

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
DIVISION OF MONETARY AFFAIRS
FOMC SECRETARIAT

Date: October 26, 2017
To: Federal Open Market Committee
From: Brian F. Madigan
Subject: Corrected Version: Some Implications of Uncertainty and Misperception for Monetary Policy

Attached is a corrected version of the memo titled “Some Implications of Uncertainty and Misperception for Monetary Policy.” The version circulated on October 24 contained errors on three pages:

- On page 5 of 29, the memo now correctly says, “we use the September 2017 staff forecast as the baseline” (not October).
- On page 6 of 29, footnote 11 has been corrected and amplified.
- On page 24 of 29, the first two equations in “The Rules” table in Appendix A now correctly have plus signs in front of the coefficient on the inflation gap term in each equation (instead of a minus sign).

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Date: October 24, 2017
To: Federal Open Market Committee
From: Steven B. Kamin, Thomas Laubach, and Andreas Lehnert
Subject: Some Implications of Uncertainty and Misperception for Monetary Policy

This year's combination of below-target and declining inflation with low and declining unemployment highlights some important areas of uncertainty confronting policymakers. The attached memo, prepared by Chris Erceg (IF), Michael Kiley (FS), and James Hebden, David Lopez-Salido, and Robert Tetlow (MA), begins by reviewing the degree of uncertainty around estimates of the natural rate of unemployment (u^*), and around the persistence of inflation and its responsiveness to resource utilization (the slope of the Phillips curve). In light of the fact that empirical evidence cannot meaningfully reduce these uncertainties, the memo then examines how various strategies for conducting monetary policy interact with errors in estimating the level of u^* and the key parameters of the Phillips curve to affect the likely distribution of economic outcomes.

The three policy strategies are the balanced-approach policy rule and two variants, one that responds more strongly to inflation ("inflation-averse") and one that responds more strongly to the unemployment rate ("unemployment-averse"). The performance of these strategies is evaluated using stochastic simulations, thus taking into account a wide range of possible shocks hitting the economy. Previous literature has highlighted that, when there is substantial uncertainty about u^* , inflation-averse policy rules perform well because they attenuate the response of policy to potentially mismeasured resource utilization. The memo finds that this result has little force under current circumstances, for two reasons: first because the Phillips curve is presently estimated to be very flat, so that responses to a mismeasured unemployment gap lead to little degradation in economic performance; and more importantly, because an aggressive response to below-target inflation under current circumstances would lead to an even larger undershooting of the unemployment rate below u^* than is already projected in the staff's baseline. Even if policymakers view low unemployment as not socially costly *per se*, they may nonetheless be concerned that high levels of resource utilization may induce other imbalances, or that a very tight labor market may lead inflation dynamics to change in undesirable ways that could be hard to detect in real time. If the most salient risk is not that u^* is mismeasured but rather that inflation dynamics will revert to those prevailing in the 1970s, the inflation-averse strategy would raise the likelihood of initially very low and later high unemployment outcomes without noticeable gains in stabilizing inflation, compared to the balanced-approach rule.

If you have any questions about the contents of this memo, please feel free to contact the authors of the memo directly or any of the three of us.