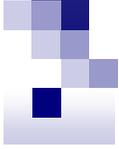


MANAGING FOREIGN EXCHANGE RESERVES

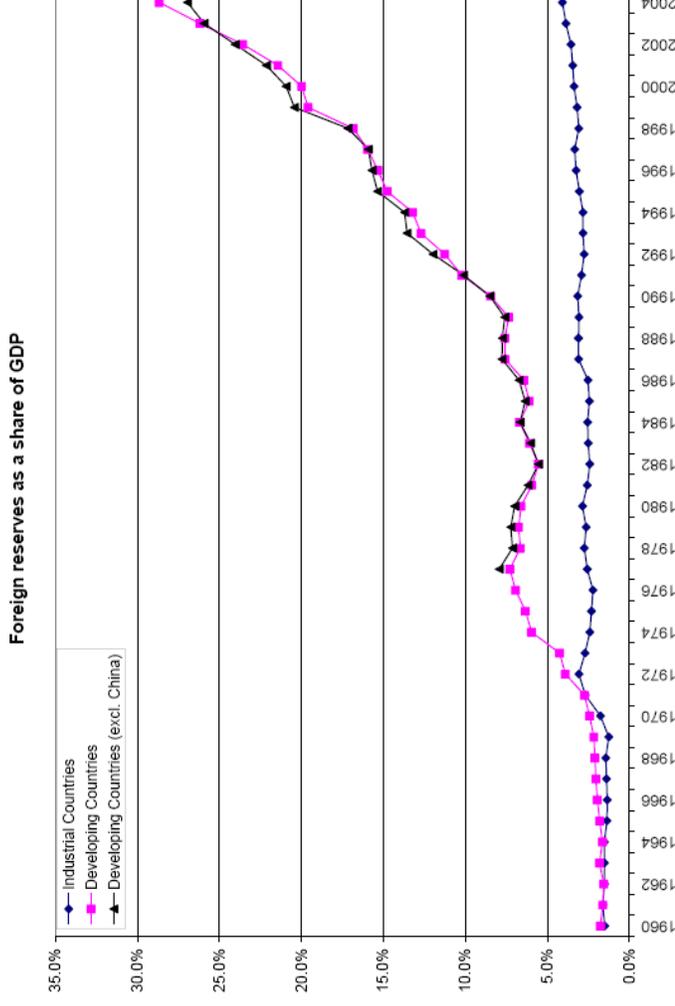


OVERVIEW

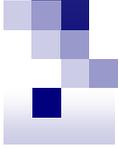
- What are Foreign Exchange Reserves?
- Why amass Reserves?
- What Reserve levels should be
- What Reserve levels actually are
- What's the Problem?
- What to do - Some Solutions
- So why keep doing it?

What are Foreign Exchange Reserves?

- Countries hold foreign exchange reserves mainly to manage foreign exchange demand and supply, arising from current account transactions.
- Historical precedent has been that Industrial Nations held Foreign Reserves at >5% GDP. Developing nations have held Foreign Reserves at 6-8% of GDP.
- Since 1990's Developing nations Foreign Reserves have increased to roughly 30% of GDP.

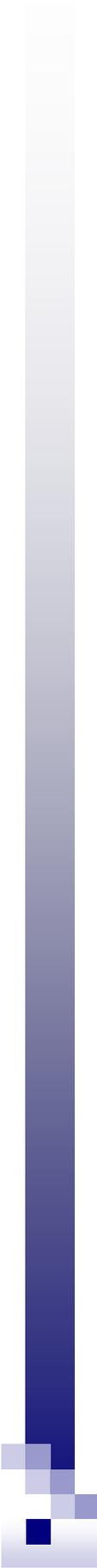


Source: IMF, International Financial Statistics (IFS).



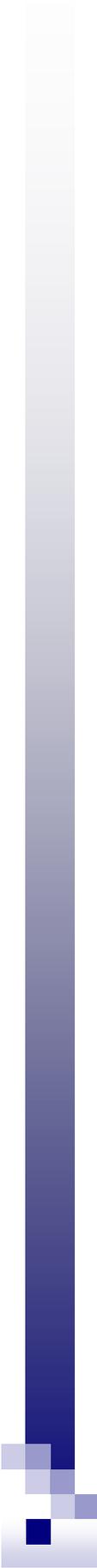
WHY AMASS FOREIGN RESERVES?

1. Liquidity provides self protection from Financial Crisis.
2. Export Oriented Growth Strategy. Keep exports from loosing their international competitiveness.



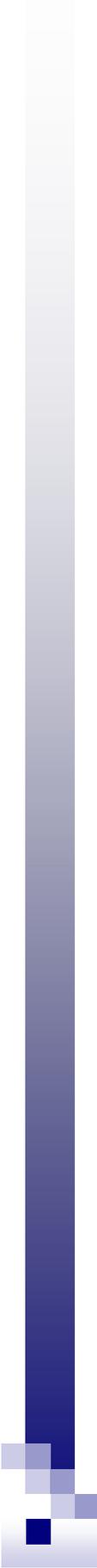
What the Level of Foreign Exchange Reserves Should Be

- Prior to 1990's and Globalization old rule of thumb was Foreign Reserves should equal 3 X level of monthly imports.
- Guidotti Greenspan Rule: Foreign Reserves should equal one year of short term foreign debt.
- Why the change?



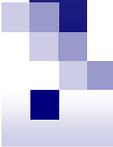
What They Really Are!

- Today, the level of Foreign Exchange Reserves in the Developing Countries (EME'S) is roughly **30% of GDP**, equal in some cases to **8X** level of monthly imports.
- These numbers hold true with or without China. Is the Chinese currency devaluated? See Rodrik Fig. 1, or See Cheung



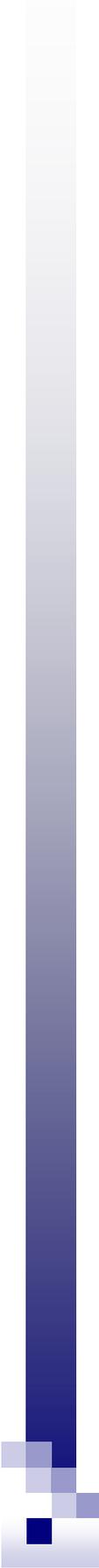
So What's the Problem?

- The prohibitive COST of holding high levels of Foreign Currency Reserves!
- The Cost is the difference between the interest rate on domestic securities and the relatively low level of interest earned on the foreign exchange reserves, adjusted for any exchange rate change. (Rodrik)
- Money could simply be invested in higher yielding domestic securities and infrastructure, or long term global capital markets. (Summers)
- Cost is between 1% (Rodrik) and 1.85 % (Summers) of GDP.



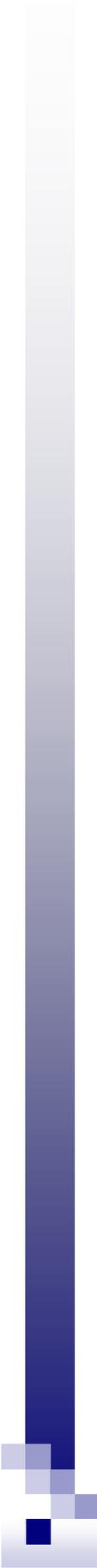
What to do? – Some Solutions

- Summers
 1. Create International Facility. (IMF/WB) External Asset Managers. Charge nominal fee and use revenues for social and domestic spending.
- Rodrik
 1. Optimum Liquidity comes from having some foreign reserves but primarily focuses on reducing short-term debt.
- Reddy
 1. Quasi Reserves turned over to Institutional Investment Authority. Isolated from political influence, they can invest money in higher risk/return investments and domestic spending. Must keep relatively high level of liquidity that can be easily retrieved.
 2. New Global Reserve Currency “Global Greenback” ?
 3. Pool Resources through agreements. Chiang Mai Initiative (CMI)
 4. Comfort Zone. Quantify comfort zone level of reserves and invest excess.



So Why Keep Doing It?

- They Don't care! Insurance is the primary concern and worth the cost.
- Fear of Rocking the Boat. They don't want to disrupt the Current Global Capital Flow. US imports = Foreign Exports. US current account deficit creates export stimulus of 2% of Global GDP. The consequence is a contractionary impulse to the remainder of the global economy.
- Political implausibility of implementing solutions. Would Japan step in and support the Chinese, or vice versa?
- Go back to Export Oriented Growth Strategy. See Fig.1 Rodrik
- Ultimately – We don't know! Security vs. “monetary mercantilism” That question remains unanswered!



SUMMARY

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- Why amass Reserves?
- What Reserve levels should be
- What Reserve levels actually are
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- What to do - Some Solutions
- So why keep doing it?