Discussion of Yannick Kalantzis et al. "Optimal Exchange-Rate Policy in a Semi-Open Economy"

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Outline

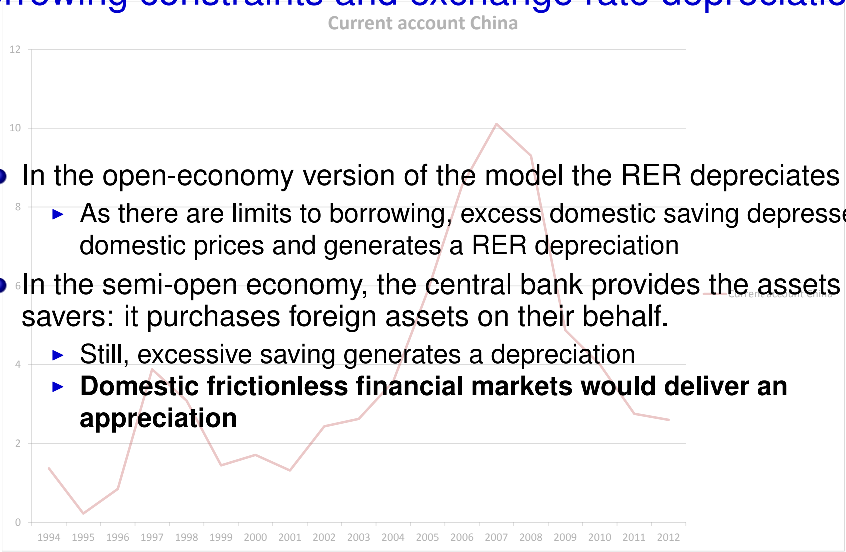
1. Description of model and results
2. Comments
3. Conclusion

Description of the model

RER depreciation and capital outflow

- Very nice paper! Clear and insightful.
- The paper aims at generating a RER depreciation accompanied by accumulation of foreign assets as a consequence of growth acceleration
- The authors want to achieve this with a model that could resemble the Chinese experience:
  1. Limited international capital mobility
  2. Net capital outflow via foreign reserves
  3. Underdeveloped domestic financial market
  4. Very high growth rate

Borrowing constraints and exchange rate depreciation



- In the open-economy version of the model the RER depreciates
  - As there are limits to borrowing, excess domestic saving depresses domestic prices and generates a RER depreciation
- In the semi-open economy, the central bank provides the assets to savers: it purchases foreign assets on their behalf.
  - Still, excessive saving generates a depreciation
  - **Domestic frictionless financial markets would deliver an appreciation**

The model

- Two households, two-state endowment economy
- Endowment of households alternate btw high and low; endowment is perfectly negatively correlated across two groups of households
- Collateral constraint for borrowers $r_t L_t \leq \phi Y_t$
- Separable preferences in tradable and non-tradable goods
    - Say **all** endowments increase. Credit constraints imply tradable consumption increases less than endowment (saving $\uparrow$).
    - Marginal utility of tradables> Marginal utility non-tradables and RER ($p = \frac{P_N}{P_T}$) $\downarrow$.
- Under capital controls, central bank channels domestic saving into foreign assets.

Comments

Growth and RER depreciation

- It is not fully transparent which equilibrium does the policymaker try to reproduce
- What would an IRBC model tell us about the real exchange rate response to growth shocks?

Financial underdevelopment and optimal depreciation

"The main reason for optimal depreciation is financial underdevelopment"

- e.g. IRBC with perfect risk sharing:

$$\Delta \widehat{C} - \Delta \widehat{C^*} = \Delta \widehat{RER}$$

  So, constant $\widehat{C^*}$, an increase in consumption implies a depreciation.
- Is this what the policymaker aims at achieving?

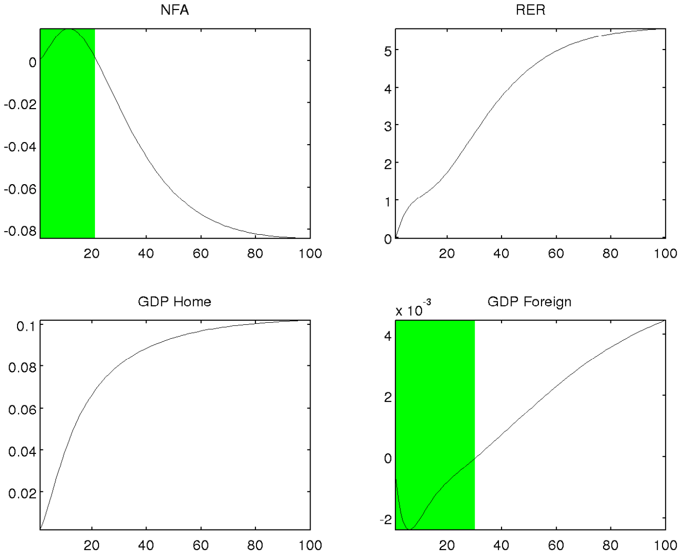
Financial underdevelopment and optimal depreciation cont'd

The real problem is not the depreciation as such, but the "large" trade surplus that has been associated with that

- Is that optimal?
- Here the paper swings a bit between positive and normative analysis.
- **Positive Problem**: How to generate a depreciation and a current account surplus with a growth shock?

Financial underdevelopment and optimal depreciation cont'd

- Under **incomplete markets** there might be a tendency for a current account deficit: wealth effect drives consumption of tradables above its current production.
- "Need" a mechanism to generate an increase in saving.
- E.g. a "top-of-lap" calculation using a two-country DSGE model (Kolasa-Lombardo 2013) get...



Source: Kolasa and Lombardo (2013).

Are the assumptions reasonable for a large economy?

- The debate around the undervaluation of the RMB was motivated by its alleged detrimental effect on e.g. the U.S. economy.
- This suggests the following questions:
  1. Is it plausible to assume that the optimal policy does not take into account **foreign variables**?
  2. Is it plausible to assume that the equilibrium is not the solution to a **non-cooperative game**?

International policy spillovers

- The non-cooperative equilibrium generated by self-oriented currency manipulations can bring about large welfare losses (e.g. De Paoli-Lipińska (2012))
- Should we think of the current set-up as leading to similar conclusions?

Is this the best policy among the plausible ones?

- In their conclusion the authors mention **domestic financial liberalization.**
- It seems to me that the **first order inefficiency** in the economy is the domestic credit friction
- Currently there are talks of a Chinese policy-induced credit bubble.
- Apparently the Chinese government sets credit targets.
- Is domestic **credit control a policy instrument**?
- If we allow for this instrument, would we get an appreciation?

Is this the best policy among the plausible ones? cont'd

- In a number of papers dealing with the current crisis, **credit policy** can alleviate the domestic financial friction and bring the economy closer to the first best (e.g. Gertler-Karadi 2011)
- In these models the policymaker borrows from savers and lends to borrowers bypassing or mitigating the financial friction: wouldn't this policy be better than the reserve policy?

Solve a self-inflicted problem?

- In the model the Ramsey policy can be (slightly) better than no intervention with free capital mobility.
- In the real world letting a **central bank pick assets** that are optimal for the private sector might entail some inefficiencies.
- Wouldn't there be **efficiency gains** in simply opening the capital market?

Robustness

- The paper shows that the depreciation would disappear if **growth is faster in the tradable sector** (Balassa-Samuelson channel). Isn't this a more reasonable scenario?
- Yet, see my example in a fully fledged DSGE model where growth was **only** in tradables.

Conclusion

Conclusion

- Very interesting paper
- Provides a different perspective on the undervaluation of the renminbi
- Not fully clear whether it provides sufficient grounds for a policy combining capital controls and reserve accumulation