Tapering Talk: The Impact on Emerging Markets

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Key Questions that we ask

- What was the impact of "Tapering Talk" on emerging markets?
- How can we explain the effects on different countries?
- Lessons for emerging markets to handle similar situations better

Documenting the Effects on…

- Exchange rates (bilateral, nominal)
- Foreign Reserves
- Stock prices
- Composite indices (E, R, S)
- Bond yield spreads/country default swaps

Important Events

May 22	Testimony by Ben Bernanke to the US Congress	Minutes of FOMC meeting (April 30-May 1) released, both pointed to tapering
June 18-19	FOMC meeting	Possibility of tapering reinforced in a press conference.
July 30-31	FOMC meeting	Stance on tapering maintained
Sept 17-18	FOMC meeting	Toned down, markets surprised
December 18	FOMC meeting	Tapering started at $ 10 bn/month
January 29, March 19, April 30, June 18, July 30, September 17	FOMC meetings	Tapering continued at additional $ 10 bn a month; and concluded on October 29, with a final tapering of $ 15 bn.

Sample

- Paper uses an initial Sample of 53 emerging countries. A large, representative sample
- Since then we extended the sample to include African frontier markets (21 countries with flexible exchange rate regimes.
- Samples in the papers that have since been written are smaller and perhaps selective!

Documenting the Effects
(Cumulative % Changes, April- August 2013)

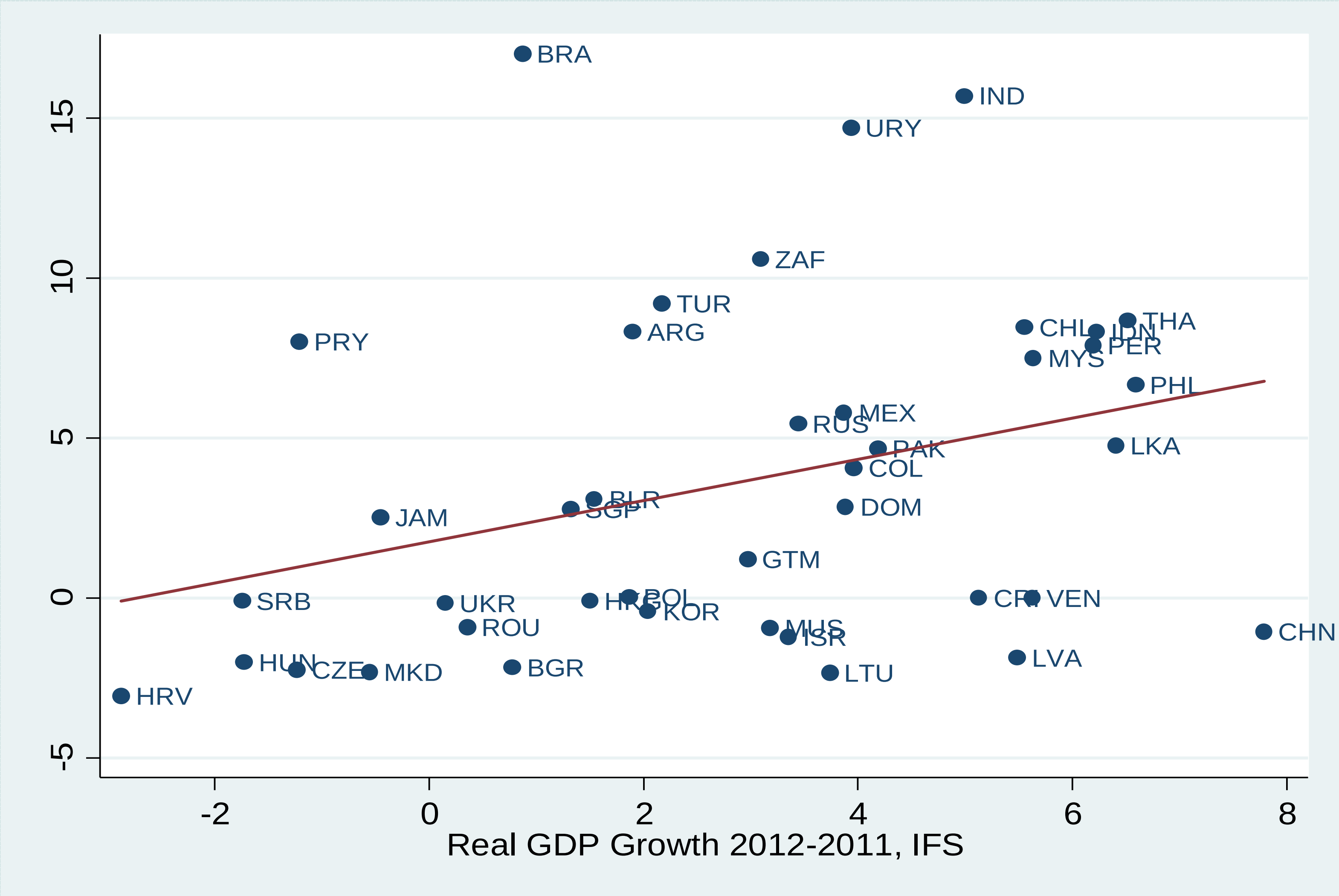
	Fraction of Countries in which E, R, S declined	Mean Depreciation/ Decline	Median Depreciation/ Decline
Exchange Rate Depreciated (E)	**30/53**	**6.2**	**5.6**
Foreign Reserves declined (R)	**29/51**	**6.2**	**4.6**
Stock Market declined (S)	**25/38**	**6.9**	**6.2**

Specifically “Fragile Five” (three of whom are erstwhile BRICS) were affected the most: **Brazil, India, Indonesia, Turkey, South Africa**

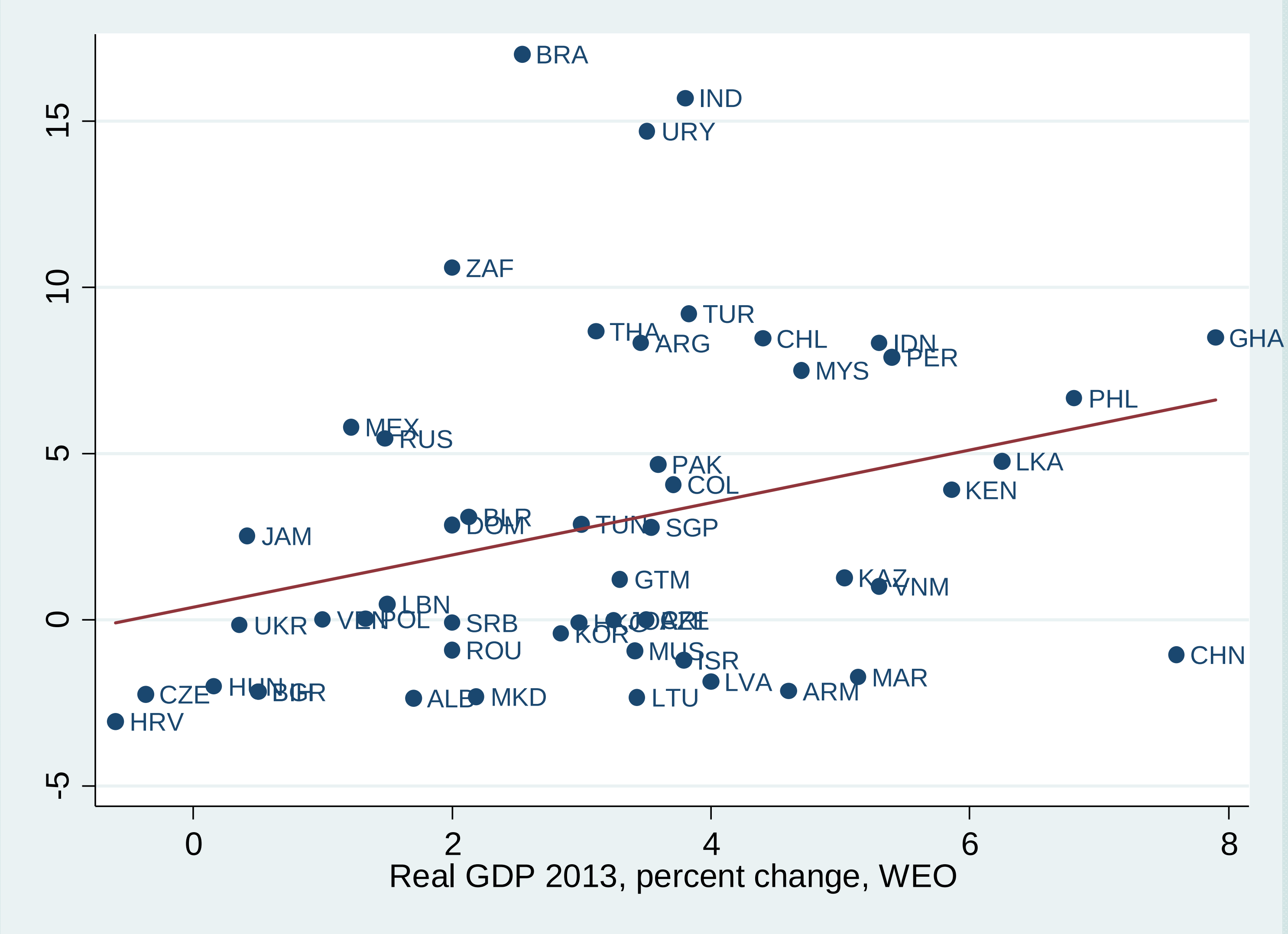
Explaining the Effects, Variables Considered

- Observable Macroeconomic Fundamentals: GDP growth, fiscal deficit, public debt, reserves, external debt, capital account openness, and other variables….
- Capital-flows (2010-2012): Capital inflows, real exchange rate, current account deficit
- Financial markets: Size, Liquidity (stock market capitalization, stock of liabilities, turnover ratio)

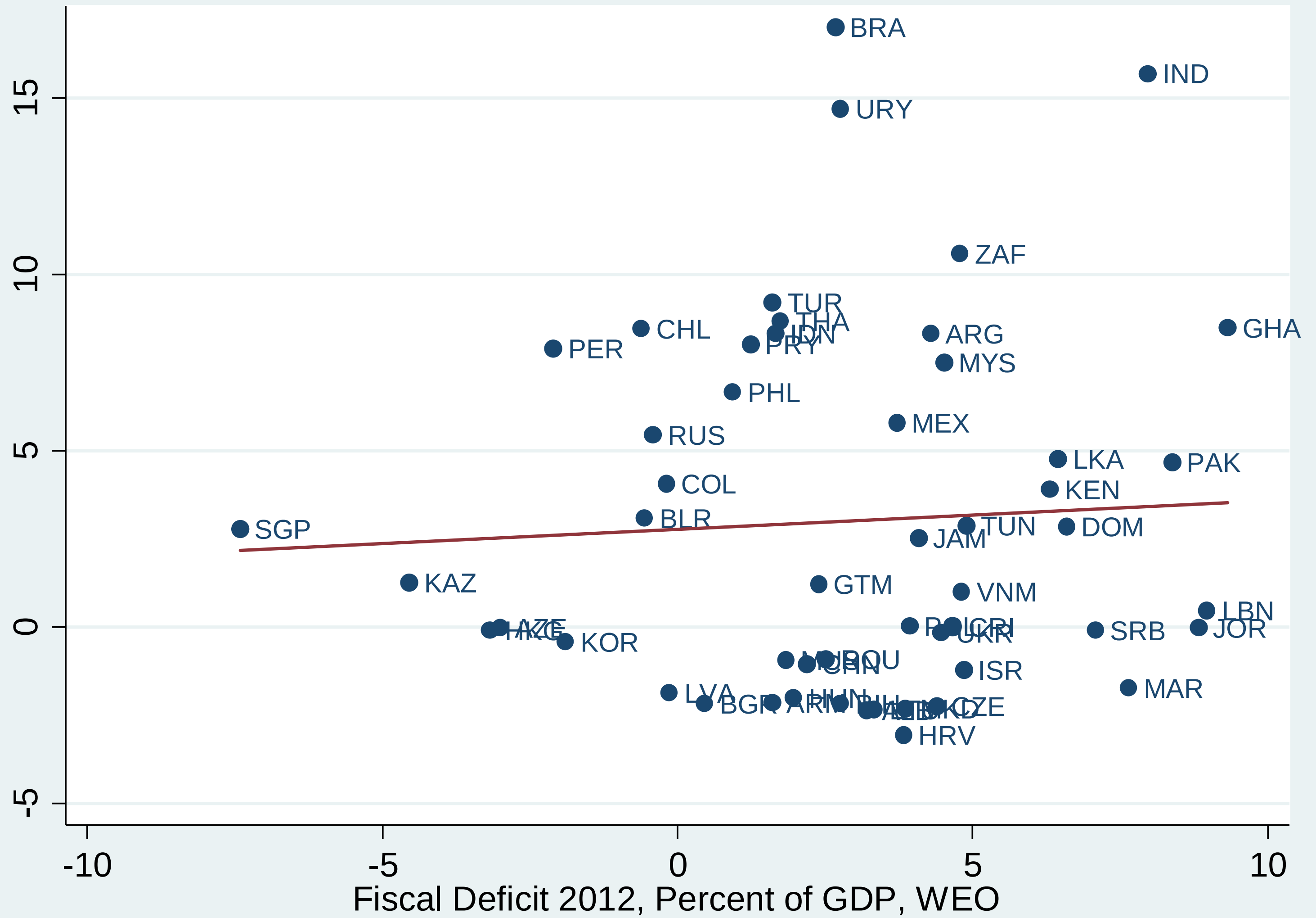
Exchange Rate Depreciation and Economic Growth (I)



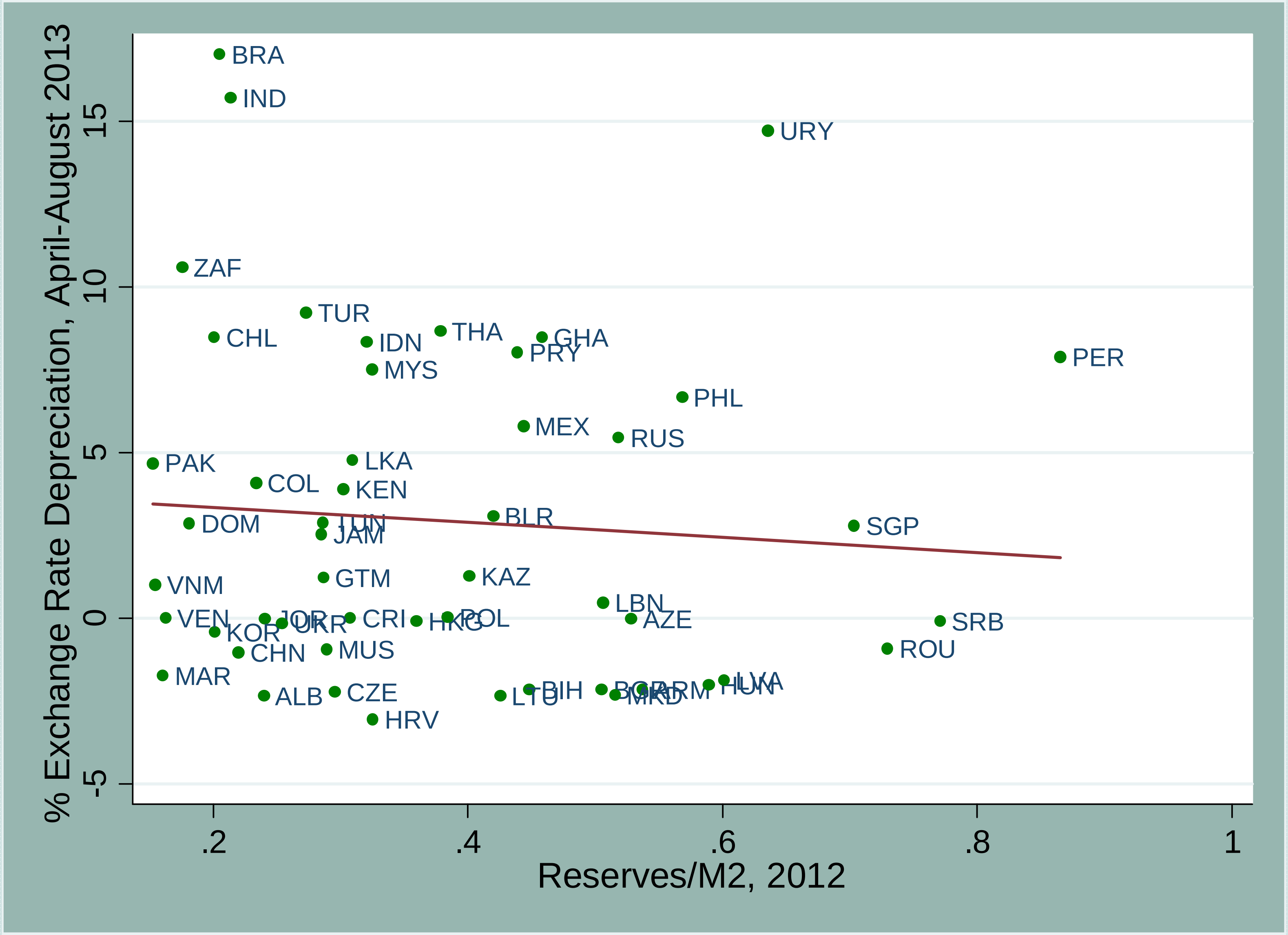
Exchange Rate Depreciation and Economic Growth (II)



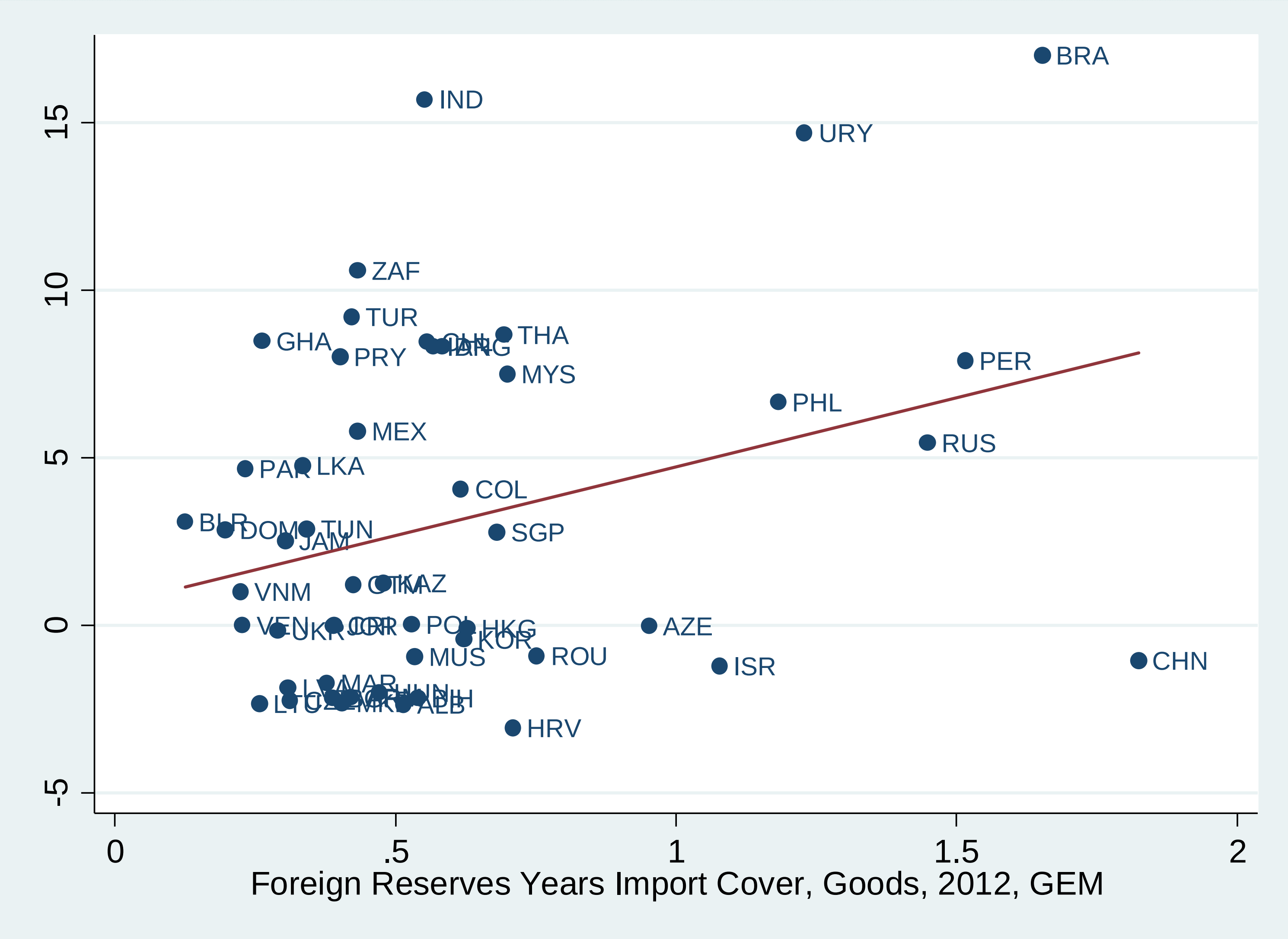
Exchange Rate Depreciation and Fiscal Deficit



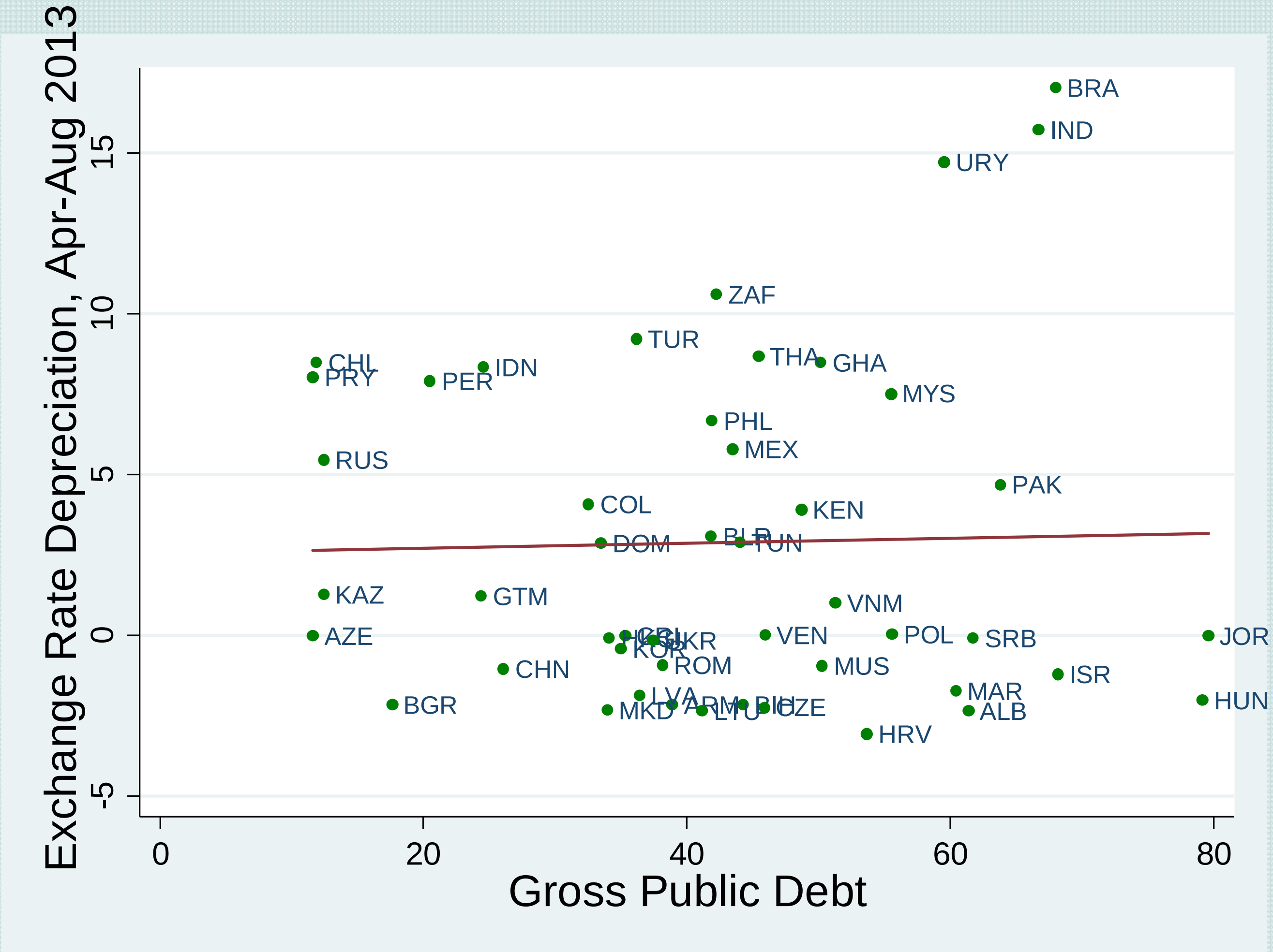
Exchange Rate Depreciation and Reserves I (Reserves/M2)



Exchange Rate Depreciation and Reserves II (Reserves/Imports Coverage)



Exchange Rate Depreciation and Public Debt



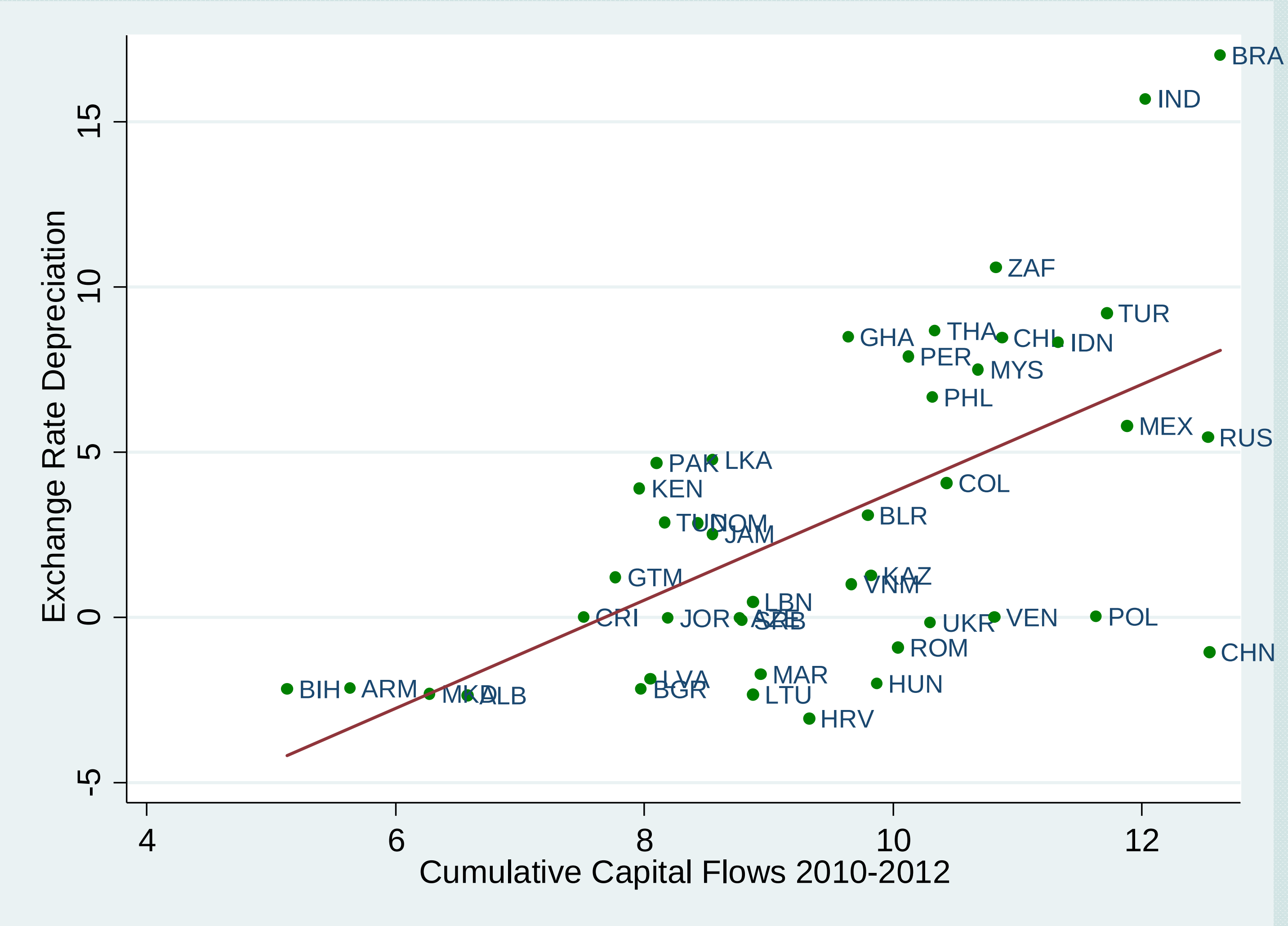
Exchange Rate Depreciation and Size of Financial Markets

- Stock market capitalization
- Cumulative capital flows
- Stock of equity, debt portfolio flows

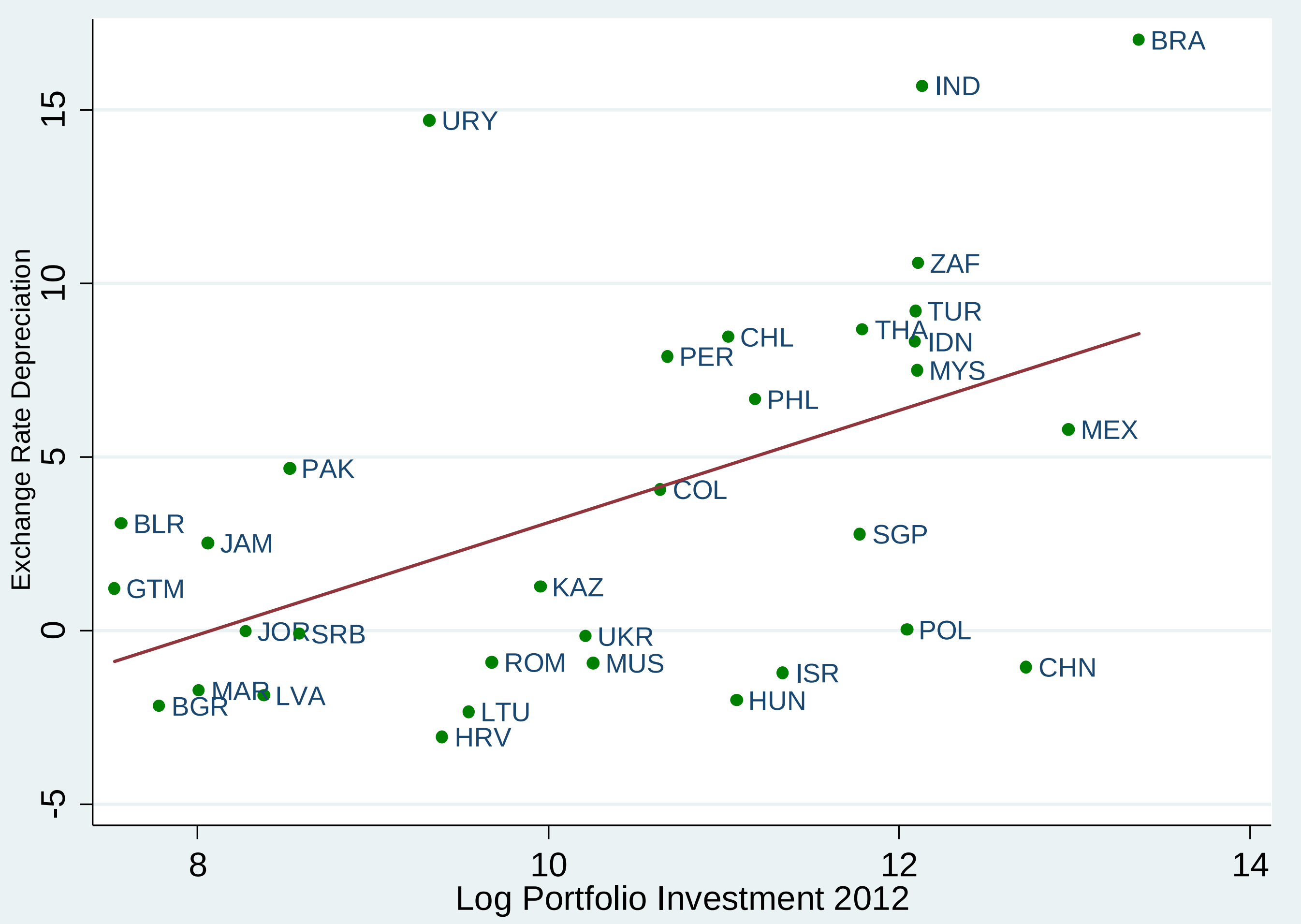
Liquidity:

- Turnover ratio in stock market

Exchange Rate Depreciation and Size of Financial Markets I



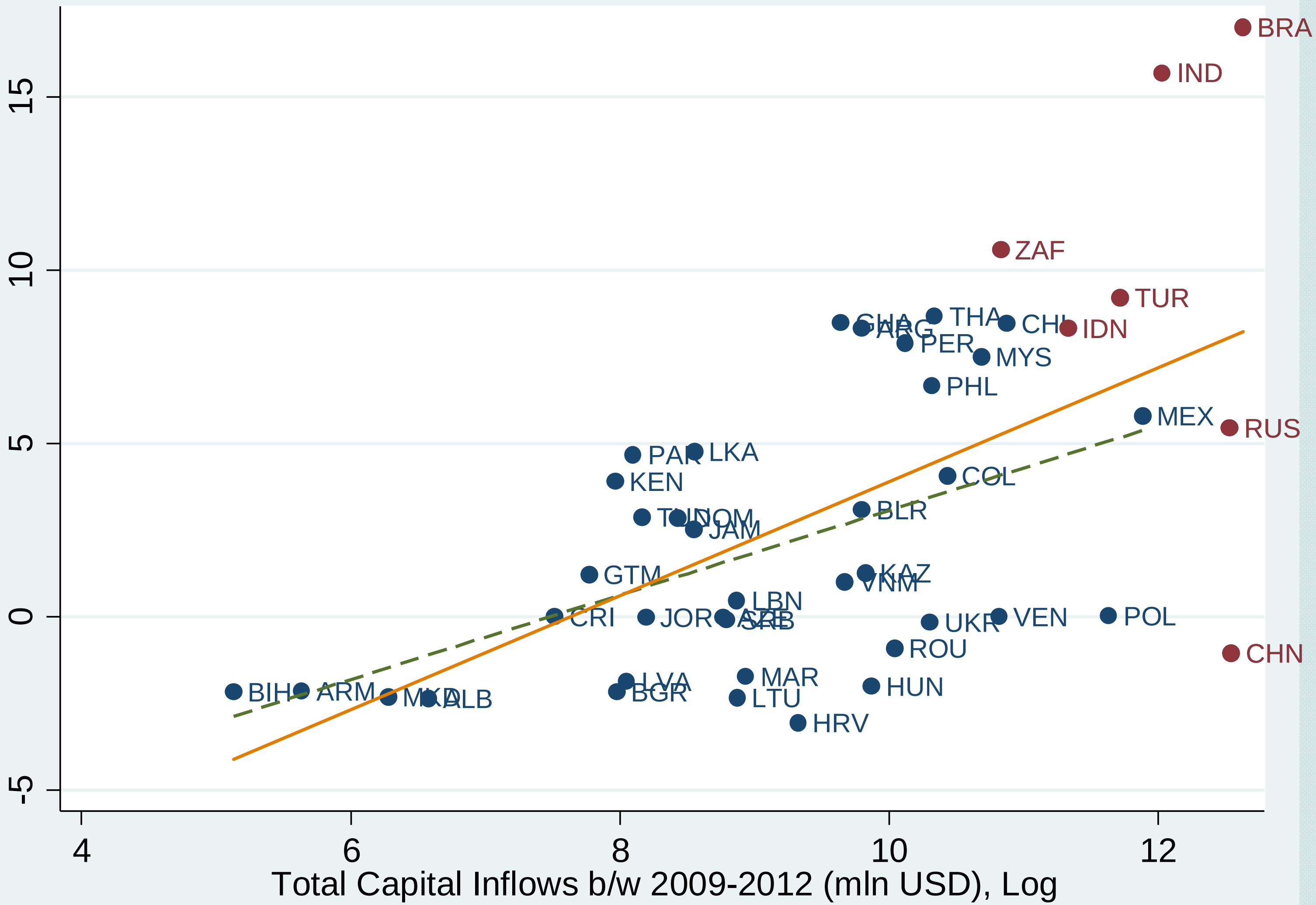
Exchange Rate Depreciation and Size of Financial Markets II



Exchange Rate Depreciation and Size of Financial Markets III

Size of Foreign Investments relative to Financial Markets

Size of Financial Markets-excluding BRICS+Fragile 5



Liquidity: Turnover Ratio

Exchange Rate Depreciation and Real Exchange Rate Appreciation

Multivariate Regressions

	(1)	(2)	(3)	(4)
Current Account Deficit	0.20**	0.21**	0.20*	0.19*
	[2.19]	[2.05]	[1.98]	[1.95]
RER Change, 2010-2012	-0.35**	-.39***	-.42**	-.49***
	[2.30]	[2.84]	[2.66]	[3.37]
Size	1.2***	1.3***	1.2***	1.1**
	[3.07]	[3.28]	[3.13]	[2.71]
Reserves/M2 Ratio, 2012	-1.17	-0.36	0.10	-0.64
	[0.41]	[0.13]	[0.03]	[0.23]
Other Controls	0.08	0.02	0.13	0.10**
	[0.30]	[0.82]	[0.67]	[2.10]
	GDP growth	Public debt	Fiscal deficit	inflation
Observations	43	42	43	43
R-squared	0.49	0.51	0.50	0.52
Adj. R-squared	0.43	0.44	0.43	0.46

Multivariate Regressions

- Size and liquidity of financial markets, extent of capital flows are important, followed by RER appreciation, and CAD deterioration
- Robust to several variations
- Not driven by outliers

Why Cumulative Capital Inflows/Size Matters?

- What goes in comes out!
- Nature of the event– rebalancing due to global factors
- Easier to rebalance in fewer larger markets, than in many small markets
- Easier and less costly to come out of larger and liquid markets

Major Findings

- Macroeconomic Fundamentals did not insulate the countries during the tapering talk
- Size mattered. Larger markets were affected more
- Larger RER appreciation/deterioration in CAD in previous years associated with a larger impact
- Residual effect seen for some countries

Caveats

- Can we explain the entire effect on each one of the countries: No
  - Why? Country specific idiosyncrasies; the factors that we did not control for
- Is the sample size too small: No
  - Almost the universe of emerging markets; large sample properties; extended the sample to include 21 African countries

Lessons

- Emerging markets, especially the larger markets, need to manage capital flows
- Help prepare banks, firms, to handle exchange rate fluctuations
- Buffers in monetary and fiscal policies to handle cycles in global liquidity
- Macroprudential measures

Thank You