FINANCE INDIA

Vol. XXXIV No. 3, September 2020
Pages—943—956

Empirical Analysis of Relationship between FPI and Nifty Returns

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Abstract

This study is an attempt to evaluate and analyze relationship between Foreign Portfolio Investors (FPI) and the Indian stock market returns. With the stable economy, better growth prospects, liberal government policies and many more profitable opportunities, India has become a hot destination for FPI investments. Thus, there is a need to study the impact of these investments on the market returns. Daily data of Foreign net investment and Nifty returns, for the period starting from January 2000 – December 2016 has been used for evaluating the presence of Feedback Trading among the Foreign investors. Granger Causality, ARIMA and GARCH have been used to establish the cause and effect relationship among the variables and test the presence of Feedback trading hypothesis. The results suggested that FPI were influenced by the Nifty returns but the relationship was not vice versa. FPIs box their investing decision on the previous period returns.

I. Introduction

THE STUDY OF behavior and investing pattern of Foreign Portfolio Investors' (FPI), have gained much momentum in the past few decades. The main reason for this surge can be attributed to the growth in the emerging markets which made them an attractive destination for foreign investments. These emerging markets are dependent heavily on the foreign investment and thus researchers all over the world are trying to examine the impact of these foreign investments on the developing as well as developed economies.

FPIs play the important role in stock market even though their volume of trade is not much high in comparison to the individual investors or market participants. FPI are perceived to be information efficient participants and

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Submitted March 2017; *Accepted* April 2018

It can be concluded that there is existence of unidirectional causality from Nifty returns toward FPI net investments but not vice versa. The analysis showed that the FPIs were significantly influenced by the lagged market returns, which clearly suggests that the foreign portfolio investors follow the positive feedback trading. In other words, investors base their portfolio decision on contemporaneous and the returns in the previous days. It can also be suggested that foreign institutional investors are return chasers and momentum traders in the Indian stock market returns represented by Nifty returns (confirms with Misra (2012)). During our sample period, FPI net investment impact on Nifty returns is very negligible and significant only in sub sample 2 i.e. from September 2003 – December 2007. Thus in the current sample, FPI net investment is significant in explaining the variations in the Nifty returns but its magnitude as well as the coefficient is low.

VI. Conclusion

This study empirically examines the dynamics of institutional investments and stock market movements for the Indian equity market with a ARIMA GARCH Model using daily data spanning from 1st Jan 2000 to 31st December 2016. The analysis has been done to analyze the relation between FPI and Nifty returns along with their lagged terms. This relationship between porfolio investment activities and stock market behavior has been intriguing in many financial researchers as well as for the policy makers. Study concluded that FPI flows get affected by the nifty returns to greater extent as compared to effect of FPI flows on the nifty returns. It was seen that FPIs base their investing decision on the previous period returns. They also tend to follow their own investing pattern on the previous days. In other words, FPI net inflows dependence on equity market returns indicated daily return chasing behavior by the Foreign Portfolio Investors.

References

Ananthanarayanan, S., C. Krishnamurti and N. Sen, (2009), "*Foreign Institutional Investors and Security Returns: Evidence from Indian Stock Exchanges*", Winter Research Conference in Finance, Indian School of Business, Hyderabad

Babu, M.S., and K. Prabheesh, (2008), "Causal relationships between Foreign Institutional Investments and stock returns in India", *International Journal of Trade and Global Markets,* Vol. 1, No. 3, pp. 259-265

Banaji, J., (2000), "*Foreign Portfolio Investment in Indian Equity Markets: Has the Economy Benefited?*", QEH Working Paper No. 54

Bandhani, K., (2004), "*Dynamic Relationship Among Stock Prices, Exchange Rate and Net FII Investment Flow in India*"Research Gate Network

Bekaert, G., and R.H. Campbell, (1998), "*Capital flows and the Behaviour of Emerging Market Equity Returns*", NBER Working Paper No. 6669

Bekaert, G., and R.H. Campbell, (2000), "Foreign Speculators and Emerging Equity Markets", *Journal of Finance*, No. 2, April 2000

Chakrabarti, R., (2001), "FII Flows to India: Nature and Causes", *Money and Finance,* Vol. 2, 2001

Chandra, A., (2012), "Cause and effect between FII trading behaviour and stock market returns: The Indian experience", *Journal of Indian Business Research*, pp. 286-300

Choe, Y., B.C. Kho, and R.M. Stulz, (1998), "*Do Domestic Investors Have More Valuable Information about Individual Stocks than Foreign Investors?*", NBER Working Paper No. 8073

Clark, J., and E. Berko, (1997), "*Foreign Investment Fluctuations and Emerging Market Stock Returns: The Case of Mexico*", FRBNY Staff Reports, Federal Reserve Bank of New York, 1997

Dhiman, R., (2012), "Impact of Foreign Institutional Investor on the Stock Market", *International Journal of Research in Finance and Marketing,* Vol. 2, No. 4, pp. 33-46

Dornbusch, R., and Y.C. Park, (1995), "*Financial Integration in a Second Best World: Are We Sure About Our Classical Prejudices*", Financial Opening: Policy Lessons for Korea, 1995

,Frenkel, M., and L. Menkhoff, (2003), "*Are Foreign Institutional Investors Good for Emerging Markets?*", Discussion paper No. 283

Froot, K., P. O'Connell and M. Seasholes, (2001), "The Portfolio Flows of International Investors", *Journal of Financial Economics,* Vol. 59, pp. 151-193

Gopinathan, N., and S.S. Rau, (2009), "A Study on the Role of Foreign Institutional Investors FII's in the Indian Capital Market", *Journal of Contemporary Research in Management*, pp. 75-81

Guru, A., and A. Parikh, (2009), "Behaviour of Foreign Institutional Investors in India: An Empirical Study", *Indian Journal of Finance,* Vol. 3, No. 8

Jayaraj, D., V. Murale and P. Christy, (2009), "An Emperical Investigation of Impact of Net FII Investment on Performance of Indian Stock Market of BSE", *Journal of Contemporary Research in Management*, pp. 125-143

Khan, M.A., S. Ashraf, and S. Ahmed, (2005), "An Empirical Investigation of FIIs' Role in the Indian Equity Market: A Firm Level Analysis", *The ICFAI Journal of Applied Finance*, 2005

Kumar, S., G.R. Tavishi and A. Khatua, (2012), "Behavioral Modeling of Foreign Institutional Investors in Indian Equity Market", *Global Journal of Business Research,* Vol. 6, No. 1, pp. 1-8

Lakshman, M.V., S. Basu and R. Vaidyanathan, (2013), "Market-wide Herding and the Impact of Institutional Investors in the Indian Capital Market", *Journal of Emerging Market Finance,* Vol. 12, No. 2, pp. 197-237

Merton, R., (1987), "A Simple Model of Capital Market Equilibrium with Institutional with incomplete Information", *Journal of Finance,* Vol. 42, No. 3, pp. 483-510

Misra, B. S., (2012), "The Role of FIIs in the Indian Stock Market", *Vilakshan, XIMB Journal of Management*, pp. 1-22

Mukherjee, P., S. Bose and D. Coondoo, (2002), "Foreign Institutional Investment in the Indian Equity Market: An Analysis of Daily Flows during January 1999-May 2002", *Money and Finance*, pp. 21-51

Pal, P., (2005), "Recent Volatility in Stock Markets in India and Foreign Institutional Investors", *Economic and Political Weekly,* Vol. 40, pp. 765-772

Paliwal, M., and S. Vashishtha, (2011), "FIIs and Indian Stock Market: A Causality Investigation", *Comparative Economic Research,* Vol. 14, No. 4, pp. 5-24

Panda, C., (2005), "An Empirical Analysis of the Impact of FIIs Investment on Indian Stock Market", *Applied Finance*, pp. 53-61

Pasricha, J., and U.C. Singh, (2001), "Foreign Institutional Investors and Stock Market Volatility", *The Indian Journal of Commerce,* Vol. 54, No. 3, pp. 29-35

Prasuna, A.C., (2000), "Determinants of Foreign Institutional Investment in India", *Finance India*, pp. 411-422

Rao, K., M. Murthy and K. Ranganathan, (1999), "Foreign Institutional Investment and the Indian Stock Market", *Journal of Indian School of Political Economy,* Vol. 11, No. 4, pp. 623-647

Reddy, D.M., and M. Saleem, (2013), "Impact of FII's on Indian Stock Markets", *Indian Journal of Applied Research,* Vol. 3, No. 4, pp. 303-307

Richards, A., (2002), "*Big Fish in Small Ponds: The Momentum Investing and Price Impact of Foreign Investors in Asian Emerging Equity Markets*", Reserve Bank of Australia and IMF, 2002

Saha, M. (2009), "Stock Market in India and Foreign Institutional Investments: An Appraisal", *Journal of Business and Economic Issue,* Vol. 1, No. 1, pp. 1-15

Sehgal, S., and N. Tripathi, (2009), "Investment Strategies of FIIs in the Indian Equity Market", *VISION-The Journal of Business Perspective,* Vol. 13, No. 1, pp. 11-18

Sethi, N., (2012), "Inflows and their Macroeconomic Impact in India a VAR Analysis", *The Romanian Economic Journal*, pp. 93-142

Shukla, D.R., D.A. Upadhyaya, and S. Jain, (2011), "FII Equity Investment and Indian Capital Market - An Empirical Investigation", *Pacific Business Review International,* Vol. 1, No. 3, pp. 62-69

Singh, S., D.L. Tripathi and A. Pardesi, (2014), "FII Flow and Indian Stock Market: A Causal Study", *Asian Journal of Research in Business Economics and Management,* Vol. 4, No. 1, pp. 202-209

Srinivasan, P., and M. Kalaivani, (2013), "*Determinants of Foreign Institutional Investment in India: An Empirical Analysis*", MPRA, pp. 1-20

Stanley, M., (2002), "FII's influence on Stock Market", *Journal of impact of Institutional Investors on ISM,* Vol. 17

Tayde, M., and S.V. Rao, (2011), "Do Foreign Institutional Investors (FIIs) Exhibit Herding and Positive Feedback Trading in Indian Stock Markets?", *International Finance Review,* Vol. 12, pp. 169–185

Thiripalraju, D.M., and D.R. Acharya, (2011), "Dynamic Interaction between Institutional Investment and Stock Returns in India: A Case of FIIs and MFs", *Finance India*, Vol. XXVII, No. 4, December 2003