STUDY ON IMPACT OF FOREIGN INSTITUTIONAL INVESTMENT ON INDIAN STOCK MARKET IN REFERENCE TO NIFTY AND SENSEX

Mr. Omer Fareed Mohammed* | Dr. S C Behl**

*PhD Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.
**Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.

ABSTRACT

When a domestic stock market is dominantly affected by the FIIs, what efforts can the government take to limit FII influence and what will be its impact on the Indian market as a whole? These are some queries that need to be dealt with delicately to determine who will remain in the controlling capacity of the market performance. The present study embarks to solve this as it holds future implications for the domestic capital market and the major market investors. Open market has its share of market regulators that play an important role in maintaining growth prospects, development and market stability. These regulators persevere to integrate stability and growth to ensure non-dominance of a single factor on the market. Unfortunately, when the regulators fail in their efforts, a debacle like the one in 2008 happens in the Indian market. Therefore, the researcher proposed due diligence should be maintained in assessing the role of regulators who design policies for market stabilisation and their implications on FII investments in the market.

Keywords: Foreign Institutional Investment, Indian Stock Market, Nifty and Sensex

ABOUT AUTHORS:

Author Mr. Omer Fareed Mohammed is working at Al Buraimi University College in Oman; He is pursuing Ph.D. from Himalayan University, Arunachal Pradesh, India. He has more than 18 years of teaching experience. He has attended various Seminars and conferences. His area of expertise covers the Corporate Finance, Stock Market Analysis, Forensic Accounting, Environmental Accounting, Personal Financial Planning, Auditing and Use of Information Technology in Accounting.

Author Dr. S C Behl is an active researcher with many publications in his name. He has 46 years’ experience in Accounts, Finance, Audit, Personnel Management & Admin in lower, Middle and HOD in Government and Private Sector He has attended and organised various National and International conferences and has given extensive lectures.
INTRODUCTION

FIIs are given utmost priorities in the capital market as they bring in a lot of financial support to the economy which can be used by the democratic representatives for economic growth and development. On the other hand, too much dependence will create a dominant position for the FIIs and its withdrawal will lead to severe crash scenarios when funds become scarce or limited. This will adversely impact the investors’ trust and affect the performance of the stock market. Stock market instability will create panic like conditions that will negatively impact the economy.

Hariprasad researched on trading in Indian organisations’ stocks by FIIs between the periods of 2013-2015. He postulated that many organisational characteristics are responsible for FII interest and investment in these organisations. The investors take into account variables like the book to market proportion and the size of the organisations to decide the level of their equity investments. Sometimes the firms use export or beta ratio of organisations as determinants but not much evidence is found to support this argument. However in the case of large scale organisations, the FIIs prefer to invest in shares of companies that have a high rate of exports.

Puja Padhi and Imlak Shaikh studied Equity Index (S&P CNX Nifty Index) and implied volatility index (India VIX) relationship and its contemporary asymmetric behaviour along with implied volatility index and its seasonality depending on option expiration cycle and weekday effects.

The researchers used simple OLS estimation and studied the present affiliation between stock index and volatility index. The study is accessible in sub periods and calendar schedule to ease access to quick results including for the Asian markets of China and Japan. The evidence points towards dominant asymmetry persistence between Nifty stock index and India VIX even though the asymmetry magnitude is non-identical. They concluded that rather than positive return shocks, negative return shocks led to bigger outcomes in India VIX.

Anubha Shrivastav, the author of “A Study of Influence of FII Flows on Indian Stock Market” claims that Indian stock market attracts investments due to its vast size of operations. She studied the stock market impact and volatility due to investors’ movement in the market. During the short term, FIIs affect national financial investment markets like foreign exchange markets, stock markets, money markets and bidirectional returns in the country. Therefore it is imperative to understand the determinants that propel investments for an economy since FIIs heavily influence the national financial markets not only in the short run but adversely affect in the long run as well. In our research paper, we intend to establish and broadly determine the causes that contribute to FII investments in India, which liberalised its foreign policies to invite investments from the international markets and overcome foreign exchange calamity.

Rahul Dhiman wrote ‘Impact of Foreign Institutional Investor on the Stock Market’ and defines FII as an institution that is an investment fund or an investor that is registered and functioning in a different country than the one it is investing in. FIIs can be in the form of mutual funds, hedge funds, pension funds and insurance companies as well. The Indian market is drawing in foreign investors to the domestic equity markets and their impact on the economy is amplified in our study.

Hemkant Kulshreshtha professes that Indian equity market is growing by leaps and bounds with investors eyeing the Indian market for their raw potential. The capital market in India appealed to a lot of domestic investors and foreign institutions with major contributions coming in from FIIs. These foreign investments are so large that they can steer and regulate the domestic capital markets. Market investment by FIIs and their following impact on the Indian capital markets are studied in detail in our paper. Foreign Institutional Investments due to its provisional nature causes twin directional commotion on the Indian capital market returns from stock markets, foreign exchange markets or the money markets. Therefore it is imperative to understand what criteria influence the FIIs especially for a developing country like India as the impact of FIIs have a cumulative effect on the domestic financial market not only in the short run but in the long run as well. Our research paper tries to shortlist the determinants that are crucial in encouraging FIIs in India that result in foreign investments to overcome the country’s restrictive foreign exchange policies. In this study, we intend to pin down if there is a compelling relation between the Indian financial market and the FIIs.
Aditya Srinivas researched on FII significance for the Indian stock market. He outlined the integration of global economies and its underlying effect on the stock market and the Indian economy. His research studied the FII flow through its statistical analysis and the consequent effect on the stock market in 2008-2013. The researcher focused on the international financial crisis in 2008 and the Euro zone crisis, 2011. He used statistical tools to analyse the empirical evidence. The two crises were analysed in detail and how FIIs played a role in these crises was also analyzed. He used correlation, t-test and regression analysis to establish the persuasive bonding between Indian stock market and FII.

**Finding:** The researcher concluded that a positive coefficient correlation of 0.41 led to prove that a considerable relationship existed between Indian stock market and FIIs. T-test recorded a value of 2.34 which proved that hypothesis zero is not relevant and FIIs play a significantly dominant role in the domestic stock market.

The regression analysis reflected on what would be the impact of FII on the index value when the FIIs are up to 1,000 mn. The analysis revealed that index value stood at 16,864 when FIIs are up to a 1,000M and at 17441 when they increase to 2000M. Therefore we can conclude that as the FII flows are being augmented the index value is increasing. The index’ intercepts value stands at 16,287 when the FII inflows (an independent variable) are nil and index (a dependent variable) will be 16,287. It means that the market will suffer drastically when the FIIs are curtailed and the stock market will steeply fall.

The investors should be encouraged to venture into the market by providing mandatory safety protection. The researcher highlighted the FII significance in domestic stock market. The investors are to be better enlightened in the financial and stock market education to help them understand the risks and profits associated with it.

**Sunita Mehta and Goyal** opines that FIIs were enticed by the Indian market during the post reform financial era. They endeavoured to bring forth the short and long term after-effects of a stabilised relation between the domestic market and FIIs. They used month based time series data with ADR (advance to decline ratios) in BSE (Bombay Stock exchange) and FIIs’ purchase to sale ratio. The sample was collected for the periods between Apr 2001 and Dec 2012. They deduced a unidirectional causality operating from FIIs and influencing BSE-ADR during both short term and long term periods. The BSE price changes are heavily impacted by FII activity according to the variance decomposition analytic study, thereby confirming that FIIs are crucial for information dissemination. The analysis suggests FIIs are indifferent to variations in BSE but the FII inflows significantly impact the performance at BSE, thereby showing a unidirectional causality originating from FII and impacting BSE-ADR.

Capital growth in an economy is of considerable significance. Developing countries like India are restricted due to limited capital supply in the domestic market. Therefore these economies resort to raising capital from the foreign markets usually in two ways - FII and FDI. FIIs are more volatile and are subject to performance of the domestic stock market. The developing economies therefore prefer FDI as foreign capital to FIIs. Still, FIIs are more influential as they directly affect the stock markets positively and as such are preferred by the developing economies.

**Mayur Shah** followed the FII patterns and trends in India and explained the connection between Nifty and FII. He studied variations in the FII inflow for the period 2004-2014 using the ARCH-GARCH model and examined the changes happening for a 24 hour time period (closing rate to another day’s closing rate).

**Varun Chotia, Dadhich, Omvir Chaudary and Gaurav** highlighted the continual volatility in FII and its impacting abilities on the Indian stock market. FIIs played a major role in persistently contributing to the Indian securities market. Gross purchase coefficient was strong, proposing high volatility for FIIs’ gross purchase and even higher insinuation for domestic stock market during 2004-2014 when compared to FII gross sales.

**Sahadeb Sarkar and Ashok Banerjee** presume that GARCH category models can easily deduce volatility in the Indian market rather than standard volatility models such as moving average, historical average etc, when the Indian markets are experiencing volatility in stock market clusters. Symmetric GARCH models are less preferred than asymmetrical GARCH models due to the leverage effect. They deduced that asset return volatility is directly influenced by Indian trade volume investments in the market. Furthermore, FIIs investments do not
further contribute to volatility in the Indian market. These deductions prove FII implications as the market regulator.

Anand Bansal & Pasricha outlined the impact of FIIs on market openings for the Indian securities market. India opened the gates of domestic securities market to the global investors on 14th of Sep 1992 for investment purposes. It listed the performance of BSE (Bombay Stock Exchange) on the domestic market to entice investments from the overseas market both before and after the relaxation of investment policies in 1992. They conducted an empirical investigation to suggest the market influence of this decision on volatility and stock market returns. They concluded that even though the average returns of the stock market were not heavily influenced, it did reduce the volatility or unpredictability in the Indian stock market after opening the domestic market to investments from the international economies.

Pardhasaradhi and Syed Tabassum Sultana studied the FII and FDI inflows between the periods of 2001-2011 and concluded that these inflows were determined with the performance of Nifty and Sensex. They reckoned that FII and FDI inflows were impacting the Indian stock market performance. Indian equity market is progressing over the years due to policies and practices adopted by the Indian market. These researchers focused on FII performance and trends in the Indian equity market by using data from FII investments in 2002-2012 from SEBI’s statistical statement and also highlighted the performance and effect of CNX Nifty and Sensex, India’s standard exchange indexes.

Hari Hara Raju & Siva Prasad presumes that a moderate and positive relation exists between Nifty, Sensex returns and net foreign institutional investments. The presence of FIIs heavily impacts the Indian securities market. Different researchers hold varied opinions about the influencing capacity of FIIs on the institutional holdings and volatility of the Indian market. The precedence blueprint is inconsistent and the deciding variable is obscure. This holds two forms of implications for the Indian market — that institutional holding augmentation increases the domestic markets volatility or risky assets with potential performance abilities attract the foreign institutional investors.

N.A. Azad and Areej Aftab Siddiqui conducted a study to find out ways to influence FII inflows into the country and regulate economic growth. The growth in FIIs is also a cause of concern for the domestic investors as their large influence on the stock market performance is considered contentious by some Indian investors.

Gupta (2011) broached the impact of FIIs in India in his paper “Does the stock market rise or fall due to FIs in India.” Researchers World - Journal of Arts, Science and Commerce, 2 (2), 99 - 107.” He highlighted the correlation between FIIs and Indian Securities markets and concluded that though both are mutually influential in their impact on the other, the time measure is different. FIIs are being considered a dynamic influential force to augment the performance of Indian stock market and therefore a crucial reason of volatility in the domestic financial market.

Zahoor Ahmad Mir and Bashir Ahmad Joo concentrated on understanding the link between stock market volatility and FII financial flows. They used monthly time series analysis of Sensex, Nifty and FIIs spanning over a 15 yr period from Jan, 1999 to Dec, 2013 to investigate non stationary time series using ADF (Augmented Dickey – Fuller) unit root analysis. In our study, we are using standard deviation, mean, variance, correlation and skewness analysis to investigate the influence of FIIs on volatility of the Indian securities market. GARCH model is also used by researchers to study the FII impact on domestic market. He concluded that a relation exists between stock markets’ volatility and FIIs and FIIs play a dominant role in Nifty and Sensex volatility that are representative exchange houses of the Indian capital markets.

Santosh Chauhan studied the role of FPI (Foreign Portfolio Investment), FII (foreign Institutional Investment) and FDI (Foreign Direct Investments) financial inflows on NSE (National Stock Exchange) and BSE (Bombay Stock Exchange) performance during the period of study. He used secondary data as input to analyse the effect of FIIs on Nifty (85 percent) and Sensex (60 percent) using analysis of Variance, Karl Pearson’s correlation, OLS model of
regression. Karl Pearson’s coefficient of correlation was almost 0.78 in Sensex and 0.90 in Nifty. On the other hand, FPI impact was relatively small on Sensex than on NSE, which was substantial.

Ranjan Dasgupta examined the studies which identified the factors that encouraged FIIs to invest in national securities market after liberalisation in the 1990s. He researched factors propelling FII inflows and limitations and found that Indian securities returns, its macroeconomic basics and factors specific to the Indian market are extremely influential despite similarities and contradictions in other studies. Researchers can further analyse the FII behaviours in the Indian stock market using ARCH analysis, a time series advanced technique. Global factors that are pushing the FIIs into the Indian stock market should also be considered as a determinant to FII inflows and given due prudence in future. The present study can prove valuable for stakeholders, investors, researchers and practitioners who intend to determine the factors contributing to FII investments in the Indian markets. The vigour and performance of Sensex and what propagates the highs and lows in its benchmarking are discussed at length in this paper.

Harmpreet Kaur and Shweta Goel strived to list the reasons that propelled Foreign Investment Institutions to venture into the Indian stock market after the Indian government opened its doors for the international investment community after 1991. The research was based on data spanning over a period of 13 years from Jan 2001 – Sep 2013. They conducted hypothesis testing to establish that a significant relation exists between stock market behaviour and FIIs. Regression analysis was used and regressing share prices over FII inflow data and a model was constructed. The resultant indication was that a positive correlation exists among the above variables and stock performances are affected up to 10 percent with a variation in the Foreign Institutional Investment action.

M.S. Ramaratnam assessed FII inflows and their impact on Sensex using empirical data and the distribution of foreign investments between debt and equity by using t-test analysis. This research holds significance for the following reasons — A foreign investment enters the domestic market when encouraged by the volatility and price performance of the share index. Therefore, it is imperative to understand the factors that influence this behaviour of volatility and price movement in the market. FII investments are today critical for a domestic market to maintain stability and growth. The aftershocks of the 2008 debacle in the stock market revealed that FIIs’ behaviour played a major role in the breakdown as FIIs have come to become driving forces in the Indian capital market. The researcher concluded that the quantum impression of the FIIs in the Indian market is significant.

ANALYSIS
The present research analyses the secondary data to conclude the behaviour and dynamics of FIIs and Indian stock market. We accumulated the data relating to FIIs through credible sources like Ministry of Commerce journals, India and Bulletins of RBI.

OUTCOMES OF THE STUDY
- FII inflows depicted a volatile trend and even a negative inflow during 2008-09.
- When we equate the inflow from FII and FDI, it was found that FII inflows were comparatively less than FDIs with an exception during the years 2003-04, 2004-05 and 2005-06.
- The indices of FDI and FIIs are showing a similar trend with both the indices increasing or declining at the same time.
- A negative correlation measure of -0.05 and -0.06 exists between Nifty and FDI and FDI and Sensex respectively.
- A vibrant positive correlation of 0.63 and 0.60 exists between FII and Nifty & Sensex and FII inflows respectively.
- BSE Sensex are marginally influenced by FDI inflows.
- BSE Sensex is majorly influenced by FII inflows.
The present study can be used for other extensive investigations on the role and impact of FIIs on the Indian stock market. In addition, it can also be used to gather information about FIIs, their registration process and its impact on industrial sectors and stock market. This study has attempted to clearly depict the influence of FIIs on domestic capital market. It is also outlining the tendencies of the market when FIIs are incoming or withdrawing from the securities market. The experiential analysis of the FII activities on the Indian market during the years 2003-2012 revealed that inflows from FIIs are caused due to performance of the Indian stock market and are not causing the Indian market to perform better due to its presence.

The researchers can draw inference from the results generated regarding the FII inflow trends and its impact on the securities market by logically analysing the time lag differences. They are outlined for time lag periods of 3 yrs, 5 yrs and 10 yrs.

Using the present conclusions, the prospective research studies can highlight volatility in NSE and BSE and determine the factors that cause it. Not only FII inflows, but FDI inflows also play a critical role in influencing the domestic financial markets.

Foreign Investment institutions change their investment behaviour not only due to the stock market performance but also due to unknown inconsistencies in the market. The future studies can gauge such inconsistencies using behaviour of macroeconomic concepts such as exchange rates, money supply, industrial production index, inflation rates, commodities or GDP rates. They can outline the buyers’ and sellers’ reliability in securing investments. As the Indian capital market is facing upheavals, it is simultaneously impacting the behaviours in the securities market. The academicians can highlight future implications of these stock market changes that will create not only opportunities but also limitations for the Indian financial system.

CONCLUSION
The study has established that FIIs hold an increasing sway on the performance of the Sensex and the Indian securities market. The secondary data gathered for the period 2003-2012 has shown that Sensex posted positive performance when FII inflows were promising and Sensex was declining when the FII inflows became unpredictable. When Pearson’s correlation factor was used to study the relationship between FIIs and Stock market, a positive correlation value of 0.646 was revealed showing that FIIs have a significant impact on the performance of the Indian stock market.

The present study can enable the future investors, stakeholders, academicians and practitioners in their review of literature and to understand the dynamics of FII inflows on the Indian capital market. Internal investments can conventionally trigger economic growth of a country as is the case in India. But the role of foreign investments is a fairly nascent discussion between investment developers and economists. Since the 1990s, post the economic policy of liberalisation, India opened its markets for foreign investments and global interest in Indian capital markets had increased. FIIs entered the Indian markets in Sep, 1992, thereby creating financial innovations and incentives for investments in the domestic market. Today, FII inflows have become the crux of many other financial decisions and it is imperative to study the economic drivers that are influencing the foreign concentrations to invest in the Indian economy.

We can therefore conclude that foreign interests in the Indian securities market are critical for its economic growth and development. We have used the Indian stock market behaviour including Nifty 50, and BSE Sensex when FIIs are flourishing as variables for our research. The researchers have studied net investments, FII sales and purchases on an average and behaviour of Nifty and BSE Sensex as part of our study and establish the pattern or influence of FIIs in
domestic market, relation between Indian indices and FII investments, trends in Nifty and BSE Sensex and critical appeal of FIIs in the Indian securities market.

I had used skewness, standard error, kurtosis, standard deviation and other statistical tools to analyse the fundamental data of this research.

The present study has future implications for stakeholders, researchers, investors and practitioners to review their literature and gather information about the determinants and consequences of FII investment inflows. This will help future academicians to understand knowledge gaps in behaviour of FII and its causal effect on the Indian market thereby paving the way for future research.

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<th>No. of Registered FII</th>
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<th>% change over previous year</th>
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% change in FII Equity Investment

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No. of Registered FII

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