

## **IMPACT OF FII'S ON INDIAN STOCK MARKET** **(SPECIFIC TO SENSEX)**

**Naresh Kedia**\*

**Prof. (Dr.) Anil Vashisht**\*\*

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### **Abstract:**

In the changing global scenario the impact of foreign institutional investors on Indian stock market is very high and its effects need to be studied. They have emerged as very significant players in the Indian stock market and their growing contribution and participation adds as an important aspect for the development of stock markets in India. Indian Stock Markets have reached new heights and became more volatile making the researches work in this dimension of establishing the link between FIIs and Stock Market. This paper makes an attempt to develop an understanding of the dynamics FIIs and effect on the Indian equity market. The study is conducted using data from BSE Sensex and FII activity over a period spanning from Jan.2003 to Dec 2012. It provides the evidence of significant positive correlation between FII activity and effects on Indian Stock Market.

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\* **Asst. Professor, Amity University, Madhya Pradesh**

\*\* **Director: Amity Business School, Amity University, Madhya Pradesh**

## **Indian Stock Market**

Stock Exchanges are the exclusive centres for trading of securities. Listing of companies on local exchange is mandatory to provide an opportunity to investors to invest in securities of local companies. The Bombay stock Exchanges (BSE) and National Stock Exchange of India Ltd (NSE) are the two primary exchanges in India. The BSE has over 6000 stocks listed and NSE has around 1500 shares listed. Both the exchanges have switched over from the open outcry trading system to a fully automated computerized mode of trading known as BOLT (BSE on line Trading) and NEAT (National Exchange Automated Trading) system. It facilitates more efficient processing, automatic order matching, faster execution of trades and transparency.

In addition, there are 22 Regional stock Exchanges. However, the BSE and NSE have established themselves as the two leading exchanges and account for about 80 percent of equity volume traded in India. Total 24 stock Exchanges in India which NSE & BSE are the nation wise exchanges having national wide operation.

### **NSE (National stock Exchange)**

The national Exchange (NSE) is leading stock exchange covering various cities and towns across the country. NSE was set up by leading institutions to provide a modern, fully automated screen-based trading system with national reach. NSE has the S&P NSE 50 Index (Nifty) which consists of fifty stocks. NSE commenced operations in wholesale Debt Market (WDM) segment in June 1994. The Capital market (Equities) segment commenced operations in November 1994 and operations in Derivatives segment commenced in June 2000.

### **BSE (Bombay Stock Exchange)**

The stock Exchange, Mumbai, popularly known as BSE was established in 1875 as "the Native share and Stock Brokers Associations". It is the oldest one in Asia, even older than the Tokyo Stock Exchange, which was established in 1878. It is a voluntary non-profit making Associations of Persons (AOP) and is currently engaged in the process of converting itself into demutualized and corporate entity. It has evolved over the years into its present status as the premier Stock Exchange in the country. The primary index of BSE is BSE Sensex comprising 30 stocks. It is the first Stock exchange in country to have permanent recognition in 1956 from the Govt. of India under the Securities Contracts (Regulations) Act, 1956.

### **Different other stock Exchanges in India:**

Bangalore stock Exchange Ltd

Calcutta stock Exchange Associations ltd.

Delhi stock Exchange assoc. Ltd

Hyderabad stock exchange Ltd

Inter-connected stock exchange of India

### **Different stock Exchange outside India**

NASDAQ: United state stock Exchange

NIKKEI: Japan Stock Exchange

NYSE: New York Stock Exchange

### **Stock Index**

The index under reference is stock index, which is computed by various stock exchanges in the country. When a stock is traded in any stock market in any stock market then there are always movements in its price either upward or downward. There is need to measure such movement in stock market prices. This movement either way cannot be known unless some methodology is adopted for construction of stock price Index. This helps an investor or a dealer in securities to make a decision as to which stock he should buy or sell, in additions to any other criteria.

#### **Different types of index:**

- a) BSE Sensex = 30 Scrip's
- b) S&P CNX NIFTY = 50 Scrip's
- c) BSE- 100
- d) BSE- 200
- e) BSE Dollex n- in Dollar Terms
- f) BSE- 500

### **Stock Exchange is an indispensable for an Economy**

- The index act as a barometer which shows the investors confidence on the companies performance. It provides a platform in mobilizing the financial resources thereby adding liquidity to the securities.
- It attracts foreign capital through FII participation in the Indian Economy which indirectly helps in bringing more FDI which is a long-term finance into Indian economy for its development.
- An in depth trading in stock exchanges helps in the real price discovery of financial assets there by encouraging domestic retail investors to invest their money and getting the benefits from the investments.

## **Introduction to BSE**

- ❖ Established in 1875
- ❖ Formerly known as Bombay Stock Exchange Ltd.
- ❖ Asia's first Stock Exchange and one of India's leading exchange groups.
- ❖ More than 5000 companies are listed on BSE.
- ❖ Established as "The Native Share & Stock Brokers' Association" in 1875.
- ❖ Compiled in 1986 with 1979 as base year and 100 as base value.
- ❖ Basket of 30 stocks captures prominent sectors of the Indian Economy.

Established in 1875, BSE Ltd. (formerly known as Bombay Stock Exchange Ltd.), is Asia's first Stock Exchange and one of India's leading exchange groups. Over the past 137 years, BSE has facilitated the growth of the Indian corporate sector by providing it an efficient capital-raising platform. Popularly known as BSE, it was established as "The Native Share & Stock Brokers' Association" in 1875. BSE provides an efficient and transparent market for trading in equity, debt instruments, derivatives, mutual funds.

More than 5000 companies are listed on BSE making it world's No. 1 exchange in terms of listed members. The companies listed on BSE Ltd command a total market capitalization of USD 1.32 Trillion as of January 2013. It is also one of the world's leading exchanges (3rd largest in December 2012) for Index options trading.

BSE also provides a host of other services to capital market participants including risk management, clearing, settlement, market data services and education. It has a global reach with customers around the world and a nation-wide presence. BSE systems and processes are designed to safeguard market integrity, drive the growth of the Indian capital market and stimulate innovation and competition across all market segments. BSE is the first exchange in India and second in the world to obtain an ISO 9001:2000 certifications. It is also the first Exchange in the country and second in the world to receive Information Security Management System Standard BS 7799-2-2002 certification for its On-Line trading System (BOLT). It operates one of the most respected capital market educational institutes in the country (the BSE Institute Ltd.). BSE also provides depository services through its Central Depository Services Ltd. (CDSL) arm.

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BSE continues to innovate. In recent times, it has become the first national level stock exchange to launch its website in Gujarati and Hindi to reach out to a larger number of investors. It has successfully launched a reporting platform for corporate bonds in India christened the ICDM or Indian Corporate Debt Market and a unique ticker-cum-screen aptly named 'BSE Broadcast' which enables information dissemination to the common man on the street.

In 2006, BSE launched the Directors Database and ICERS (Indian Corporate Electronic Reporting System) to facilitate information flow and increase transparency in the Indian capital market. While the Directors Database provides a single-point access to information on the boards of directors of listed companies, the ICERS facilitates the corporate in sharing with BSE their corporate announcements.

### **Foreign Institutional Investor (FII)**

Foreign Institutional Investor (FII) means an institution established or incorporated outside India which proposes to make investment in securities in India. These investment proposals by the FIIs are made on behalf of sub accounts, which may include foreign corporate, individuals, funds etc. In order to act as a banker to the FIIs, the RBI has designated banks that are authorized to deal with them.

FII's are regulated by the Securities and Exchange Board of India (Foreign Institutional Investors) Regulations 1995. As per Section 15 (1) (a) of the SEBI, FII Regulations, 1995, a Foreign Institutional Investor (FII) may invest in the securities in the primary and secondary markets including shares, debentures and warrants of companies unlisted, listed or to be listed on a recognized stock exchange in India.

### **Following foreign entities / funds are eligible to get registered as FII:**

- Pension Funds
- Mutual Funds
- Investment Trusts
- Banks
- Insurance Companies / Reinsurance Company
- Foreign Central Banks
- Foreign Governmental Agencies
- Sovereign Wealth Funds
- International/ Multilateral organization/ agency
- University Funds (Serving public interests)
- Endowments (Serving public interests)
- Foundations (Serving public interests)
- Charitable Trusts / Charitable Societies (Serving public interests)

All FIIs must register themselves with SEBI and should also comply with the exchange control regulations of the central bank. Apart from being allowed to invest in securities in primary and secondary markets, FIIs can also invest in mutual funds, dated government securities, derivatives traded on a recognized stock exchange and commercial papers.

### **Regulations relating to FII's:**

- No person shall buy, sell or otherwise deal in securities as a Foreign Institutional Investor unless he holds a certificate granted by SEBI.
- The FII registration is valid for 5 years. After expiry of 5 years, the registration needs to be renewed.
- Parameters on which SEBI decides FII applicants' eligibility:
  - ✓ Applicant's track record, professional competence, financial soundness, experience, general reputation of fairness and integrity. (The applicant should have been in existence for at least one year).
  - ✓ Whether the applicant is registered with and regulated by an appropriate Foreign Regulatory Authority in the same capacity in which the application is filed with SEBI.
- A Foreign Institutional Investor shall appoint a branch of a bank approved by the Reserve Bank of India for opening of foreign currency denominated accounts and special non-resident rupee accounts.
- SEBI released regulations for FII investment in Indian debt markets. The debt limit was kept at \$1-1.5 bn. FIIs were allowed to invest in debt markets via the 70: 30 route. In this FII investment will be in the 70:30 ratio out of which equity investments shall not be less than 70% of total funds and maximum 30% of investment was allowed in debt.
- Foreign companies can set up wholly owned subsidiary companies in India in form of private companies subject to FDI guidelines. A wholly owned or a subsidiary company has the maximum flexibility to conduct business in India when compared with a liaison or branch office and has following salient features:
  - ✓ Funding can be done via equity, debt (foreign as well as local) and internal accruals
  - ✓ Indian transfer pricing regulations apply
  - ✓ Repatriation of dividends is allowed without approvals

- Foreign companies can also set up joint venture with Indian or foreign companies in India. There are no separate laws for joint ventures in India and laws governing domestic companies apply equally to joint ventures.
- FII's can invest in India in financial markets such as pension funds, mutual funds, investment trusts and asset management companies or their power of attorney holders. FII's can invest in all securities in primary and secondary markets including the equity and other instruments of companies which are listed or are to be listed on stock exchanges of India.

### **Impact of Foreign institution investors**

Positive fundamentals combined with fast growing markets have made India an attractive destination for foreign institutional investors (FIIs). Portfolio investments brought in by FIIs have been the most dynamic source of capital to emerging markets in 1990s. At the same time there is unease over the volatility in foreign institutional investment flows and its impact on the stock market and the Indian economy.

#### **➤ Some major impact of FII on stock market:**

- They increased depth and breadth of the market.
- They played major role in expanding securities business.
- Their policy on focusing on fundamentals of share had caused efficient pricing of share

These impacts made the Indian stock market more attractive to FII & also domestic investors. The impact of FII is so high that whenever FII tend to withdraw the money from market, the domestic investors fearful and they also withdraw from market.

- FII strongly influence short-term market movements during bear markets. However, the correlation between returns and flows reduces during bull markets as other market participants raise their involvement reducing the influence of FIIs. The correlation between foreign inflows and market returns is high during bear and weakens with strengthening equity prices due to increased participation by other players.
- The equity return has a significant and positive impact on the FII. But given the huge volume of investments, foreign investors could play a role of market makers and book their profits, i.e., they can buy financial assets when the prices are declining thereby

jacking-up the asset prices and sell when the asset prices are increasing. Hence, there is a possibility of bi-directional relationship between FII and the equity returns.

- It is influence of the FIIs which changed the face of Indian stock markets. Screen based trading and depository are realities today largely because of FIIs. Equity research was something unheard of in the Indian market a decade ago. It was FII which based the pressure on the rupee from balance of payment position an lowest the cost of capital to Indian business. It is due to the FIIs that a concept like corporate governance is being increasingly adopted by Indian companies; this is benefiting domestic investors also. FIIs are the trendsetters in any market. They were the first one to indentify the potential of Indian technology stock.

## Review of literature

**Kumar (2001)** investigated the effects of FIIs inflows on the Indian stock market. The time period for the study was January 1993 to December 1997. Objective of the study was testing whether Net FII Investment (NFI) would have any impact on Sensex. His methodology used was regression analysis and findings that Sensex causes NFI. Similarly, regression with Sensex as dependent variable showed that one month lag of NFI is significant, meaning that there is causality from FII to Sensex. This finding is in contradiction with the findings of Rai and Bhanumurthy (2003) who did not find any causation from FII to return in BSE using similar data between 1994 and 2002. However, Rai and Bhanumurthy have also found significant impact of return in BSE on NFI. **Stanley Morgan (2002)** studied fiis role in building up India's forex reserves, for which time taken was 1980 to 2000 and the objectives was to establish the relation between foreign inflows and market returns . Methodology used was correlation in which he founded that that the correlation between foreign inflows and market returns is high during bear and weakens with strengthening equity prices due to increased participation by other players. **Paramita Mukherjee, Suchismita Bose and Dipankor Coondoo (2002)** studied foreign institutional investment in Indian Stock Market for which he took a time period of January 1999-May 2002.His objective explores the relationship of FII flow to the Indian equity market. Linear regression techniques were the methodology used by him. He concluded that FII investors do not seem to use Indian equity market for the purpose of diversification of their investment return from exchange rate variation and fundamentals of the Indian economy may have influence on FII decisions, but such influence does not seem to be strong, daily FII flows are highly auto-correlated. **Agarwal, Chakrabarti et al (2003)** studied impact of Equity on FII . Objective of the study was to establish relationship between FII and the equity returns and for this methodology called correlation was used. They have found in their research that the equity return has a significant and positive impact on the FII. But given the huge volume of investments, foreign investors could play a role of market makers and



book their profits, i.e., they can buy financial assets when the prices are declining thereby jacking-up the asset prices and sell when the asset prices are increasing. Hence, there is a possibility of bi-directional relationship between FII and the equity returns. **Tanupa chakraborty (2007)** studied title of the study was foreign institutional investment flows and Indian stock market return. Period of eight years ranging from April 1997 to March 2005 was selected for empirical study. The empirical study aims at determining whether FII flows to India are caused by or are the causes of national stock market returns. Data under this was analyzed by using correlation and regression tool of SPSS software. He found that that monthly net FII flows exhibit a near similar trend as that of monthly returns on BSE National Index. **P. Krishna Prasanna (2008)** studied contribution of FII in sensitivity index (Sensex) of Bombay Stock Exchange. Time period was taken 1999 – 2006. Objective was foreign institutional investment and firm in terms of ownership structure, financial performance and stock performance, for which he used ARIMA model which observed that foreign investors invested more in companies with a higher volume of shares owned by the general public. The promoters' holdings and the foreign investments are inversely related. Foreign investors choose the companies where family shareholding of promoters is not substantial. Among the financial performance variables the share returns and earnings per share are significant factors influencing their investment decision. **Anad Bansal, J.S.Pasricha (2009)** studied Foreign institutional Investor's impact on stock prices in India, Objective was change in stock price volatility level, before and after the entry of FIIs. Methodology used was regression test in which there is no significant changes in the Indian stock market average returns, volatility is significantly reduced after India unlocked its stock market to foreign investors. They study the change of market return and volatility after the entry of FIIs to Indian capital market. **Thenmozhi and Kumar (2009)** studied dynamic interaction between mutual fund flows and security returns, Time Period taken was 1994 – 2008 and his objective stated the relationship between returns and institutional investment by FIIs and MFs. Methodology used VAR approach and Granger Causality test. Findings found a positive contemporaneous relationship between stock market returns and mutual fund flows measured as stock purchases and sales. The study has found that mutual funds flows are significantly influenced by returns but returns were not influenced by mutual fund flows. The study has also identified a strong positive relationship between stock market volatility and mutual fund flows. **Dr. K Mallikarjuna Rao(2010)** studied FIIs is a vital component which helps in the development of financial market , time period was 1995-2007 with an objective of overall financial development thereby allowing the capital flows available in a country to pursue its trajectory of economic growth. Methodology used was regression and findings concluded there has been growing presence of the FII inflows in the Indian stock markets which is evident through the net cumulative investments and at times of recession there has been a decline in the inflows. **Rajendra Kumar singla(2011)** studied an empirical study of determinants of foreign direct investment (FDI) in India with a time period from April 1993 to March 2010. Objective

was to determinants of FDI in India for which methodology used was Correlation and multiple regression analysis which founded that FDI inflows depend on stock market, IIP and GDP performance and FIIs net investment. On the other hand exchange rate and foreign exchange reserves do not appear to had any significant effect on FDI inflows in India. **JATINDER LOOMBA (2012)** studied do FII's impact volatility of Indian stock market, with a time period of 01st Jan 2001 to 31<sup>st</sup> Dec 2011 in which the objective was to find a correlation between BSE SENSEX and FIIs & to discover the number of FIIs in India and their investments at BSE. Methodology used was Pearson correlation which founded that FIIs are strong forces driving the Indian Stock Market which is evident from top twenty five crashes at BSE SENSEX as FIIs were the net sellers in all the leading market crashes. This study further gives the scope for identifying the role of FIIs in India in overall market volatility. **Dr. Renuka and Dr. kiran Mehta (2012)** studied Foreign institutional investors and Indian stock market with the time period of 2000 – 2011. His objective was to examine the degree of dependence of performance of Indian stock market on the movement of Indian stock market. Methodology used was Correlation coefficient & simple linear regression analysis, findings were Foreign institutional investment is generally made on short-term basis and in most of the cases the investment by foreign institutional investors is channelized by financial markets. FIIs can invest in the instruments of primary and secondary market; it is fully administered by Reserve Bank of India under Portfolio Investment Scheme (PIS). The PIS gives all guidelines and rules and regulation regarding the investment by FIIs.

### **Objectives**

- To find out the relationship between the FIIs investment and stock market.

### **Research Methodology**

The main objective of study is to examine the impact of FII's on Indian Stock Market. We considered two variables one is stock market represented by BSE index (Sensex) that is dependent Variable and another is FII as independent variable.

We have collected last 10 years data of Sensex from official site of bseindia.com and FII data from official site finance.yahoo.com and tried to make link between Indian stock Market and FII by using Regression and correlation Analysis. For calculation monthly BSE (Sensex) data has been taken and absolute change is calculated. The data has been processed and analyzed by using statistical software SPSS 16.0

## Hypothesis

To achieve the objective of the study following hypothesis has been developed:

**H1** : There is no effect of FII on Indian Stock Market.

**H2**: There is effect of FII on Indian Stock Market

The study is based on regression and correlation model representing relationship between Indian stock Market (Dependent variable) and FII ( Independent Variable).

## ANALYSIS

### Variables

#### Entered/Removed<sup>b</sup>

Model	Variables Entered	Variables Removed	Method
1	FII <sup>a</sup>	.	Enter

a. All requested variables entered.

b. Dependent Variable: SENSEX

### Model Summary

Model	R	R Square	Adjusted R Square
1	.609 <sup>a</sup>	.370	.365

**R:** Correlation (R) measures the degree of association between two variables. Value of r lies in between +1 and -1.

**Interpretation:** In our case value of R is .609 which reflect a strong positive correlation between Indian stock market and FII. A value more than +.5 shows that independent variable predict dependent variable very well.

**R Square:** it is a very commonly used measure of fit for regression models. The ratio of regression sum of squares (SSR) to total sum of squares (SST) referred as coefficient of determination ( $r^2$ ).

$$R^2 = SSR/SST$$

**Interpretation:** The value calculated in this study of R square is .370 we could interpret this to mean that 37% of the variance in Indian Stock Market is explained by FII's.

**Adjusted R Square:** it takes into account the number of variables in the model and the number of observation (participants) the model is based on.

**Interpretation:** Adjusted R square value is .365 which reflect that there is 36% of variance in the dependent variable.

#### ANOVA<sup>b</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.440E7	1	4.440E7	69.417	.000 <sup>a</sup>
	Residual	7.547E7	118	639549.243		
	Total	1.199E8	119			

**Regression :** It is statistical process of analyzing relationship between a dependent and independent variable.

**Residual :** It is the difference between actual value and regressed value, determined by the regression equation for a given value of independent variable.

**Degree of Freedom:** The degree of freedom is the number of values in a calculation that we can vary.

**Mean Square = Sum of square / degree of freedom**

**F Test :** It is a test to determine the overall significance of the model. F value is used for testing the hypothesis.

**Interpretation:** Since the level of significance is 0.000 that is less than 0.05, therefore null hypothesis is rejected and alternative hypothesis is accepted, it means that FII has significant impact on Indian stock market.

### **Conclusion**

Our study reveals that FIIs does have an impact on Indian Stock Market where the value of R is 0.609 which signifies that the FIIs have almost 60% positive impact in stock market.

It implies that, inflow of FII's leads to a bullish trend in the market or vice-versa.

Furthermore, the impact of foreign institutional investors is more on Sensex as our study is specific to the Bombay stock exchange.

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