

## **RELATIONSHIP BETWEEN THE FIIS INVESTMENT AND INDIAN STOCK MARKET**

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### **Abstract**

*For making selection investment in India, one should be registered either as a foreign institutional investor (FII) or as one of the sub-accounts of one of the recorded FIIs. Both registrations are granted by the market regulator, SEBI. Foreign institutional investors mainly consist of mutual funds, pension funds, endowments, sovereign wealth funds, insurance companies, banks, asset management companies etc. Foreign institutional investors and their sub accounts can invest directly into any of the stocks listed on any of the stock exchanges. Most portfolio investments consist of investment in securities in the primary and secondary markets, including shares, debentures and warrants of companies listed or to be listed on a recognized stock exchange in India. An FII registered as a debt-only FII can invest 100% of its investment into debt instruments. Other FIIs must invest a minimum of 70% of their investments in equity. The balance of 30% can be invested in debt. Aims Of this paper are 1. To find out the impact of FII on Indian capital market, 2. To determine the behaviour and trend of FII's on Indians tuck market, 3. To determine the factors the influence investment decision of FII's, 4.To find out the relationship between the FIIs investment and Indian stock market, 5. To examine the correlation if any exists between the FII net equity flow and nifty, by using Linear Regression & Correlation.*

**Key Words:** Foreign Institutional Investment (FII), Indian Stock Market, Portfolio Management, Indian Capital Market.

## 1. INTRODUCTION

The foreign investment is necessary for all developing nation as well as develop nation but it may differ from country to country. The developing economies are in almost needed of these foreign investments for boosting up the entire development of the nation in productivity of the labour, machinery etc. The foreign investment or foreign capital helps to build up the foreign exchange reserves needed to meet trade deficit or we can say that foreign investment provides a channel through which developing countries gain access to foreign capital which is needed most for the development of the nations in the area of industry, telecom, agriculture, IT etc. The foreign investment also effects on the recipient country like it effects on its factor productivity as well as effects on balance of payments.

With integration of national and international market, the Indian stock market has witnessed a phase of exponential growth and expansion post globalization, which has been continuing since then. Today, Indian economy ranks the third largest economy in the world making the Indian markets a platform of enormous opportunities for growth in returns. The investments by global participants is an evident part of any prevalent economy in the present time and investment by FIIs has increased the breadth and depth of the Indian stock market and the movement by FIIs has lead the Indian investors in the similar movement. The present paper investigates the relationship between net investments by FIIs and return on BSE 100 Index for the period from 1st April 2000 to 31st March, 2012 using monthly data. The Granger Causality test has been used to find relationship between net investment by FIIs and return on BSE 100 Index. The empirical investigation reveals that the net investments by FIIs granger cause the return on BSE 100 Index. The results highlight that investment by FIIs series

### 1.1 DETERMINE FII FLOW IN INDIA

**1.1.1 Risk-**Whenever risk in home market increases, the foreign depositors would start to pull out of their home country thereby creating a deficiency of funds in

domestic market, hence so as to attract investment domestic interest rate would increase thereby to ensure that the above equality is restored

**1.1.2 Inflation-**At the time of high inflation, the **real return** on fixed income securities like bonds and fixed deposits **declines**. Thus a bond which gives says around 7.5% interest rate, actually gives a real return of just 1% if the inflation is 6.5%. If the inflation increases further, the real return would decline more.

**1.1.3 Interest rates** -For the business, cost of borrowing rises this has a negative result on their profit margins. As a result they **might even delay any investment activity which may be funded by borrowing** to some later period when the interest rates are lower so as to reduce their investment costs. Over the past year RBI has increased the repo rate reverse repo rate, CRR and SLR. This has led to an increase in the Prime Lending Rate (PLR) and hence the general interest rate in the economy.

**1.1.4 Good news /bad news** -If say there is some bad news in the nation, which affects that is decreases the asset price, which in turn decreases the return and hence FII would withdraw from the market. However on the other hand, if there is good news, asset prices would increase; thereby increasing return and hence FII would be attracted. But the sensitivity with which investors withdraw is greater than with which they invest i.e. they would be more cautious while investing than at the time of withdrawing. This is primarily due to their basic nature of being risk averse, thus they would react more vigorously to bad news than to good news

**1.1.5 Equity Returns-**The results show that, the equity return in India (RBSE) is the main driving force for foreign institutional investment, which is significant at all levels. That is increase in the returns in US stock market adversely affects the portfolio investment flowing to India. Predictable risk in foreign market (SDSRF) adversely affects FII flow to India and is highly significant in the model.

**1.1.6 GDP of India** -Both have more or less direct relationship. The reason is change in capital account. When interest rates were high India was attracting lot of investments so the credit balance was high for that period. It kept on increasing from 2003-04 to 2007-08 and interest rates also kept on increasing from 2003-04 to 2007-

08. besides there are various other factors like rules and regulation, taxation, govt. policies etc.

## **2. OBJECTIVE OF THE STUDY.**

2.1 To find out the impact of FII on Indian capital market.

2.4 To find out the relationship between the FIIs investment and Indian stock market.

2.5 To examine the correlation if any exists between the FII net equity flow and nifty.

2.6 To find out the impact of FII on nifty

## **3. METHODOLOGY OF RESEARCH STUDY**

This study gives the light on the factor affecting Indian stock market. FII is also very important factors which affect Indian stock market. Examine the contemporaneous relationship between net FII flows & equity market returns in India for the financial periods. By and large, this analysis revealed that there was an evidence of negative feedback trading hypothesis & positive feedback trading hypothesis by foreign investors before the respectively. This implies that FII acts as smoothening effect and destabilizes forces before and during the crisis period respectively. However, such positive feedback trading strategies from FII seems to be the rationale during the period in this paper we are using linear regression and correlation techniques.

With the help of this research paper one can easily analyze the future trend of the market. The main purpose to invest in stock market for each and every person is to earn more and more profit with less risk. This research paper suggest at what time which trading strategies should be used so a person can earn profit in any critical situation.

### **Hypothesis**

H0: There is no Significant Relationship between FII & Nifty

H1: There is significant relationship between FII & Nifty

## **4. LITERATURE REVIEW**

**4.1 Griffin, John M., Federico Nardari, and Rene M. Stulz. 2002. “Daily Cross-Border Equity Flows: Pushed or Pulled?” NBER Working Paper Series, no.9009.**

They analyzed the relationship between equity flows toward a country and stock returns of that country or the stock returns in the rest of the world for India and eight other emerging countries. By applying a bivariate structural VAR, and using daily data from 31 December 1998 to 23 February 2001, they obtain the empirical results that greatly differed from those of related studies. They rejected the null hypothesis that net foreign flows do not induce Indian stock returns in a Granger-causality sense, whereas they could not reject the null hypothesis that past stock returns do not induce net foreign flows in a Granger-causality sense. In addition, they pointed out that stock returns in North America have a statistically significant effect on equity flows towards Asian countries including India.

**4.2 Stanley Morgan (2002):“FII’s influence on Stock Market”, Journal: Journal of impact of Institutional Investors on ism. Vol 17. Publisher: Emerald Group Publishing Limited.**

He 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. His 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

**4.3 Bekaert, Geert and Campbell R. Harvey (2012),“Emerging Market Finance,” Mimeographed.**

They find much of the discussion of increased volatility of capital flows post liberalization, in many ways, “as odd”. “The emerging countries start with little or no capital flows and move to an environment (post liberalization) with significant capital flows which are, as expected, subject to portfolio rebalancing. Consequently, it is no mystery that the volatility of capital flows increases”. According to them “In fact, the segmentation model predicts that volatility should spike around the time of

market liberalization, but should then subside once the large capital inflow has occurred. Of course, there is always the worry that portfolio flows are not as “sticky” as foreign direct investment (FDI) and may disappear at a whim, causing a crisis in the process....” However, they find that, in terms of coefficient of variation, capital flows are more volatile in developed markets than in emerging markets.

**4.4 Gordon, James, and Poonam Gupta (2016), In their study on “Portfolio Flows into India: Do Domestic Fundamentals Matter?” IMF Working Paper, WP/03/20.**

Examined the determinants of FII equity flows into India in a multivariate regression modal using monthly data from March 1993 to October 2001. Their empirical result showed that a combination of this factor is important in the regressions, and that lagged stock returns individually exert the greatest influence on FII flows, followed by emerging market returns, and credit rating downgrades. Lagged stock returns was found to be negatively associated with FII flows, which suggests that foreign institutional investors are negative feedback traders.

**4.5 Bhanumurthy and Rai (2015 ) "Determinants of Foreign Institutional Investment in India; The role of Risk Return and Inflation", Development Planning Centre, Institute of Economic growth.**

By using monthly data from January 1994- November 2002, they examine the determinants of FIIs in Indian context by analyzing the effect of return, risk and inflation in domestic and foreign economy. Domestic and foreign returns are calculated using BSE- SENSEX for Indian stock prices and S&P 500 for US stock prices. To capture risk, monthly standard deviations are computed from daily returns on BSE SENSEX and S&P 500. He uses ex-ante risk rather than realized risk, because realized risk represents a combination of ex-ante risk and unexpected risk. Whole sale price index is used to calculate year on year inflation in India and Producer Price Index is used to calculate inflation in US. He finds that FII inflows depend on Stock Market Returns, inflation rate (both domestic and foreign) and Ex-ante risk.

#### **4.6 BatraAmita(2014) "The Dynamics of Foreign Portfolio Inflows and Equity Returns in India", ICRIE CR Working Paper 1**

He uses daily data on FII equity purchases and sales and equity returns between January 2000- December 2002 on the BSE SENSEX and monthly data between January 1994 to December 2002. He examines three issues, firstly if trading by FIIs reveals any trends of positive feedback trading secondly, if there is evidence of herding by the FIIs and lastly the destabilizing impact, if any, of the FII trading strategies on stock prices in India. To test positive feedback strategy, he predicts a relation between the past performance of the market (as indicated by value of market index) and the current FII investment.

#### **4.7 Sivakumar S (October 2003): "FIIs: Bane or boon?" , Journal : Journal of stock market volatility , Vol: 34. Publisher: MCB UP Ltd.**

He has analyzed the net flows of foreign institutional investment over the years, it also briefly analyses the nature of FII flows based on research, explores some determinants of FII flows and examines if the overall experience has been stabilizing or destabilizing for the Indian capital market.

#### **4.8 Trivedi & Nair, and Agarwal, Chakrabarti (2003), Journal: International Journal of foreign money supply Management, Vol: 19. Publisher: MCB UP Ltd.**

They 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 jacking-up the asset prices and sell when the asset prices are increasing. Hence, there is a possibility of bi-directional relationship between.

### **5. ANALYSIS**

Dependent variable is NSE, 1 independent variables FII, 1292 cases.

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 Variable      Coefficient      St. Error      t-value      p(2 tail)  
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Intercept	2609.7112	134.38606	19.419508	<.001
VAR1	136.56288	5.3589963	25.482921	<.001

R-Square = 0.3348      Adjusted R-Square = 0.3343

Cohen's f-square = 0.5034, a medium effect size.

### Analysis of Variance to Test Regression Relation

Source	Sum of Sqsdf	Mean SqF	p-value
Regression	454,161,484.352	1 454161484.352 649.37924	<.001
Error	902,197,480.868	1290 699377.89	
Total	1356358965.22	1291	

**A low p-value suggests that the dependent variable NSE may be linearly related to independent variable(s)FII.**

MEAN X = 24.698      S.D. X = 4.343      CORR XSS = 24352.88

MEAN Y = 5982.549      S.D. Y = 1025.003      CORR YSS =1356366000.0

REGRESSION MS=54161484.352      RESIDUAL MS= 699377.892

Pearson's r (Correlation Coefficient)= 0.5787

**The linear regression equation is:**

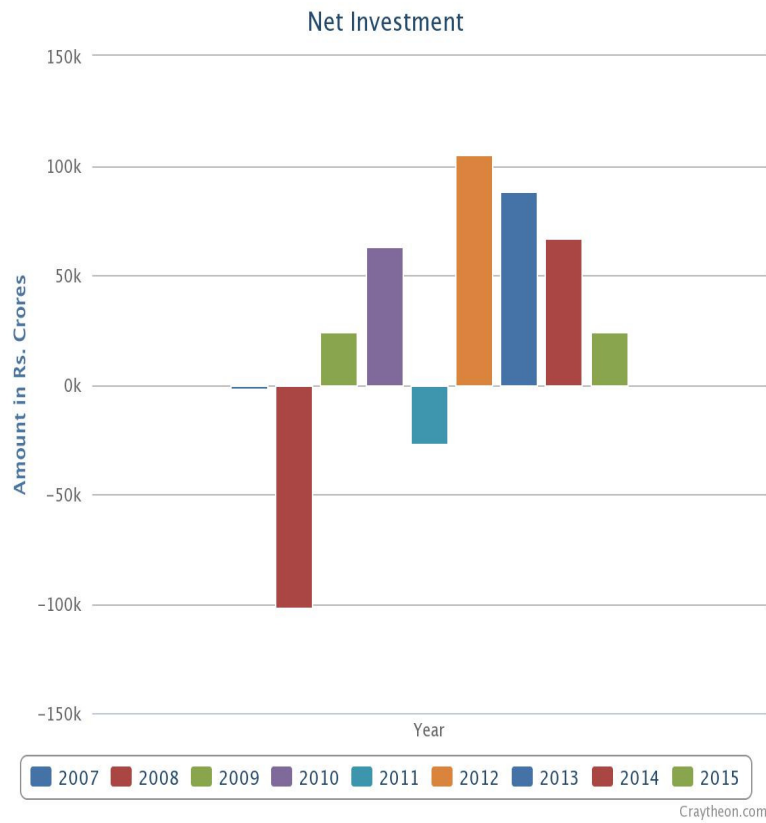
$$NSE = 2609.711 + 136.5629 * FII$$

**Test of hypothesis to determine significance of relationship:**

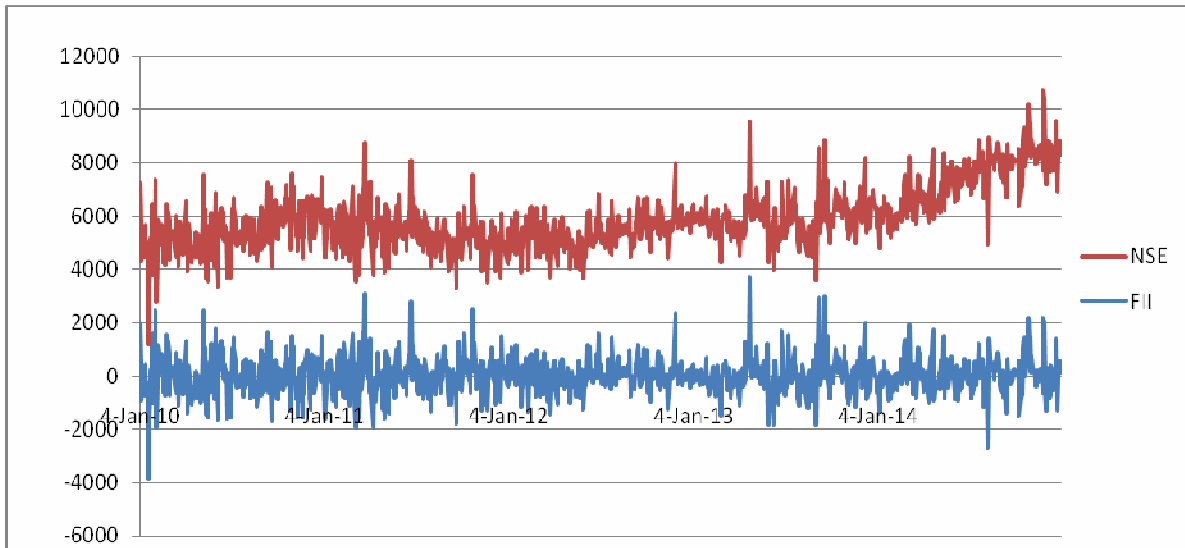
H(null): Slope = 0 or H(null): r ≠ 0 (two-tailed test)

t = 25.48 with 1290 degrees of freedom p ≤ .001S





[Source: [www.craytheon.com](http://www.craytheon.com)]



[Source: [www.indianstockmarket.com](http://www.indianstockmarket.com)]

## 8. 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 Rejected. Thus it is found that FII has a significant impact on Indian stock market.

The study conducted observed that investments by FIIs and the movements of nifty are quite closely correlated in India and FIIs wield significant influence on the movement of nifty. There is little doubt that FII inflows have significantly grown in importance over the last few years. According to findings and results, I concluded that FII did have high significant impact on the Indian capital market. Therefore, the alternate hypothesis is accepted. FII'S have positive impact on Nifty. However there are other major factors that influence the bourses 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.

In the absence of any other substantial form of capital inflows, the potential ill effects of a reduction in the FII flows into the Indian economy can be severe which can be seen at the time of U.S subprime crisis. Data on trading activity of FIIs and domestic stock market turnover suggest that FII's are becoming more important at the margin as an increasingly higher share of stock market turnover is accounted for by FII trading.

## 9. REFERENCE

- 9.1 Griffin, John M., Federico Nardari, and Rene M. Stulz. 2002. “Daily Cross-Border Equity Flows: Pushed or Pulled?” NBER Working Paper Series, no.9009.

- 9.2. Stanley Morgan (2002):“FII’s influence on Stock Market”, Journal: Journal of impact of Institutional Investors on ism. Vol 17. Publisher: Emerald Group Publishing Limited.
- 9.3. Bekaert, Geert and Campbell R. Harvey (2012),“Emerging Market Finance,” Mimeographed.
4. Gordon, James, and Poonam Gupta (2016), In their study on “Portfolio Flows into India: Do Domestic Fundamentals Matter?” IMF Working Paper, WP/03/20.
- 9.5. Bhanumurthy and Rai (2015 ) "Determinants of Foreign Institutional Investment in India; The role of Risk Return and Inflation", Development Planning Centre, Institute of Economic growth.
- 9.6. BatraAmita(2014) "The Dynamics of Foreign Portfolio Inflows and Equity Returns in India", ICRIECR Working Paper 1
- 9.7. Sivakumar S (October 2003): “FIIs: Bane or boon?” , Journal : Journal of stock market volatility , Vol: 34. Publisher: MCB UP Ltd.
- 9.8. Trivedi& Nair, and Agarwal, Chakrabarti (2003), Journal: International Journal of foreign money supply Management, Vol: 19. Publisher: MCB UP Ltd.

## **BIBLIOGRAPHY**

[www.etheses.saurashtrauniversity.edu](http://www.etheses.saurashtrauniversity.edu)

[www.accman.in](http://www.accman.in)

[www.slideshare.net](http://www.slideshare.net)

[www.shodhganga.inflibnet.ac.in](http://www.shodhganga.inflibnet.ac.in)

[www.papers.ssrn.com](http://www.papers.ssrn.com)

[www.indianresearchjournals.com](http://www.indianresearchjournals.com)