefulness of the FOMC forecasts has changed over time. For inflation and unemployment, the weight on the FOMC forecast is higher in the later sample, but still small and far from significant. For real growth, the weight on the FOMC forecast in the later sample is both large (1.74) and significant ($t = 2.45$). Thus, for real growth the FOMC appears to have had useful information in more recent years.

[2] The absence of obvious outliers does not mean that the differences between the FOMC and staff forecasts are small. If one looks directly at the forecast differences, one finds substantial variation. The standard deviations of the forecast differences are 0.28 for inflation; 0.23 for unemployment; and 0.35 for real growth.

damages the FOMC's predictive power for all three variables is the next-year forecast in July 1981. When we exclude this observation, the results for inflation are little changed; those for the unemployment rate move slightly toward the FOMC having some useful information; and those for real growth move strongly in favor of the FOMC. An observation that damages the FOMC's apparent predictive power for inflation, but not for unemployment or real growth, is the forecast in February 1990. Excluding this observation, however, does not in any way rescue the hypothesis that the FOMC inflation forecast contains useful information: the weights for this sample are 0.95 ($t = 2.55$) on the staff forecast and 0.03 ($t = 0.09$) on the FOMC forecast. From these and other exercises, we conclude that the results in Table 1 reflect consistent patterns in the data. The FOMC's attempts to improve on the Greenbook forecasts, with the partial exception of the forecasts for real growth, have been largely unsuccessful.

III. Do Forecast Differences Affect Policy Choices?

The failure of the FOMC to bring useful additional information to the monetary policy-making process raises an obvious question: do policymakers act on their apparently useless information? To put it even more bluntly, are the FOMC's efforts to improve on the staff forecasts just ineffective, or are they a potential source of monetary policy mistakes?

To investigate this issue, we test whether the differences between the FOMC and staff forecasts predict monetary policy shocks. As our measure of shocks, we use the series derived in Romer and Romer (2004). This series shows times when the FOMC moved the funds rate in a way that differed from its usual response to the staff forecast. One possible source of such unusual movements is differences between the FOMC and staff forecasts.

To see if this is the case, we run regressions of the form

$$(2) \qquad M_t = a + b\,(P_t - S_t) + e_t,$$

where M is our measure of monetary policy shocks, and P and S are again the FOMC and staff forecasts of some variable. We consider the impact of the forecast differences for each variable first individually and then in combination. For the July meetings, when we have forecasts for both the current year and the next year, we measure P and S using only forecasts for the current year.[3]

The results are given in Table 2. The estimates suggest that forecast differences may be one source of monetary shocks. When the differences for each variable are considered separately, the estimated impact on monetary policy is of the expected sign and marginally significant. The point estimates suggest a relatively large impact. For example, the estimates for inflation in row (1) show that an FOMC forecast of inflation one percentage point higher than the staff forecast is associated with an unusual rise in the federal funds rate of approximately 30 basis points.

The results in row (4) show the effect when the forecast differences for all three variables are included. The point estimates and the statistical significance fall somewhat, but are qualitatively unchanged. These results suggest that the forecast differences may combine to generate even larger monetary shocks. For instance, if the FOMC is more pessimistic than the staff about inflation and more optimistic about unemployment and real growth, a combination that could plausibly occur, the coefficients predict a substantial unusual rise in the funds rate.

An examination of the data reveals three FOMC meetings where the gap between the FOMC and staff inflation forecasts was especially large, and where the FOMC's behavior was consistent with the pattern suggested by the regressions. In July 1979 and February 1982, the FOMC's forecast was well above the staff's, and there were substantial contractionary monetary shocks. In February 1991, the FOMC's forecast was well below the staff's, and there was a substantial expansionary shock. We examine the transcripts of these three meetings to see if the statistical relationship may be capturing a genuine behavioral link.[4]

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[3] Because the shock series ends in 1996, the sample period for these regressions is 1979–1996.

[4] Actual inflation in 1979 and 1982 was closer to the staff forecast than to the FOMC forecast, while in 1991 it was closer to the FOMC forecast. Thus, the three episodes fit with our overall finding that the FOMC does not on average improve on the staff forecast.

TABLE 2—ROLE OF FORECAST DIFFERENCES IN PREDICTING MONETARY POLICY SHOCKS

| | Constant | Difference between FOMC and staff forecast for: | | | R^2 |
		Inflation	Unemployment	Real growth	
(1)	0.04 (0.06)	0.31 (0.20)			0.07
(2)	0.04 (0.06)		−0.50 (0.25)		0.11
(3)	0.03 (0.06)			0.31 (0.16)	0.11
(4)	0.01 (0.06)	0.23 (0.21)	−0.35 (0.31)	0.13 (0.20)	0.17

Notes: The dependent variable is the Romer and Romer (2004) measure of monetary shocks. Standard errors are in parentheses.

In the July 1979 episode, FOMC members emphasized their differences from the staff forecast and urged policy actions consistent with these differences. For example, Governor Wallich said: "I continue to think that we may be underestimating inflation" (*Transcript*, 7/11/79, p. 15), and urged raising the top of the funds rate target range to allow for tightening if the price of the dollar fell in the coming weeks (p. 42). Likewise, Mr. Mayo said: "Although the staff forecast is a reasonable one, I find myself a little more pessimistic. I am concerned about both the likelihood of less real growth and more inflation" (pp. 20–21). He urged keeping the funds rate at its same, relatively high level (p. 44). The discussion clearly suggests that gloomier forecasts of inflation than the staff were one reason the FOMC voted to keep policy tight despite high unemployment and fear of a recession.

The second of these episodes, February 1982, is less supportive of a causal link between the forecast differences and monetary shocks. While members clearly noted their disagreement with the staff forecast, these differences do not appear to have been central to their actions. Money growth had been enormous in the previous month, and much of the meeting revolved around policymakers' view of what would happen to velocity. The increase in the funds rate target seemed to be the result of an attempt to keep money growth rates in the target ranges.

In the third episode, February 1991, policymakers clearly overruled the staff on the forecast and acted on the basis of their own views. In the go-around, member after member said the staff forecast was too optimistic about real growth and predicted that inflation would be lower than the staff forecast as a result. Chairman Greenspan summarized the committee's view by saying: "And while we've all taken pot shots at the Greenbook forecast, it is not a zero probability forecast by any means" (*Transcript*, 2/5–6/91, p. 49). He went on to say: "I actually don't quite agree with the Greenbook because I think the inflation forecast is too high. From what I can sense, looking at the internal price structure of a lot of companies and talking to a lot of people …, it may turn out to be doing better" (p. 49). This belief led Greenspan to conclude: "[W]e may have to move it [the interest rate structure] down further as insurance" (p. 49). Other members also drew the link between their differences from the staff forecast and their view of appropriate policy. For example, Mr. Boehne said: "I think the staff forecast, while well thought out, is on the rosy side. … I'd rather err on the side of too much stimulus at this point rather than too little" (p. 24).

Thus, the narrative evidence, like the statistical analysis, is suggestive of a link between forecast differences and monetary policy actions. It appears that monetary policymakers may indeed act on information that is of little or negative value.

IV. Conclusions

When it comes to forecasting, US monetary policymakers do not have useful information relative to their staff. Someone wishing to predict inflation and unemployment who had access to both the FOMC and staff forecasts would be well served by discarding the FOMC forecast and just using the staff predictions. Since the staff forecast reflects a great deal of effort by hundreds of highly trained professionals, it is not especially surprising that policymakers do not have useful additional information. But since policymakers know the staff forecast when they make theirs, the finding that the staff forecast contains information beyond what is in policymakers' forecast indicates that the FOMC

is not using its available information optimally in constructing its forecast.

Yet, as the FOMC currently operates, policymakers' forecasts play a role in policy. Much time is spent preparing individual forecasts and debating the staff forecast. More importantly, we find suggestive statistical and narrative evidence that differences between the FOMC and staff forecasts are one source of monetary policy shocks. Policymakers appear to base at least some decisions on their apparently useless information.

These findings have some possible implications for policymaking in the United States. It appears that a more effective division of labor within the Federal Reserve might be for the staff to present policymakers with policy options and related forecasted outcomes, and for policymakers to take those forecasts as given. With this division, the role of the FOMC would be to choose among the suggested alternatives, not to debate the likely outcome of a given policy.

Our findings could also have implications for policymaking in other countries. In many countries, monetary policymakers are less likely to be experts than in the United States. This suggests that the likelihood that they will have useful information is even smaller than for the FOMC. For this reason, monetary policymakers elsewhere might wish to consider the possibility that they do not have additional information, and to encourage empirical testing of this proposition.

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