A Study on Dynamics of the Trading Behaviour of FIIs in Indian Stock Market With Reference To NIFTY

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Abstract

Indian economy is opened up for foreign investment post liberalization in 1991. This enabled capital flow and increase in foreign exchange reserves. India opened her doors to Foreign Institutional Investors in September 1992. This event represents a landmark event since it resulted in effectively globalizing its financial services industry. The recent massive structural reforms on the economic and industry front in the form of de-licensing rupee convertibility, tapping of foreign funds, allowing foreign investors to come to India, have resulted, on one hand, in the quantum leap in activities/volume in the Indian capital market, and on the other hand and more importantly, that the Indian capital market has undergone a metamorphosis in terms of institutions, instruments, etc. The Indian capital market is emerging and growing since the last 20 years. It has witnessed growth in volume of funds raised. The paper makes an attempt to develop an understanding of the dynamics of the trading behavior of FIIs.

Index Terms- Foreign Institutional Investors, Stock Market, NIFTY

1. Introduction

The National Stock Exchange of India Limited (NSE) was established in 1992 as the first demutualized electronic exchange in the country. NSE was the first exchange in the country to provide a modern, fully automated screen-based electronic trading system which offered easy trading facility to the investors spread across the length and breadth of the country. NSE's flagship index, the NIFTY 50, the 50 stock index is used extensively by investors in India and around the world as a barometer of the Indian capital markets. NSE has been established with a diversified shareholding comprising domestic and global investors. The key domestic investors include Life Insurance Corporation of India, State Bank of India, and Stock Holding Corporation of India Limited. And the key global investors are Gagil FDI Limited, GS Strategic Investments Limited, Aranda Investments (Mauritius). NSE offers trading in equity comprising of Indices, Mutual Funds, Exchange Traded Funds, Initial Public Offerings, Derivatives (Equity Derivatives, Currency Derivatives, and Interest Rate Futures) and debt (corporate bonds)

The NIFTY 50 index is National Stock Exchange of India's benchmark broad based stock market index for the Indian equity market. It represents the weighted average of 50 Indian company stocks in 12 sectors. The Nifty 50 was launched on 21st April 1996 and is one of the world's most actively traded contracts. The NIFTY 50 covers 12 sectors (as on Oct 7, 2017) of the Indian economy and offers investment managers exposure to the Indian market in one portfolio. The NIFTY 50 index is a free float market capitalisation weighted index. The index was initially calculated on full market capitalisation methodology. From June 26, 2009, the computation was changed to free float methodology. The base period for the CNX Nifty index is November 3, 1995, which marked the completion of one year of operations of National Stock Exchange Equity Market Segment. The base value of the index has been set at 1000 and a base capital of Rs. 2.06 trillion.

Foreign Institutional Investors (FIIs)

The term 'FII' is used to denote an investor, mostly in the form of an institution or entity which invests money in the financial markets of a country different from the one where in the institution or the entity is originally incorporated. According to Securities and Exchange Board of India (SEBI) it is "an institution that is a legal entity established or incorporated outside India proposing to make investments in India only in securities". These can invest their own funds or invest funds on behalf of their overseas clients registered with SEBI. The client accounts are known as 'sub-accounts'. A domestic portfolio manager can also register as FII to manage the funds of the sub accounts. From the early 1990s, India has developed a framework through which foreign investors participate in the Indian capital market. A foreign investor can either come into India as a FII or as a sub-account. As on March 31, 2015, there were 1,722 FIIs registered with SEBI and 6,386 sub-accounts registered with SEBI as on March 31, 2015.Basically, FIIs have a huge financial strength and invest for the purpose of income and capital appreciation. They are no interested in taking control of a company. Some of the big American mutual funds are fidelity, vanguard, Merrill lynch, capital research etc. They are permitted to trade in securities in primary as well as secondary markets and can trade also in dated government securities, listed equity shares, listed non- convertible debentures/bonds issued by Indian company and schemes of mutual funds but the sale should be only through recognized stock exchange. These also include domestic asset management companies or domestic portfolio managers who manage funds raised or collected or bought from outside India for the purpose of making investment in India on behalf of foreign corporate or foreign individuals. In the Indian context, foreign institutional investors and their sub-accounts mostly use these instruments for facilitating the participation of their overseas clients, who are not interested in participating directly in the Indian stock market.

2. Literature Review

Shrikanth, M. and Kishore B. (2012), in their paper investigated a cause and effect relationship between FII and Indian capital market. They observed that FIIs carried the institutional flavour in terms of market expertise and fund management by way of pooling small savings from retail investors. The main objective of FIIs is maximizing returns and minimizing risk while keeping liquidity of the investments intact. They concluded that net FII inflows had a positive impact on the Indian stock market and foreign exchange reserves.

Loomba, J. (2012), attempted to testify the behavior of FII trading and its effect on Indian stock market. He observed that in the course of capital market liberalization, foreign capital has become increasingly significant source of finance and institutional investors are growing their influence in developing markets. He concluded that the Indian stock markets have come in age where there were significant developments in the last 15 years make the markets at par with the developed markets.

Jawar N & Abid S. (2017) in their paper found that FII affect the Indian stock market and hence the Indian Economy. The study found that there is a positive correlation between the indices and the FIIs inflows. Institutional investors have made the markets more efficient and were attracted towards Indian indices since they have large domestic base.

Aswini A. and Mayank Kumar (2014) have conducted a descriptive study to validate the association between stock market and FII. The correlation analysis has been used to find the association between these two variables. The study concluded high correlation between FII flow and Indian stock market in the long term but less impact is seen in the short term.

Bohra, N. Singh and Dutt, Akash. (2011), studied the behavioural pattern of FII in India and figure out the reasons for indifferent responses of NSE NIFTY due to FII inflows. They found the correlation between FII investment and turnover of different individual groups at NSE NIFTY. They concluded that there is a positive correlation between FII investment and stock market but in year 2005 and 2008, it was also observed that positive or negative movement of FII's investment leads to a major shift in the sentiments of domestic or related investors in market

3.1 Trends of Registered FIIs in India.

Portfolio investments in India include investments in American Depository Receipts/ Global Depository Receipts, Foreign Institutional Investments and investments in offshore funds. Before 1992, only Non-Resident Indians and Overseas Corporate. Bodies were allowed to undertake portfolio investments in India. Thereafter, the Indian stock markets were opened up for direct participation by FIIs. They were allowed to invest in all the securities traded on the primary and the secondary market including the equity and other securities/instruments of companies listed/to be listed on stock exchanges in India.

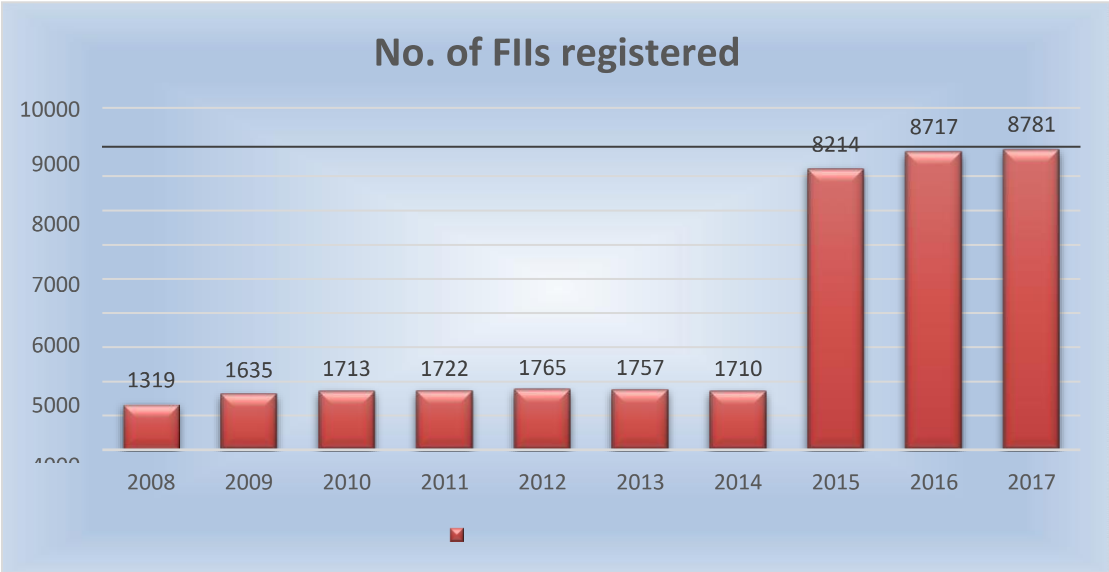
TABLE: 1

Year Wise Registration of FIIs Registered with SEBI

Year	No. of FIIs Registered
2008	1319
2009	1635
2010	1713
2011	1722
2012	1765
2013	1757
2014	1710
2015	8214 (FPI)
2016	8717 (FPI)
2017	8781 (FPI)

Note: As per the SEBI (Foreign Portfolio Investors) Regulations, 2014 all existing FIIs, sub-accounts and QFIs are merged into new single category 'Foreign Portfolio Investors' (FPIs).

FIGURE 1: Year Wise Registration of FIIs Registered with SEBI



In the above figure, in year 2008, there were 1319 FIIs registered under which the Net Investment were –Rs. 40,711.3 crores. The reason for such low FII registered and a negative Net Investment was the great recession which caused a great fluctuation in the market. In the year 2009, the registered FII had increased to 1635 with an increase of 316. The Number of FII registered is increasing year by year till the year 2012 with 1765 FII registered. In the year 2012 Rs.1,66,049.1 crores.

From 2014 onwards all existing FIIs, sub-accounts are merged into new single category ‘Foreign Portfolio Investors’ (FPIs). So, in 2015 registered FPIs reached 8214 in number which included the existing as well as new FIIs with sub-accounts merged into FPIs. The FPIs registered in 2016 and 2017 were 8717 and 8781 respectively. It can be seen that the number of FPIs are increasing significantly.

3.2 Foreign Portfolio Investment

SEBI (Foreign Portfolio Investors) Regulations, 2014 were framed and notified on January 7, 2014 and the FPI regime commenced from June 1, 2014. Under the new regime, existing FIIs, sub-accounts and QFIs were merged into a new investor class termed as FPIs. SEBI approved designated depository participants (DDPs) to register FPIs on behalf of SEBI subject to compliance with KYC requirements.

Registration of Foreign Portfolio Investors and Custodians

The FPI Regulations were notified by SEBI on January 7, 2014 and accordingly, the foreign portfolio investor regime revamping the existing FII and sub-account structure commenced from June 1, 2014. As per the new regime, all existing FIIs, sub-accounts and QFIs are merged into new single category ‘foreign portfolio investors’ (FPIs).The FPI Regulations define a ‘foreign portfolio investor’ (FPI) as a person who satisfies the eligibility criteria prescribed under Regulation 4 of the FPI Regulations, 2014 and has been registered under Chapter II of the FPI Regulations, 2014. Any foreign institutional investor (FII), sub-account or qualified foreign investor who holds a valid certificate of registration shall be deemed to be a FPI until the expiry of the block of three years for which fees has been paid as per the SEBI (Foreign Institutional Investors) Regulations, 1995.

4. RESEARCH METHODOLOGY

4.1 OBJECTIVES OF THE STUDY

- To understand the concept of FIIs and Nifty.
- To Study the Dynamics of Trading Behavior of FIIs in Indian stock Market

4.2 RESEARCH DESIGN

Exploratory Research method applied for the study. The study period covered under this is for the years 2008-2017.

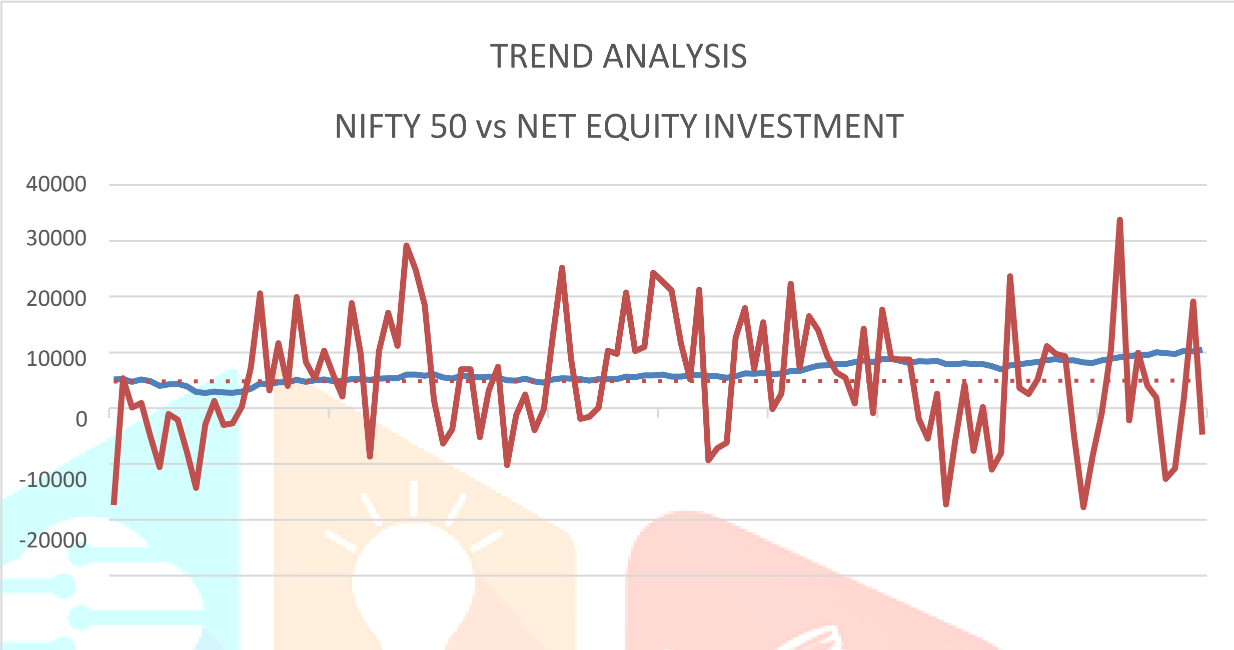
4.3 DATA COLLECTION SOURCES

Data for the study collected primarily from Secondary sources. For this various literatures, books, journals, magazines, web links were used.

4.4 RESEARCH ANALYSIS TOOLS

The data was classified and tabulated using MS EXCEL and SPSS 12.0. Correlation and Regression analysis used as statistical tool for data analysis. The use of F statistics and T statistics were also used in the analysis of the data which were analysed with the help of SPSS 12.

FIGURE 2: FIIs Investment in Equity

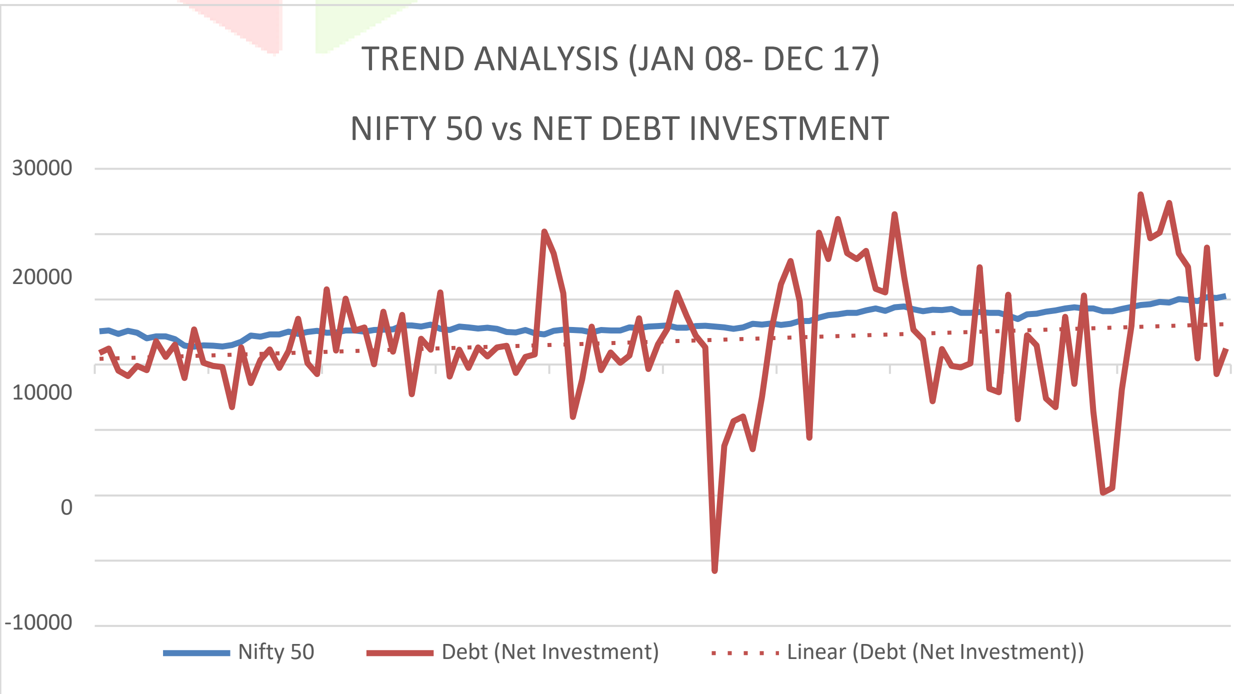


The above graph shows the trend analysis between Nifty and Net Equity Investment of FIIs. The Red line shows the Net Equity Investment, the Blue Line shows the Nifty points and the Red Dotted line shows the trend of FIIs of Net Equity Investment.

It can be seen that for the year 2008, the Net Equity Investment is below the trend line and is negative which means that sale of equity is more than purchase of equity. The Nifty also low for this period. In the year 2009, Net equity Investment of FIIs increases with Nifty and both of them are above the trend line.

In the next 5 years, Net Equity Investment and Nifty both are increasing at a significant rate. From 2015 onwards Net Equity Investment and Nifty both are subsequently decreasing and increasing because the improper balance between the inflows and outflows of FIIs and Nifty.

FIGURE 3: FIIs Investment in Debt



The above graph shows the trend analysis between Nifty and Net Debt Investment of FIIs. The Red line shows the Net Debt Investment, the Blue Line shows the Nifty points and the Red Dotted line shows the trend of Net Debt Investments of FIIs.

It can be seen that in 2008 to 2011 the Net Debt Investment is operating close to trend line. In the year 2013, the Net Debt Investment is negative which means that sale of Debt is more than purchase of Debt. The Nifty also Low for this period.

From 2015 to 2016 onwards Net Debt Investment and Nifty both are subsequently decreasing and increasing because the improper balance between the inflows and outflows of FIIs and Nifty. But in the year 2017 the Net Debt Investment is increasing with Nifty.

HYPOTHESIS

Hypothesis Part I:

H0: There is no relationship between NIFTY and FII.

H1: There exists a relationship between NIFTY and FII.

Hypothesis Part II:

H0: The variation between NIFTY and FII is not significant.

H1: The variation between NIFTY and FII is significant.

TABLE: 2

Computation of statistical estimates & Regression equation for January 2008 - December 2017 (NIFTY 50 vs. Total Net Investment)

n	120				
R^2	0.033				
Adjusted R^2	0.025				
SE	1847.365				
Term	**Coefficient**	**95% CI**	**SE**	**t Statistic**	**D.F.**
Intercept	6223.914	5845.870 to 6601.957	190.905	32.602	118
Slope	0.021	0.000 to 0.042	0.011	2.007	118
Nifty (y) = 6223.914 + 0 .021 Net Investment (x)					
Source of variation	**Sum Squares**	**D.F.**	**Mean Square**	**F Statistic**	
Model	13747979.44	1	13747979.44	4.028	
Residual	402705730.4	118	3412760.427		
Total	416453709.8	119			

As seen in the above table, the slope equation of the above regression equation indicates that as FII increases by 1 unit, NIFTY 50 increases by 0.021 units. Since NIFTY 50 is an indexed measured in hundreds, the co-efficient of NIFTY 50 implies that NIFTY 50 increases by 100 for every Rs. 2.1 FII net investment increase. Secondly, value of Adjusted R^2 comes to be 0.025 and R^2 comes to be 0.033 which is comparatively weak. Thus we can conclude that, the explanatory variable (FII Turnover) is relatively a weak measure of NIFTY 50 as it explains 33% influence on the fluctuation in the NIFTY 50 and is unable to determine 67% influence of the other extraneous variables.

HYPOTHESIS PART I:

This relationship is tested with the help of t statistic. The t statistic is calculated and it comes to be 32.602. The tabulated value of t for 118 degree of freedom at 5% level is 1.9805. Thus, t calculated > t tabulated for 118 D.F. at 5%. So we reject H_0 and accept H_1. Thus, we conclude that there exists a relationship between NIFTY 50 & FII.

HYPOTHESIS PART II:

This relationship is tested with the help of F statistic. The F statistic is calculated and it comes out to be 4.028. The tabulated value of F for (1, 118) degree of freedom at 5% level is 3.921. Thus, F calculated > F tabulated for (1,118) D.F. at 5%. So we reject H_0 and accept H_1. Thus, we conclude that the variation between FII and NIFTY 50 is significant.

5. Conclusion

The study conducted observed that investments by FIIs and the movements of NIFTY 50 are quite closely correlated. Foreign institutional investors (FIIs) have significant impact on the movement of NIFTY 50. However there are other macroeconomic factors also influence the courses in the stock market, but FII is definitely one of the factors. This signifies that market rise with increase in FII's and collapse when FII's are withdrawn from the market.

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