A STUDY ON VOLATILITY OF NATIONAL STOCK EXCHANGE DUE TO FII INFLOWS

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Introduction

Indian Markets have been one of the most attractive investment places for the FII's. India being a developing nation attracts the foreign flows looking at the growth potential in the Indian Economy. The FII's contribute a major chunk of volumes on the Indian bourses and this in turn impacts the market moves. In case of recession in the world economies, the foreign investors look for saver bets and India with a rising GDP where other nations GDP / Growth is shrinking has always offered greater investment avenues. Indian Markets have been the clear outperformers vis-a-vis the global markets in the past years.

In order to lift the Indian stock market trading system on par with the international standards. On the basis of the recommendations of high powered Pherwani Committee, the National Stock Exchange was incorporated in 1992 by Industrial Development Bank of India, Industrial Credit and Investment Corporation of India, Industrial Finance Corporation of India, all Insurance Corporations, selected commercial banks and others.NSE provides exposure to investors in two types of markets, namely: Wholesale debt market and Capital market.

Trading at NSE

- Fully automated screen-based trading mechanism.
- Strictly follows the principle of an order-driven market.
- Trading members are linked through a communication network.
- This network allows them to execute trade from their offices.

The National Stock Exchange (NSE) which was set up as a model exchange to provide nation-wide services to investors. NSE, which in the recent past has accounted for the largest trading volumes.

Statement of the problem

FIIs have played a very important role in building up India's forex reserves, which have enabled a host of economic reforms. FIIs are now important investors in the country's economic growth. The Indian stock market is highly volatile and the FII have an important role in the upward and the downward movement of the Stock market. National Stock Exchange is one of the stock market which acts as a key place in the circulation of currency where high volatility is maintained. From the data observed in past few years shows clear evidence that there is a huge investment going into these stock markets through various sources and the number of companies listed in the National stock exchange has also increased significantly. This paper is done to study the relation between the stock index, CNX NIFTY and the FII flow into Indian markets and as well as study the volatility of NSE due to FII's.

Review of Literature

Krishna Prasanna (2008) investigated the contribution of foreign Institutional investment particularly among companies of Bombay Stock Exchange and the relationship between foreign institutional investment and firm specific characteristics in terms of ownership structure, financial performance and stock performance. It was observed that foreign investors invested more in companies with a higher volume of shares owned by the general public.

Stanley Morgan (2002) has examined that FIIs have played a very important role in building up India's forex reserves, which have enabled a host of economic reforms. Secondly, FIIs are now important investors in the country's economic growth despite sluggish domestic sentiment. The Morgan Stanley report notes that 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. Research by Morgan Stanley shows 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.

Agarwal, Chakrabarti et al (2003) 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 jackingup 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.

Dey Subarna & Mishra Bishnupriya (2004) in their study examined the casual relationship between net FII investment & the Indian stock market represented by market capitalization of BSE & NSE. The study also inferred that whenever market capitalization was high, FIIs were more attracted for investing. They gave importance to the policy makers as the Indian stock market was susceptible to changing investment patterns of foreign portfolio investors.

Md. Aamir Khan, et al. (2010) has outlined the causal relationship between Nifty and FIIs' net investment for the period January 1999 to February 2009 using daily data. The author has also highlighted unidirectional relationship of Nifty over FIIs during each phase in the long run. The paper have analysed the data using Normality test, Unit root test, ADF test and PP test. From their analysis they concluded that Correlation between time series is higher in bear phase as compared to bull phase as in bull phase other market participants raise their involvement reducing the influence of FIIs.

Gordon and Gupta (2003) It was found observed that FIIs act as market makers and book profits by investing when prices are low and selling when they are high. Hence, there are contradictory findings by various researchers regarding the causal relationship between FII net inflows and stock market capitalization and returns of BSE/ NSE. Therefore, there is a need to investigate whether FIIs are the cause or effect of
stock market fluctuations in India

Objectives of the study

- To identify the fluctuation of FII's Equity Investments, FII's Debt Investments, FII's Net Investments and CNX during 2008 to 2015.
- To analyse the relationship between CNX Nifty and FII equity and debt investments.
- To know the volatility of NSE due to FII's.
- To analyse the trend of CNX Nifty, FII's Equity and debt Investments through graphical representation.

Research Methodology

This study examines the impact of FIIs on the volatility of NSE . The scope of the research comprises of information derived from secondary data from various sources e.g. economic intelligence, SEBI websites, Central Depository Service (India) Limited, journals and reports. A clear benefit of using secondary data is that much of the background work needed has been already been carried out, for example: literature reviews, case studies might have been carried out, published texts and statistic could have been already used elsewhere, media promotion and personal contacts have also been utilized. This wealth of background work means that secondary data generally have a pre-established degree of validity and reliability which need not be re-examined by the researcher who is re-using such data. For the study CNX Nifty was selected as the representative of the Indian stock market as it is the most widely used index by market participants as benchmark index and account for the major market capitalization of listed companies and data for these index was collected from the websites of SEBI . The study is analytical and empirical in nature in which it explores the relation between FII and their impact on CNX Nifty. The yearly data was collected for a period of seven years from 2008-09 to 2014-15. The statistical tools like Descriptive statistics, Regression and correlation analysis were used in the study.

Limitation of the study

As the time available is limited and the subject is very vast and it focused only on identifying whether there exist a relationship between FII equity & Debt investment and CNX Nifty. The data used for analysis is historical in nature.

Analysis

CNX Nifty is the commonly used name for the National Stock Exchange Index – an index Composed of 50 of the largest and most actively traded stocks on the National Stock Exchange (NSE). The term FII is used most commonly in India to refer to outside companies investing in the financial markets of India. FII investment is frequently referred to as hot money for the reason that it can leave the country at the same speed at which it comes in.

Table No. 1 – FII Investments from 2008 – 2015

Year	Equity	Debt	Total
2008-09	-47706.20	1895.20	-45811
2009-10	110220.60	32437.70	142658.30
2010-11	110121.10	36317	146438.10
2011-12	43737.60	49987.90	93725.50
2012-13	140032.60	28334.40	168367
2013-14	79708.68	-28059.89	51648.79
2014-15	111332.59	166127.09	277459.68

Source: Central Depository Service (India) Limited

Table No. 2 – FII Investments from 2008 – 2015

Year	CNX Nifty
2008-09	3731
2009-10	4657.8
2010-11	5583.5
2011-12	5242.7
2012-13	5520.3
2013-14	5918.7
2014-15	7967.34

Source : www.sebi.gov.in

Table 3 -Mean and Standard Deviation of data
Descriptive Statistics – FII

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
Equity	7	78207.00	63255.59
Debt	7	41006.00	60953.10
CNX Nifty	7	5517.30	1302.13
Fii	7	88684.00	73829.97

The above table depicts the mean of the data and the significant standard deviation of data . The mean value for the sample data FII's equity is 78207 and the standard deviation for the same is 63255.59. The mean value for the sample data FII's Debt is 41006 and the standard deviation for the same is comparatively high i.e., 60953.10. The mean value for the sample data CNX Nifty is 5517.30 and the standard deviation for the same is 1302.13. The mean value for the sample data Net FII's Investments is 88684 and the standard deviation for the same is 73829.97.

Regression Analysis – Relationship between FII Equity Investments and CNX Nifty

Ho - There is no significant impact of FII equity investments on CNX Nifty

Ha – There is significant impact of FII equity investment on CNX Nifty

Table 4 - Regression Analysis – Relationship between FII Equity Investments and CNX Nifty

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589[a]	.347	.216	56013.93796

a. Predictors: (Constant), Equity

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.320E9	1	8.320E9	2.652	.164[a]
	Residual	1.569E10	5	3.138E9		
	Total	2.401E10	6			

a. Predictors: (Constant), Equity

b. Dependent Variable: CNX Nifty

Regression has been used to determine the strength of relationship between FII and CNX Nifty. R-square value is 34.7% which means model explains the 34.7% variation. In other words independent variable FII equity investment is able to explain 34.7% variation of the dependent variable CNX Nifty. p value is 0.164 which is more than 0.05 which means null hypothesis is accepted and there is no significant impact of FII equity investments on CNX Nifty.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-79575.047	99179.825		-.802	.459
	Equity	28.597	17.562	.589	1.628	.164

a. Dependent Variable: CNX Nifty

Interpretation: The table above provides us with the information on each predictor variable. This provides us with the information necessary to predict FII's Equity from CNX Nifty.

Regression Analysis – Relationship between FII Debt Investments and CNX Nifty

Ho - There is no significant impact of FII debt investments on CNX Nifty

Ha – There is significant impact of FII debt investment on CNX Nifty

Table 5 - Regression Analysis – Relationship between FII Debt Investments and CNX Nifty

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742[a]	.550	.460	44779.84261

Predictors: (Constant), Debt
Dependent Variable: CNX Nifty

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.227E10	1	1.227E10	6.117	.056[a]
	Residual	1.003E10	5	2.005E9		
	Total	2.229E10	6			

a. Predictors: (Constant), Debt

b. Dependent Variable: CNX Nifty

Regression has been used to determine the strength of relationship between FII and CNX Nifty. R-square value is 55% which means model explains the 55% variation. In other words independent variable FII Debt investment is able to explain 55% variation of the dependent variable CNX Nifty. p value is 0.056 which is more than 0.05 which means null hypothesis is accepted and there is no significant impact of FII Debt Investments on CNX Nifty.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-150571.166	79288.426		-1.899	.116
	Debt	34.723	14.040	.742	2.473	.056

a. Dependent Variable: debt

Interpretation: The table above provides us with the information on each predictor variable. This provides us with the information necessary to predict FII's Debt from CNX Nifty.

Correlation Analysis

Ho – There is no significant relationship between FII Investments and CNX Nifty.
Ha - There is significant relationship between FII Investments and CNX Nifty .

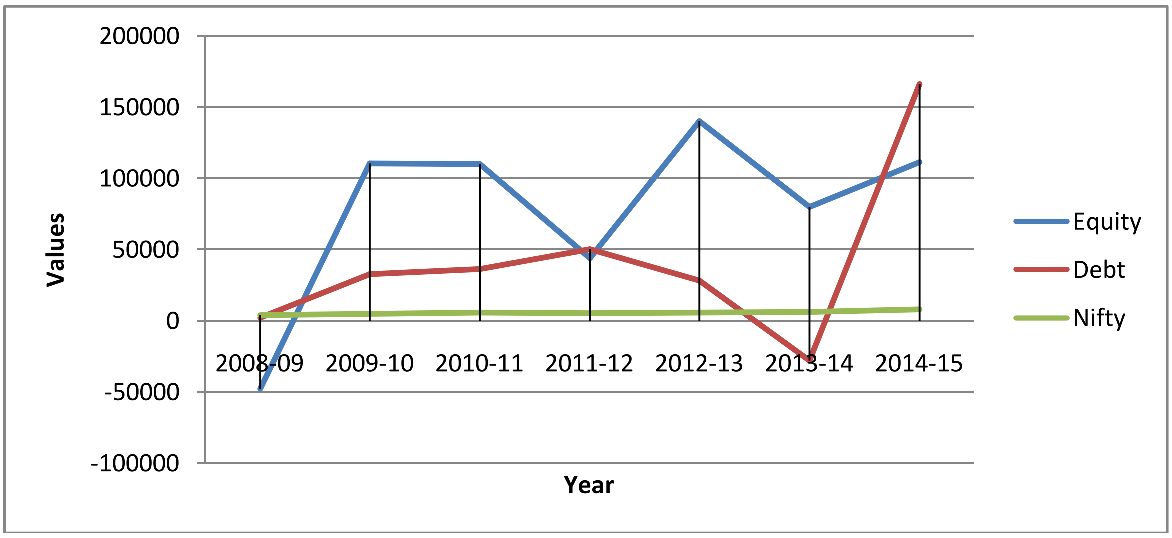
Table 4 - Correlation Analysis – Relationship between CNX Nifty and FII investments.

Correlations			
Particulars		CNX Nifty	FII
CNX Nifty	Pearson Correlation	1	.209
	Sig. (2-tailed)		.653
	N	7	7
FII	Pearson Correlation	.209	1
	Sig. (2-tailed)	.653	
	N	7	7

The above table reveals that performances of indices are positively correlated with FII Investment. Degree of correlation between FII Investment and CNX Nifty is .209 which indicates that the strength of correlation is not strong and the significant value is greater than 0.05, hence the null hypothesis is accepted.

It is concluded that there is no relationship between FII Investments and CNX Nifty.

Trend Analysis of Equity and Debt of FII and Nifty



Conclusion

Compared to security markets in developed economies, Indian markets being narrower and shallower, allows foreign investors with access to significant funds, to become the dominant player in determining the course of markets. Because of their over sensitive investment behaviour and herding nature, FIIs are capable of causing severe capital out flight abruptly, tumbling share prices in no time and making stock markets unstable and unpredictable. In the process, more often than not, the domestic individual investors are on the receiving end, losing their precious savings in such outrageous speculative trading.India as an emerging economic power cannot afford to be intimidated down by the FIIs every now and then. We need formidable Domestic Investors which can pump in liquidity even during cash crunch circumstances thereby fuelling the development. With savings to the tune of roughly 35% of GDP, India can use this to its strength by formulating policies which ensure that domestic funds like Pension Funds, Provident Funds & other Large Corpus Funds have a greater exposure to the equity market. The foreign investment in India should be encouraged, but only from a strategic long term perspective. Derivative instruments which facilitate long term foreign investment with specified lock in periods should be introduced. Sustained long term foreign investments would not only contribute to India's growth but also help in curbing volatility, maintaining currency stability and creating environment for inclusive economic development.

Recommendations

After the analysis of the project study, following recommendations can be made:

- Simplifying procedures and relaxing entry barriers for business activities and providing investor friendly laws and tax system for foreign investors.
- Allowing foreign investment in more areas. In different industries indices the FIIs should be encouraged through different patterns.
- The laws should be such that it should protects domestic investors and also promote trade in country through FIIs.
- Encourage industries to grow to make FIIs an attractive junction to invest

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