Transparency, Communication, and Commitment

Introduction to a Special Issue of the
International Journal of Central Banking

Questions about transparency and the optimal way to communicate and commit to a monetary policy are both highly practical and fascinating from a research viewpoint. How far can transparency be taken? Is it better for a central bank to provide information about the future path for the interest rate instrument, or simply to give the staff's economic forecast of inflation and the real economy? How should one model transparency? By assuming that communications are sent and received with error, or by assuming that only a fraction of economic agents get the information? Similarly, how can one model different degrees of commitment? And how can one test and evaluate different models of transparency and commitment?

Progress has been made recently in designing economic models that can be used to answer such questions. Several conferences on this subject have been planned or are now under way, and discussions are taking place among policymakers in a number of central banks around the world. Many technical research papers are being written on the subject. This special issue of the *International Journal of Central Banking* is devoted to these questions of transparency, communication, and commitment. It is the second special issue since the IJCB was founded. The first, *Staggered Pricing Models Face the Facts*, was published in September 2006 as Volume 2, Number 3.

The leadoff paper in this issue is by Carl Walsh. It examines the transparency question in a standard model with staggered price setting and rational expectations. Price shocks result in a policy tradeoff between fluctuations of inflation and real GDP. The model assumes a continuum of different degrees of transparency, measured by the fraction of firms who receive the announcement of a policy change. There is an optimal degree of transparency in the model; it balances (1) the volatility-reducing effect of transparency—due to people being informed that the central bank is reacting either to a supply or demand disturbance—against (2) the volatility-increasing effect of transparency—due to the private sector's reaction to the inevitable noise in the forecast. Optimal transparency can be less

than full transparency primarily because of the private sector's reaction to the noise in the central bank's forecast.

Petra Geraats focuses mainly on a model with perfectly flexible prices, though a more complex sticky-price model is considered in an appendix. The paper models varying degrees of transparency differently than Walsh, focusing on the noisiness of the signal sent about the target inflation rate and the target for potential output rather than the fraction of participants who receive the signal. Geraats works within a discretionary policy framework (rather than a rules framework) and finds that more transparency about the inflation target improves outcomes while less transparency about the output target can improve outcomes. A novelty is modeling a situation where people's views about transparency are different from the actual transparency; thus, there is a lack of common knowledge. This is modeled by assuming that people believe there is a larger variance of the noise in the signal than there actually is.

The paper by Gara Mínguez-Afonso delves further into the common-knowledge issue and models how information about policy flows through the market. It examines a situation where the fundamentals of the economy are not common knowledge among the traders, and it is this absence of common knowledge that generates rapid and possibly large discrete changes in rates. Using assumptions somewhat analogous to the Walsh paper, traders sequentially become informed that the price—whether the exchange rate or the interest rate—has moved away from fundamentals, but they are also aware that other traders are not so informed.

The paper by Ewerhart, Cassola, Ejerskov, and Valla looks at the detailed "plumbing" of monetary policy—by actually peering into the microstructure of the money markets where the central bank's targets, or corridors, for the overnight interest rate interact with commercial banks buying and selling in the market. In their model, a bank with private information can cause a non-negligible price change because banks extract information from the observed trading volume and order flows. This type of model is relevant for the analysis of communication policy of the central bank because the stated intentions of the central bank—for example, to take actions to offset the impact of manipulators in the market—can affect the size of market volatility.

Hakan Kara focuses on the problem of commitment by the central bank to a policy rule. A new parameter—measuring the degree of a policymaker's commitment to an optimal monetary policy—is defined in the paper; it ranges from zero commitment to full commitment. A higher commitment parameter results in a monetary policy rule that is more reactive to expected inflation and output than a lower commitment parameter; it also results in more inertia. Using U.S. data, pre- and post-1980, the paper interprets the observed higher reaction coefficients in the policy rule in the later period as a greater degree of commitment. Hence the paper interprets changes in policy rule coefficients as due to changes in the commitment parameter. It also shows the value, in terms of improved performance, of committing to a policy rule.

The final paper, by Michael Ehrmann and Marcel Fratzscher, empirically examines how the market reacts to two different ways of communicating about Federal Reserve policy. Their findings are valuable for determining whether to announce intentions for the paths for future interest rates or economic outlook. They distinguish between the communication approach used during the 1990s period before December 1999 and the "balance of risks" approach followed afterward. In both cases, markets anticipate interest rate moves, but they do so more rapidly in the newer regime than in the older regime, and with less overshooting.

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