International Growth Centre

Authors

Ila Patnaik

Principal Economic Advisor

Ministry of Finance (India)

Ajay Shah

Professor

National Institute for Public Finance and Policy

Nirvikar Singh

Professor

University of California - Santa Barbara

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Foreign Investors Under Stress: Evidence from India

Emerging market policymakers are concerned about the effects of foreign portfolio flows on financial stability. This column focuses on the behaviour of investors in extreme events, allowing for the possibility that what happens under stressed market conditions may differ from day-to-day outcomes. The findings for India suggest that while on good days, foreign investors exacerbate the boom by bringing in additional capital, no significant effects are found on very bad days in the local economy.

The impact of international capital flows on emerging markets has occupied the attention of policymakers and economists for many decades. While developing countries have eased capital controls in recent decades, the debate is not settled, and many policymakers continue to be concerned about the problems associated with financial globalisation. These concerns have become more prominent after the global crisis, with the suggestion by the International Monetary Fund (IMF) that capital controls should be viewed more favourably under certain situations.Role of foreign investors in emerging markets.

Role of foreign investors in emerging markets

A significant international finance literature has explored the role of foreign investors in emerging markets (For instance, Froot and Ramadorai 2001, 2008). The emphasis of these explorations has been on the extent to which foreign investors are a 'stabilising' or a 'destabilising' influence in emerging equity markets, in the following sense – do foreign investors trade in a manner that push prices away from the fundamental value (in which case they are viewed as 'destabilising')? Alternatively, do foreign investors forecast prices better than domestic investors, and thus enhance market efficiency (in which case they are viewed as 'stabilising')? A considerable literature has developed on these questions, with mixed results.

Foreign investments and financial stability

Emerging market policymakers are concerned about the financial stability consequences of foreign portfolio flows. However, their notions of stability may differ considerably from those expressed above. From the viewpoint of policymakers in emerging markets, four questions about the financial stability implications of foreign investment flows appear to loom large:

1. Do foreign investors exacerbate a domestic crisis by withdrawing capital on a large scale during the crisis?
2. In this, is there asymmetric behaviour, with different responses to

2. In this, is there asymmetric behaviour, with different responses to very good versus very bad days in the local economy?
3. Are foreign investors `big fish in a small pond' – do their large transactions kick off substantial, though possibly temporary, distortions in the equity or currency market of an illiquid emerging market?
4. When there is stress in the global financial system, do foreign investors withdraw capital on a large scale, and thus act as a vector of crisis transmission?

These four questions are almost exclusively about behaviour in extreme events. The first question is about the behaviour of foreign investors when there are extreme events in the local economy. The second question is about potential asymmetries in response to large positive shocks versus large negative shocks in the local economy. The third question is about days with extreme events in foreign investment and, the fourth question is about extreme days in the world economy.

We have adapted the workhorse of empirical finance – the event study – so as to directly address the above four policy-relevant questions (Patnaik, Shah and Singh 2013). Our methodology focuses on extreme events, allowing for the possibility that what happens under stressed market conditions may differ from day-to-day outcomes, and measures relationships of interest under stressed conditions.

Foreign investor behaviour in India

We illustrate our new methodology by analysing data for one large emerging market – India. The findings our study for India, are relatively benign. We find that on very good days in the local economy, foreign investors exacerbate the boom by bringing in additional capital. However, there is asymmetric behaviour: on very bad days in the local economy, no significant effects are found. Foreign investors do not seem to be `big fish in a small pond': extreme days of foreign investment in India do not kick off short-term price distortions with mean-reversion in following days, either on the currency market or on the equity market. Finally, very positive days on the S&P 500[1] trigger off additional capital flowing into India, but there is no evidence of the reverse: international crises (with very poor days for the S&P 500) do not trigger off exit by foreign investors. Foreign investors are not a vector of crisis transmission into the Indian equity market.

Future research

Future research can explore extensions in three dimensions. The results presented here pertain to one large emerging equity market, India. It would be interesting to explore (a) The relationships observed in other countries, particularly relatively small countries and those less integrated into financial globalisation; (b) Other asset classes including debt capital, which have been an important source of concern in international financial crises; (c) Cross-sectional variation between multiple firms traded in the Indian equity market. Foreign investors may not be `big fish in a small pond' when it comes to the overall Indian stock market index – but may kick off problems either with illiquid Indian securities or with the stock market indices of countries with an illiquid equity market stock market indices of countries with an illiquid equity market, because of the thinness of that market. The stance of foreign investors towards debt securities may differ considerably. We are currently exploring these additional research questions.

Notes:

1. The Standard & Poor's 500 is a stock market index based on the market capitalisations of 500 leading companies publicly traded in the US stock market, as determined by Standard & Poor's.

Watch a video of Nirvikar Singh presenting the underlying research at the 2nd IGC South Asia Growth Conference (July 2013; New Delhi)

Further reading

- Anshuman, V. Ravi, Rajesh Chakrabarti and Kiran Kumar (2010), Trading Activity of Foreign Institutional Investors and Volatility. Paper presented at 7th meeting of NIPFP-DEA research program, New Delhi, September 1.
- Broner, Fernando, Tatiana Didier, Aitor Erce, Sergio L. Schmukler (2010), "Financial Crises and International Portfolio Dynamics", Working Paper, June 28.
- Chakrabarti, Rajesh (2001), "FII Flows to India: Nature and Causes", Money and Finance, October-December.
- Chakrabarti, Rajesh (2006), 'Foreign Institutional Investment, in Basu, Kaushik and Annemie Maertens (eds.) (2010), The Concise Oxford Companion to Economics in India, New Delhi: Oxford University Press.
- Davison, A. C., D. V. Hinkley, and E. Schechtman (1986): "Efficient bootstrap simulation," Biometrika, 73(3), 555–566.
- Froot, Kenneth and Tarun Ramadorai (2001), The Information Content of International Portfolio Flows, NBER Working Paper 8472, September
- Froot, Kenneth and Tarun Ramadorai (2008), Institutional Portfolio Flows and International Investments, Review of Financial Studies, 21(2), 937-971
- GoI (Government of India), Ministry of Finance (2005), 'Report of the Expert Group on Encouraging FII Flows and Checking the Vulnerability of Capital Markets to Speculative Flows', New Delhi, November.

- Gordon, James and Poonam Gupta (2003), 'Portfolio Flows into India: Do Domestic Fundamentals Matter?', IMF Working Paper 03/20, Washington DC.
- Manova, Kalina (2008), 'Credit Constraints, Equity Market Liberalizations and International Trade', Stanford University Working Paper.
- Mukherjee, Paramita, Suchismita Bose and Dipankar Coondoo (2002), "Foreign Institutional Investment in the Indian Equity Market", Money and Finance, April-September.
- Patnaik, Ila and Ajay Shah (2012), "**Did the Indian capital controls work as a tool of macroeconomic policy?**", IMF Economic Review, 60, 439—464.
- Patnaik, Ila, Ajay Shah and Nirvikar Singh (2013), "Foreign Investors under Stress: Evidence from India", forthcoming, International Finance
- Rakshit, Mihir (2006), "On Liberalising Foreign Institutional Investments", Economic and Political Weekly, 18 March, 991-998.
- Shah, Ajay and Ila Patnaik (2007), 'India's experience with Capital Flows: The Elusive Quest for a Sustainable Current Account Deficit', in Sebastian Edwards (ed.), Capital Controls and capital flows in emerging economies: Policies, practices, and consequences, NBER and University of Chicago Press.
- Shah, Ajay and Ila Patnaik (2011), 'India's financial globalization', in Gerard Capiro, Elsevier (ed.), Encyclopedia of Financial Globalization
- Shah, Ajay and Susan Thomas (1998), 'Market microstructure considerations in index construction, CBOT Research Symposium Proceedings, Summer 1998.
- Stigler, Matthieu, Ajay Shah, and Ila Patnaik (2010), "Understanding the ADR Premium under Market Segmentation", NIPFP Working Paper 71, July 2010.
- Zeileis, Achim, Ajay Shah and Ila Patnaik (2010), "Testing, monitoring and dating structural changes in exchange rate regimes", Computational Statistics and Data Analysis, 54(6), page 1696-1706, June 2010.