Normalizing Central Banks' Balance Sheets

New York Fed/Columbia SIPA Workshop

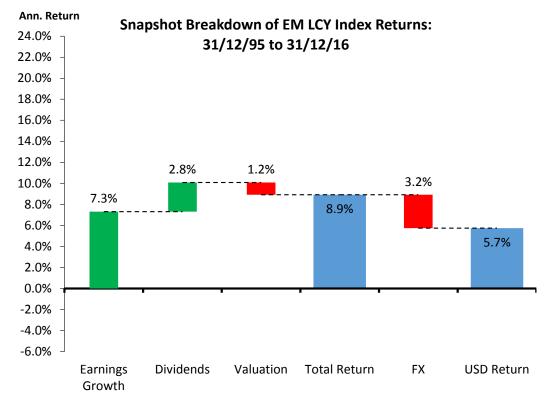
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Remarks by Prakash Kannan, Head of Total Portfolio Management; GIC Singapore

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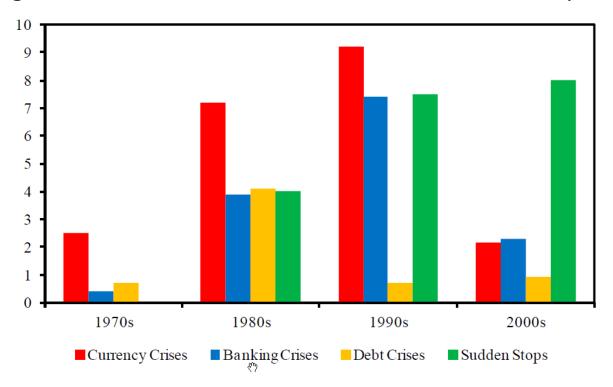
EM assets in the long run

- Over a long horizon, the biggest driver of returns is the compounding of earnings
- Stability of institutions and predictability of policy frameworks more important in the long run



Crises are a prevalent feature of EM

• Price controls, leverage buildups, currency and maturity mismatches, thin markets and reliance on external financing introduce non-linearities in macro and market responses to shocks

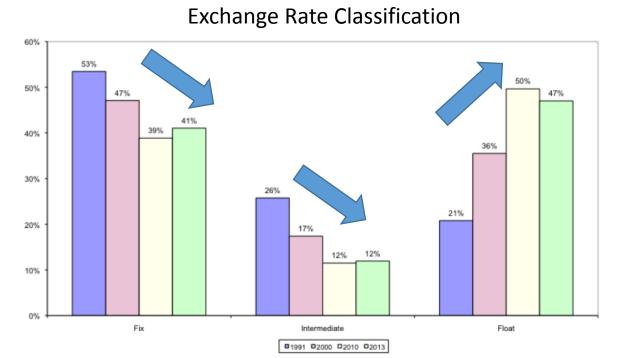


Notes: This graph shows the average number of financial crises in respective decades.

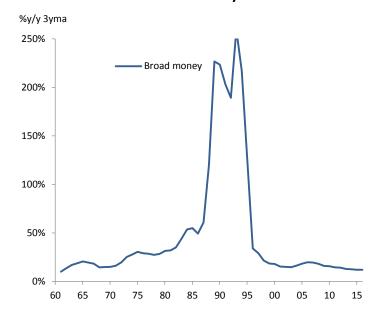
Source: Claessens and Kose

Policy frameworks have been changing

- Price flexibility provides some buffers
- Investors are more discerning across EMs



EM: Broad Money Growth



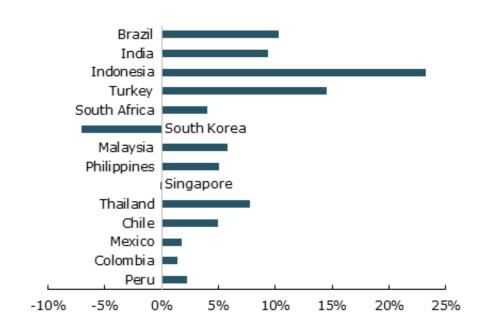
Source: Levy-Yeyati and Sturzenegger (2016)

Taper Tantrum 2013

 Impact was large, but did not lead to traditional "crises"

- Two main drivers:
 - 1. EM Fundamentals
 - 2. Policy signalling channel

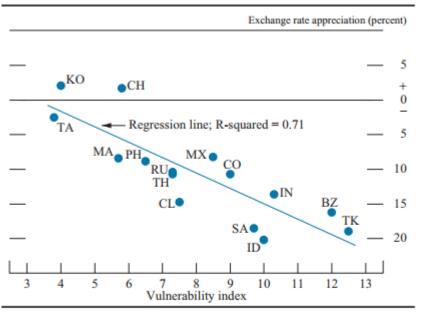
Exchange rate depreciation, May to December 2013



FX moves were in line with fundamentals

Vulnerability Index:

- Current Account to GDP ratio
- Gross Govt Debt to GDP
- Average inflation over past 3 years
- Ratio of external debt to exports
- Ratio of FX reserves to GDP



Note: Exchange rate appreciation of emerging market currencies against the U.S. dollar is measured from April 30, 2013, to February 6, 2014. BZ is Brazil; CH is China; CL is Chile; CO is Colombia; ID is Indonesia; IN is India; KO is Korea; MA is Malaysia; MX is Mexico; PH is the Philippines; RU is Russia; SA is South Africa; TA is Taiwan; TH is Thailand; TK is Turkey.

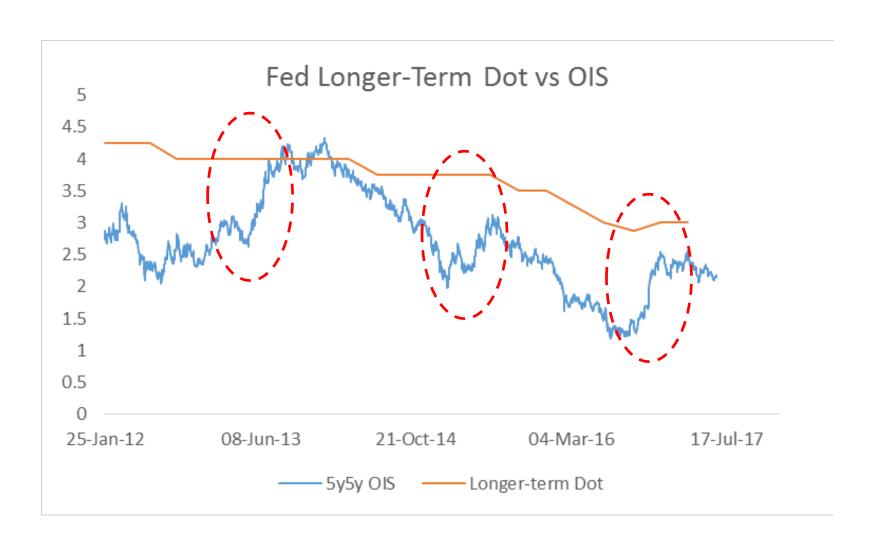
SOURCE: CEIC; Haver Analytics; International Monetary Fund (IMF) International Financial Statistics and World Economic Outlook; IMF Fiscal Monitor; Joint BIS-IMF-OECD-WB External Debt Hub; Federal Reserve Board staff calculations.

Policy signalling also mattered

• Fed policy = $f(r^*, output gap, inflation vs target, "X")$

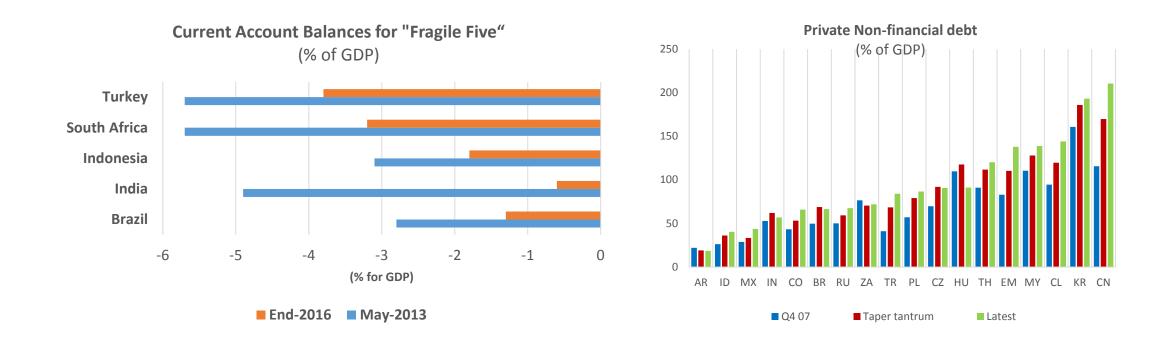
- Uncertainty over "X" factor:
 - Asset prices?
 - Financial stability?
 - Credit growth?
 - Change in preferences or reaction function?

Managing expectations



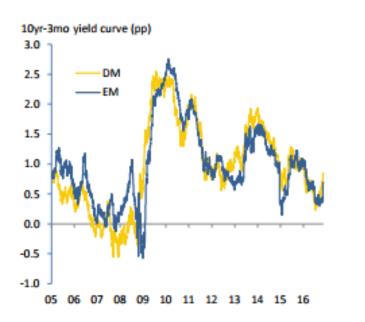
The situation today (1)

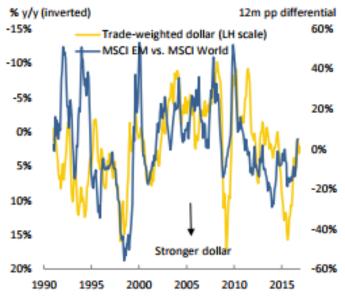
Vulnerabilities have fallen for "Fragile 5", but risen elsewhere

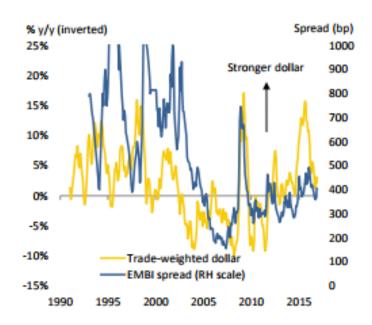


The situation today (2)

• EMs remain vulnerable to the global risk environment, DM interest rates, and the US dollar

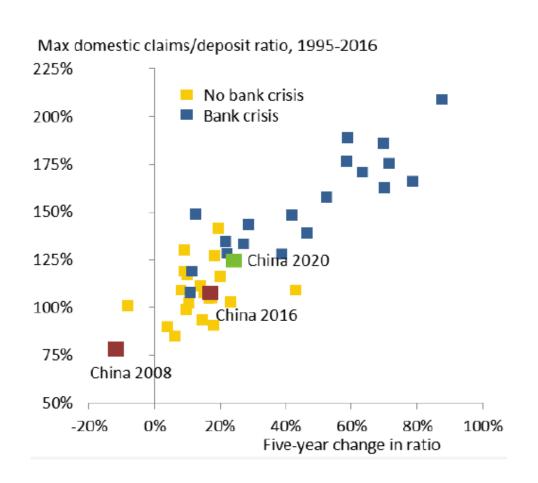


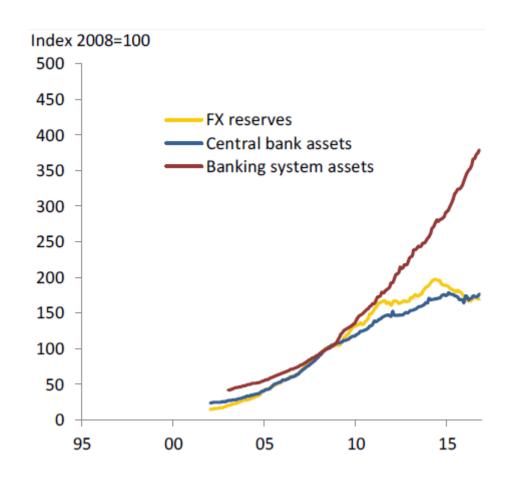




Source: Jon Anderson, EM Advisors

China remains a key risk factor for EMs





Source: Jon Anderson, EM Advisors

Conclusion

• EMs have undergone structural changes over the past 20 years that have resulted in more robust policy frameworks

 But, EMs remain vulnerable to the global risk environment. Issue is not so much about interest rate increases per se but a spike in global risk aversion and a sharp moves in the USD

China remains a source of risk. Will it amplify or dampen Fed shocks?