

BOK-IMF ER Conference

**Monetary Policy Regimes and
Capital Account Restrictions
in a Small Open Economy**

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Comments by Young Sik Kim

Overview and Summary

Quantitative assessment on the effectiveness and welfare implications of capital account restrictions under alternative monetary policy regimes in the context of a small open economy DSGE model with the following features:

- (1) Incomplete capital mobility with external shocks (e.g., foreign interest rate, export demand) as well as domestic productivity shocks**
- (2) Capital controls in the form of “time-varying” or constant taxes on foreign borrowing**
- (3) “Flexible inflation targeting” (Svensson 2000)**
- (4) Parameters calibrated to small Asian economies**

Overview and Summary

Key results and implications :

- (1) Either the optimal “time-varying” capital control policy or the optimal monetary policy with real-exchange-rate targeting does quite well in mitigating macroeconomic volatility.**
 - (2) The “constant-tax” capital control policy is dominated by the optimal monetary policy with the exchange-rate targeting.**
- ⇒ A monetary policy that considers the real exchange rate as well as the inflation and output volatilities has the advantage of absorbing external shocks as well as domestic productivity shocks.**

Overview and Summary

Key results and implications :

⇒ This is consistent with the main insight of a large existing literature on real exchange rate targeting (e.g., Dornbusch 1982) :

In the presence of nominal rigidities, **the use of the real exchange rate as a policy target can facilitate the economy's adjustment to fundamental shocks** (e.g., innovations in the terms of trade or the world interest rate).

Comments

1. Real exchange rate targeting (or “purchasing-power-parity” rule) : theory and evidence

- Calvo, Reinhart, and Vegh (1995) “Targeting the real exchange rate : theory and evidence” *Journal of Development Economics*:

“ ... being a key relative price in any open economy, the real exchange rate is probably the most popular real target in developing economies.”

- Three examples in Latin America :

Brazil (1968)

Chile (1985~1992)

Colombia (1986~1990)

Comments

1. Real exchange rate targeting (or “purchasing-power-parity” rule) : theory and evidence

- **Uribe (2003) “ Real exchange rate targeting and macroeconomic instability” *Journal of International Economics*.**
 - **A policy tradeoff** : “On the one hand, in a world where nominal rigidities are significant, a PPP rule might introduce the necessary real flexibility to cope with intrinsic (fundamental) uncertainty. On the other hand, tight PPP rules can give rise to aggregate fluctuations driven by extrinsic (non-fundamental) uncertainty.”

Comments

1. **Real exchange rate targeting (or “purchasing-power-parity” rule) : theory and evidence**

- ⇒ **A tight PPP rule can generate indeterminacy of the rational expectations equilibrium and **endogenous aggregate instability** due to arbitrary revisions in expectations.**
- ⇒ **PPP rules can give rise to **welfare-decreasing situations** in which exchange rate instability (nominal and real) occurs simply because people expect it.**

Comments

1. **Real exchange rate targeting (or “purchasing-power-parity” rule) : theory and evidence**

- **The current paper focuses on the first part of the tradeoff on the role of PPP rules as absorbers of fundamental shocks.**
- ⇒ **Quantitative evaluation of this tradeoff in a DSGE model where both intrinsic and extrinsic sources of uncertainty are accounted for?**

2. Parameter calibration vs Bayesian estimation

- The current paper appears to simply follow the literature to calibrate the parameters.
- An and Kang (2011) “Oil Shocks in a DSGE Model for the Korean Economy” *Commodity Prices and Markets*, edited by T. Ito and A. Rose, 2011.
 - **Bayesian estimation** (An and Schorfheide 2007) using the data in KOSIS (Korean statistical information service) maintained by Korea National Statistical Office and ECOS (Economic statistics system) kept by the Bank of Korea.

Comments

2. Parameter calibration vs Bayesian estimation

- Some comparisons ...

	Parameter Description	Liu and Spiegel	An and Kang
η	Inverse Frisch elasticity	2.0	0.6277
ρ_r	Persistence: Foreign interest rate	0.95	0.8229
σ_r	StDev: Foreign interest rate	0.01	0.0113
ρ_x	Persistence: Export demand	0.95	0.9305
σ_x	StDev: Export demand	0.01	0.0244
ρ_z	Persistence: Technology	?	0.8862
σ_z	StDev: Technology	?	0.0189