

**Foreign Institutional Investors vs Mutual Funds comparison of flows from 1999  
to 2020**

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**Abstract:** Mutual Funds (MF) is an open-ended professionally managed investment fund that collects the money from numerous financial investors to purchase securities. The investment in MF is done by institutional investors including Foreign Institutional Investors and retail investors. The study is aimed to analyze the statistical relationship between the FII and the MF. The comparison between Mutual Funds and FII shows the total flow of funds in the stock market.

**Keywords:** FII Net Flows, MF Net Flows

**Introduction:** - The Indian stock market has been affected by strong Institutional flows in the last 3 decades. The FII (Foreign Institutional Investors) always had a very strong influence on Indian stock market due to their strong inflows and outflows. Our markets simply danced to their tune, when they invested our markets went sharply up but whenever they pulled out the money, our markets have fallen like a deck of cards. Thus this is the crucial aspect of the working of the Indian stock market. But in recent years, Indian mutual funds have become strong players and their contribution has provided a certain degree of stability in the markets. In the last few years, the Indian mutual funds have become the backbone for the Indian stock markets as they are witnessing steady flows from the retail investors through the Systematic Investment Plan (SIP).

This paper tries to analyse the statistical relationship between the FII and MF flows from 1999 to March 2020 into the Indian stock market. The paper would give insights into the effect both these institutions have on the Indian stock market and also how their flows have differed in different situations related to the world economic events.

### **Foreign Institutional Investors**

FII were allowed to invest in the Indian stock market from May 1992 onwards after the economy has opened with the new LPG (Liberalization, Privatization, and Globalization) norms that changed the working of the Indian economy. The FII has been a major player when it comes to investing in the Indian stock market and its impact has been very high on the volatility of the Indian stock market. FII has been one of the key driving forces in the Indian stock market and has been able to influence the working of the Indian markets with great impact. In the year 1999, there

were around 56 FII<sup>1</sup> registered in the Indian capital market which increased to 506 on 31 Mar 2000. Between the year 1999 and 2000, FIIs had made a net investment of Rs. 10,121.93 crores which in 2019 touched a five-year high of Rs 101,122 crores<sup>2</sup>. There have been years like 2014 when they have invested Rs. 166127 crores<sup>3</sup> in the Indian debt market and our markets gave returns of 31 % and in 2019 they had invested Rs. 101,122 crores<sup>4</sup> while the markets gave a return of 14 %. In 2008 during the Global Financial Crisis, the FII have withdrawn Rs. 45811 crores<sup>5</sup> from the Stock market and the market had crashed from 21206.77<sup>6</sup> in January 2008 to 7697.39 in October 2008. This shows the power of the FII for the outflows they had created and its impact on the working of the Indian stock market.

## **Mutual Funds**

In 1963, with the formation of the Unit Trust of India under the initiative of the Government of India (GoI) and Reserve Bank of India (RBI)<sup>7</sup>, The Indian mutual funds started its journey. It was in 1993 when the private sector players were allowed to start their mutual funds. Today the total Asset Under Management (AUM) has

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1 [https://www.sebi.gov.in/sebi\\_data/commndocs/ar99002d\\_h.html](https://www.sebi.gov.in/sebi_data/commndocs/ar99002d_h.html)

2. <https://www.ibef.org/economy/foreign-institutional-investors.aspx>

3. <https://www.fpi.nsdl.co.in/web/Reports/Yearwise.aspx?RptType=5>

4. <https://www.cdslindia.com/publications/FIIFPIInvstmntFinYrData.aspx>

5. <https://www.sebi.gov.in/statistics/fpi-investment/fpi-calendar-year/fpi-investment-details-financial-year.html>

6. <https://www.bseindia.com/Indices/IndexArchiveData.html>

7. <https://www.amfiindia.com/research-information/mf-history>

been reached at Rs. 23,93,486 crores<sup>8</sup> in April 2020 as compared to Rs.47004 crores at the end of 1993.

Presently there are 43 mutual funds with more than 1000 schemes. Every month around Rs. 8000 crores are coming into the Indian stock market through the Systematic Investment Plan (SIP) which shows that the psychology of the Indian Investors is maturing. Though the global and Indian markets have corrected more than 30 %, then also the flow in the mutual funds have been positive. In 2017 the mutual funds had invested Rs. 1,15,000 crores<sup>9</sup> when the Indian markets gave a return of 27 % and in 2018 mutual funds invested Rs. 1,20,000 crores when the markets gave 5.6 % return even though FII were net sellers to the tune of Rs. 32000 crores. This shows that the mutual funds have become the strong support for the Indian stock market and have been contributing a steady flows of funds to the Indian stock market.

## **REVIEW OF LITERATURE**

This is a comprehensive summary of the research that has been done by various researchers. All the existing and significant research from the past has been described here.

(Naik, 2015) conducted the study on the topic "An Empirical Evidence of Dynamic Interaction between Institutional Fund Flows and Stock Market Returns in India" examined a three-factor vector auto regression (VAR) model. They found that both the Mutual Fund Flows and the FII's fund flows are significantly influencing the Indian Stock Market.

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8. <https://www.amfiindia.com/indian-mutual>

9. <https://economictimes.indiatimes.com/mf/mf-news/investors-rush-to-mutual-funds-asset-base-grows-over-rs-6-trillion/articleshow/62238938.cms?from=mdr>

(Kulshrestha, 2014) conducted a study on "Impact of Foreign Institutional Investors(FIIs) on Indian Capital Market". He has taken the data for the period of 11 years starting from 2000 to 2011. The objectives of his paper were to find out whether there is effect of FII on the Indian Capital Market, and to observe whether the FII have any impact on BSE Sensex and CNX Nifty. For this study he has used regression analysis. He found that the relationship between the FII with BSE Sensex and FII with CNX Nifty was positive. Thus if FII's Investment goes up then both the BSE Sensex and CNX Nifty will go up.

(Kotishwar, 2015) conducted the study on the topic "FII & DII Fund Flow Impact of Mutual Funds Inflows and Outflows". His objectives were to find the relationship of nifty with FII, DII, and MF inflow & outflow, to know the nifty impact on MF inflow and outflow. For the study, he has taken the data for a period of 8 years starting from 2006 to 2014. He used correlation, regression, and granger causality test and found that Mutual fund inflows were having a negative correlation with the secondary benchmark. FII, DII, Flows were affecting nifty during the study period.

(Meman, 2016) in his research paper conducted a study on "Impact of Foreign Institutional Investments (FIIs) on India Stock Market". For this study he took the data for the period spanning over 15 years starting from the year 2000 to 2015. His objective was to study whether the FII have any effect on NSE Nifty. Causal Analysis has been done for this research. He found that there is uni-directional causality from NSE Nifty to Foreign Institutional Investments (FIIs) and there is no reverse causation present on it. There is no direct relationship that foreign investments cause the movement of Indian stock market, but a direct relationship could be established that the movement in Indian stock market does cause foreign investors to invest or disinvest in or from Indian stock market.

(Dave, 2016) in his research conducted a study on the topic “A study on FII’s Investment in Equity Market and its impact on BSE SENSEX”. The data for the period of 15 years starting from the year 2000 to 2015. The objective of his study was to find out whether there is any effect on BSE Sensex on the Equity Net Investment made by the FII’s. For this study Regression Model has been used. He found out that BSE Sensex have a significant impact on FII’s Investment in India.

(Abid, 2017) conducted a study on the "Impact of Foreign Institutional Investors(FII) on Indian Capital Market". Their objective was to find out whether there exists any significant relationship between the Indian Stock Market and FII. They took the data for 10 years starting from the year 2006 to 2016. They used correlation for their analysis and found out that there is a positive relationship between the Indian Stock market and the FII inflows. Hence the findings of the various researchers are contradicting therefore there is the need for investigating the statistical relationship between the FII flows and the Mutual Fund Flows in the Indian Stock Market.

(Budur, 2017) conducted the study on “Effect of Foreign Institutional Investor on Stock Market: Bibliography of unclassified literature” His objective was to know whether there is any relationship between the FIIs and the Stock Market. From his study it revealed that there is a moderate positive correlation between these two and also revealed that both the SENSEX and the inflows of FIIs have direct relationship as Sensex has increased when there is a positive flow of FIIs and it decreased when there is a negative flow of FIIs.

(Bansal, 2018) conducted “A study on impact of FII’s and DII’s on the Indian stock market NSE Nifty”. Their objectives are to study the pattern of Foreign Institutional Investors and Domestic Institutional Investors with respect to the Indian stock

market, to establish whether there is any cause and effect relationship between the Institutional Investors (both foreign and domestic) with the Indian stock market returns and also to study the impact of these Institutional Investors on the Indian Stock Market. For this study they took the data for the period of 11 years starting from April 2007 to April 2018. From the trend analysis they found that when the FII's were investing in the Indian stock market then DII's were disinvesting and vice-versa was happening. They found out that there was highly negative relationship between the DII's and NSE nifty but slightly positive relationship with the FIIs.

(Datta, 2019) conducted the study on the topic "Impact of FII (Foreign Institutional Investors) on Indian Stock Market with specific reference to Sensex and Nifty". For doing this research they took the data starting from the year 2007 to 2018 till April end. The objectives for their research was to examine the relation and the effect of FII on the Indian Stock Market with emphasis on Bombay Stock Exchange (BSE) and National Stock Exchange (NSE), and to know the relationship of FII flows and NIFTY returns. For this they did both qualitative and quantitative research. From the qualitative research the result was that there is the positive relationship between the investments made by the FII and the SENSEX returns. For the quantitative research they used correlation and t-test and found out that there is moderate correlation between the net investments made by the FII and the SENSEX returns and there is also moderate correlation between the net equity investments made by the FII and Nifty returns and there is significant relationship between the FII flows with SENSEX returns and also with Nifty returns.

(Nalini, 2019) conducted a study on the topic "Impact of FII on Indian Stock Market" where their objective was to examine the impact of FII on various indicators of National Stock Exchange (NSE). For conducting this study, they took few variables



of NSE and its data for the period of 18 years starting from the year 2000 to 2018. They have used statistical tools like correlation and regression analysis for their data analysis. The results they got from the analysis was that the regression analysis showed that there is an impact of FII on various indicators like market capitalization, Demat trading and internet trading. It is concluded in their paper that the FII has a positive impact on the Indian Stock Market.

### **OBJECTIVE**

The objective of this paper is to find out the statistical relationship between the FII flows and the Mutual Funds flow from 1999 to March 2020 in the Indian Stock Market.

### **SCOPE OF THE STUDY**

The research work is done for the period from 1999 to Mar 2020. In this study, the Net flows of both Mutual Funds and FII have been considered for research. The study is aimed to analyse the statistical relationship between the FII and the Mutual Funds flow from 1999 to March 2020 in the Indian Stock Market.

### **RESEARCH METHODOLOGY**

The available data (Secondary data) has been used for analysis. The analysis of the secondary data has been done using statistical analysis. Data from different websites such as NSE, NSDL, Way2Wealth, and CDSL has been collected for the past 20 years, starting from the year 1999 to Mar 2020, to show the relationship between the two variables. One of the variables is the Mutual Funds Flows (Dependent Variable) and the other one is Foreign Institutional Investors (Independent Variable). The data has been analyzed using Microsoft Excel and IBM SPSS Statistics Version 25.

## **HYPOTHESIS**

**Null Hypothesis Ho:** - There is no significant relationship between FII flows and MF flows.

**Alternative Hypothesis H1:** - There is a significant relationship between FII flows and Mutual Fund flows.

For this study, we have taken Correlation, F-Test, T-Test, Regression, and ANOVA and the analysis is done using the above mentioned statistical tools.

## **RESEARCH DESIGN**

The research design applied here is Casual research which is aimed at testing the hypothesis.

## **ANALYSIS**

**Table 1:** Correlation between FII net flows and Mutual Funds net flows for the period (1999 – 2020)

<b>Year</b>	<b>FII Net Flows (Rs. In Cr)</b>	<b>MF Net Flows (Rs. In Cr)</b>
1999	6578.1	-1975
2000	6370.5	-81
2001	13498.1	428
2002	3607.7	1340
2003	30737.1	-4
2004	38704.2	-25
2005	46711.9	1627
2006	36393.1	15225
2007	70057.2	6195
2008	-52986.9	13992
2009	83392.4	-5313
2010	133266	-27876
2011	-2714	6653
2012	128360.7	-20593
2013	113026.7	-21188
2014	97736.08	23326
2015	17946.24	71564
2016	21398.26	47818
2017	51949.06	115946
2018	-32628.28	120280
2019	100887.14	51514
2020	-50981.47	39947
	<b>Correlation</b>	<b>-0.333423348</b>

**Data Source:** [www.way2wealth.com](http://www.way2wealth.com)

**Note:** The data is taken up to 31<sup>st</sup> March 2020

**Correlation:** - The coefficient of Correlation has come to -0.3334 which means that there is some kind of negative relationship between the flows of FII and MF. For instance, from January 2020 to March 31, FII withdrew Rs. -122348.56 crores in January 2020, Rs. 3916.59 crores in Feb 2020 and Rs. -209 Crores in Mar 2020 thus totaling Rs.-1,18,222.97 crores<sup>10</sup> in three months from the Indian stock market but the investment made in MF from January 2020 to March 31 (Jan 2020 - Rs. 16020.01 crores, Feb 2020 - Rs. 23392.59 crores and Mar 2020 - Rs. 28764.68 crores) totaling Rs. 68177.28 crores<sup>11</sup>. The reason for this indifference behavior is because of Pandemic-2020 (Novel Coronavirus) which has negatively affected the world's GDP and hence the FII have withdrawn money from equities and put it in gold as an alternative asset class while the mutual funds which are getting huge inflows through SIP of retail investors feel that since markets have corrected around 30 %, the valuations are cheap and one must do value buying so that when things become better, the returns are then magnified.

F-Test Two-Sample for Variances		
	<i>FII NET FLOWS</i>	<i>MF NET FLOWS</i>
Mean	38650.84318	19414.95455
Variance	3007896968	1581924298
Observations	22	22
df	21	21
F	1.901416503	
P(F<=f) one-tail	0.074527668	
F Critical one-tail	2.084188623	

<sup>10</sup><https://www.way2wealth.com/market/fiiactivity/>

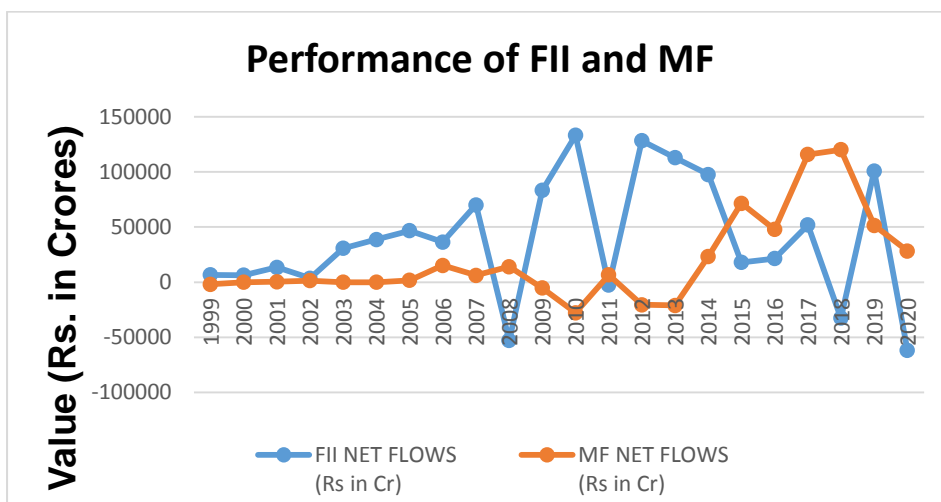
<sup>11</sup><https://www.way2wealth.com/market/mfactivity/>

**F-Test:** - The calculated value of the F test comes to 1.90, which is less than table value at 5 % level of confidence which is 2.08, which means that the Null Hypothesis is accepted that there is no significant relationship between the flows of FII and Indian Mutual funds.

<b>t-Test: Two-Sample Assuming Unequal Variances</b>		
	<b>FII NET FLOWS</b>	<b>MF NET FLOWS</b>
<b>Mean</b>	38650.84318	19414.95455
<b>Variance</b>	3007896968	1581924298
<b>Observations</b>	22	22
<b>Hypothesized Mean Difference</b>	0	
<b>df</b>	38	
<b>t Stat</b>	1.331759206	
<b>P(T&lt;=t) one-tail</b>	0.095436406	
<b>t Critical one-tail</b>	1.68595446	
<b>P(T&lt;=t) two-tail</b>	0.190872812	
<b>t Critical two-tail</b>	2.024394164	

**T-Test:** - The calculated value of the T-test comes to 0.190, which is less than table value at 5 % level of confidence which is 2.02, which means that the Null Hypothesis is accepted that there is no significant relationship between the flows of FII and Indian Mutual funds.

**Chart 1:** Trend Analysis of Net Flows of Foreign Institutional Investors and Mutual Funds.



**Source:** Data has been taken from way2wealth.com and presented by Gaurav.

**Interpretation:** The above chart shows the Net Flows of Foreign Institutional Investors and the Mutual Funds. From this figure, it can be easily understood that when the Foreign Institutional Investors are investing in the market then at that time, the investors are withdrawing their money from the Mutual Funds and when Mutual Funds Net flows are rising then Foreign Institutional Investors are disinvesting from the market. So we can say that both of them are having a negative relationship in terms of Net Flows.

**Average flows:-** Between 1999 to April 10, 2020 it has been observed that the average flows of FII annually has been Rs. 40701 crore while that of Mutual funds is around Rs. 20989 crores. The fact that in the initial years the flows of mutual funds as compared to FII were very subdued and that Mutual Funds were only spectators in the market and did not hold major impact on Indian stock market. Since 2015, the flow of mutual funds have become very strong.

• Year	FII flows	Mf flows
• 2015	17946	71564
• 2016	21398	47818
• 2017	53650	112000
• 2018	-32000	120000
• 2019	100000	51000
• 2020 (April 10)	-51000	39000
• All figures in Rupees Crore		
• Source:- <a href="http://www.way2wealth.com">www.way2wealth.com</a>		

## **Findings of the study**

1. There is a negative correlation between the flows of FII and the MF.
2. There is no significant relationship between the flow of FII and the Indian Mutual Funds.

**Conclusion:** - Foreign Institutional Investors have been a vital source for the Indian stock market since 1992 when they were allowed to invest for the first time. Since 1999 they have been a very strong force affecting the volatility of the Indian stock market. But in the last couple of years, Indian mutual funds have stolen the show and they have become a strong counterforce in the Indian stock market. Indian mutual funds have been investing steadily through the SIP (Systematic Investment Plan) through which every month Rs.8000 crores is coming into the stock market. In the year 2018, Indian MF had invested Rs.120000 crores while the FII were the net sellers to the tune of Rs.32000 crores but even then SENSEX gave return of 5.6% which was mainly due to the mutual funds inflows. This is in construct to Global Financial Crisis of 2008 when FII had withdrawn Rs.52000 crores from Indian stock markets and SENSEX gave negative return of 52 % and even in 2011 European Union Crisis FII had withdrawn Rs.2700 crores and the SENSEX had given negative return of 24.65 %.

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