The Cost of Foreign Exchange Intervention Can Reserve Accumulation be Counterproductive? UNCTAD Summer School Geneva, Switzerland

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Overview



- Trend in Reserve Accumulation
- Reasons for Reserve Accumulation
- 2 Research Question
- Basic Assumptions and Stylized Facts

4 Model



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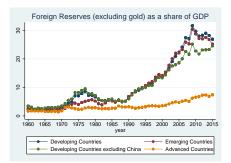
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Figure: Reserves as a Share of GDP (%)

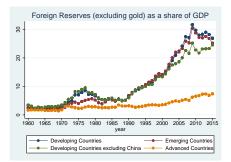


Source: Author's Calculations based data from World Bank World Development Indicators

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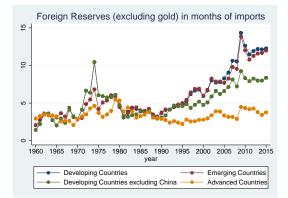
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Figure: Reserves in Months of Import



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Why is this being observed?

- Reserve holdings allow central banks to lean against the trilemma or widen the policy space constrained by the trilemma
- A rise in reserve holdings often lowers the cost of private debt and equity capital (Feldstein, 1999)
- To some extent, reserve holdings have substituted for capital controls (Ilzetzki et al., 2017)
- Holding of international reserves equal to at least the value of short term external debt reduces the annual probability of a country experiencing a share reversal in capital flows, which can precipitate and external debt and/or currency crisis, by 10 percentage points (Rodrik, 2006)
- Reserves of foreign exchange are built to provide insurance against speculative currency attacks

But what is the Cost of this Self-Insurance?

- Direct Quasi-Fiscal Cost Associated With Foreign Exchange Intervention
- Indirect Cost of Foreign Exchange Intervention
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Research Question

- Main Purpose: To theorize and identify potential indirect costs of foreign exchange intervention.
- Research Question: One of the best predictors of financial crises can be shown to be excessive credit growth. In particular, gross flows of capital can serve as a source of significant instability, even if net flows do not reflect an imbalance in the balance of payments. Is it possible, then, that higher reserve holdings encourage higher capital inflows and create instability and crisis, ceterus paribus?

• Contribution:

- There is very limited literature that studies this question, and the few studies that study it focus on micro-level risk taking.
- A Minksyian model that incorporates stylized facts of balance of payments/ financial crises.
- A cross-country empirical investigation of this phenomenon based on my model.

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- One of the best predictors of financial crisis is excess credit growth and or gross capital inflows.

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Reserve Accumulation and Crises

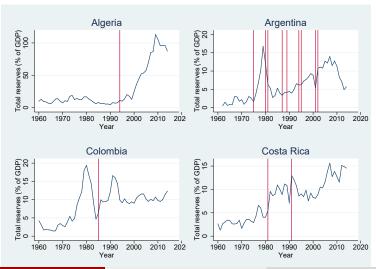


Figure: Reserve Accumulation and Crises in Emerging Markets

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Reserve Accumulation and Crises

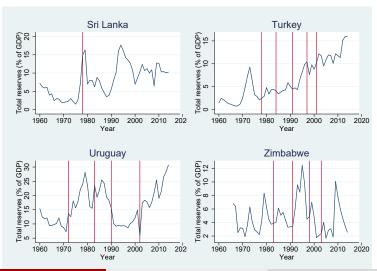


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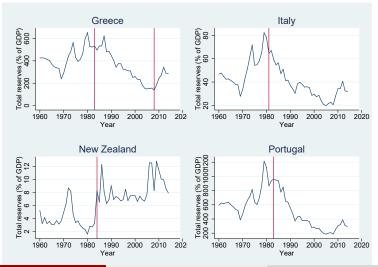


Figure: Reserve Accumulation and Crises in Advanced Economies

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Basic Schematic of my Model

Central banks accumulate foreign exchange reserves to protect against currency/sovereign debt/financial crises

Increased gross flow of capital into an economy increases likelihood of currency/sovereign debt/financial crises Accumulation of foreign exchange reserves reduces the probability of a currency/sovereign debt/financial crises

Reduced perception of risk encourages gross inflow of capital into an economy Reduced probability of crisis makes investment in country less risky, ceterus paribus

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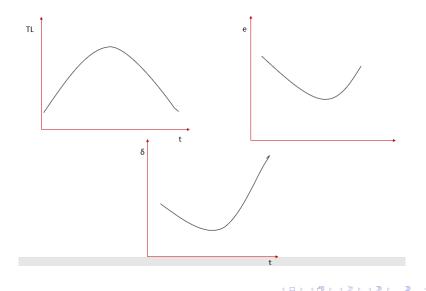
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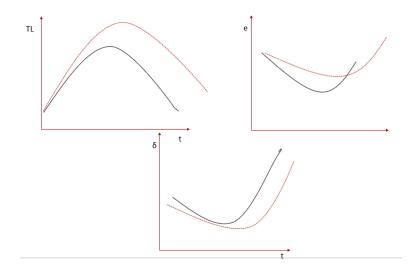
... no ex-ante announcement by policy makers can convince the public that ex-post (that in the midst of a generalized financial turmoil) the government would cross its arms and let the financial system proceed towards its debacle. (Corsetti et al., 1999)

Basic Dynamics: Total Lending



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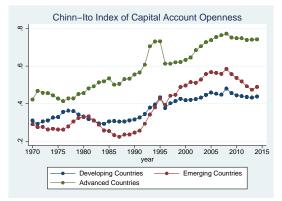
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- Some of these effects can be mitigated by other policy tools to manage the external account, like capital controls or policy coordination.

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Figure: Trend in Capital Account Openness



Source: Author's Calculations based on Chinn-Ito (2006)

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