Foreign Institutional Investors as key Determinants of Indian Stock Market: An Empirical Study

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Abstract

After Industrial policy, 1991, Indian government started to focus on Globalisation and because of which they started to attract Foreign Investors to invest in Indian stock market. On September 14, 1992 Foreign institution investors (FIIs) are allowed to invest in capital market including securities issued by enterprises which is listed in BSE & NSE. And from that time investment by FIIs in India have become important for Indian Economy, especially at time of globalisation when India is emerging as one of the leading market for investors in Asia. As with pros there is always some cons with everything, FIIs have some loop holes because at the time of financial crises some time FIIs had withdraw their investment from the market. So in this research the main emphasis is given to analyse the effect of foreign institution investors on Indian stock market. And for this purpose correlation is used as a statistical tool to find out relationship between foreign institutional investor and BSE.

***Keywords**:- Foreign Institutional Investors (FIIs), Indian Stock Market, SENSEX, Globalisation*

1. Introduction

Foreign Institutional Investors (FIIs) refers to an organization establish outside of India whose basic objective is to build investment into the Indian stock market under the policy set by SEBI. FIIs may consist of different sources including operating companies which play a key role in deciding investment & their profits to these types of resources established outside India for the purpose of making investments at the place of foreign fund.

And the main investor includes people who may have retirement fund or pension funds, hedge funds, investment advisors and mutual funds and their contribution in the economy is of high concern and appreciable. For example, a salaried person are getting a contributions to his fund from his employer and he utilises that fund in buying shares of a company, or some other financial product. And that fund are useful because it will helps in minimising risk as if one company fails in providing profit, the whole fund is not going in loss. Foreign institutional investors have almost no restriction for buying and selling of shares in Indian Stock Market and because of favouring Indian economy condition and rapid growth in stock market, it may be best place for FIIs to invest.

According to Policy set by SEBI in 1992, there are basically to ways by which FIIs can invest in Indian Stock Market which are as follows:-

i) First one is of Regular FIIs, in which the investment amount should be in the proportion of 7:3 of their investment in equity instrument & debt instrument.

ii) And second is that FIIs can invest its all sum in debt instrument.

2. Review of Literature

Babu and Prabheesh (2008), reveal that the FIIs investments are influenced by the previous trading day returns, confirming the positive feedback strategy by them, but they are also influenced by the next trading day returns. Most of the studies generally point to the positive relationship between FIIs investments and movement of the National Stock Exchange share price index some also agree on bi-directional causality stating that foreign investors have the ability of playing like market makers given their volume of investments.

Badhani, (2005), examines the long term and short-term relationship among stock prices, Dollar Rupee exchange rate and net FIIs investment in India using monthly data from April 1993 to March 2004. Study finds long term relationship between FIIs investment flow and stock prices and between FIIs investment flow and exchange rate. However no long-term relationship was found between exchange rate and stock prices. Study also shows that exchange rate long term granger causes FIIs investments flow and vice versa. It suggests that FIIs use positive feedback trading in respect to exchange rate. BI-directional long term causal it was found between FIIs investment flow and stock prices.

Batra (2004), has examined the time varying pattern of stock return volatility in India over the period 1979-2003 using monthly stock returns and asymmetric GARCH methodology. He has also examined sudden shifts in volatility and the possibility of coincidence of these sudden shifts with significant economic and political events both of domestic and global origin. Stock market cycles have also been analyzed for variation in amplitude, duration and volatility of the bull and bear phases over the reference period. His analysis reveals that liberalization of the stock market or the FIIs entry in particular does not have any direct implications for the stock return volatility. No structural changes in the stock price volatility around any liberalization event or more importantly around the dates of breaks for volatility in FIIs sales and purchases in India are observed. The apparent link generally drawn between stock price volatility and the sudden withdrawal or heavy purchases by the FIIs i. e. the volatile FIIs investment in the stock market does not seem to hold true for India. Reforms in general lead to a structural shift in the volatility in India.

Chandrasekhar, (2009), one consequence of the capital outflow was a collapse of India's stock markets, just as the earlier capital inflows had triggered a speculative bubble in both stock and real estate markets. They had caused an unprecedented rate of asset price inflation in India's stock markets and substantially increased volatility. FIIs investments were an important force, even if not always the only one, driving markets to unprecedented highs, with a high degree of correlation between cumulative FIIs investments and the level of the BSE's Sensitive Index.

Ghosh (2004), conducted a research and found the main causes related to market volatility which keeps importance for some players of stock market like investors speculators and brokers. And secondly they found that security pricing is majorly depends on volatility of market. In this research they also explore that low volatility is result of the markets which are developed and providing high return over long time period.

Gooptu, (1994), it is important for the policy makers in the developing economies to provide right signals to international capital markets in terms of economic and domestic institutional reforms to successfully compete with other developing economies to attract portfolio investment from abroad. Study found that to attract more private capital flows policy makers must continue to provide right signal to foreign institutional investors in terms of economic and domestic institutional reforms that attract portfolio investment from abroad. Study concludes that there is a need to continue for increasing pace of reforms in any given emerging stock market in order to maintain the steady portfolio flows to developing countries.

Kumar, S (2003), analysed that the inflows of FIIs have some impact on Stock market and also found the main characteristics FIIs and the main factors which motivate FIIs to invest Stock market.

Srinivasan, Kalaivani and Bhat (2010), reveals that there is an evidence of negative feedback trading hypothesis and positive feedback hypothesis by foreign investors before the global financial crisis period and during the crisis period respectively. This implies that FIIs acts as a smoothening effect and destabilizes force before & during the crisis period respectively. However, such positive feedback trading strategies from foreign institutional investors seem to be the rational during the period of the global financial crisis.

3. Objectives of the Study

The present study is focused to obtain the following objectives:

i) To find out the relationship between the movement of investment by Foreign Institutional Investors (FIIs) and movement of Indian stock market (SENSEX).

ii) To find out the degree of dependence of performance of Indian stock market on the movement of Foreign Institutional Investors.

4. Hypotheses

Keeping in view the above-mentioned objectives of the study, it was intended to test the following hypotheses:

H_0=There is no relationship between India's stock market return and FIIs flows

H_1=There is relationship between India's stock market return and FIIs flow.

5. Research Methodology

This research is empirical in nature because it mainly focuses on the relationship between FIIs & SENSEX and its impact on stock market.

5.1 Statistical Tools Used

Research treats Karl Pearson Correlation as an analytical tool for data analysis. Correlation aims at determining the relationship between two types of data which are independently measured on scale.

Mainly the value of correlation factor (r) ranges from (-1) to (+1). Where:-

(up to -1) relation indicates the negative relationship between two variables.

(0) Indicate the no relationship between two variables.

(up to +1) indicate the positive relationship between two variables.

Table 6.1: Investment by FIIs from 2008 to Feb 2013

Year	Equity	Debt	Total Investment (in Cr.)
2008	-52987.4	117719	-41215.5
2009	83422.2	4563.4	87987.6
2010	133266.3	46408.3	179674.6
2011	-2714.20	42067	39352.80
2012	127736.2	34989.4	163350.1
2013 (up to 12 Feb) February)	46498.5	6948.3	53446.8

Source: *WWW. sebi. gov. in*

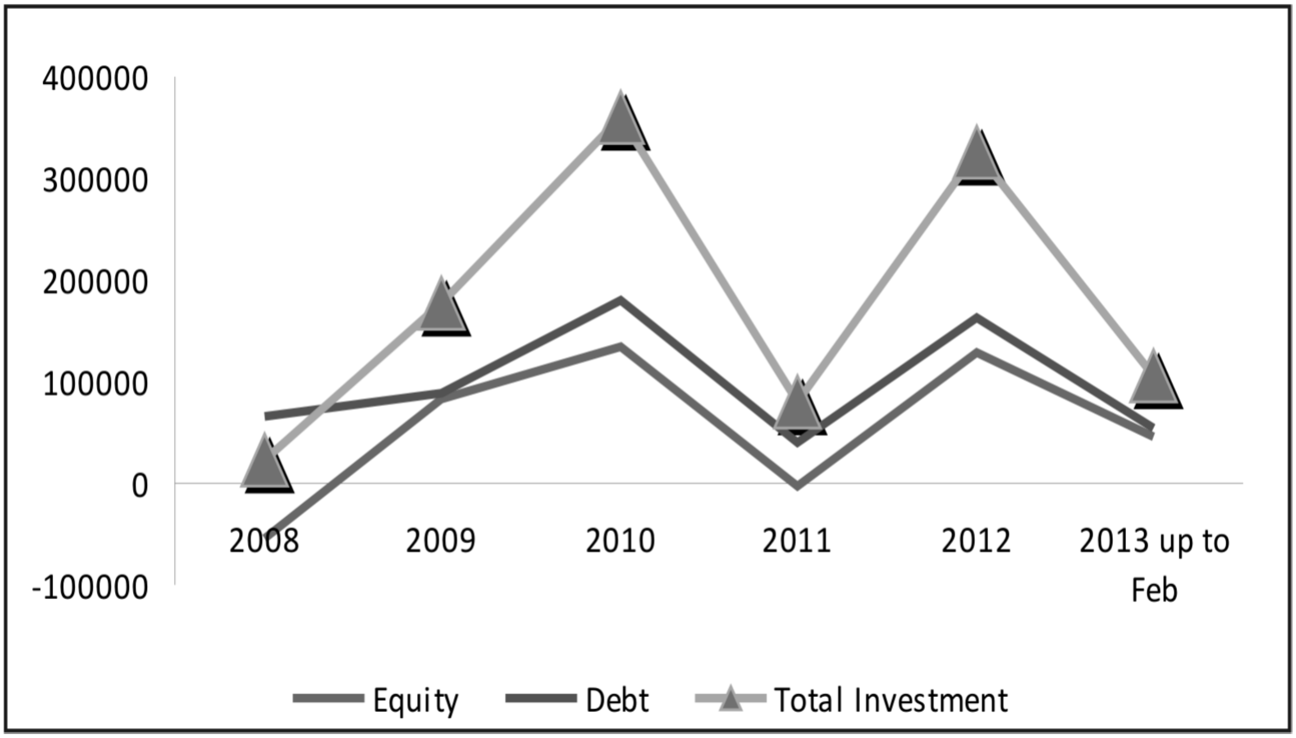

Fig. 1: Investment by FIIs from 2008 to Feb 2013

6. Data Collection and Analysis

In this research, the data regarding to research is collected through secondary method and that data have resemblance for time period from 2008 to Feb. 2013, with help of different sites and books, magazines etc.

Table-6.1 and Figure-1 show the inflow and out flow of FIIs through Debt and Equity and it is clear that, in year 2008 and 2011 investment by FIIs in equity was decreased so total investment also decreased and in year 2009, 2010, 2012 total investment increased with increase in equity investment by Foreign Institutional Investors.

Table 6.2: Investment by FIIs and SENSEX

Year	Total Investment by FII (In cr)	SENSEX (In points)
2008	-41215.5	9647
2009	87987.6	17467
2010	179674.6	20509
2011	39352.80	15455
2012	163350.1	19425
2013 (up to 12 February)	53446.8	18862

Source: *http://www. nrimutualfunds. com/sensex_ movement_frame. htm*

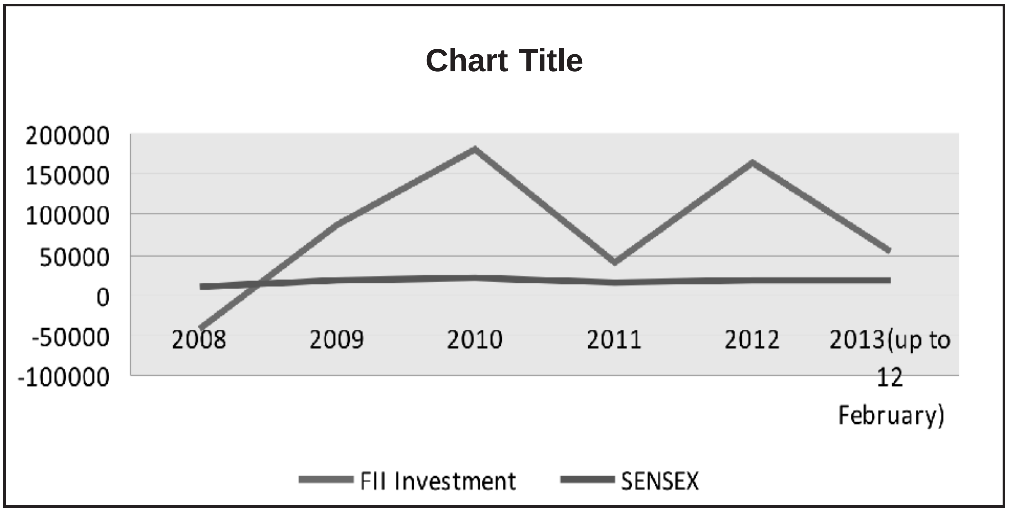

Fig. 2: Investment by FIIs & SENSEX

Table-6.2 and Figure-2 show the relationship between FIIs investment and SENSEX. It is clear that FIIs investment and SENSEX positively related because in year 2009, 2010 and 2012 FIIs investment increase from previous year so SENSXE also increase, in year 2011SENSEX decrease with decrease in investment by FIIs.

After calculation of Correlation from above data we found that correlation between FIIs and SENSEX is-

$$r = \frac{N\sum dxdy - \sum dx \times \sum dy}{[\sqrt{N}\sum dx^2 - (\sum dx)] \times [\sqrt{N}\sum dy^2 - (\sum dy) \times (\sum dy)]}$$

r = 0. 89385

So that BSE SENSEX and investment by foreign institutional has followed a close relationship. The Pearson correlation values indicate positive correlation between the foreign institutional investments and the movement of SENSEX (pearson correlation value is (0.89385).

7. Findings

This research is carried data of time period from 2008 to Feb, 2013 of FIIs investment, and SENSEX. And for the purpose of analysis K. P. Correlation method is used which aims at finding the relationship between FIIs & SENSEX. In this analysis SENSEX is mainly considered as a key parameter of Indian Stock Exchange. As from data analysis, the value of correlation was found is 0.89385 which indicates a high degree of correlation between FIIs & SENSEX. And so from value of correlation it is clearly seen that there is direct relation between the SENSEX and FIIs. It means with an increase in investment from foreign institution (Purchase of securities by FIIs), there will be an increase in value of SENSEX and vice-versa. Investment by Foreign institutional investor is dynamic in nature and these characteristics of FIIs compel some problem to the Indian stock market. Often it is seen that FIIs withdraw their investment at time of fall down in SENSEX. So some time SENSEX becomes free from influence of FIIs.

Briefings of research findings

i) Here null hypothesis is rejected because FIIs and SENSEX is highly correlated. It means relationship between FIIs and stock market is existing.

ii) With a positive movement of FIIs have significant impact on the movement of SENSEX that is on increasing magnitude of FIIs in stock market there will also be increase in SENSEX and vice versa.

iii) From research it was found that FIIs is mainly responsible for increasing the volatility in stock market.

8. Conclusion

This paper conclude that Foreign Institutional Investors as key determents of Indian stock market which is supported by examining the empirical relation between stock market return and FIIs flows. Results of the study shows the linkages between the FIIs inflows and the performance of SENSEX are robust and significant. FIIs have significant impact on the share prices of the Companies and their active trading behaviour. Small and periodic shifts in FIIs & SENSEXs behaviour lead to market volatility.

It was found that funds of long term in nature are given high concern and importance.

From Pearson correlation values indicate positive correlation value which is 0.89385. Therefore FIIs influences SENSEX positively.

9. Limitations of Study

i) In this research paper only SENSEX is considered as parameter of stock market.

ii) Time duration taken into consideration in comparatively short, this is of 5. 2 Years.

iii) Data is collected on annual basis which may be less reliable in comparison to data collected on monthly basis.

10. Future Implication

10.1 For Indian Investors

This paper will provide guideline for Indian investor to understand how foreign investment affects the Indian stock market and they can make their buy and sell decision accordingly.

10.2 For Management Student

This paper will help management student to understand the role of foreign institutional investors in Indian stock market. They can easily understand with the help of this paper that Indian stock market is affected by domestic factors along with foreign factors (foreign investments).

This paper explain the relationship between FIIs and SENSEX during 2008 to Feb, 2013. So this paper can be utilized as a base for further research related to same area.

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