

FII's and the Indian Stock Markets

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Abstract— *Since last two decades, FIIs have been dominant players in Indian Stock Markets. Their contribution in a larger scale and consistent presence in the market has become an important feature of Indian Stock Market. In the last decade, there are huge ups and downs in the market. The stock markets in India, have recently reached new heights and on the other hand just few years back there was a devastating crash in the stock market throughout the world, including India. During these ups and downs, activities of FIIs were also significant. Frequent investments and pulling out funds by FIIs has been the regular activity of FIIs in Indian markets. Therefore, it is an important aspect to study the role of FIIs in Indian stock market and also ascertain whether they are causing the volatility in Indian market. With this objective, a study has been conducted to study the correlation between FIIs activity and corresponding market position over the last ten years i. e. from 2006 to 2015. It is found that there is a positive correlation between FIIs activity and movement of market indices.*

Keywords— *FIIs, Indian Stock Market, NIFTY, Volatility.*

I. INTRODUCTION

In pre-liberalized era, India's development strategy stressed on self-sufficiency, instead of export promotion, more emphasis was on import substitution. In 1991, the major step was brought by the then government through which liberalization was promoted. As part of this policy, both import and export started getting momentum. Financial sector, which remained ignored by policy makers to a large extent, was also brought to be liberalized. After these reforms, in the last decade of last century, foreign institutional investors were allowed to invest in India in the securities traded in primary and secondary markets. As the contribution of FIIs started hitting the Indian market, the regulatory authority also gave a critical alteration for improving infrastructure as well as regulating the markets.

Since then, India is being looked as an attractive destination for the FIIs. Though FIIs have been dominant in Indian market in last two decades, their money is also regarded as 'hot money' as this can be pulled off any time, when these FIIs are attracted towards any other emerging markets.

Indian stock market ranks third in the world after the US and Japan in terms of investor base. Over 9000 companies have been listed to various stock exchanges in the world. There are over 20 million investors which are supported by over 8000 intermediaries. In terms of technology usage, volume, growth potential, Indian markets are treated as one of the significant markets in the world.

II. OBJECTIVES OF THE STUDY:-

The present study is undertaken by keeping in mind the following objectives.

- To find out correlation between FIIs activities and movement in NIFTY.
- To study the role of FIIs in Indian stock market.
- To study the intra-day movements in Indian stock market with reference to FIIs activity.

III. HYPOTHESES

The following hypotheses were set for the study.

- I) H_0 – There is no significant relation between decline in NIFTY and FIIs activity.
 H_1 – There is significant relation between decline in NIFTY and FIIs activity.
- II) H_0 – There is no significant relation between intra-day declines in NIFTY and FIIs activity.
 H_1 – There is significant relation between intra-day declines in NIFTY and FIIs activity.

IV. RESEARCH METHODOLOGY

The present study is descriptive in nature. It is largely based on the secondary data. The data relevant with movements in NIFTY, and FIIs activities is a major source for the study. The requisite data have been collected from published reports about FIIs by renounced institutes, websites of the NSE and FIIs. The absolute change in NIFTY, percentage change in NIFTY and volatility have been considered for calculation. The ups and downs in the index (NIFTY), corresponding activity by FIIs for the period from 1st January, 2006 to 31st December, 2015 have been considered for the study.

For analyzing the data, Pearson Correlation was used so as to find the linear association between the two variables. For this purpose, the variables used are NIFTY and FIIs investments.

As there is absence of primary data and most of the conclusions are based on secondary data, only correlation has been used as a tool for analysis. It is helpful to find out association between two variables as well as impact of one variable on the other.

V. REVIEW OF LITERATURE

The studies conducted so far have concentrated on FII net investment and their impact on movement on SENSEX. Some of these studies were conducted two decades back. Now, NSE is technologically more advanced than the BSE. Similarly, the index for NSE i.e. NIFTY is more wider than SENSEX. Nifty covers 50 companies based on the free float capitalization across the various sectors. Even at the national as well as international level, now Nifty is more scientifically tracked than Sensex, through sensex is popular in this respect. Therefore, the earlier researchers have focused on sensex for this purpose. Further, the earlier studies have calculated returns and established relation with FII investment. Considering this fact, it is attempted in this paper to relate FII investment in NSE and the movement in NIFTY. Some of these studies are briefly reviewed herewith.

Dornbusch and Park (1995) have stated that the stock market shows more reaction to foreign investment as the economy liberalizes. A concern with FIIs is that they are positive feedback traders.

Berko and Clark (1997) revealed that trades by FIIs push the stock prices away from the fundamentals on contemporaneous relation between FII investments and equity returns based on monthly data.

Bekaert and Harvey (1998) stated that the waves of liberalization results in appreciation of stock price followed by inflows by foreign investors. As the Indian market is growing, the trend and future prospects of FIIs has become a topic of concern.

Gordon and Gupta (2003) found causation running from FII inflow to return in BSE. They observed that FIIs act as market makers and book profits by investing when prices are low and selling when they are high. There are contradictory findings by various researchers regarding causal relationship between FII flows and stock market.

Avadhani V. A. (1999) hints at the future of the Indian capital market. The future capital market should be sophisticated with less developed segments of all types namely cash market, forward market, options and futures etc. These segments will attract more foreign funds to come in through FIIs. The individuals and small investors may be out of this market due to strict capital adequacy norms and high margins.

Reddy B. B., Ramaiah M. V. Reddy B. P. (2008) have concluded that there is a significant impact of FIIs on the prices and volatility in Indian market. The fortune of investors in stock market is often determined by behavior of FIIs. This has been proved several times. FIIs are one of the main factors for the growth of Indian stock market, but there is a high degree of volatility due to investments made by FIIs.

Suryavanshi A. G. & Marulkar K. V. (2012) concluded that FIIs are playing an important role in bringing the funds needed by the equity markets. However, FIIs investments are volatile and market driven. It is important to note that the recent past, FIIs contribute volatility as well as due to recession, when there

is sharp fall in the net investments by the FIIs and that leads the market to go down further.

Bonser Neal et. al. (2002) analyzed the foreign trading behavior on the Jakarta Stock Exchange (Indonesia) between 1995-2000. They concluded that there is positive correlation between foreign investment and index movement. But they found no evidence to indicate that such trading behavior by foreign investors destabilized the market.

Anthony and Richards (2002) concluded that there is a strong evidence of positive correlation with respect to domestic, US and regional equity returns and daily net investments by FIIs. The six emerging Asian markets, during 1999-2001 have observed this fact of correlation between FIIs investment and equity trading.

Bhanumurthy and Rai (2003) explored the possibility of bidirectional relationship between FIIs investment and equity trading in Indian Stock Market. During the period of 1994-2002, they observed that FIIs investment is significant whenever market moves. They also argued that FIIs react more (sell heavily) to bad news than to good news.

VI. ROLE OF FIIs IN INDIAN STOCK MARKETS

After the launch of financial sector reforms in the year 1991, FIIs were allowed to enter to Indian markets with suitable restriction from September, 92. A positive contribution of the FIIs has now become feature of Indian stock market. Indian stock market, with high degree of development, volume of trading and growth potential has been an attractive destination for FIIs. Though FIIs bet on short term movements, their regular infusion of funds has helped the market improve the liquidity. The capital needed by the corporate sector can thus be provided by various players and FIIs are one of the important source from the same this is because the developing countries like India have more or less scarcity of capital.

In India, SEBI is the nodal agency for dealing with FIIs with reference to registration and extent of investment. FIIs widen and deepen the stock exchanges and provide better price discovery process. But when these FIIs are negative about India, they leave the havoc in market.

Since the adoption of liberalization, there is a significant growth in net investment in FIIs in Indian markets. The following table describes the significance of FIIs over the last two decades.

It can be seen that overall, there is tremendous increase in net investment by FIIs in Indian markets over the last two years. Except the two year viz. 1998-99 and 2008-09, all the years have shown increase in FIIs net investment. Particularly, in the years 2008-09, there was recession in the global financial market which has resulted in to withdrawal of invested money by the FIIs. This is the reason why there are negative net FIIs investments (i. e. withdrawal) during 2008-09. But this data for over two decades throws light on how significant the investment

of FIIs is there in the Indian Stock Market in general and in the National Stock Exchange (NSE) in particular.

TABLE I
FII INVESTMENT IN THE INDIAN STOCK MARKET

Years	Net FII Investment (Rs. Crores)	Years	Net FII Investment (Rs. Crores)
1992-93	13	2002-03	2689
1993-94	5127	2003-04	45764
1994-95	4796	2004-05	45880
1995-96	6942	2005-06	41467
1996-97	8575	2006-07	30841
1997-98	5958	2007-08	66179
1998-99	-1584	2008-09	-45811
1999-2000	10122	2009-10	142658
2000-2001	9933	2010-11	146438
2001-02	8763		

(Source: Bloomberg L. P., Handbook of Statistics on Indian Securities Market pp. 51)

VII. RESULTS AND DISCUSSION

The present study analyses the movement of NIFTY with reference to its percentage fall and corresponding amount of FIIs net investment. The table shows the 10 major declines in NIFTY over a period of 10 years. Most of these declines are during the years 2007 and 2008.

TABLE II

Date	Nifty @ open	Nifty @ close	Decline	Decline FII net in Rs. Cr.
21-10-2008	2936	2525	411	-1432
21-01-2008	5705	5208	497	-3297
10-10-2008	3502	3280	222	-2514
06-07-2009	4430	4166	264	-1483
22-01-2008	5203	4899	304	-4265
03-03-2008	5223	4953	270	-711
11-02-2008	5121	4857	264	-2269
17-03-2008	4745	4503	242	-658
13-03-2008	4869	4624	245	-108
24-08-2015	8056	7809	247	-5275

(Source: www.nseindia.com/daily report/ 30-01-2016)

The hypotheses set for the study with reference to this data given above was as follows:

H_0 – There is no significant relation between decline in NIFTY and FIIs activity.

H_1 – There is significant relation between decline in NIFTY and FIIs activity.

TABLE III

Correlation at confidence level of 95% df 8	Pearson Correlation obtained	Result of Relationship
0.50	0.20	Not Significantly strong (Accept H_0)

Analyzing the given 10 years data, and correlation, it is concluded that H_0 is accepted and H_1 is rejected. Though there is positive relation between FII investment and movement in NSE, it is not that significant. The withdrawal of money by FIIs results into decline in Nifty, but the proportionate decline is not there.

It means that there exists a relationship between decline in Nifty and FII activity. But still if we look at the absolute figures of FII net investment which is negative, it is clear that there are withdrawals of huge amounts by FIIs whenever the market declines. But at the same time decline in Nifty and withdrawal by FIIs are not proportional to each other. Thus it can be concluded that even though the decline in nifty and FII withdrawal are not proportional, whenever the nifty declines, FIIs have shown negative net investment i.e. they have withdrawn the amounts which correspond to decline in nifty.

Similarly, an attempt has also been made to analyze the intraday declines in nifty and corresponding activity of FIIs during the same day.

TABLE IV

Date	Nifty's high during the day	Nifty's low during the day	Intraday decline (%)	FII net investment Rs. Cr.
22-01-2008	5203	4448	14.51	-4265
24-10-2008	2936	2525	14.00	-1432
27-10-2008	2585	2252	12.88	-1027
21-01-2008	5705	4977	12.76	-3297
10-10-2008	3502	3198	8.68	-2514
08-10-2008	3604	3329	7.63	-1056
06-07-2009	4480	4134	7.01	-1483
11-02-2008	5126	4804	6.28	-2269
13-03-2008	4869	4580	5.94	-108
17-03-2008	4745	4482	5.54	-658

(Source: www.nseindia.com/daily report/ 30-01-2016)

The second hypotheses set for the study was tested with the data given in this table.

H_0 – There is no significant relation between intra-day declines in NIFTY and FIIs activity.

H_1 – There is significant relation between intra-day declines in NIFTY and FIIs activity.

TABLE V

Correlation at confidence level of 95% df 8	Pearson Correlation obtained	Result of Relationship
0.50	0.80	Significantly strong (Reject H_0)

The data analyzed and tested with correlation test shows that the null hypothesis is rejected and H_1 is accepted which means that there is a strong correlation between intraday movements of nifty and FII activity that means the amount withdrawn by FIIs

results into big decline in nifty. Larger the negative FIIs investment, larger will be the decline in nifty. Thus the decline

VIII. CONCLUSION

Since the last two decades, the Indian stock markets NSE have advanced significantly in terms of turnover, technology, transparency etc. The growth in the stock markets has also been contributed by number of factors. Foreign Institutional Investors (FIIs) has been one of the important factor in this regard. The data of last two decades shows that there is a definite relationship between the FII investment and movement of the index of NSE i.e. Nifty. Similarly, when we consider the intraday trades, the percentage decline in intraday trade is strongly associated with negative net investment by the FIIs. After the liberalization, foreign capital is attracted in huge quantity in the Indian financial market. Growing number of FIIs and their consistent presence in the Indian market has become the feature of Indian market. FIIs are strong forces driving the market in India. The significant declines in the Nifty show that FIIs were net sellers during these biggest declines.

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