# Discussion of International Reserves and Central Bank Independence by Agustin Samano

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May 14, 2021

# Paper Outline

- Presents evidence that countries with higher central bank independence have a higher level of reserves
- Provides a simple explanation: governments are more impatient than the central bank
  - Rogoff: appoint a conservative central banker
  - Samano: appoint a patient central banker
- Develop a theoretical model to describe the mechanism at work
  - Debt crisis model related to Alfaro and Kanczuk (2009)
- Calibrate model to provide a quantitative assessment
- Nice paper !

# Interesting Question

- Why holding asset and debt at the same time?
- Pervasive question, difficult to model in standard macroeconomic models with representative agents
  - E.g. firms with large corporate debt may also hold large amount of cash
- In the case of consolidated governments: issue debt and hold reserves
- Growing literature on the topic, with emphasis on precautionary or liquidity motives
- Different approach in this paper: heterogenous decision makers in the government and the central bank

# Basic Mechanism

- Both the government and the central bank optimize household consumption, but with different discount rates
- Hand-to-mouth households:

$$c_t = (1 - \tau^{\pi})y_t + T_t$$

- Impatient government: increase in  $T_t$  by increasing debt
- ullet Central bank can offset this by increasing  $au^\pi$  and thus reserves
- ⇒ Both debt and reserves co-exist



# Basic Mechanism

- Different mechanism from Alfaro-Kanczuk and most of the literature
- Reserves matter in normal times. Main role is not for crisis times
- ⇒ Also matter in deterministic case
  - Question: do we need debt crisis model to illustrate the mechanism?

Nice to have a simple model. Question some of the simplifying assumptions

### 1. Central Bank

- Objective of an independent central bank: smoothing of household consumption?
  - Main objective is inflation stabilization
  - Other objectives include output growth, financial stability, exchange rate, climate change, etc.
- Central bank reserves are typically matched by liabilities (monetary base) rather than taxes
- Independent central banks also buy domestic government bonds

### 2. Households

- Hand-to-mouth: no intertemporal decision
- Cannot hold government debt or foreign assets
- Government and central bank do all the (international) asset transactions
- A semi-open economy

- In a semi-open economy, the government or the central bank plays a role for intertemporal trade
- Analyzed in Bacchetta, Benhima, and Kalantzis (AEJMacro, 2013)
- Central bank as Ramsey planner: may be optimal to hold reserves
- Would be the case here if  $\beta > q^*$  (patient consumers)
- ullet Would also be the case with an initial government debt when  $eta=q^*$
- Two remarks:
  - In our model, reserves are the counterpart of deposits by households
  - Our analysis was motivated by the Chinese case

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- The hand-to-mouth assumption for household is a key assumption
- If households could buy foreign assets, they could offset increases in government debt and transfers
- No need for central bank reserves
  - Also shown in Davis, Fujiwara, Huang, and Wang (JME 2021), where the central bank is a Ramsey planner
- Accumulation of reserves plays role with restricted capital mobility
  - or with strong deviation from Ricardian equivalence
- Central bank independence should be accompanied by capital controls
  - or maybe capital mobility is sufficiently limited in Latin America. Analysis in the line of Davis et al. (2021)

# Conclusion

- Nice paper with interesting idea
- The proposed mechanism relies on very strong assumptions
- In particular, no private sector capital mobility (semi-open economy)
- The role of central bank independence could be related to political economy issues
- The accumulation of reserves generates large political pressures (to use these reserves)
  - $\bullet$  E.g. the independence of the Swiss National Bank enables it to resist the pressures (reserves/GDP >130% )