

# Introductory Remarks

by Bennett T. McCallum

## I. Introduction

It is a pleasure, but also a somewhat daunting task, to provide introductory remarks for the 2008 International Conference entitled “Frontiers in Monetary Theory and Policy.” It is daunting, because the papers’ topics do indeed concern the scientific frontiers of monetary policy analysis, and therefore represent new and partly unfamiliar ideas that are challenging to understand and evaluate. Furthermore, the authors of these papers are outstanding leaders in monetary and macroeconomic analysis, ones whose sophisticated and technically challenging work has been instrumental in developing the current frontiers that they are today attempting to push forward.

Monetary economists have been rather proud, recently, of developments in our subject over the past 15–20 years. There has been great progress both analytically and in the actual conduct of monetary policy. Analytically, the profession has developed an approach to policy analysis centered around a somewhat standardized model that is designed to be structural—respectful both of theory and evidence—and therefore usable for policy analysis, with a policy instrument that agrees with the one typically utilized in practice. Meanwhile, most central banks have been much more successful than in previous decades in keeping inflation low while avoiding major recessions (with a few exceptions). And, best of all, these improvements have been related; the widely adopted inflation targeting style of policy practice is strongly related in principle to the prevailing framework for analysis.

There are, however, reasons for concern including ongoing disputes about empirical performance of key relationships in the semi-standard model, about communication and commitment mechanisms in theory and especially in practice, about the relationship of monetary policy to credit, fiscal, and foreign exchange policies, and about a myriad of technical details. And there is much uneasiness about current policy approaches in the face of major credit market difficulties and hints of rising inflation.

As this talk is an introduction, I will not attempt to describe—much less evaluate—the analysis contained in the papers that we will be hearing. (Perhaps Maurice Obstfeld will attempt to do that at the closing session tomorrow.) Instead, I will merely try to give a few words of background for the specific areas that the various papers will be

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concerned with, together with a very few comments on the contributions of the authors in the past.

## II. Description of the Sessions

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The paper in Session 1 is by Michael Woodford, who is widely viewed as arguably the single most influential contributor to the prevailing frontier-status mainstream approach to monetary policy analysis. He has authored too many influential papers to recount, but his Princeton University Press treatise of 2003, *Interest and Prices* (Woodford [2003]), is too important to ignore. It has already become a classic and was partially responsible for his award of the second biennial Deutsche Bank Prize in 2007. His paper for this conference is on “credit frictions and optimal monetary policy.” This is a subject of great interest, in part because of major credit market problems in the United States and elsewhere during recent months. More fundamental and lasting, however, is the issue of whether or not models that ignore credit market complications can be satisfactory approximations to reality, that is, satisfactory for the design of monetary policy rules for management of the central bank’s short-term interest rate instrument. From the title of Woodford’s paper, it would appear that he will be conducting an optimal policy rule exercise in the context of a model that includes a banking sector that represents some credit market frictions. Such models have been developed most prominently by Bernanke, Gertler, and Gilchrist (1999), but also by Christiano, Motto, and Rostagno (2003), and Goodfriend and McCallum (2007). I look forward with great interest to seeing Woodford’s results.

Next on the schedule is the inaugural Mayekawa Lecture, named after Haruo Mayekawa, who was Governor of the Bank of Japan (BOJ) from 1979 to 1984. The speaker will be John B. Taylor, who is as distinguished and appropriate an individual as one could imagine for this occasion. Not only is he the originator of the rightly ubiquitous Taylor rule for the conduct of monetary policy, but also he served for four years as the U.S. Under Secretary of the Treasury for International Affairs and for several years on the President’s Council of Economic Advisers—two extremely important positions among U.S. monetary/macroeconomic policymakers. Furthermore, he was from 1994 to 2001 one of the Honorary Advisers of the Institute for Monetary and Economic Studies (IMES), and contributed keynote speeches and comments to previous gatherings of this annual conference. As an academic, however, I myself consider his greatest contributions (thus far) to have been his outstanding scholarly publications on numerous aspects of macro and monetary analysis including an influential, early specification of nominal stickiness; implementation of open- and closed-economy quantitative models (both large and small) with rational expectations (RE) and nominal rigidities; techniques for the solution, estimation, and simulation of RE models; and the first worked-out example of quantitative monetary policy analysis in an RE model designed to be invulnerable to the Lucas critique—in other words, the predecessor of today’s dynamic stochastic general equilibrium (DSGE) models. Personally, I have also been impressed by his thoughtful exposition and great common sense. I look forward with anticipation to the Mayekawa Lecture.

After lunch today, at Session 2, we will have a contribution by Ippei Fujiwara, Keisuke Otsu, and Masashi Saito, all (now or previously) of the BOJ. Fujiwara is Director and Senior Economist at IMES and a major organizer of this conference; Otsu was formerly an economist at IMES but is now Assistant Professor at Sophia University in Tokyo; and Saito is an economist in the BOJ's Research and Statistics Department. Their topic is the global impact of Chinese growth, and they strive in their analysis to study in a rigorous manner some effects of the reform and "opening up" of China that has taken place over recent decades. In particular, they develop a neo-classical, two-country model of the real business cycle type to determine how China's rapid productivity growth affects economic conditions in the rest of the world. They ask, in particular, is there scope for China's growth to increase welfare both in China and in the rest of the world? There are many non-standard details that must be calibrated for solution of their two-country model, so the exercise is a challenging one. Its objective is to evaluate welfare effects on both China and the "rest of the world" of the opening up (modeled as a reduction in home bias) and resulting increased rate of productivity growth.

In Session 3, our speaker will be Mark Gertler of New York University. Gertler is a prolific and influential researcher in many aspects of monetary and financial analysis, with outstanding contributions in such diverse areas as sticky-price formulations, the role of banking in monetary economics, and monetary policy design in open and closed economies. His coauthored paper on "The Science of Monetary Policy: A New Keynesian Perspective" (Clarida, Galí, and Gertler [1999]) was one of the first overviews of today's mainstream approach to policy analysis and has rightly been highly influential. As an individual, Gertler was, by revealed-preference analysis, a favorite co-author of Ben Bernanke's before the latter became Chairman of the Federal Reserve's Board of Governors. His paper this afternoon will be a new contribution in the rapidly growing area of monetary DSGE models in which labor market frictions, as well as sticky-product prices, are important. To me, this seems like an important line of research, since many existing DSGE models fail to include any analytical counterpart to real-world unemployment and also have some problems matching aspects of the time-series data. Gertler is co-author, with Antonella Trigari, of a much-cited pioneering paper in this area (Gertler and Trigari [2006]), and his presentation today will represent a continuation of this work.

In Session 4, George Evans will present a recent installment in his amazingly long and productive series of publications, many coauthored with Seppo Honkapohja, on the role of *learning* in monetary economics and in macroeconomic analysis more generally. Evans and Honkapohja's (2001) treatise for Princeton University Press, which synthesized their work from about 50 prior publications, quickly became the essential reference and textbook for researchers concerned with issues involving learnability of RE solutions, as well as for those concerned with expectational formulations that replace full rationality with various near-rational learning schemes. In the paper that we will be hearing today, Evans and Honkapohja focus on policy rules that are operational, in the sense of recognizing that current-period values of inflation and the output gap may not be available to actual central banks when setting interest rates for a policy period. The

concern is to determine the robustness of several forms of rules with respect to the gain parameter that reflects the extent to which agents give weight to recent (in comparison with older) observations in their process of learning about the structure of the economy. The concern for robustness and the emphasis on operationality are practical matters that have long seemed to me to be of great importance.

The final paper on the schedule for today will be presented by Lawrence Christiano, of Northwestern University. Christiano is very well known as a prolific and innovative macroeconomist, whose work has often featured empirical analysis in the context of structural vector autoregression (VAR) models. In recent years, however, his work has moved toward models of the DSGE type, therefore intended to be structural and potentially more suitable for policy analysis. Indeed, one of the most prominent and influential examples of an estimated medium-scale DSGE model—along with ones by Frank Smets and Rafael Wouters—is one developed by Christiano in work with his frequent co-authors Martin Eichenbaum and Charles Evans (Christiano, Eichenbaum, and Evans [2005]). This team has also done influential work on identification of monetary policy shocks and quantification of their effects, in open- as well as closed-economy settings. The paper that Christiano will be presenting this afternoon concerns monetary policy effects on stock market prices, and it develops some quite striking results.

The final paper is in Session 6, tomorrow morning. The presenter will be Christopher Sims, yet another outstanding professional leader—in his case, over the past 40 years. Sims has made prominent and path-breaking technical contributions in a host of distinct areas. Most famous of these, perhaps, is the development of VAR models in Sims (1980). Also notable are his contributions in the areas of temporal aggregation, distributed lags, identification, and Bayesian methods in econometrics. He has devoted much effort to the search for alternatives to the Lucas-Prescott approach to policy analysis; proposing instead (in his words) a strategy involving “elaborate modeling of the predictive structure of the data preceding a cautious and sometimes informal application of *a priori* knowledge to interpret the results.” He has been a leading promoter of the “fiscal theory of the price level” and recently has been working on an information theory-based approach to the analysis of inertia or stickiness in economic behavior.

The six papers will be discussed by an outstanding group of scholars, each of whom has made major contributions in monetary policy analysis, including Miles Kimball, Selahattin Imrohoroglu, Michael Krause, James Bullard, Andrew Levin, and Frank Smets.

### III. Panel Discussion

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Following Sims’ paper, there will be a concluding panel session, moderated by Kiyohiko Nishimura, the BOJ’s Deputy Governor and past member of its Policy Board, and a former Professor of Economics at the University of Tokyo. The five presenters (excluding the BOJ authors) together with John B. Taylor and the two Honorary Advisers (Obstfeld and myself) will participate as panelists. Finally, Maurice Obstfeld will have the difficult task of providing some concluding remarks.

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