BANK FOR INTERNATIONAL SETTLEMENTS

Jotikasthira, Lundblad, Ramadorai, "How do foreign investors impact domestic economic activity? Evidence from China and India": Comments

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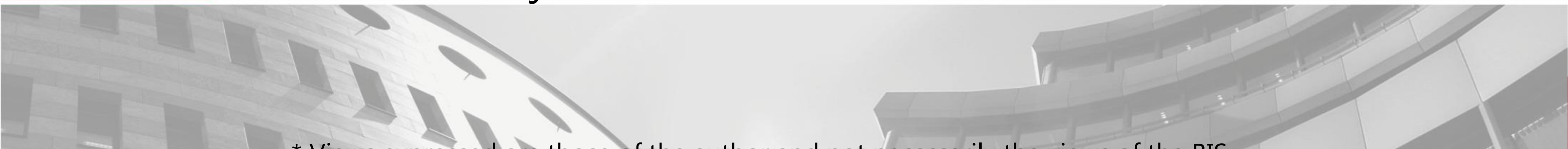


* Views expressed are those of the author and not necessarily the views of the BIS

A very ambitious paper…

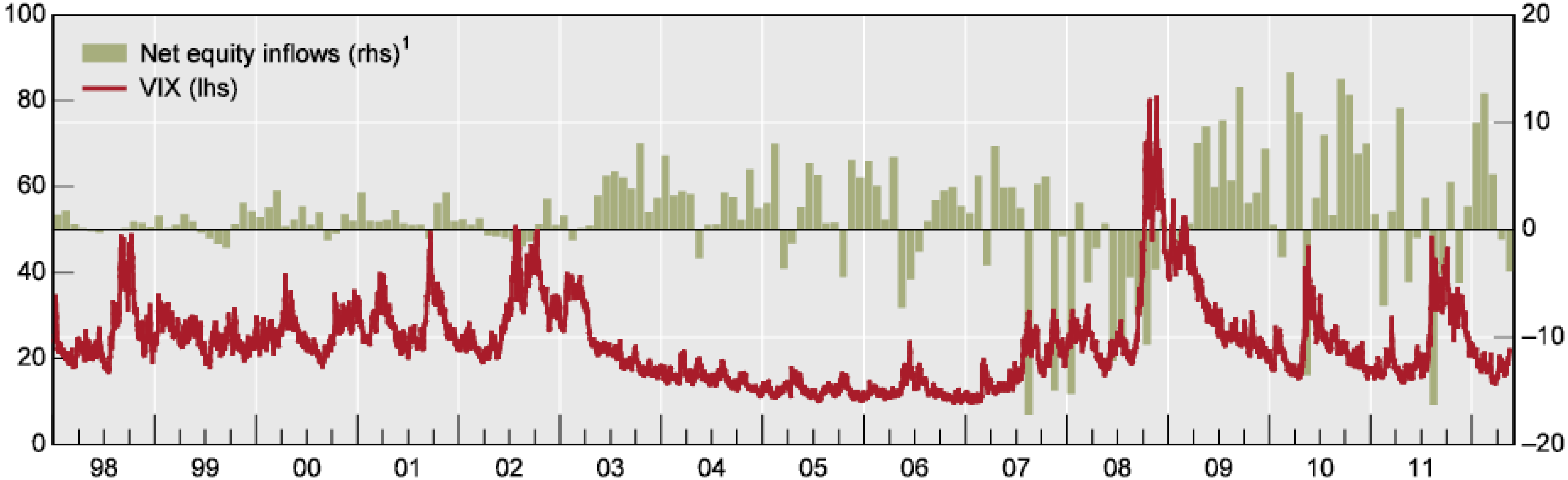
- Lots of work to measure country flows from mutual fund data.
- Measures two effects:
  - Aggregate foreign mutual fund net equity purchases on investment and growth in 25 emerging markets over 48 quarters, 1996-2008
  - Foreign net equity purchases for whole market on investment and and asset growth for firms (Compustat Global derived) in China, 2003-09 , 5,500 firm-years and India, 2001-09, 3,500 firm-years.
- Finds in country panel: One standard dev higher fund flows leads to:
  - 1% higher investment and .5% higher GDP for China
  - 1.3% higher investment and .6% higher GDP for India.
- Finds in firm panel: One standard deviation higher fund flows leads to:
  - 2.9% higher asset growth for CN firms in 90^{th}% Kaplan Zingales.
  - 1.1% higher asset growth for IN firms in 90^{th}% Kaplan Zingales.

Four questions to be asked…

- Are the fund flows "plausibly exogenous", permitting "cleaner identification"?
- Why just mutual fund flows and not overall flows?
- Why not separately estimate effect of fund flows on prices and effects of prices on investment?
- Which Chinese equity market? What prior for China vs India?

Are mutual fund flows exogenous?
(monthly data)

Global volatility and Asian net equity inflows

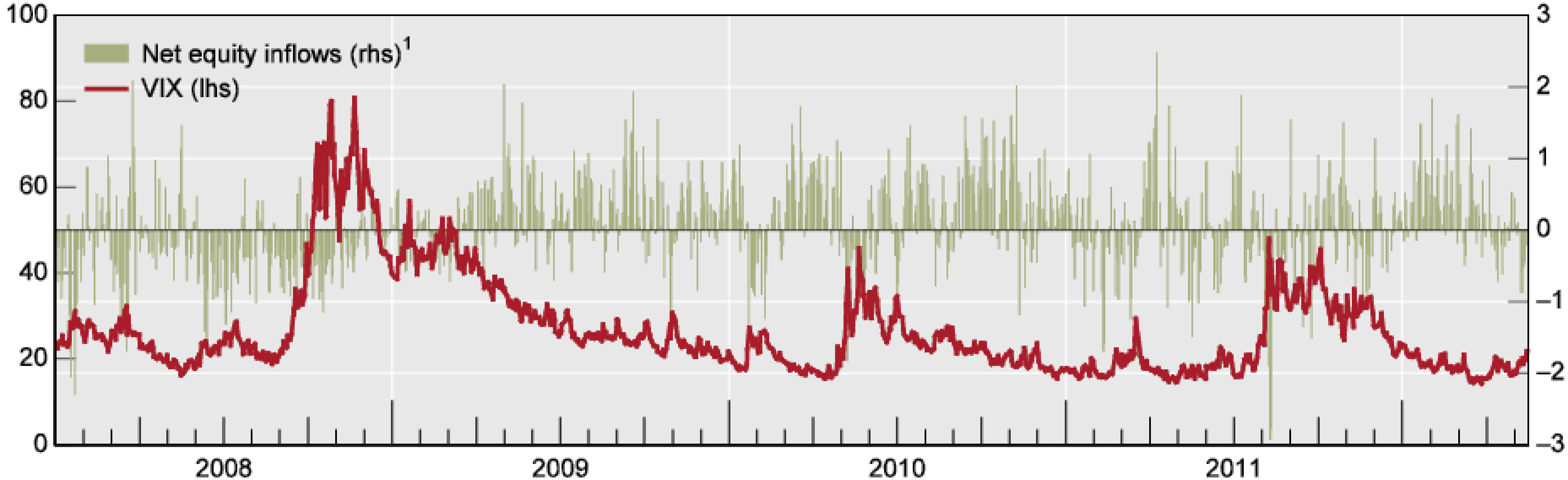


1 Net foreign purchases of equities in India (data start in 1999); Indonesia; Korea (KOSPI and KOSDAQ); Philippines; Chinese Taipei and Thailand, in billions of US dollars.

Sources: CEIC; Bloomberg.

Are mutual fund flows exogenous?
(daily data)

Global volatility and Asian net equity inflows



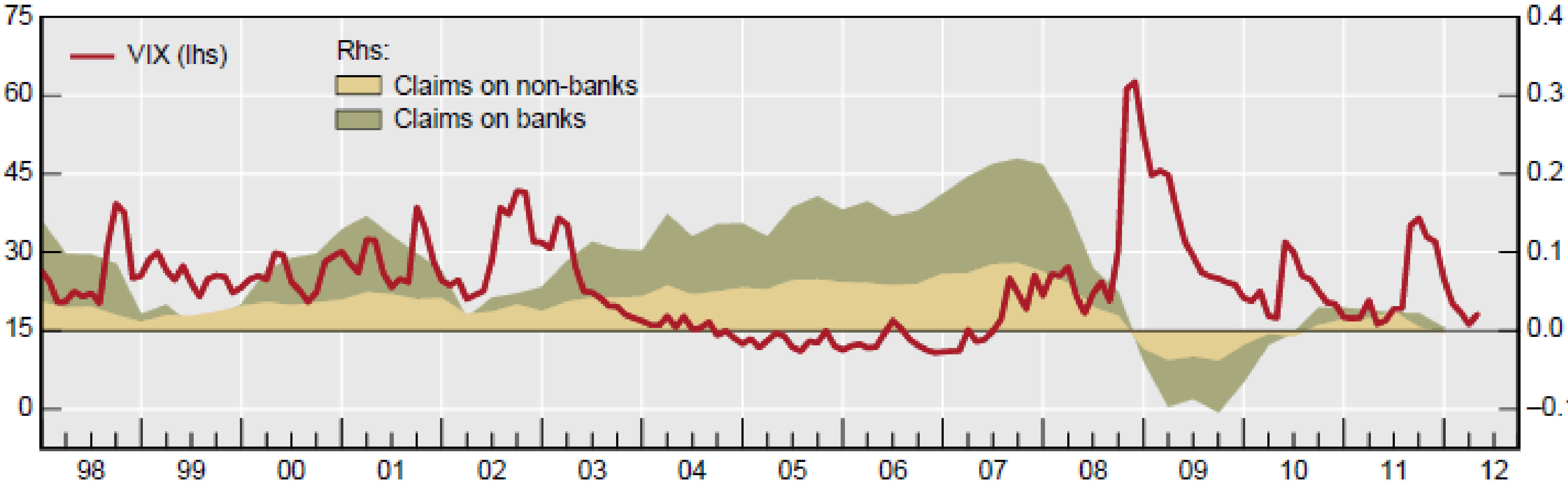
1 Net foreign purchases of equities in India; Indonesia; Korea (KOSPI and KOSDAQ); Philippines; Chinese Taipei and Thailand, in billions of US dollars.

Sources: CEIC; Bloomberg.

Exogenous? Mutual fund flows reflect risk-on risk-off

- Authors have in mind purchase/redemptions as reflecting more or less random "withdrawals and investments by their developed country domiciled retail investor base".
- But these flows vary systematically with VIX, which goes up when equity prices go down.
  - Higher VIX requires de-risking of VAR governed portfolios (Bruno and Shin (2012))
  - International banking credit correlated with VIX at lower frequency (Committee on the Global Financial System (2011).

Contributions to growth in international bank claims by sector and the VIX[1]



[1] The stacked areas indicate the contributions to the total year-on-year rate of growth in international claims, which include all BIS reporting banks' cross-border credit and local credit in foreign currency.

Sources: Bloomberg; BIS locational banking statistics by residence.

Why just mutual fund flows and not overall flows?

- Richards (2005), Chai-anant and Ho (2008) and Gyntelberg et al (2009) find effects with daily stock exchange data on nonresident net purchases—including for India.
- Chai-anant and Ho and Gyntelberg et al also analyse exchange rate effect which the authors ignore.
- Difference between mutual fund flows and overall flows includes hedge fund transactions, which may feature forced sales when volatility spikes and VAR limits bite.
- Since mutual funds vary their cash holdings, net redemptions at the fund level are a noisy measure for mutual fund sales in the market (errors in variables).
- Redoing India analysis using stock exchange data would provide robustness check and allow authors to connect to these studies, which estimate directly the equity market and forex market impacts.

Separately estimate effect of fund flows on prices and effects of prices on investment?

- Authors have in mind:

  Capital flow → Share prices, cost of equity → Corporate investment

- Authors run:

  Capital flow → Corporate investment

- As argued, separate estimation could include exchange rate effect:

  Capital flow → Share prices

  → Exchange rate → Corporate investment

Which China equity market?

- Hong Kong- and NY-listed shares of Chinese firms are presumably the bulk of the Chinese shares held in mutual funds.
- Yet prices of these shares vary greatly with respect to domestically traded shares in the sample period.
- Among the 275-1,256 firms in the Chinese sample:
  - Some are H-shares or N-shares
  - Some are A-shares
  - Some are both.
  - Expect their investment to respond in same way to buying/selling that is concentrated in Hong Kong/NY markets?
- Does this market structure give a prior for the responsiveness of Chinese vs Indian investment to mutual fund flows?