# Impact of FII (Foreign Institutional Investors) on Indian Stock Market with specific reference to Sensex and Nifty

**Dr. Bidhan Datta[1], Banantika Datta[2], Rajeshreeba Gohil[3]**

1. *Faculty of Economics & Management, ICFAI Business School, Pune, India*
2. *Research Scholar, IIM Bangalore, India*
3. *Post-graduate, ICFAI Business School, Pune, India*

**ABSTRACT**

*India being a developing country, Foreign Institutional Investors play vital role in stock market and economy. The major part of investments in Indian stock market is contributed by FIIs. More overseas investment may shift the control to foreign hands from Domestic firms. Thereforse, theperennial concern is up to what extent FIIs influence Indian Stock Market and role of RBI and SEBI on FII investments in India*.

*Investors on Dalal Street always have an eye on the stocks that have large FII holdings, as any escalation in FII selloff may eventually hurt the domestic industry. This paper is focused to identify the determinants of FII investments and to analyze its impact on Indian Stock market considering investment barriers, liquidity and firm size.*

***Keywords: FII, Indian Economy, Indian Stock Market, Investment Barriers, SEBI***

***JEL Classification: F21, G10, G12, G28***

## I. INTRODUCTION

Investment is a process where current consumption is foregone for future growth. In other words, surplus funds are parked for getting higher future returns and foreign investment refers to the investment made by residents of a country in the financial assets and production process of another country. Foreign investment can come to any country by two forms: FDI (Foreign Direct Investment) and FII (Foreign Institutional Investment). FDI was allowed in India as a part of reforming process, the government under its New Industrial Policy revamped its foreign investment policy recognizing the growing importance of FDIas having an effect on foreign exchange reserves in Indian economy. Capital market will gradually be opened up to foreign portfolio investors as recommended in *Narsimhan Committee* report.

Foreign investment is a necessity for developing country like India for building up foreign reserves, needed to meet trade deficit. It also provides access to foreign capital, required for the development of nation's agriculture, IT, telecom, manufacturing etc.India faced 'Balance of Payment Crisis' (BOP) in 1991. In July 1991, India had taken some steps to improve BOP position and restructure the economy. On implementation of LPG policy, the

ISBN : 978-81-943584-6-6

Indian economy has seen some positive consequences which included **r**eduction in unemployment, increase in GDP growth rate, increase in FDI and FII in India.

**FDI (Foreign Direct Investment):**FDI is an investment made by a firm or individual in one country into business located in another country.FDI can be in the form of capital investment, management expertise and technology**.**FDI cap increased continuously in insurance sector from 26% to 49%.In India, RBI (Reserve Bank of India) doesn't allow full capital convertibility for FDI.

**FII (Foreign Institutional Investment):**FIIincludes investments in financial markets such as money market, stock market and foreign exchange markets, e.g. an investor merely purchases equities of foreign based company. FII includes foreign based categories like Pension Funds, Mutual Funds, Insurance, Investment Trusts, Charitable Trusts, Banks etc. FII can invest in securities in primary and secondary markets including shares, debentures and warrants of companies those are unlisted, listed or to be listed on a recognized stock exchange in India, units of mutual funds, government securities, derivatives traded on a recognized stock exchange and commercial papers.

FIIoften doesn't lead tolarge employment generation for any economy and is for shorter term compared to FDI and it is often referred as *Hot money*.The investors can decide thetime of entry and exit from the economy and the percentage to be withdrawn, making it highly unstable and volatile. Investors invest in countries with high interest rates and favourable macroeconomic indicators. Investors can pull back portfolio investments if they expect any economic weakness in host country which often leads disastrous consequences for any economy. Some economists believe that FII flows have, in fact, had no significant benefits for the economy at large (Chakrabarti R, 2001).In India, FII investment has steadily increased from about Rs. 2600 crores in 1993-94 to over Rs. 11,000 crores in 1999-2000 and invested more than Rs. 8 lakh crores since 1992. Thus,the share of FII in total foreigninflows in India is increased to over 70% in 1999-2000 from 47% in 1993-94 (Chakrabarti R, 2001).

## II. LITERATURE REVIEW

Most of the developing countries opened up their economies by dismantling capital controls for attracting foreign capital, supplementing it with domestic capital in the early 1990's (Maram Srikanth and Braj Kishore, 2012).In Indian market, institutional investors are the major contributors and the primary importance lies on the foreign investment. It was inferred from the results of GARCH test analysis that FIIs investment are also contributing significantly to the volatility of Nifty and Sensex (Bashir Ahmad & Zahoor Ahmad, 2014).FII inflow depends on inflation rates and stock market returns (Bhattacharjee & Upadhyay, 2014). The huge volume of foreign investment and profit booking, the foreign investors can play as market makers in Indian market and may book their gains, (Trivedi and Nair, 2006). There is a strong evidence amongst FII, foreign exchange reserves and exchange rate (Bhasin, N., & Khandelwal, V. 2014). Krishna Reddy Chittedi (2009), in his research work analyzed the performance of sensex v/s FIIs. FIIs and institutional investors have provided a perfect support to the rising equity values. Expectations of increased foreign portfolio investment has driven

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traders' interest in the market. In another study it was found that there is no long- run equilibrium relationship between stock returns and exchange rate (Sundaram Kumar, 2009). FII investments have an impact on the Indian stock market& apparent unidirectional relationship was confirmed through'Granger-Causality Test' (Shivprasad, 2013).In Indian stock market, there is a high correlation between FII flow and the raise in the index (Aswini A. & Mayank Kumar, 2014). Behavior of Indian stock market influence by FIIs upto a certain extent, but there are numerous other reasons to determine the volatility of the S&P CNX Nifty (Raja Mannar, 2018).Hence, in this study, it is found appropriate to anlyse the Impact of FII on Indian Stock Market (SENSEX and NIFTY). Thus, few important factors those have greater impacts on FIIs are need to be discussed.

**Monitoring Foreign Investments in India**

FIIs must register with SEBI before they invest in India."RBI monitors the ceilings on FIIs, Persons of Indian Origin (PIOs) and NRIs investments in Indian companies on a daily basis, by using fixed cut-off points that are 2% percentage lower than the actual ceilings. For instance the cut-off point is fixed at 8 % for companies in which NRIs/ PIOs can invest up to 10 % of the company's paid-up capital and the cut-off limit for companies with 24 % ceiling is 22 %and so on. The cut-off limit for public sector banks (including State Bank of India) is 18 percent" (Source: rbi.org.in).

| FII Name | No. Of Companies Invested In | Total Value of Holdings as on 30 June 2016 (Rs.crore) |
|---|---|---|
| EUROPACIFIC GROWTH FUND | 16 | 51,564 |
| GOVT.OF SINGAPORE | 33 | 41,085 |
| OPPENHEIMER | 14 | 27,073 |
| ABU DHABI INVESTMENT AUTHORITY | 21 | 18,943 |
| GOVT.PENSION FUND GLOBAL | 77 | 14,599 |
| FIRST STATE INVESTMENTS | 23 | 14,104 |
| ABERDEEN | 21 | 13,087 |
| DODGE & COX INTERNATIONAL STOCK FUND | 3 | 12,657 |
| FRANKLIN TEMPLETON INVESTMENT FUNDS | 29 | 10,610 |
| VANGUARD | 9 | 10,338 |

Source: PRIME Database

https://economictimes.indiatimes.com/markets/stocks/news/dons-of-d-street-meet-the-10-biggest-fiis-in-india-and-the-stocks-they-love/articleshow/53721990.cms?from=mdr

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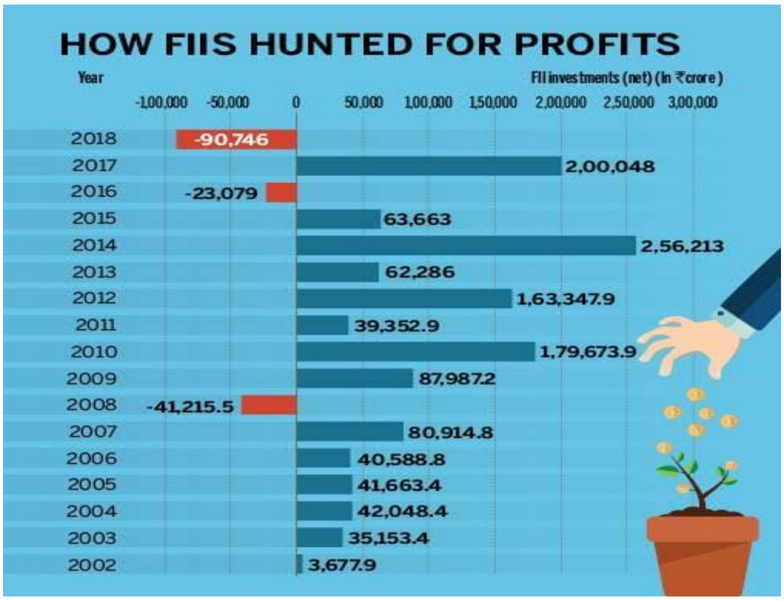


Source: Business today, October 17, 2018, *Aseem Thapliyal*

Since 2002, FIIs have made net withdrawals from the Indian market only three times: 2008, 2016 and 2018.

## III. DETERMINANTS OF FII FLOW IN INDIA

**World interest rates:**

For a business, cost of borrowing becomes more expensivewith the increase in interest ratesand hence yielding lower profit margins. In some cases, this may lead to a delay in investment activities which were to be funded by borrowing.The rise in interest rates in US sends a signal to FII to move towards US. Thus, FII will pull back money from Indian market and sudden withdrawal of huge amount from market will affect the Indian economy.

**Minimum Alternate Tax (MAT) on FII:**

MAT, which was likely to be imposed at the rate of 20 % on the FIIs, sold stocks worth Rs. 6500 crores in the first 10 days in month of May 2015. That implies a sharp fall in the index of Indian Stock market. The income tax department had sent demand to 68 FII resulting into tax demand of INR 602 crores. There were around 3,000 FPI (Foreign Portfolio Investors), which includes FII, where the tax demand could go up to INR 40,000 crores (Srinivas, 2016).

Country like Singapore and Mauritius contribute 30 % of the total FII flows, where the DTAA (Double Taxation Avoidance Treaty) has been signed will not be coming under MAT.Tax laws in India is vital concern about the FIIs in Indian economy and Minimum Alternate Tax (MAT) is one of the prominent determinants of FII flow in India.

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**Country risk measures (Macroeconomic Variables):**

FIIslook at various macroeconomic indicators like Fiscal deficit, IIP, current account deficit and GDP of any country, before investing into any country.PE(Price Earning) ratio of Indian SENSEX is seen before investment by FII.

PE ratio more than 21 is considered overvalued by FII and they will start selling their shares.PE ratio less than 21 or around 21 for Indian SENSEX is considered welcoming sign for FII entry. PE ratio is one of the most vital indicators used by investors in the case of FII in Indian Market.

**Inflation:**

During high inflation, the real return on fixed income securities like bonds and FD declines. Thus, a bond with around 7.5 % interest return givesa real return of only around 5 %.

**Good / Bad news:**

Bad news affects asset prices adversely, which leads to decreasing return and hence FII would withdraw from the market. On the other hand, good news leads to a rise in asset prices, which lead to increased returns and hence FII would invest more into the economy.

**Fluctuation of Rupee:**

Due to high Doller rate (exchange rate) more FII money comes in and also goes out from the economy when Dollar dips. Depreciation reduces FII, as they get less dollars in return after investment.

## IV. OBJECTIVES

To analyze the relation and impact of Foreign Institutional Investment on Indian Stock Market with special reference to BSE and NSE.

To study the impact of crisis on the Indian market

To study the impact of Macroeconomic variables and FIIs flows of country

To understand the relationship of FII flow and Nifty Return

## V. RESEARCH DESIGN (QUALITATIVE & QUANTITATIVE APPROACH)

### A. Qualitative Study:In Depth Interview technique and Focused Group method

With qualitative research, researchers seek more open and complete perspectives through in-depth interview on focus group. In depth Interview was carried out over 10 respondents. Respondents were Senior Officials and Chief Finance & Economics Officers of various mutual fund companies.The result is very much effective because a generalize idea has come out from the in-depth interview and through focused group method. The outcome of the discussion revels that FII investment and Sensex return has a positive relationship.

### B. Quantitative Study:

The quantitative study will be majorly based on primary as well as secondary data. Applied research will be conducted to analyze the growth trend of FIIs and its impact on various macroeconomic factors.In this study the research design adopted is Descriptive Research of cross-sectional studies and empirical in nature. The study is

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conducted for the period from 2007-2018.The analysis is done through correlation. The objective is to identify whether any relation exists between the net investment, FII purchases and sales with the equity market returns. Primary dada is collected through the questionnaire method on 5-point Likert scale and responses are collected from the investors to get the real feel of the situation. Number of respondents are 60 working professionals, working in managerial posts in corporate sectors.Secondary Research has been done by collecting data from the NSE, SEBI, Money Control, BSE, Way2 wealth, ANMI (Association of National exchange Members of India), EBSCO database, journals, books and research papers.

**Data Analysis of Secondary Research**

The closing Index of SENSEX and Equity net purchase by FII has been recorded in given table from year 2007 to year 2018 till April month. The analysis is done by correlating FII equity net investments and daily returns of SENSEX and NIFTY from BSE and NSE websites respectively.

**Hypothesis 1**

H1: There is no significant relationship of FII flow and Sensex Return

FII net Equity Investment and Sensex Return

| Sr.no | Year | FII (Rs. Crore) | Index | Sensex Return |
|---|---|---|---|---|
| 1. | 2007 | +70057 | 20286 | 46.71 |
| 2. | 2008 | -52986 | 9647 | -52.53 |
| 3. | 2009 | +83392 | 17,464 | 79.66 |
| 4. | 2010 | +133266 | 20,509 | 17.37 |
| 5. | 2011 | -2714 | 15,454 | -25.05 |
| 6. | 2012 | +128360 | 19,426 | 25.05 |
| 7. | 2013 | +113026 | 21,170 | 8.49 |
| 8. | 2014 | +97736 | 27,499 | 29.57 |
| 9. | 2015 | +17946 | 26,117 | -4.977 |
| 10. | 2016 | +21398 | 26,626 | 2.011 |
| 11. | 2017 | +51949 | 34,056 | 27.50 |
| 12. | 2018(till April) | +3301 | 34,915 | 2.51 |

Correlation coefficient between FII net Equity investment and Sensex return is 0.68228 for given period and it clearly indicates that FII net investment and Sensex return has positive relationship.

In T test, P- value is 0.0074, which is less than 0.05 (critical value), we reject the null hypothesis.So, it prevails that there is significant relationship between FII flow and Sensex Return.

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**Hypothesis 2**

H2: There is no significant relationship of FII flow and Nifty Return

FII net Equity Investment and Nifty Return

| Sr.no | Year | FII (Rs. Crore) | Nifty Return |
|---|---|---|---|
| 1. | 2007 | +70057 | 54.80% |
| 2. | 2008 | -52986 | -51.80% |
| 3. | 2009 | +83392 | 75.80% |
| 4. | 2010 | +133266 | 17.90% |
| 5. | 2011 | -2714 | -24.60% |
| 6. | 2012 | +128360 | 27.70% |
| 7. | 2013 | +113026 | 6.80% |
| 8. | 2014 | +97736 | 31.40% |
| 9. | 2015 | +17946 | -4.10% |
| 10. | 2016 | +21398 | 3.00% |
| 11. | 2017 | +51949 | 28.60% |

**Found Correlation Coefficient: 0.682699**

Since Correlation coefficient is positive 0.6, it shows that Nifty returns and FII flow influences each other in same direction either in upward or in downward direction.In both the cases SENSEX return and NIFTY return are positively correlated with FII flow in India.

**T test: P- value: 0.0070**

Since the Calculated value is 0.007 which is less than 0.05 (critical value), we reject the null hypothesis.So, it prevails that there is significant relationship between FII flow and NIFTY Return.

**Data Analysis of Primary Research**

For this study the data collected from 60 respondents through structured questionnaires,isframed on 5 points Likert scale.

i. FIIs trading in India is effect of positive Indian Stock market return and not the cause of it.

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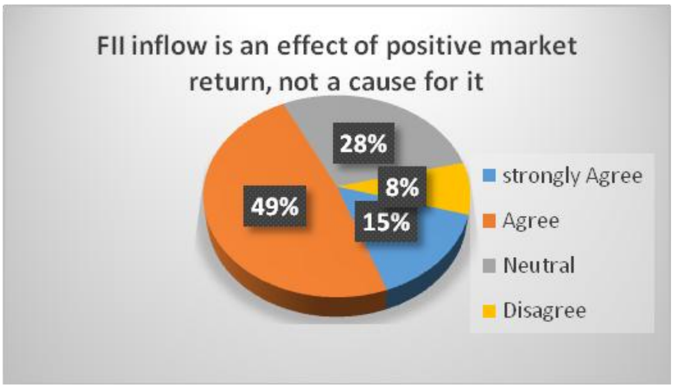
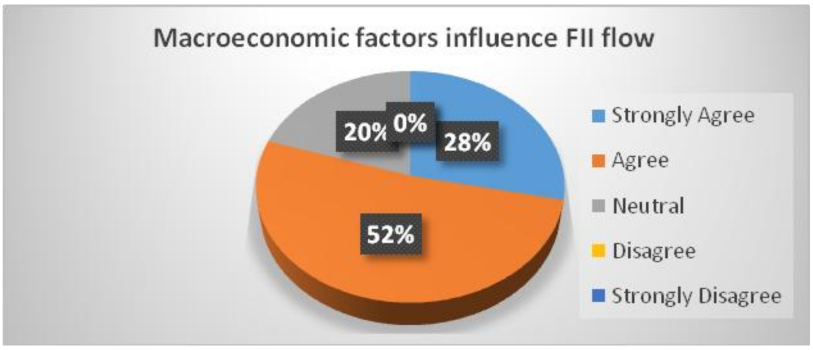


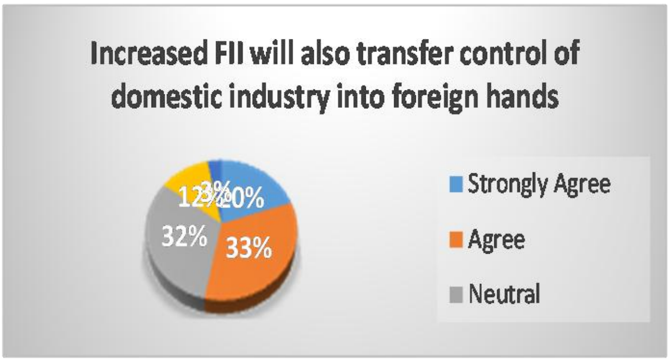

**Observations:** It is observed, 64% of respondents are agreed or strongly agreed that FII inflow is an effect of Positive Indian Market and not cause of positive market.

ii. Economic activity in India is one of the determinants of FIIs' investment in Indian Market (Macroeconomic variables and FIIs flows of country has positive co-relation).




**Observations:**It is observed that nobody disagreed or strongly disagreed on this point.80% of respondents agreed or strongly agreed that Macroeconomic factors of country are responsible for FII inflow.

➢ Increased investment from overseas may shift control of domestic firms to foreign hands.




**Observations:** It is observed that 53% of respondents believe that increased FII will transfer control of domestic industry to the foreign hands.

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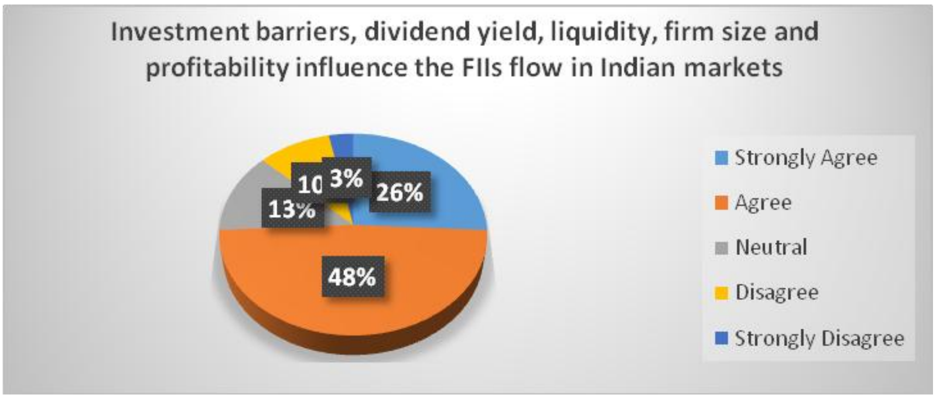
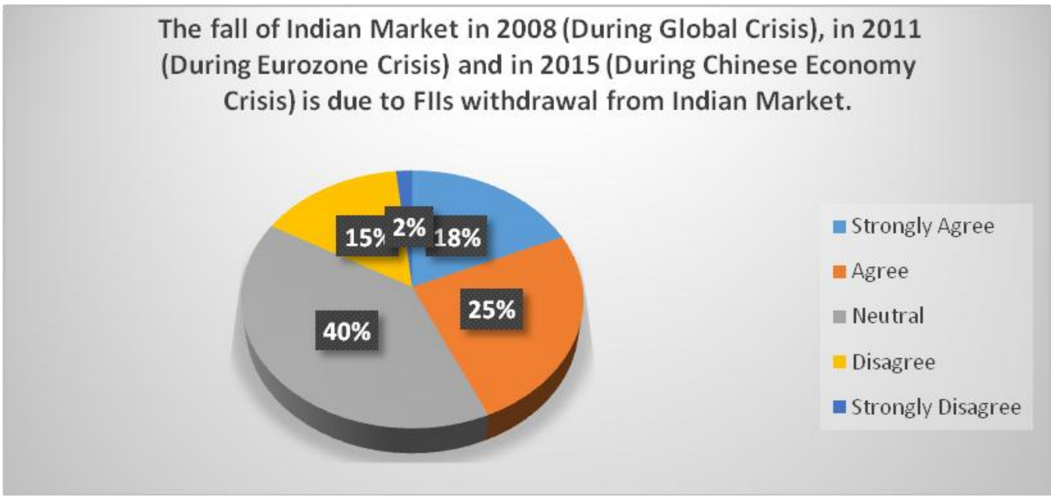
iii. Investment barriers, dividend yield, liquidity, firm size and profitability influence the FIIs flow in Indian market




**Observations:** It is observed that 48 % of respondents believe and agree that Investment barriers, dividend yield, liquidity, firm size and profitability influence the FIIs flow in Indian markets

iv. The fall of Indian Market in 2008 (During Global Crisis), in 2011 (During Eurozone Crisis) and in 2015 (During Chinese Economy Crisis) is due to FIIs withdrawal from Indian Market.




**Observations:** It is observed that 40% of respondents do not have any opinion about FII role and various past financial crisis.

They couldn't connect FII outflow with 2008 global financial crisis, 2011- Eurozone Crisis and 2015- Chinese currency crisis.

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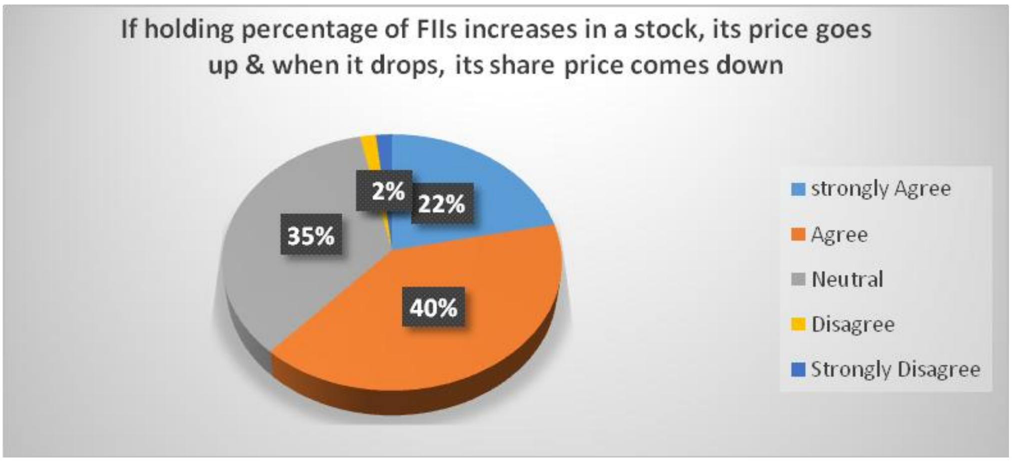
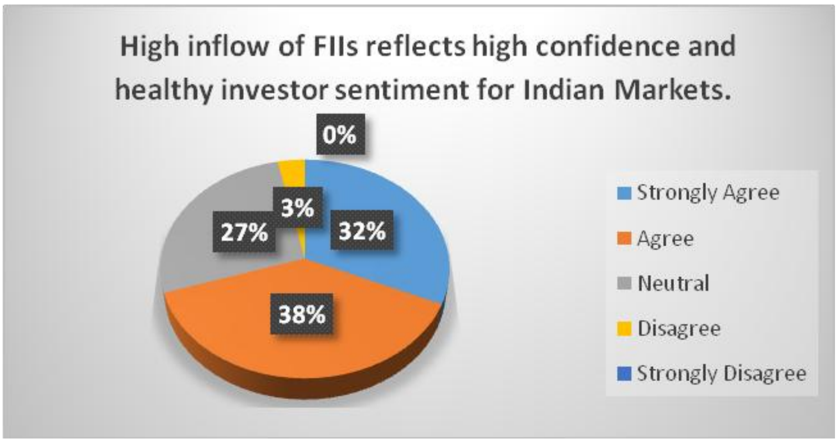
v. If holding percentage of FIIs increases in a stock, its price goes up & when it drops, its share price comes down.




**Observations:** It is observed that 40% of respondents agreed thatif holding percentage of FIIs increases in a stock, its price goes up & when it drops, its share price comes down.

vi. High inflow of FIIs reflects high confidence and healthy investor sentiment for Indian Markets.




**Observations:** It is observed that 70% of respondents agreed or strongly agreed that high inflow of FIIs reflect high confidence and healthy investor sentiment for Indian Markets

vii. Sudden withdrawal of FIIs leads to rupee depreciation

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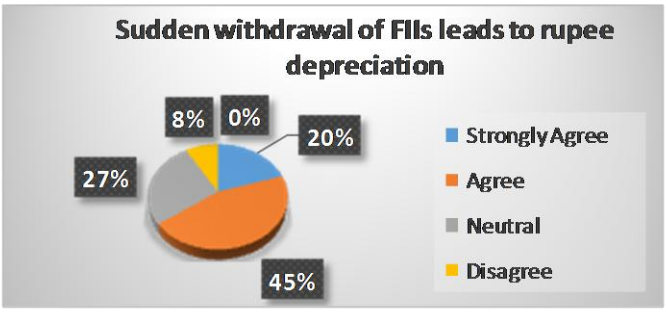
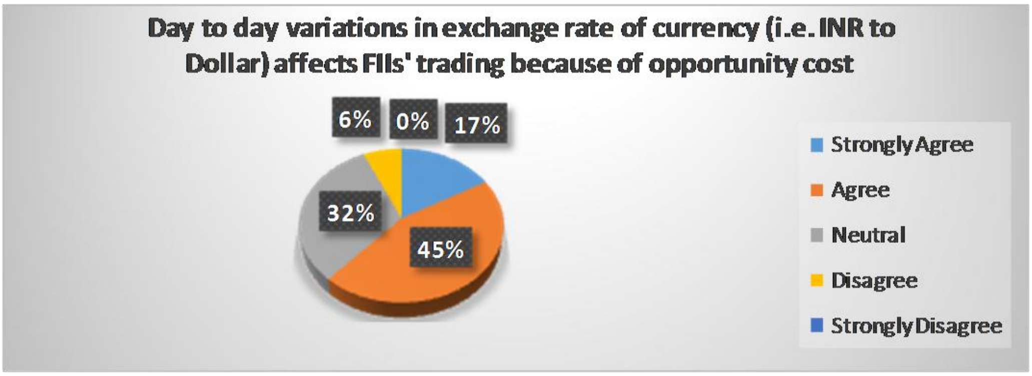


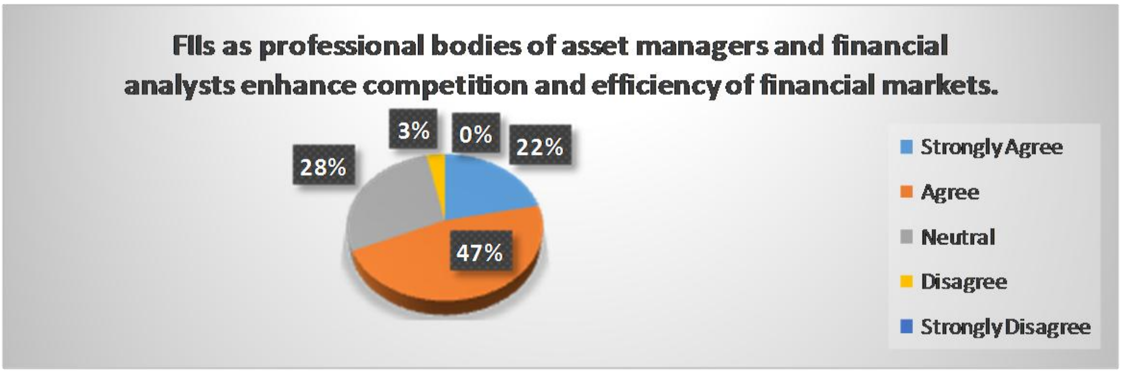

**Observations:** It is observed that 65% of respondents agreed or strongly agreed that sudden withdrawal of FIIs lead to rupee depreciation.

viii. Day to day variations in exchange rate of currency (i.e. INR to Dollar) affects FIIs' trading because of opportunity cost




**Observations:** It is observed that 45% of respondents agreed that day to day variations in exchange rate of currency (i.e. INR to Dollar) affects FIIs' trading because of opportunity cost.

ix. FIIs as professional bodies of asset managers and financial analysts enhance competition and efficiency of financial markets



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**Observations:** It is observed that 47% of respondents agreed that FIIs as professional bodies of asset managers and financial analysts enhance competition and efficiency of financial markets.

**STATISTICAL ANALYSIS**

**ANOVA**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1. | Regression | 3.981E7 | 1 | 3.981E7 | 88.350 | .000 |
| | Residual | 5.317E7 | 118 | 450593.239 | | |
| | Total | 9.298E7 | 119 | | | |

a. Predictors: (Constant), net _purchases or sales

b. Dependent Variable: SENSEX

- The ANOVA is one way to test whether our model is better than using just mean to predict outcome.
- When value is less than 0.05 it is considered to be significant to predict the outcome.

**Coefficients**

| Model | Unstandardized coefficients | | Standardized | | |
|---|---|---|---|---|---|
| | B | Std. Error | CoefficientsBeta | T | Sig. |
| (Constant) | -146.131 | 68.161 | | -2.144 | 0.034 |
| Net_purchase or sales | 0.083 | 0.009 | 0.654 | 9.399 | 0.000 |

a. Dependent Variable: return_stock_exchange

**REGRESSIONS**

**Impact of FII's on NIFTY**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .541(a) | .293 | .288 | 7.09787 |

**a. Predictors: (Constant), FII**

**CORRELATIONS**

| | | NSE NIFTY | FII |
|---|---|---|---|
| NSE NIFTY | Pearson Correlation | 1 | .541(**) |
| | Sig. (2 tailed) | . | .000 |
| | N | 143 | 143 |

| | | | |
|---|---|---|---|
| FII | Pearson Correlation | .541(**) | 1 |
| | Sig. (2 tailed) | .000 | . |
| | N | 143 | 143 |

- Correlation is significant at the 0.01 level (2 tailed)

**Interpretation:**

- Here P value is less than 0.05 which shows it is significant enough to reject null hypothesis.
- Which means FII inflow or outflow influences NIFTY significantly.
- There is positive relationship between FII flow and NIFTY and SENSEX of Indian Stock market.
- BSE SENSEX and NIFTY has moderate degree of positive correlation with FII's investment as a result their influence on stock prices cannot be completely ignored.

## VI. CONCLUSIONS

FII plays a very vital role in Indian Stock market return. Result shows that FII investment can lead Indian market to go up and withdrawal can lead Indian Stock market to fall down.In case of India, they control Stock Market except for last three years from 2016 when Mutual fund of India had outperformed FII.Considering volatility factor of FII, it is very essential for any country to pay attention towards its flow in economy and understanding its key features in order to predict chances of its sudden reversals.In particular 2018, total Net investment of mutual fund in India was 153490 crores INR whereas FII's total net investment in that year was -26185 crores (They sell their shares recently in 2018) observing performance of various macroeconomic parameters of India. This is also observed that during Global financial crisis, Eurozone crisis and Chinese Economy crisis, selling of FII from India market had given negative return. In June 2013, US Fed indicated that they are going to wind up bond buying program for first time on 20th June 2013, FII sold their shares worth Rs. 2100 crore within 2 hours of this announcement and Indian market (SENSEX and NIFTY) were down by 575 points and rupee depreciated by 1.5% in one trading session.SEBI and other regulatory bodies have improved trading efficiency in order to sustain FII's investment in India.With the help of trend analysis, it has found that FIIs are now more investing into Banking Sector and PSU sector.Before investing in India FIIs observe Macroeconomic parameters including Current Account Deficit, Fiscal deficit, GDP, Interest rates and IIP data.Data on the 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.It is observed that, FIIs are currently the most dominant and also control more tradable shares of Sensex companies than any other investor groups.The common observation was, generally people don't observe FII activity before investing into Stock Market.

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