Essays on Monetary Policy

Submitted by Christoph Himmels to the University of Exeter as a dissertation for the degree of Doctor of Philosophy, August 2012.

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Abstract

This thesis consists of three essays on optimal monetary policy. In the first essay I study time-consistent monetary policy in an small open economy model with incomplete financial markets. I demonstrate the existence of two discretionary equilibria. The model is capable of explaining periods of different exchange rate volatilities as well as the transition between those regimes. Following a shock the economy can be stabilised either ‘quickly’ or ‘slow’, where both dynamic paths satisfy the conditions of optimality and time-consistency. I also show that a policy of partially targeting the exchange rate results in far worse welfare outcomes relative to a strict inflation targeting policy.

In the second essay, I analyse how a policy maker can avoid expectation traps and coordination failures. Using a framework developed by Schaumburg and Tambalotti (2007) and Debortoli and Nunes (2010) in which a policy maker may or may not default on past promises I show that already mild degrees of precommitment are sufficient to generate uniqueness of the Pareto-preferred equilibrium.

In the last chapter, I examine optimal monetary policy from an empirical perspective. I estimate a simple small open economy model separately for a policy maker acting under commitment and discretion and find that the data favours the commitment approach. Furthermore, the data suggest that the Bank of Canada did not target the nominal exchange rate in the inspected time period.
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