SPECIAL ISSUE INTRODUCTION

Money and Monetary Policy in a Changing World

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Monetary policy unfolds in an environment that is subject to considerable innovation and uncertainty about both the nature of developments in the economy and the appropriate framework for interpreting them. Long-standing questions surround the transmission channel for monetary policy, the determinants of inflation, and the reliability and stability of the relationship between money and prices, let alone the appropriate empirical measure of money to use in policy analysis. Even when there is agreement on these matters, the extent to which econometric models can detect and measure structural change is also at issue. Finally, questions arise concerning the role that policy itself can play; The extent to which monetary policy can successfully stabilize economic fluctuations, how monetary policy should be conducted in the face of uncertainty regarding the structure of the economy, and the role of expectations and credibility in the monetary policy process. The ten papers in this special issue of the Journal of Economics and Business address some important issues facing the monetary analyst or policymaker in light of such uncertainties from both theoretical and empirical perspectives.

The first five papers document structural change and uncertainty regarding the transmission of monetary policy and inflation.

In his theoretical paper, English reexamines the credit transmission channel. A body of work has arisen that suggests that firms, particularly smaller firms, may be credit-constrained in making their investment decisions and that monetary policy could have direct effects on output by relaxing credit constraints. English argues that this proposition need not be true. He constructs a simple general equilibrium model in which agents are...
truly constrained in the credit market, but finds that monetary policy does not have direct quantity effects in the steady state.

The papers by Lindh and Malmberg and by Huh and Lansing explore factors that complicate our understanding of disinflations. Lindh and Malmberg argue that a complicating factor supporting the disinflation that has occurred in OECD countries over the last two decades is the effect on aggregate savings from the changing demographic structure of the population. Huh and Lansing examine the role of expectations and credibility in the Volcker disinflation episode in the early 1980s. They find that a model incorporating adaptive expectations and partial credibility best explains the behavior of long-term interest rates during the onset of the disinflation episode.

The papers by Orphanides and Porter and by Carlson, Craig, and Schwarz show how the money-inflation relation is shifting and how to take account of this shift in the conduct of policy. Orphanides and Porter propose an amendment to the $P^*$ forecasting model of inflation to deal with the apparent shift in equilibrium M2 velocity that took place at the beginning of the 1990s. Carlson, Craig, and Schwarz also examine this shift using the Bai–Perron test for multiple structural breakpoints. The implied equilibrium values for M2 velocity they obtain are, as they state, "generally consistent" with those found by others including Orphanides and Porter in this volume. In terms of inflation itself, Carlson, Craig, and Schwarz find relatively little evidence for structural shifts in the weighted median CPI measure of core inflation since the early 1980s. They find only one downward shift in early 1991.

The remaining five papers evaluate the consequences of following various monetary policy rules that have been put forth to stabilize the economy while reigning in inflation. Two papers, by Orphanides, Porter, Reifschneider, Tetlow, and Finan and by Drew and Hunt take up the interaction between monetary policy rules such as the Taylor rule and uncertainty about a chief ingredient in the rule, the output gap (between potential real output and actual real output). The first of these papers employs stochastic simulations of the Federal Reserve Board’s forward-looking macro model of the United States economy (FRB/US) to show that the benefits for economic stabilization from following a Taylor-type rule deteriorate, at times considerably, when the model is confronted with a substantial amount of measurement error in the estimated output gap. Their work is based on real-time estimates of the output gap over several decades. If the measurement error is not substantial, the deterioration is smaller, but when the error is large, it may be advantageous to respond to the growth rate of output rather than its level. Drew and Hunt draw upon a Hodrick–Prescott filter to calibrate uncertainty regarding potential output measurements and examine the performance of Taylor-type and inflation-forecast-based rules using the Reserve Bank of New Zealand’s Forecasting and Policy System (FPS). They find that including a forward-looking inflation target in a Taylor rule can improve performance.

While Taylor’s rule and related interest-rate rules have been the subject of a considerable research effort in the macro policy community in the last few years, a competitor to them, which also promises to deliver low inflation and possibly improved overall economic performance, is the monetary rule presented by McCallum. Two papers, one by Jefferson and one by Thornton, evaluate the McCallum rule in a simple reduced-form income equation. Jefferson uses estimates of the domestic monetary base as the instrument. He finds that the domestic base performs better than the total base. Thornton finds that broader monetary aggregates such as M2, Divisia M2, or Divisia L perform best as the policy instrument.
The last paper by Sack and Wieland explores how the gradualism observed in the actual monetary policy process can be understood as being consistent with optimal behavior on the part of central bankers. Specifically, they explore the implications of interest-rate smoothing, either in the form of a lagged interest rate in a generalized rule or a reduced degree of responsiveness to output and inflation. Rather than being evidence of suboptimal, sluggish central bank behavior, as has been alleged, Sack and Wieland find that such interest-rate smoothing may in fact be optimal if there is measurement error in the inputs to the rule, forward-looking behavior in financial markets, or uncertainty about structural coefficients.