An Impact of Foreign Institutional Investors on National Stock Exchange

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Abstract

Foreign Institutional Investor refers to an institution established or incorporated outside India, which proposes to make investment in India stock market. In order to trade in Indian equity market foreign corporations must register with the Securities and Exchange Board of India as an international institutional investor. One of the major market regulations pertaining to FIIs involves placing limits on FII ownership in Indian companies.

In order to invest in the stock market, it is very necessary that foreign investors have a good idea about NSE, BSE….etc. There are Institutional investors that include hedge funds, insurance companies, pension funds and mutual funds. According to research there are 1484 FIIs and 38 foreign brokers registered to securities & Exchange Board of India (SEBI). This paper attempts to study the impact of FIIs variation on NSE& The relationship between them.

Keywords: FII, NSE, SEBI, BSE.

1.Introduction

Foreign investment means investments made by the people of a country in production process & financial assets of another country. Foreign investment in India are of different forms, investment in listed/ unlisted companies other than through stock exchanges that is FDI, private equity/ foreign venture capital investment, investment through ADRS & GDRS, & Investment by Non- resident Indians(NRIs) or person of Indian origin through various forms, investment in listed companies that is FII investment. Investments made by foreign companies in Indian stock market listed

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companies are referred to as FII. FII plays a very important role to get recognition to Indian companies globally. Investments made by foreign institutions in Indian economy has improvised the market efficiency & lowered the cost of capital. FIIs are the short term investments which are made by the foreign Institutions in the home countries.

FIIs are allowed to make an investment in all the securities traded on the Indian capital market which includes shares, debentures, warrants issued by companies which are directly listed or where to be listed on the stock markets in India & in schemes floated by the domestic mutual funds. FII not only invest their own funds but also invest on behalf of their overseas clients in the Indian stock market who are registered with SEBI. The overseas clients' accounts which are managed by FIIs are known as "sub- accounts".

Foreign Institutional Investor has defined by SEBI as: "Means an institution established or incorporated outside India which proposes to make investment in India in securities. Provided that a domestic asset management company or domestic portfolio manager who manages funds raised or collected or brought from outside India for investment in India on behalf of a sub-account, shall be deemed to be a Foreign Institutional Investor."

Entities who are eligible to invest through FII route include" an institutions which are incorporated outside India as a mutual fund, investment trust, pension fund, insurance companies, Assets Management companies, Investment managers or advisor, bank, international organizations, foreign government agency, sovereign wealth fund, foreign central bank, trustee, university fund, endowment, foundations, charitable trusts, charitable societies etc." FIIs are playing a very important role in bringing the fund into the India, which is needed by the local markets, an also they are contributing terribly to the foreign exchange inflows, when funds from international institution &FDI are insufficient.

FIIs inflows in India

Table1: FII Investment for the period of 2006-16

Financial Year	Equity	Debt	Total
2006-07	**25236**	**5605**	**30840**
2007-08	**53404**	**12775**	**66179**
2008-09	**-47706**	**1895**	**-45881**
2009-10	**110221**	**32438**	**142658**
2010-11	**110121**	**36317**	**146438**
2011-12	**43738**	**49988**	**93726**
2012-13	**130284**	**22539**	**153448**

2013-14	**110280**	**17853**	**128133**
2014-15	**95000**	**22540**	**117540**
2015-16	**125280**	**11220**	**136500**

FIIs were allowed to trade i.e. to buy & sell equity shares/ debt in the companies listed on the Indian stock market with the due permission from RBI & registration with SEBI. Until 1998, FII investment were allowed only in equity later in 1999; FIIs were allowed to invest in debt market. FII contributes a large proportion in foreign portfolio investments. Table 1 explains the FII investment for the years 2001-16

The highest investment on equity through FII till date is in 2012-13with INR 130284 Crores & in debt market is in 2011-12with INR 49988 Crores. There is an increase of FII investment in the year 2012-13with INR 153448 & in the year 2008-09 showed a decline in the equity investment due to global credit crisis.

2.Objectives of the study

1. To find the relation between FIIs investment & NSE.
2. To study the impact of FIIs on NSE INDICES(S&P CNX NIFTY)
3. To study whether the stock market is affected by the foreign investment.

3.Research Methodology

The methodology in this research work is based on data collection as well as primary sources.

Primary sources: The sources of primary data collection is based on discussion with SEBI official or NSE's players and putting Questionnaire to players of the Market.

1. The sampling unit decided by stratified Random Sampling with sample size 50 investors of Delhi Population. To fill up the questionnaire, we contacted the local players of market like Speculators and Arbitragers and explained them in brief about the study and tried to find out the actual possibilities of impact of FIIs on National stock Exchange.
2. The data was also collected through observation in the NSE.
3. The study has been conducted during 1st March, 2017 to 10th April 2017.

Secondary sources: The secondary data have been collected from various external sources such as SEBI bulletins, RBI bulletin , NSE, BSE, CNX NIFTY signifies CRISIL NSE index which is an index for fifty shares & it is managed by India index services & products ltd(IISC). The data of CNX NIFTY & FIIs is collected from the NSE & SEBI bulletins... The present study has taken into consideration of 10years starting from 2006-2016.

4.Statistical Techniques used for Data Analysis

As the study is to find out the relationship between the two variables NSE & FIIs. Correlation, regression would be suitable technique to give the accurate statement of linear relationship between the two variables. Linear regression analysis has been used for data analysis where let's consider CNX NIFTY as dependent variable & FII investment as independent variable.

Hypothesis Testing

1. Let the null hypothesis be that there is no significant relationship exists between NSE CNX NIFTY change & flow of FII investment.
2. To confirm our hypothesis, let us consider a linear regression equation.

$$\text{CNX NIFTY} = \alpha + \beta \quad \text{FII}$$

3 Variables considered are…. FII: INDEPENDENT VARIABLE
CNX NIFTY: DEPENDENT VARIABLE

5.Review of Literature

There have been several studies focusing on the extent of variables influencing the market index and their importance in including in the model. Some researchers resorted to classifying the variables depending on the relativity to the index taken for study. The selection of variables is different in each of the studies with varied time lines involving different countries. The study of Impact of the macro-economic variables has been complex due the nature of interaction of different factors and the time lag to take effect. Due to the economic liberalization of countries, the cross border factors have been playing a significant role with contagion effects of economic conditions. In the light of external factors gaining importance, some studies have been conducted to understand the relationship and quantify the impact. This would further add to the benefits of general investors and the governing bodies. Some of the findings from the previous studies on various aspects discussed have been listed below.

Sulaim and D. Mohammad et al. (2009) conducted the study on the Karachi stock exchange with Influencing variables as foreign exchange reserve, foreign exchange rate, industrial production Index, whole sale price index, broad money and gross fixed capital formation for the period of 1986 -2008. It concluded that the foreign exchange rate and foreign exchange reserve .Significantly affect the stock prices while the others affect insignificantly.

Another study by **Basabi Bhattacharya & Jaydeep Mukherjee** (2002) explored the relationship between the stock market and Exchange rate, foreign exchange reserves Value of trade balance in India. The researchers used unit-root tests, co integration and the long-run Granger .Non causality test to conclude that the BSE Index and the macro-economic variables exhibit no casual linkage.

The study on Stock Exchange of Thailand by Sardar M.N Islam et al. (2004) concluded that the market indexes are determined by the interest rate, bond, foreign exchange rate, market capitalization, price to earnings ratio and consumer price index both in the short and long term.

History

FIIS were allowed to make an investment in Indian securities market from September 14 1992, upon which they to be registered with SEBI & also a permission with RBI under the act of FERA, a very first investment was made in Jan 1993. For every 5 years they have to make a renewal of registration & permission process. In April 1997, with the objectives of increasing the participation of FIIs, government has increased the limit for all FIIs up to 30% & in the year 2001 it has increased to 49%. In June 1998, FIIs were allowed to make an investment in equity derivatives. Foreign institutions with high net worth were allowed to invest as sub- accounts of FIIs in the year 2000. In June 2008, Government has given approval to increase the cumulative debt investment limits by $1.8(from $3.2 to $ 5 billion) & from US $ 1.5 billion to US$ 3 billion for making an investment by FIIs in Government securities & corporate debts.

6.Analysis

The analysis has been started by taking the past 10 years closing index of NIFTY and the FII into India that is from the year 2006 to 2016 to understand the correlation between the stock market changes in relation to the FII.

While analyzing we can say that FIIs play a significant role in bringing the funds to India. The presence of FIIs in Indian stock market witnessed an increase in the net cumulative investment. Table: 1 shows that 2006-08 there was a standard increment but all of there was a decline in the in 2008-09 due to global crises leading to decrease in the CNX NIFTY indices points.

Table2: FII Inflows & CNX Nifty Index for the period of 2006-16

Financial Year	FII Investment Rs(in cr)	CNX Nifty(INDEX)

2006-07	**30840**	**3572**
2007-08	66179	4897
2008-09	-4588	3731
2009-10	142658	4658
2010-11	146438	5583
2011-12	93726	5296
2012-13	153448	5905
2013-14	157550	5134
2014-15	98621	6023
2015-16	145283	5925

Sources: SEBI Bulletin 2016, NSE.

Summary Output

Table 3: Correlation Coefficient

	FII INVESTMENT	**CNX NIFTY (INDEX)**
FII INVESTMENT RS(INCRORES)	**1**	
CNX NIFTY(INDEX)	**0.720184256**	**1**

Table: 4 Regression Analysis

Regression Statistics	
Multiple R	**0.7201843**
R SQUARE	**0.5186654**
Adjusted R Square	**0.4749077**
Standard Error	**1338.1043**
Observations	**13**

Table: 5 ANOVA

	df	$S	MS	F	Significance I
Regression	**1**	**21223290.64**	**21223291**	**11. 85312**	**0.005497066**
Residual	**11**	**19695753.06**	**1790523**		
Total	**12**	**40919043.7**			

Table: 6 Summary

	Coefficient S	Standard Error	T Stat	P- Value	Lower 95%	Upper 95%
Intercept	**2060.201**	**516.139360**	**3.9916**	**0.002**	**924.185509**	**3196.21**
FII Investment	**0.0216394**	**0.006285337**	**3.442837**	**0.0055**	**0.007805455**	**O.O35473**

The estimated regression equation is Y=2060.2006+0.021639X

In this study we find out the relationship, data analysis method has been used through MS EXCEL. Correlation analysis has been used to find out the relationship between the variables FII & CNX NIFTY. Table 3 represents the output, where correlation has been considered for 10 years. Based on the result we conclude that there are 0.720184256 high degree positive correlations between FII & CNX NIFTY.

To find out the impact regression analysis has been used, Table 4 shows the strength of the relationship between the variables, the coefficient of determination $R^2$is 0.518665 explain that 51.8665% of variation in dependent variable (CNX NIFTY) can be explains with the help of independent variable (FII INVESTMENT). Standard error which is the standard deviation of the sampling distribution is 1338.1043.

From statistical perspective, test of acceptability of the linear regression model can be explains by ANOVA test. Table 5 explains that the variance ratio F calculated value is 11.85312 tested at 5% level of significance is greater than level of significance. So we don't accept $\mathbf{H_0}$ but accept $\mathbf{H_1}$. The other way to proof the results are by comparing 1 & 11 degrees of freedom F tabulated value is 4.84 at 5% level of significance, F calculated value (11.85312) is greater than F tabulated value so we conclude the statement that there is a significant relationship between the variables FII investment & CNX NIFTY.

Table 6 explains the regression equation, where a= 0.02163939 signifies to a direct positive relationship between variables considered. Growths of inward FII with a unit determine an increase in CNX NIFTY on an average of 0.02163939 in India. In other words one unit change in CNX NIFTY will be explained by one unit change in FII. The lower limits & upper limits at 5% level of significance are 3196.21 & 924.185509.

7.Conclusion

Based on the findings from the table it can be concluded that there is a high correlation between FII flow and the raise in the index of Indian stock market in a longer span but there is a very less impact in the short span that is the correlation between FII flow and the corresponding raise in the index of Indian stock market is very poor and based on the chi-square test performed with the help of the above data with the assumption of 5% significance level where the null hypothesis was assumed as-" There is relation between FII and the stock index of Indian market "and it was found that null hypothesis was validated. Thus it is found that FII has a significant impact on Indian stock market.

The empirical study is on the basis of ordinary least method suggests that there is a strong positive relationship between the variables. This means that FIIs has a significant impact direct on CNX NIFT & indirectly on Indian national stock exchange. Hence it can be **concluded** that there is a significant relationship between FIIs investment change the indices of NSE (CNX NIFTY).

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