

Referee Report on “Evaluating Inflation Targeting Using a Macroeconometric Model”

This paper uses a medium-to-large size macroeconometric forecasting model to evaluate inflation targeting and price level targeting rules. The model is built to fit historical data. Expectations are backward-looking and policy affects the economy through narrow channels. Although the consensus in the academic profession is that this model should not be used to analyze monetary policy rules, the author is very clear about what he is doing and the reader can decide for themselves whether they believe the results.

Models such as this one are still used by central bankers around the world to make the baseline forecasts. In most situations the baseline forecast is based on the assumption that the policy regime in force during the forecast horizon is the one that was in place during the estimation period. But central bankers around the world also maintain alternative versions of their models for doing policy analysis. These smaller versions are modified to include forward-looking behavior. The use of this backward-looking model to analyze alternative policy regimes is clearly at odds with current practice in giving advice to central bankers and 4 decades of advances in applying general equilibrium ideas to the problem of understanding monetary policy.

The author understands that the New Keynesian model now dominates the space at the frontier of research on monetary policy analysis. For this reason, the paper includes a criticism of the New Keynesian framework based on a forecasting criterion. The New Keynesian model does not fit the data as well as the econometric forecasting model. This result is well known but not the critical criterion for selecting a model that will be used to do policy analysis. The key question that a policy model must answer is how a change in the policy rule will change nature of the economic equilibrium. If one insists on using disequilibrium models, then one should ask the much more difficult questions about how the disequilibrium behavior depends on the policy regime, and how the disequilibrium behavior affects welfare.

A hint of such analysis can be found in the current literature that nests both backward and forward looking behavior. See, for example, Nessen and Vestin (2005). They use a model that allows for a mix of backward and forward looking agents and a continuum of inflation targets ranging from 1 to k periods ahead. In the limit, a long-run average inflation target is a target for the price path. They demonstrate the well known result (at least, well known among people who work on New Keynesian models) that the more people are backward looking, the shorter should be the averaging interval. But in these models, given any degree of backward-looking behavior, welfare is not very sensitive to the policy choice. Welfare is, however, extremely sensitive to the degree of backward looking behavior. If people really were as backward-looking as this paper assumes, then policymakers should be thinking about how to deal with the distortions caused by this self-destructive behavior.

The failure of the dynamic stochastic general equilibrium model to fit the data has led to an explosion of research in the area of learning and non-rational behavior. But the key to success in this research is to define the equilibrium concept implied by the behavior. In

general, the research confirms the policy advice that comes out of the New Keynesian model. The reason is simply that the analysis includes agents who attempt to be forward looking in the presence of information constraints.

Nessén, Marianne and David Vestin (2005) "**Average Inflation Targeting**" *Journal of Money, Credit and Banking* 37, 837-863.