An analysis of devaluation and output dynamics in Latin America

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Summary

The paper proposes a DSGE model to analyse the interaction between devaluations and output dynamics.

The model allows for two different transmission channels, the expenditure-switching (expansionary) and the firms' balance sheets (contractionary).

The model is fitted to the data of three Latin American Countries.

Devaluation have expansionary more than contractionary effects on output, despite the opposite evidence in the data.

General comments

The topic is interesting and relevant from a policy perspective. This makes the contribution potentially important.

The paper is therefore well motivated and the analysis is performed in a standard way.

The model is carefully described and with realistic features.

The paper does not seem to reconcile entirely the contradiction between evidence and model results. At least is not able to convince me that the expenditure-switching effect is prevailing.

On the Results

Uncontroversial

1. Devaluation alone is expansionary in this model

2. The balance-sheet effect is clearly at work, because a devaluation indeed reduces net worth and capital, inducing a potential contractionary effect on output.

Not so uncontroversial

While there is a direct evidence of the balance-sheet, there is no direct evidence that the expenditure-switching effect is responsible for a positive effect on output.

- A direct prove of it should be given by the IRF of the ratio (C^H/C^F) and/or the relative prices.

- Actually, as IRF are reported I would rather say that output increases as a consequence of a labor shift (relatively higher than the decrease in capital). But this channel has little to do with the expenditure-switching effect.

Conclusion: in this model a devaluation is expansionary, but not necessarily for the expenditure-switching effect. (run the same model dropping the expenditure-switching channel and check results).

Some unanswered questions

Why a devaluation shock has a positive impact on domestic rate and not a negative one as it should be from the reaction function?

Why a devaluation alone is expansionary, while paste episodes show differently?

Robustness analysis is not conclusive:

a. A shock to international interest rate (i^*) alone is a mere speculative exercise but does not help much, also because on the period 1989-2005 they have been largely decreasing.

b. A combination of devaluation and shock to i^* has little impact on output given the offsetting effects.

What I missed (suggestions to improve)

1. A Benchmark: Run a VAR

2. Robustify the expenditure-switching channel by allowing K^H and K^F (what about FDI?)

3. Sensitivity analysis: how much key results depend on calibrated parameters (which do not vary across countries)

4. Introduce in the model a relative measure of the two effects (the simple parameters μ and γ are not enough). Play with this measure, calibrating and estimating it.

5. Uncertainty? Without confidence bands around IRF we cannot conclude much.