Should Central Bank Respond to Exchange Rates : An Estimated DSGE Model for Turkey

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February 27, 2017

Abstract

In recent years, there has been extensive research on monetary policy conduction in small open economies. Ever increasing instability in global financial markets bring the merits of taking exchange rates into consideration while conducting Taylor-type interest rate rules. This study aims to examine the characterization of optimal monetary policy and the implications of that policy for a number of macroeconomic variables. We use a small open economy DSGE model borrowed from Gali (2015). Some important features of the model are sticky prices, monopolistically competitive firms, complete international financial markets and law of one price. Model is calibrated to capture the dynamics of the Turkish economy. Structural parameters of the model are estimated by employing Bayesian methods over quarterly data for Turkish economy. In line with the existing literature, as a basis of comparison for alternative interest rate rules, we adopt a welfare based criterion. Our preliminary findings indicate that applying strict inflation targeting is superior to any other alternative interest rate rule. However, a policy maker that values exchange rate stability should also respond to exchange rate fluctuations.

Keywords: DSGE, Optimal Monetary Policy, Exchange Rates
JEL Classification: E52, E58, E44, F41, E10

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