

Discussion on "Exchange Rate Pass-Through, Capital Flows, and Monetary Autonomy", by Olivier Wang.

Gianluca Benigno

Federal Reserve Bank of New York and *London School of Economics*

New Economics of Exchange Rate Adjustment, Cambridge,
March 2019.

Disclaimer: **The views expressed are mine and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System**

Summary

- Neat theoretical paper on role of exchange rate pass-through for the design of monetary policy in a sudden stop environment.
- Key results:
 - ▶ under complete pass-through, no constraint on monetary policy.
 - ▶ under incomplete pass-through, monetary policy promises exchange rate depreciation during crisis to mitigate the contractionary effects of a sudden stop.
 - ▶ Role of macropudential policies and interaction with monetary policy

Summary

- Structure of the model
 - ▶ New Keynesian Two-country model with incomplete markets.
 - ▶ Only traded assets is foreign currency denominated bond.
 - ▶ Borrowing constraint occasionally binding. Under a sudden stop, agents cannot borrow (no amplification mechanism).
 - ▶ Different assumptions in terms of invoicing (PCP, LCP and DCP).
 - ▶ Nominal rigidities: prices are fixed permanently (monetary policy is equivalent to exchange rate policy).

Discussion

- Mechanism in the model.
- Modelling of sudden stop and monetary policy.

Discussion

- Mechanism in the model:
- Exchange rate operates through two channels: expenditure switching and balance sheet.
 - ▶ Expenditure switching effect: it depends on the degree of pass-through. (expansionary)
 - ▶ Balance Sheet: incomplete markets with foreign currency denominated debt. (contractionary)
- Under some assumption monetary policy faces no constraint (close labor wedge). No trade-offs (two effects compensate each other).

Expenditure Switching Channel

- New Keynesian small open economy with incomplete markets: reference is De Paoli (2009). Optimal monetary policy with PCP under commitment.
- In this paper similar setting but analysis of monetary policy with sudden stop under discretion.

Balance Sheet Channel

- Exogenous Sudden stop. Two states: normal and sudden stop. In sudden stop, agents cannot borrow. Transition is determined exogenously through a constant probability (i.e. does not depend on the amount of debt).
 - ▶ When agents cannot borrow, consumption is lower and the exchange rate depreciates.
- Borrowing constraint is exogenous not endogenous as in Mendoza (2002, 2010).
- Endogenous borrowing constraint: amount that agents can borrow depends on value of collateral and probability of hitting the constraint depends on endogenous and exogenous states.
- Endogenous borrowing constraint generates amplification mechanism.
 - ▶ When agents cannot borrow, consumption is lower and the exchange rate depreciates. Depreciation reduces value of the collateral that induces a further reduction in consumption that amplifies the initial depreciation.

Balance Sheet effect and Monetary policy

- Message of the paper: monetary policy in sudden stop should engineer a depreciation of the currency.
- Brazil and Mexico faced a sudden stop in private capital inflows following the Lehmann's collapse in September 2008.
 - ▶ The Brazilian Real depreciated by more than 20 percent in a month against the US dollar, and the central bank intervened heavily to defend it. As Mesquita and Toros (2010) emphasize, the main motivation for this intervention was the vulnerability of the non-financial corporate sector to the depreciation of the Real because of their exposure in the derivative market to US dollar swaps.
 - ▶ A similar experience was shared by Mexico when large corporate entities were also exposed to foreign currency derivatives at the time of Lehmann's collapse. Chang, Cespedes and Velasco (2012) emphasize how the response of the policy authorities consisted in foreign exchange market intervention with the objective to limit the depreciation of the Mexican Peso in the face of currency mismatches in the corporate sector balance sheet.

Balance Sheet effect and Monetary Policy

- Devereux, Young and Yu (2018) and Coulibaly (2019): when borrowing constraint depends on real exchange rate, monetary policy want to limit exchange rate depreciation during a sudden stop. In tranquil time this line of reasoning imply a procyclical monetary policy.
- There is a trade-off between macroeconomic stability (price stability) and financial stability: use of macroprudential policy enhance role of monetary policy for macro stabilization.

Role of Monetary policy

- Monetary policy coincide with exchange rate policy.
- No limit to monetary policy.
- Other channel through which exchange rate transmits is through monetary policy channel: in richer model, changes in interest rate affect investment decision and supply of credit by financial intermediaries.
- Cavallino and Sandri (2018) effective lower bound of monetary policy: similar here where level of debt determines extent to which depreciation is optimal.

Role of Macroprudential policies

- Perfect vs imperfect macroprudential policies: unconstrained macroprudential policies solve time-consistency problem of monetary policy.
- Role of macroprudential policy: allow planner to impose optimal borrowing decision.

Conclusion

- Paper focuses on core mechanism behind sudden stop.
- Examine interaction between sudden stop and invoicing.
- First step towards a richer framework with more realistic modelling of sudden stop.
- Novel part: nature of interaction between monetary policy and macroprudential policy.