

**A STUDY ON IMPACT OF FII AND DII ON NSE AND BSE**

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**ABSTRACT**

The purpose of study is to examine the impact of FII and DII on Indian stock market, a Descriptive statistic, correlation analysis and regression analysis are the tools used in this research. This study involves understanding relationship between the variables. The study mainly deals with how FII and DII have impact on BSE and NSE. Analysis have done by considering the period of last 10 years. Both NSE and BSE have been significantly affecting by foreign and domestic investments. The study used BSE and NSE (Sensex and Nifty 50) as dependent variable and FII and DII as independent variable.

**keywords:** BSE, NSE, FII, DII, Sensex, Nifty 50

**INTRODUCTION**

Domestic institutional investors" is referred to as DII. A specific category of investors known as DIIs commits to investing in the financial assets and securities of the nation, they are presently residing in. Political and economic trends have an impact on DIIs' investing selections. Domestic institutional investors (DIIs), like foreign institutional investors (FIIs), can have an impact on net investment flows in the economy. An FII is often an investor, investment fund, or asset that makes investments outside of its place of residence or registration. For foreign companies investing in the Indian financial markets, FII is utilized in India. In every economy, FIIs are important. The two stock exchanges that control the Indian stock market are the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE).

**STATEMENT OF THE PROBLEM**

DII has considerably aided in the growth and development of the economy. This investigation was done to find out how the BSE Sensex and NIFTY 50, two Indian stock exchanges, related to the flow of foreign and domestic investments. India attracts significant FII each year (foreign institutional investment). The effect of these foreign investments on the Indian economy has been profound. Since emerging economies have made the decision in recent years to achieve more, the interaction between foreign exchange, foreign institutional investments, and the stock market is vital.

**OBJECTIVE OF THE STUDY**

- To study the trend and pattern of DII and FII into Indian stock market.
- To study the relationship between DII, FII, and Indian stock market (BSE and NSE)
- To analyze the impact of DII and FII on Indian stock market

**I. REVIEW OF LITERATURE**

Aggarwal, V., Doifode, A., & Tiwary, M. K. (2022) This study examines the relationship that both domestic and foreign institutional net equity flows have with the India stock markets. The motivation behind is the study to examine whether increased net equity investments from domestic institutional investors has reduced the influence of foreign equity flows on the Indian stock market volatility.

In this study, Srivastava, P., & Varshney, S. (2022) studied How volatility affects the behavior of institutional investors in emerging markets. The investments made by domestic institutional investors (DII) have turned out to be a dynamic force for the development of Indian stock markets.

In this study S. Baranidharan<sup>1</sup> and N. Dhivya (2020) studied on Influence of Macroeconomics Factors Shock on Indian Stock Market: This study used the macroeconomic variable regime to assess the shock of BSE stock returns. The study chose representative macroeconomic indicators from the RBI website and [www.bseindia.com](http://www.bseindia.com).

On the other hand, Chhimwal, B., & Bapat, V. (2020) studied Impact of foreign and domestic investment in stock market volatility: DIIs provide a stable source of finance so the government needs to strengthen domestic investment and participation. This is to be done by changing the investment, saving outlook and tax policy of the country. Second, small-cap firms, mainly those firms that are in their early stages of development, need more financial stability and efficiency.

Balaji, C., Srikanth, A., & Babu, P. R (2020) studied a behavioral Study on Impact of FII and DII on Indian Stock Market. Stock markets are the indicators of any country's economic growth. Which indicates pulse of the country.

Saravana Krishnan, V., & Nandhini, M. (2020) in this research they have done a pragmatic study on interactions and frequency of nifty return, institutional: This study has examined the institutional investor of both foreign and domestic investment, and Nifty movements in India. FIIs investment and DIIs investment do have any relationship with Nifty return.

S. Baridhara, N. Dhivya, Alex (2019) studied on Influence of Changes of FDI And FII Flows on Indian Stock market: They studied that Indian stock market has experienced substantial growth during the past 20 years.

The work done by Gahlot, R. (2019) An analytical study on effect of FIIs & DIIs on Indian stock market the purpose of this research is to examine the effect of FIIs and DIIs activities on volatility of Indian stock market. This study also examined the causal relationship between FIIs and DIIs. This study uses Nifty, Nifty Next 50, BSE Sensex, and BSE 100 to represent Indian stock market

Baral, S. K., & Patra, S (2019) studied Impact of Investments by FIIs and DIIs on Liquidity and Volatility in Indian Stock Market: This analysis of market movement impact of mutual fund inflows and outflows for this study.

The other theory to be considered S Roy, S Deb (2019) The Impact of FII and DII on Indian Stock Market For exploring the relationship this study has been carried out and found that there was strong negative relationship exists between the DIIs and Nifty Return and are having positive relationship with the FIIs.

## **METHODOLOGY**

Type of research: Descriptive study Source of data: Secondary data

Dependent variable: BSE and NSE (SENSEX and NIFTY) Independent variable: DII and FII

Tools and techniques: Correlation, Regression analysis, descriptive statistics. Period of study: 10 years (2013 to 2023)

## **HYPOTHESIS**

### **Hypothesis 1:**

H<sub>0</sub>: Flow of FII and Sensex trend are independent H<sub>1</sub>: Flow of FII and Sensex trend are dependent.

### **Hypothesis 2:**

H<sub>0</sub>: Flow of FII and NIFTY trend are independent. H<sub>1</sub>: Flow of FII and NIFTY trend are dependent.

### **Hypothesis 3:**

H<sub>0</sub>: Flow of DII and Sensex trend are independent. H<sub>1</sub>: Flow of DII and Sensex trend are dependent

### **Hypothesis 4:**

H<sub>0</sub>: Flow of DII and NIFTY trend are independent. H<sub>1</sub>: Flow of DII and NIFTY trend are dependent.

## **Limitations**

- The study restricted only for 8 weeks (about 2 months)
- This study is based on last 10 years.
- The source of information is derived from secondary data.
- The only basis for the findings reached is performance over the previous years

**II. DATA ANALYSIS AND FINDINGS Table 4.1 Table showing Descriptive Statistics**

Particular	FII net purchase/sales	DII net purchase/sales
Mean	-2894.906	5791.7066
Standard Error	1773.231	1375.3814
Median	-895.935	4631.21
Standard Deviation	19424.77	15066.548
Sample Variance	3.77E+08	227000872
Kurtosis	2.325631	2.550837
Skewness	-0.31551	0.3694535
Range	103914.35	103914.35
Minimum	-65816.7	-48319.17
Maximum	65317.13	55595.18
Sum	-347388.7	695004.79
Count	120	120

**Interpretation**

In the above table, the average investment made by FII from 2013 to 2023 is represented by the mean value of 2894.906, median (-895.935), standard deviation (19424.77), minimum (-65816.7), and highest (65317.13) and, the average investment made by DII from 2013 to 2023 is represented by the mean value of 5791.71, median (4631.21), standard deviation (15066.55), minimum (- 48319.17), and highest (55595.18).

**Table 4.2 Table showing Correlation analysis**

Independent variable	Dependent variable	Correlation
SENSEX	FII	0.345001
	DII	-0.28298
NIFTY 50	FII	0.329894
	DII	-0.26396

**Interpretation**

In the above table we found that FII has a low degree positive correlation on SENSEX which is 0.34500. The positive value of correlation shows that when there is a decrease in FII, SENSEX will decrease. FII has a low degree positive correlation on Nifty 50 which is 0.329894. The positive value of correlation shows that when there is a decrease in FII, Nifty 50 will decrease we found that DII has a low degree negative correlation on SENSEX which is -0.28298. The negative value of correlation shows that when there is a decrease in DII, SENSEX will increase.

**Table showing Regression analysis**

**Regression analysis of FII and DII on SENSEX**

Regression Statistics	
Multiple R	0.31399
R Square	0.0995515
Adjusted R Square	0.0919205
Standard Error	11769.795
Observations	120

ANOVA	df	SS	MS	F	Significance F
Regression	1	1.6E+08	1.6E+08	12.3409	0.00099
Residual	118	1.3E+09	1.1E+07		
Total	119	1.5E+09			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	35290.475	1118.7	31.5659	4.40E-58	33075.2	37505.8
FII	0.282839	0.07084	3.99282	0.00011	0.14256	0.42312
DII	-0.17994	0.05615	-3.2049	0.00174	-0.2911	-0.0688

**Interpretation**

The above table indicates that R-Square value is 0.0995515, or 9.95%, which indicates that FII explains 9.95% variation in SENSEX. This implies that FII is impacting SENSEX to an extent of 9.95% and the remaining 90.05% of the impact is experienced by other independent variables. For 1 unit change in FII the SENSEX will show a positive change of 28.28%, i.e., for 1 unit increase in FII, SENSEX will increase by 28.28% or if FII decreases by 1 unit SENSEX will decrease by 28.28%. Since, the p value 0.00011 which is less than 0.05 H<sub>1</sub> is accepted and null hypothesis is rejected. There is significant impact of FII on SENSEX and both FII and SENSEX are dependent. Similarly, for 1 unit change in DII the SENSEX will show a Negative change of 17.99%, i.e. for 1 unit increase in DII, SENSEX will decrease by 17.99% or if DII decreases by 1 unit SENSEX will increase by 17.99%. Since, the p value is 0.00173 which is less than 0.05 H<sub>1</sub> is accepted and null hypothesis is rejected. There is significant impact of DII on SENSEX, both DII and SENSEX are dependent.

**Regression analysis of FII and DII on NIFTY 50 Summary**

Regression Statistics	
Multiple R	0.2969245
R Square	0.089251
Adjusted R Square	0.081533
Standard Error	3388.7835
Observations	120

ANOVA	df	SS	MS	F	Significance F
Regression	1	1.6E+08	1.6E+08	11.6236	0.00191
Residual	118	1.3E+09	1.1E+07		
Total	119	1.5E+09			

	Coefficients	Standard Error	t Stat	P-value	Lower95%	Upper95%
Intercept	10270.21	322.098	31.9051	1.33E-58	9632.37	10908.1
FII	0.077428	0.0204	3.79608	0.00023	0.03704	0.11782
DII	-0.04805	0.01616	-2.9727	0.00358	-0.0801	-0.016

**Interpretation**

The above table indicates that R-Square value is 0.089251, or 8.29%, which indicates that FII explains 8.29% variation in Nifty 50. This implies that FII is impacting Nifty50 to an extent of 8.29% and the remaining 91.71% of the impact is experienced by other independent variables. For 1 unit change in FII the Nifty 50 will show a positive change of 7.74 %, i.e., for 1 unit increase in FII, Nifty 50 will increase by 7.74% or if FII decreases by 1 unit Nifty 50 will decrease by 7.74%. Since, the p value is 0.000234 which is less than 0.05 H<sub>1</sub> is accepted and null hypothesis is rejected. There is significant impact of FII on Nifty 50, both FII and Nifty 50 are dependent. For 1 unit change in DII the Nifty 50 will show a Negative change of 4.80%, i.e. for 1 unit increase in DII, Nifty 50 will decrease by 4.80% or if DII decreases by 1 unit Nifty 50 will increase by 4.80%. Since, the p value is 0.0035789 which is less than 0.05 H<sub>1</sub> is accepted and null hypothesis is rejected. There is significant impact of DII on Nifty 50, both DII and Nifty 50 are dependent.

**Findings**

- It is found that FIIs significantly affect the movements of the stock market indices in India is now widely acknowledged. If one examines the entire FII equity trade in India and its correlation with significant stock market indices like the Sensex and Nifty.
- There is significant impact of FII on SENSEX FII explains 11.9% variation in SENSEX. This implies that FII is impacting SENSEX to an extent of 11.9% and the remaining 88.1% of the impact is experienced by other independent variables. There is a significant impact of DII on SENSEX and Nifty 50. There is significant impact of FII on Nifty 50.

➤ FII explains 9.95% variation in SENSEX. This implies that FII is impacting SENSEX to an extent of 9.95% and the remaining 90.05% of the impact is experienced by other independent variables. The positive relation between institutional investor inflows and Nifty and SENSEX suggests that their presence has boosted market efficiency. It also reveals the strong correlation between FIIs and Indian Stock Market indexes.

### **Conclusion**

This study indicates how DII and FIIs affected the Indian stock market. This study's key finding is that stock market performance affects foreign investment decisions. However, while FII are becoming more prominent in the stock market, foreign investment has played a major role in India's stock market rise Reference. The positive relation between institutional investor inflows and Nifty and SENSEX suggests that their presence has boosted market efficiency. It also reveals the strong correlation between FIIs and Indian Stock Market indexes.

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