Remittances and the macro balance approach to the exchange rate assessment

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Summary of the paper

- **Interesting Exercise:** The goal is to incorporate remittances in the Fund's CGER (general equilibrium) model.

- Emphasis on the Macro-Balance approach: This one estimates the equilibrium current account balance or **S-I norm**.

- Assesses the degree of the **exchange rate misalignment** on the basis of the deviation of this norm and the actual current account balance (corrected by the cycle).

Summary of the paper

- The author estimates the S-I norm, regressing the CA (current account balance) variable on the CGER explanatory variables.
- He uses pooled OLS and fixed effects
- Endogeneity is not assessed in this paper.

Results

- An increase in remittances increases the CA balance and improves the model fit.
- Omitting remittances entails substantial underestimation of the equilibrium CA position (about 1.5 -3%)
- This also allows for an appreciation of the real exchange rate in equilibrium.

Comments

- Remittances are part of the CA balance

CAB=X-M+NI+ NCT

NCT (net transfers): **Remittances.**

- It is not a surprise that remittances have a significant effect on the current account.

Comments

- In the case of Philippines were remittances account for 10% of the GDP, remittances clearly should improve the fit of the model, and results the ones we would expect:

- A permanent increase in foreign transfers is consistent with a trade deficit (X-M).

- Given the price of tradables exogenously given, transfers are consistent with higher non-tradable prices (demand effect) and an appreciation of the real exchange rate.

Comments: The IMF model.

- Tough qualitative results are trivial, the quantitative implications of the model may be interesting to asses policy issues.

- So it is important to scrutinize the model adequacy…

- The main problem with the IMF model (CGER) specification is that is could be easily be the target of the **“Lucas’ Critique.”**

"Lucas' Critique." (1976)

- The parameter of these simple equation estimated models, will necessarily change whenever the rules of the game change.

- **A simple example:** During the 60's the Fed used these type of models and established a negative relationship between unemployment and inflation (Phillips Curve).

- **Policy Guideline:** Choose a desired unemployment rate and inflate accordingly (given the coefficient obtained in the econometric regression)

The IMF model

- **The problem**: Agents learned the FED inflationary bias, built that on the expectations and killed the implicit unemployment inflation trade-off existent in the econometric model.

- **This IMF's model faces similar challenges:**

The historical quantitative effect of macroeconomic variables on the CA balance could be significantly altered by the emergent phenomenon of labor migration and remittances.

The IMF model

Just one example:

- The **quantitative impact (coefficients of regressions)** of demographic variables on the CA balance should be altered if sizable labor migration is expected to occur..

Before: Higher population growth today (PGRO) is consistent with higher borrowing from abroad today (CA deficit) to be repaid in the future as the labor force increases.

Now: With labor migration this relationship is broken: workers' will migrate by the time they incorporate to the labor force.

The IMF model

- **Other example:**

  If El Salvador can easily tax (directly or indirectly) rapidly growing remittances, a large fiscal surplus is expected….less difficulties to repay debt in the future…foreign creditors willing to refinance debt with lower risk premiums (lower interest rates)

Conclusion:

Higher government deficits (FISCAL) are sustainable with a given current account balance.

Proposal for a new model strategy

- **Follow Lucas' advice:**

Built model based in "deep parameters" (relating to preferences, technology, terms of trade, and resource constraints) that govern individual behavior (micro-foundations).

Interacting rational agents subject to stochastic and predetermined (demographic) trends in a DSGE model.

Proposal for a new model strategy

- **New Problem:** How to determine the value of these “deep parameters” in rich model with several behavioral equations using standard calibration techniques?

Proposal for a new model strategy

Use new developments adopted by several Central Banks around the world (Smets and Wouters, 2007 AER):

- Use the likelihood approach (from the Kalman filter) to estimate those deep parameters using the available data.
- The marginal likelihood is used to compare the fit of different competing models.
- The model can be used to do historical and variance decompositions, and more important, out-of-sample forecasts.

Proposal for a new model strategy

- In **Acosta, Lartey and Mandelman (2009)** we take this approach:

The micro-foundations of the model address several of the concerns in this paper.

- It's **two sector model** (tradables, non tradables).
- We add **labor supply choice** to compare the model fitting of different specifications.
- Consider **3 generation process** for the remittances:
- Exogenous
- Endogenous: *Insurance (Countercyclical)

  *Profit-Driven (Procyclical)