Discussion of

"Should Central Banks React to Exchange Rate Movements? An Analysis of the Robustness of Simple Policy Rules under Exchange Rate Uncertainty"(by Timo Wollmershäuser)

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- Very stimulating paper.
  - Provides useful insights about the effects of open vs. closed economy policy rules in models with different exchange rate determination
  - Challenges existing literature on robust monetary rules
  - Main message: Exchange Rate Uncertainty provides a rationale for adopting an open economy policy rule.

- Summary and some comments
  - Baseline model close to the backwarding-looking Neo-Keynesian model by Ball (1999)
  - However, nominal exchange rate is forward looking and expectations determined.
  - UIP cum persistent risk premium.
  - Loss function composes (equally weighted) the unconditional variances of inflation and output.
  - Monetary policy minimizes losses by choosing response coefficients in different closed and open economy interest rate rules (6 Rules).
  - Open economy rules perform slightly better (however what does actually slightly mean???)
  - I like very much part 2.3. Gains of commitment (as in Woodford (1999)) because central bank responses to the lagged exchange rate.

– However, the response to $q_{t-1}$is identical to responding to i_{t-1}, because exchange rate is solely interest rate determined (see equation (5)) and only forward looking agents are the foreign exchange market participants.

– Why are people in the financial markets more rational than in the goods market????

– MAIN CONTRIBUTION: Checking whether closed or open economy rules are more robust to different degree of exchange rate uncertainty (model and parameter uncertainty).

– 6 Models...but one objective function (?????)

– Monetary policy continues to use the baseline model to determine the policy rule.

– Figure 4. show the loss function generated by the rules for different model and parameter specification..

- Results: Open Economy rules perform better....
- However, no report on the individual components of the loss function.....

- Critical Look
  - Get back to the point before: 6 models, but 1 loss function.
  - If the MPC disagrees about the model, it may also disagree about objective

- Unfair...i.e. if (we) worry about micro foundations:
  - Weights in the loss function would be different for different structural model
  - AND also functional form of the loss function would be different

– New Keynesian model with Price stickiness only

$$\pi_t = \beta E(\pi_{t+1}) + \lambda mc_t$$

Expected utility of rep. HH can be approximated by

$$L = E_0 \left\{ \sum_{t=0}^{\infty} \beta^t \left[\pi_t^2 + \lambda y_t^2 + \phi i_t^2 \right] \right\}$$

– If we allow for indexation to lag inflation prices

$$L = E_0 \left\{ \sum_{t=0}^{\infty} \beta^t \left[(\pi_t - \gamma \pi_{t-1})^2 + \lambda y_t^2 + \phi i_t^2 \right] \right\}$$

– If model with habit persistence

$$L = E_0 \left\{ \sum_{t=0}^{\infty} \beta^t \left[\pi_t^2 + \lambda (y_t - \delta y_{t-1} - y^*)^2 + \phi i_t^2 \right] \right\}$$

- Fair Criticism
  - OK, no microfoundation
  - But is the model robust to different weights in the given loss function
  - Some own simulations:
  - Model 4 ($\upsilon = 0.5$)

	var(π)	var(y)	L ($\lambda = 1$)	L ($\lambda = 0.2$)
R1	1.37	2.94	4.3	*1.96*
R2	1.71	2.09	3.8	2.12
R6	1.55	2.19	*3.7*	1.98

  - Is this a general result? Do open economy rules create higher inflation volatility?
  - Key: Forward looking behavior in the exchange rate market (see also Leitemo et al. (2002))
  - Closed Economy Taylor Rule

  * A depreciation caused by a high interest rate differential feeds directly into CPI

  * This induces an even higher (nominal) interest rate differential$\rightarrow$ even greater rate of depreciation

  * CB responds again with raising the interest rate further

  * Large volatility of output

- Open Economy Rule: negative response to real exchange rate depreciation

  * Negative policy response to RER implies that the response is below that of the Tayor Rule

  * As a consequence output volatility is lower at the price of slightly higher volatility of inflation

- How to avoid this conflict?
  * Discuss policy frontiers (vary λ in the loss function)
  * Apply minmax criteria (see Hansen and Sargent (2000) or von zur Muehlen (2001))