# FLOWS OF FOREIGN INSTITUTIONAL INVESTMENTS ON THE INDIAN STOCK MARKET

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## 1. ABSTRACT:

Capital is seen as a very significant component of economic growth. For a developing nation like India, domestic capital is insufficient to meet all of the needs of the economy. In that situation, foreign funding is crucial. There are two types of foreign capital: FDI and FII. Compared to FII, FDI is considered a more reliable foreign money source. However, FII inflows and outflows have a direct influence on the stock market. As a result, FIIs have become important players in the Indian Stock Market. In addition to examining the trend and pattern of FII flow in India, this research also looks at how FII and Nifty are related.

Indian stock markets have recently experienced unheard-of expansion. The patterns of foreign investment in the stock markets have changed significantly along with growing development and expansion. In this context, the academic community is increasingly looking into the connection between Nifty and Foreign Institutional Investors (FIIs). This study's main objective is to analyse this link throughout the course of ten years, from 2013 to 2023. The analysis is done on the connection between FII and the returns on the NIFTY50 broad market index. To ascertain the relationship between foreign institutional investors and the nifty, this study uses correlation, regression, and growth trend analysis.

The early 1990s saw the beginning of the financial sector reform, which completely altered India's development plan. The initial strategy of primarily using loan flows and official development aid to finance the current account deficit has changed to utilizing non-debt-creating capital flows. Foreign Institutional Investors (FIIs) have been permitted to invest in financial products in India under this strategy since September 14, 1992, and as a result, the volume, size, depth, and nature of the Indian financial markets have significantly changed. FIIs are crucial to emerging economies because they provide capital and funds to companies in developing nations. Since large

corporations like investment banks, mutual funds, etc. invest a sizable sum of money in the Indian markets, foreign institutional investors play a crucial role in any economy. Hedge funds, mutual funds, insurance providers, and investment banks are typical examples of these investors. In most cases, FIIs have stock positions in international financial markets. Because of the healthy influx of cash as a result, the capital structures of the companies that FIIs participate in often have improved. As a result, FIIs support capital market expansion and financial innovation. The domestic financial markets may experience a sharp swing as a result of an FII's arrival.

**KEYWORDS:** FIIs, NSE, Correlation, Regression, Growth trend.

## 2. INTRODUCTION:

Domestic Institutional Investors (DIIs) and Foreign Institutional Investors (FIIs) are two categories of highly organized market participants on the Indian Stock Exchange. The FIIs are institutional bodies that are established outside of India, unlike the DIIs, which are based in India. They view investment opportunities in the Indian stock market primarily based on various economic factors relating to Indian industries and the overall long-term growth story of the country. FIIs are subject to regulation in India by the Securities and Exchange Board of India (SEBI), and they are required to abide by the rules, which call for institutional investors to register as such. Outside of India, FIIs are represented by organized investment companies, such as Foreign Pension Funds, Foreign Mutual Funds, Asset Management Companies (AMCs) and Foreign Securities. Foreign portfolio managers, trusts, foundations, endowment funds, and so on. As seen by the frequent influence on share prices and associated indexes, FII activities have an impact on Indian markets.

The massive FII inflows are having an impact on the stock market in general as well as the different types of shares specifically. FIIs can occasionally cause extreme volatility in share prices and indices. However, there isn't a clearly defined pattern of their behavior, in part because they have an extremely opportunistic approach to investing and are influenced by financial factors outside of India and other investment opportunities in other emerging economies. As a result, there are many variables that could influence how they invest in the Indian Stock Market.

Investors who invest in the financial assets of a nation other than their own are referred to as foreign institutional investors. These investments are done by buying stock, bonds, etc. from companies located in other nations. A "Foreign Institutional Investor" is defined as an institution founded or incorporated outside of India that seeks to invest in securities in India by the Securities and Exchange Board of India (Foreign Institutional Investors) Regulations, 1995. Insurance firms, hedge funds, pension funds, and mutual funds make up the majority of FIIs.

Foreign institutional investments are crucial for developing countries and have significantly impacted capital inflows into India. Even while FDI is still the preferred method of bringing in foreign capital, FIIs have proven to be quite beneficial. Since FIIs were permitted in India in 1992, there has been a significant change in the way people invest. The governance structure for FIIs in India has undergone adjustments as well. India was the preferred equities market for international investors in 2015, with 43% of the vote, followed by China with 26%,

according to a Bank of America - Merrill Lynch (BofA-ML) survey in which 50 investors took part. The total amount of FII investment in Indian equities for 2017 was INR 51,252 crores. This is primarily due to the fact that investors seek to profit from their investments in Indian equity markets, demonstrating that there may be some relationship between FII investment and stock market success.

If there is a correlation between FII investments and stock market performance, it is important to determine whether FII investments drive up the stock market performance or whether higher stock market performance drives up FII investment. This research article intends to investigate a relationship that has been the subject of ongoing empirical and theoretical inquiry. After demonstrating a link between FII investment and Stock Market Performance, the cause-effect relationship will therefore be examined because it is conceivable for variables to be related but yet not have a cause-and-effect relationship. By measuring the returns on broad market indices, it is possible to gauge stock market performance. To conduct the analysis, NIFTY has been chosen, and data for a 10-year time period will be collected. Ten years of FII data (2013-2023) are collected.

## Some major impacts of FII on stock market:

- They increased depth and breadth of the market.
- They played major role in expanding securities business.
- Their attention on the fundamentals of the stock had led to effective pricing of the stock.
- These effects increased the appeal of the Indian stock market to both foreign and domestic investors.
- The influence of FII is so great that anytime FII tends to withdraw money from the market, local investors become concerned and do the same.

## **NATIONAL STOCK EXCHANGE:**

The National Stock Exchange (NSE) is the leading stock exchange in India. It was established in the year 1992 and it is located in Mumbai. The NSE provides a platform for buying and selling various financial instruments such as equities, derivatives, currencies, and bonds. It operates on an electronic trading system, which allows for efficient and transparent trading. The NSE is regulated by the Securities and Exchange Board of India (SEBI) and follows strict rules and regulations to ensure fair and transparent trading practices. It offers a wide range of products and services, including cash equities, equity derivatives, currency derivatives, and interest rate derivatives.

The top 50 companies listed on the exchange make up the Nifty 50, the NSE's premier index. It is frequently used as a benchmark for the Indian stock market and is regarded as a sign of both investor confidence and market trends. The NSE was crucial in introducing cutting-edge trading technologies and procedures, and it has contributed significantly to the growth of the Indian capital market. It has helped the Indian economy expand by offering a stable and effective platform for capital formation and investment.

#### TRADING COMMODITIES:

Through its subsidiary, NSE Clearing Limited (previously known as National Securities Clearing Corporation Limited or NSCCL), the Indian National Stock Exchange (NSE) provides trading in commodities. On the NSE platform, the commodity derivatives segment is run by NSE Clearing Limited. Financial instruments known as "commodity derivatives" get their value from underlying commodities like gold, silver, crude oil, natural gas, and more. Market participants can use these derivatives to speculate on future commodity price movements or to protect against price fluctuations.

#### 3. LITERATURE REVIEW:

- 1. Rahul Dhiman, (2012), Impact of foreign institutional investor on the stock market. The research objective is to know whether the stock market is affected by foreign investment. The study covered the period from 1st April 2006 to 28th February 2011. The primary source of data is the website of the National Stock Exchange wherein we got data regarding daily data on FIIs purchases and sales on NSE and Daily Advances and Decline Data of NSE.
- 2. Biswa Swaup Misra (2020), The Role of FIIs in the Indian Stock Market. The study uses both daily and monthly data on Net FII inflows (surplus of FII inflows over FII outflows) for the period April 2007 and December 2011. The causality analysis performed on monthly data reveals that neither net FII inflows granger causes return on Nifty nor returns granger cause FII inflows in the four sub-periods.
- 3. Aditya Vimal, (2022), The Impact of FII on Indian Economy and Stock Market. The data for the study was gathered from 2011 to 2021 and included monthly FII flow and Nifty50 index data. When collecting FII data, the total amount of net equity investment was taken into account. Our analysis shows that though it appears in preliminary analysis (plot similarity and correlation test) that there is a strong correlation b/w FII Investments and NIFTY50 .this is not the case which gets clear by the conclusion we can draw from regression analysis.
- 4. Ruchika Sikarwar (2018), The impact of FII flows on the stock market performance in India. The research objectives are to determine whether there exists a relationship between FII investment in India and Stock market performance and to examine the nature of such a relationship. A quantitative approach has been used by ascertaining variables and using statistical techniques to understand the impact of FII investment on stock market performance. The present study is empirical in nature as it is data-driven research wherein proof is sought that certain variables affect other variables in some way.
- 5. Krishna Kumar, S Sireesha and K Anand, (2018). A Study on the Impact of FII on the Indian Stock Market. The main objective of this study is to know if the flows of FII investments have an impact on the volatility and stability of the Indian stock market. This paper studies the impact of FIIs on Nifty 50 from July 2015 to February 2018 by dividing it into pre and post-demonetization periods. Tools like the ADF test, Granger's causality test, correlation, and regression have been used. There was no causality before

demonetization, but causality was seen after demonetization. A regression equation has been formulated to determine the relationship between FII and Nifty 50 after demonetization.

## 4. OBJECTIVES OF THE STUDY:

The main objective of this study is:

- 1. To analyse the relationship of Foreign Institutional Investors on the Indian stock market.
- 2. To know the impact of Foreign Institutional Investment on the Indian stock market.
- 3. To understand the growth trend of Foreign Institutional Investment (FIIs).

## 5. RESEARCH METHODOLOGY:

For the purpose of the present study of the effect of FIIs on major Index NIFTY of NSE of the Indian Stock Market. The secondary data have been used from various authentic sources primarily from the NSDL website. The data of the last 10 years from the calendar year 2013 to the calendar year 2023 have been taken for study and analysis. The FII Data on a monthly basis have been extracted from the website of NSDL and the data is part of yearly reports of FII investment in India. On the other side, the most popular equity index of the NSE, as one of the broad markets benchmarks to compare FII Flows with stocks listed on the NSE. It is based on the free float market capitalization approach and consists of 50 financially stable and reputable Indian corporates listed on the NSE. The association between FII operations and the Effect on NSE Index has been studied and examined using a variety of statistical methods and tests, notably mean, correlation analysis, and regression analysis.

## **6. LIMITATIONS:**

- Data for the cash segment of the equity market are collected; futures and options are not included.
- Only movements in equity market are observed, transactions in debt market are not covered.
- The study use of secondary data is limited, as different websites display different information about FIIs.
- Only 10 years of FII data taken into consideration.

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## 7. DATA ANALYSIS AND INTERPRETATION:



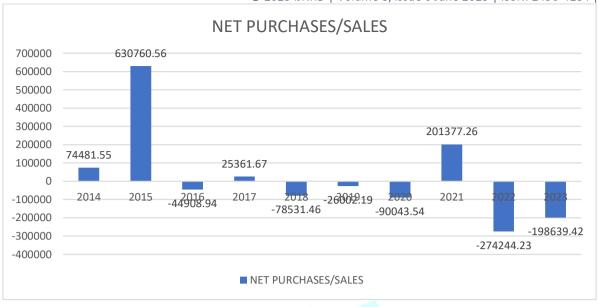
Graph 1: Gross Purchases of FII from 2013 to 2023

The above graph shows year-wise total gross purchases of foreign investments from the year 2013 to 2023. From the year 2014 to 2023 the gross purchases increased yearly. In the year 2023, the gross purchases move to 2013048.75 Crores which is the highest ever total from the last 10 years.



Graph 2: Gross Sales of FII from 2013 to 2023

The graph shows year-wise total gross sales of foreign investments from the year 2013 to 2023. In the year 2022 the gross sales are highly increased which is 220804.33 Crores. The lowest gross sales were found in the year 2014.

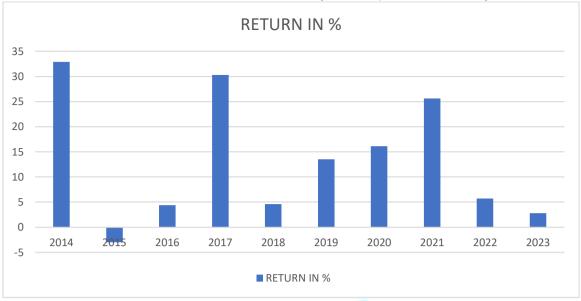


Graph 3: Net Purchases/ Sales of FII from 2013 to 2023

The above graph shows year-wise total net purchases and sales of foreign investments from the year 2013 to 2023. In the years 2014, 2015, 2017 2021 the net purchases and sales move into positive figures. In the years 2016, 2018, 2019, 2020, 2022,2023 the net purchases and sales move into negative figures.

Table 1: Nifty returns from 2013 to 2023

YEAR	NIFTY RETURN %
2014	32.9%
2015	-3.0%
2016	4.4%
2017	30.3%
2018	4.6%
2019	13.5%
2020	16.1%
2021	25.6%
2022	15.7%
2023	2.8%



Graph 4: Nifty Return in % from 2013 to 2023

The above graph shows the Nifty returns in % from the year 2013 to 2023. The above returns are taken from the NSDL website. In the year 2016, the return moves into a negative figure apart from that all the year returns in a positive figure. The highest return was found in the year 2014 which is 32.9 Percent.

## **Hypothesis:**

- 1. H0: There is no significant relationship between FIIs investments and nifty.
- 2. H1: There is a relationship between FIIs investments and nifty.

# **Correlation between FII and Nifty:**

Correlation analysis is a statistical technique used to measure the degree of association or relationship between two or more variables. It helps determine how changes in one variable are related to changes in another variable. Correlation is typically measured using correlation coefficients, which provide a numerical value that represents the strength and direction of the relationship between variables.

**Table 2: Correlation analysis** 

		Nifty	FII
Pearson Correlation	Nifty	1.000	.514
Kerear	FII	.514	1.000
Sig. (1-tailed)	Nifty		.042
	FII	.042	
N	Nifty	10	10
	FII	10	10

a. DependentVariable: NiftyReturn

## **INTERPRETATION:**

Correlation has been used to determine the statistical relationship between variables under study FII and CNX nifty. Based on the results it can be concluded that there is a moderate positive correlation of 0.51 between FII and Nifty. Since the significance value is 0.042 which is less than 0.05, we should reject the null hypothesis. There is a relation between FII and Nifty.

## Regression analysis between FII and Nifty:

Regression analysis is a statistical technique used to model the relationship between a dependent variable and one or more independent variable. It is commonly used for predicting or explaining the behaviour of the dependent variable based on the values of the independent variables.

**Table 3: ANOVA** 

		Sum of	df	Mean Square	F	Sig.
		Squares				
1.	Regression	1084 <mark>6</mark> 905.448	1)	10626905.668	3.859	0.35(a)
	Residual	28723353.216	10	290213.129		
	Total	40150258.684	11			

a. Predictors: (Constant), Gross Purchases

Table 4: Model Summary

Model		R	R Square	Adjusted R	Std. Error of the
	nte	ernation	ial Res	Square	Estimate
1		.514(a)	.245	.188	1643.813563

a. Predictors: (Constant), Net Values

**Table 5: Coefficient** 

	Don	Un-stand	dardized	Standardized		
	Ke/e	coefficient		coefficient		n
		В	Std. error	Mean square	t	Sig.
						-
1	(Constant)	2902.533	625.188		4.323	.001
	FII	.013	.007	.514	1.826	.035

a. Predictors: (Constant), Net Values

b. Dependent Variable: Nifty Return

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## **INTERPRETATION:**

Regression has been used to determine the strength of the relationship between FII and Nifty. R-Square value is 24% which means the model explains the 24% variation. In other words, the independent variable FII is able to explain the 24% variation of the dependent variable Nifty. The p-value is 0.035 which is less than 0.05 which means the alternative hypothesis is accepted and there is a significant impact of FII on Nifty.

## **DESCRIPTIVE STATISTICS:**

Descriptive statistics is a branch of statistics that involves summarizing and describing the main feature or characteristics of a dataset. The mean or average is calculated by summing up all the values in a dataset and dividing it by the total number of observations. The median is the middle value of a data set when it is arranged in ascending or descending order. It represents the value below and above which 50% of data falls.

**Table 6: Descriptive Statistics** 

	Gross Purchases	Gross Sales	Net Value
N	120	120	120
Mean	90189.580 <mark>2</mark>	88640.0281	1.549653
Median	91999.0850	8767.2700	1.484053
Variance	1.16459	1.15159	2.09958

## **INTERPRETATION:**

The above data represent descriptive statistics of the FIIs gross purchase, FIIs gross sales, Net Purchase and Sale on monthly basis. I have taken data April 2013 to March 2023 (120 months) time duration for data analysis. The Mean value gross purchase is 90189.58 Cr and gross sales is 88640.03 Cr which indicate every month purchase is higher than sales. The average yearly Nifty return is 14.29% and variance is 24% which indicate Indian stock market is more volatile.

# Growth Trend of FIIs for the period 2013-2023:

Growth trends quantify the rate of growth over a specified period of time. A growth trend can be measured over any period of time, such as a month, year or decade. Determining the growth trend can help you predict future growth.

The following formula is useful to calculate the growth trend analysis:

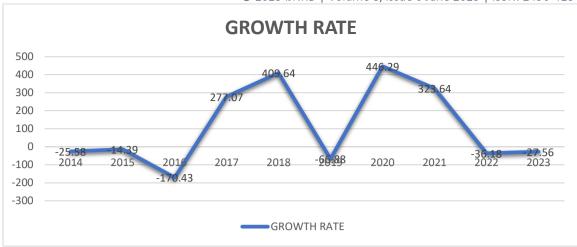
Growth trend =  $\frac{\text{Current Year} - \text{Previous Year}}{\text{Previous Year}} \times 100$ 

**Table 7: Growth Trend Analysis:** 

YEAR	NET PURCHASES/ SALES	GROWTH RATE
2013	100087.84	-
2014	74481.55	-25.58%
2015	63760.56	-14.39%
2016	-44908.94	-170.43%
2017	25361.67	277.07%
2018	-78531.46	409.64%
2019	-26002.19	-66.88%
2020	-90043.54	446.29%
2021	201377.26	323.64%
2022	-274244.23	-36.18%
2023	-198639.42	-27.56%
TOTAL		1130.01

**INTERPRETATION:** It shows that even though the Net Purchases/Sales of Foreign Institutional Investments are declining, the growth rate has been increasing and decreasing throughout the 10 years due to the fact that foreign investors are keener on investing in emerging economies rather than settled economies because of the biggest advantage of the potential high growth and diversification.

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Graph 5: Growth Rate of FII from 2013 to 2023

The above graph shows about the growth rate of foreign investments. In the year 2018 and 2020 the growth rate is highly increased but after 2020 the growth rate goes into down. There is lot of fluctuation in the stock market. There is no steady growth in the foreign investments.

## 8. FINDINGS:

- There is a relationship between the FII and Nifty Stock Market Index.
- FII flows increased and decreased the growth rate from 2013 to 2023.
- The regression analysis shows there is a significant impact of FII on Nifty.
- FII is able to explain the 24% variation of the dependent variable Nifty.
- The descriptive statistics indicate that every month purchases are higher than sales.
- The largest number of FII is from the USA ultimately the foreign investment from USA is the maximum.
- FII investments seem to have influenced the Indian stock market to a considerable extent. Analysis suggested a strong influence of FII investments on the nifty.

## 9. SUGGESTIONS:

- Government rules may make investing more challenging. For instance, restrictive planning regulations may deter investment. Government tax breaks and subsidies, on the other hand, can promote investment. Therefore, the government can implement policies to ensure that investment costs are supported, which will encourage more investment.
- The investor has to be careful of exchange rate fluctuations. Currency movements can impact their investment returns positively or negatively, so assess and manage this risk accordingly.
- ➤ Only if the investor is confident in future costs, demand, and economic prospects will they invest. Economic expansion and interest rates, as well as the general political and economic environment, will have an impact on confidence.

- ➤ The investors have to stay update and regularly monitor the market conditions. This will help to make informed decisions and to take necessary actions.
- ➤ Encourage investors from other countries by changing the regulatory policies of FIIs. This will help to improve the country's economy.
- > To reduce risk, the investor must diversify their holdings across various industries and asset classes. When a certain market or sector underperforms, diversification helps shield their portfolio from potential losses.

## 10.CONCLUSION:

Since the introduction of financial reforms in 1991, the Indian Capital Market has seen a number of changes. Since liberalisation began, the Indian Stock Market has undergone significant changes. It is currently thought to be one of the most alluring areas for foreign institutional investors (FII). The importance of institutional investors has greatly expanded as a result of ongoing globalisation. India is regarded as a rising market, and its stock markets provide all Indian investors with a wide range of appealing investment possibilities. In the past five years, there have been some notable reforms and developments on the Indian Stock Market, reflecting a growth in FII trust.

The impact of foreign institutional investors (FIIs) on the Indian stock market is discussed in the study. It was concentrated on the role that FIIs played in the Indian Stock Market; their percentage of all foreign investments is unquestionably evidence of the significant amount that they contributed. If one looks at the total FII trade, there is a steadily growing influence of FIIs in the domestic stock market. Indian Stock Market are an attractive investment opportunity as they are not dependent on the world economy. Moreover, Indian markets offer a wide variety of sectors and companies. The only factor that determines the behaviour of the FIIs is the opportunity for profit, if they feel that a market has the potential for profit, they will invest.

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