

Foreign capital inflows (FII and FDI) and its Impact on NSE Nifty

Dr. Savitha P

Department of Management, Karnataka State Open University, Mukthagangothri, Musuru, Karnataka, India

Abstract

A Developing country like India has emerged as one of the favoured destination for foreign investments like FDI and FII. The study makes an effort in order to investigate the relation between foreign capital (FDI and FII) and the Indian stock market (NSE Nifty) between the years 2000 to 2017. Study has made the use of the statistical tools such as Karl Pearson Correlation test and Multiple Regression Model for the purpose of analysis in order to understand the relations between FDI, FII and NSE Nifty in a right way. Results from the study shows that there is a strong positive correlation between FDI and Nifty and also a strong positive relationship between FII and Nifty. Further Multiple Regressions give the results which shows that there is an impact of FDI and FII on the NSE Nifty.

Keywords: NSE (national stock exchange), FDI (foreign direct investment), FII (foreign institutional investor)

1. Introduction

The FDI (Foreign Direct Investments) as well as FII (Foreign Institutional Investments) both relates to an investment from foreign, which is made by an entity that is based in the another country. And it can be said that FDI and FII are quite similar in the way that they both results in a considerable inflow of funds into a particular foreign country, and generally results in the higher development as well as the growth. There are a number of differences between FDI and FII, despite of their similarities. Than FII, FDIs require more funds and commitment, and are generally more complex.

Foreign Direct Investment (FDI)

Refers to an overseas investment made by an entity based in one country, as its name suggests as FDI. In a number of ways an FDI can be set up such as through a subsidiary, through a foreign associate partnership, merger, acquisition, or through a joint venture. With the indirect investments such as when a foreign entity invests funds in another foreign country's stock market, the investment of FDI should not be confused in that matter. FDI will have a substantial amount of control over the operations or company into which the investments are made, when a foreign entity that enters into a FDI.

As FDI results in more jobs, production, create higher demand for local products/raw materials/services, hence any economy will try to attract more FDI into their country which can also result in overall economic growth. So the most attractive locations for FDI will be those countries which have opened their economies with the lower regulations. So a Chinese car manufacturer setting up manufacturing operations in the United States through acquiring the local car manufacturer of US will be an example of an FDI.

Foreign Institutional Investment (FII)

FII are made by the individuals or the investment groups and funds that are registered in one particular country are invested in the country. Examples of such investors include; pension funds, mutual funds, wealthy individuals, hedge funds, and the large insurance corporations. In order to make a foreign investment by an entity, they must be permitted legally in

order to make the investments in a country which is other than its country of the establishment.

FII can invest in the secondary markets and can invest in government securities, commercial papers, shares, debentures, etc. To an economy FIIs are quite important as they provide a number of benefits; in order to obtain extra funding for local corporations, they serve as an easy method and by bringing in more foreign currency improves a country's foreign exchange reserves, which results in more capital and investment that leads for the better development as well as the growth of the local corporations.

2. Literature Review

Dr. B. Venkatrajaz (2018): FII has emerged as an engine for the growth of the economy of a developing economies in general and also the Indian economy in particular as it has the potential to meet the very much needed requirement of the capital. FII is not consistent and stable though it has flown largely to the market of India. For several global and domestic macroeconomic factors, FII appears to be sensitive. The study has an objective in order to identify the various factors contributing to the fluctuations of the FIIs. The study is based on the secondary data from April 2005 till December 2016, for which the data collected on an monthly basis. So for analysis a linear multiple regression model is been estimated with Index of Industrial Production, wholesale price index, exchange rate, BSE Sensex and net inflow of FII as dependent variable and the 90- days treasury bill yield rate as explanatory variables. The results of the study show that inflation, exchange rate and the interest rate of treasury bills have an considerable impact on the FII flows of India. It has also been found from the study that there exists an inverse relationship of exchange rate with the FII. So this ultimately leads to the interpretation that the appreciation of the domestic currency in the Indian capital market may discourage the FII. And surprisingly, interest rate on Treasury bill appears to be inversely related to FII and inflation seems to have positive impact on FII. So finally based on the results of the study, it has been suggested to pursue the appropriate fiscal policy and monetary policy measures in order to

stabilize the interest rate, exchange rate and inflation so as to ensure the stable inflow of FII to the capital market of India, which would finally energize and sustain the economy of India.

Pooja Nagpal, Chandrika R and Dr. Ravindra H V (2016) [2]: In both developed as well as the developing countries, the Foreign investment has become a striking measure of the economic development. Under Foreign Exchange Management Act (FEMA), the foreign investment was introduced in 1991. Now the countries which are developing such as like India, because of their expansion as well as integration of their world equity market are witnessing the changes in the composition of capital flows in particular of their economies. In the development of Indian stock markets, the flow of foreign capital is playing a significant role. FDI and FII have become instruments of international economic stimulation and integration; hence the Indian capital market is vast and will attract the foreign investors as their destination of investment. So the important cause for the stock market volatility is increasingly seen as the flow of FDI as well as FII for that particular economy. Hence this state of affairs has been propelled for the researchers who are upcoming in order to study the extent of relation between volatility of the stock market and the flows of foreign capital. Hence, in this context an attempt has been made to study the impact of FII and FDI flow on Stock market of India (NSE Nifty and BSE Sensex). Study has made an attempt to cover the time horizon for a period of 10 years during 2005-2006 to 2014-2015.

Kirti Verma (2015) [3]: For the benefit of the business interest, foreign direct investment is one of that investment which is made. For attracting international economic integration in any economy, FDI is one and the only most important instrument, which serves as a link between investment and saving. India as a developing country is facing the problem of saving, which can be solved by FDI. The flow of foreign investment is serving as a cause for the growth of economy in India and a profit making industry like services, business insurance, and real estate. Today the present study is based on the objectives like (a) for the India's economic development, to find out the requirement of amount of foreign investment by India and (b) in order to improving the quality of and the availability of goods which has been beyond doubt, and hence to examine the trend and role of FII and FDIs. The data for the analyses have been gathered through the secondary sources such as publication and reports of the govt. and Reserve Bank of India relating to foreign investment, in order to analyze all these objectives. In developing countries particularly in India, foreign investment flows are increasing the domestic investment. According to the recommendation of this paper, any country should take the benefit of invasion of foreign investment. In order to achieve our appreciate goal like quick economic development, making favorable balance of payment, removal of poverty and internal personal imbalance in the development etc.

3. Objectives of the study quick economic development

- To analyze the impact of foreign capital inflow (FDI and FII) on NSE Nifty.
- To examine the correlation between foreign capital inflows (FDI and FII) and NSE nifty.
- To highlight the amount of foreign capital inflows (FDI and FII) into India between the years 2000 to 2017.

4. Hypothesis of the Study

- FII:** Ho: There is no significant impact of FII on NSE Nifty
H1:- There is significant impact of FII on NSE Nifty.
- FDI:** Ho: There is no significant impact of FDI on NSE Nifty
H1:- There is significant impact of FDI on NSE Nifty.
- FDI and FII:** Ho: There is no significant impact of FDI and FII on NSE Nifty
H1: There is significant impact of FDI and FII on NSE Nifty.

5. Data collection and research methodology

- The research design for this particular study is descriptive and is also exploratory in nature. The quantitative approach has been used for this particular study.
- Study is based on the sources of secondary data and the statistical data pertaining to FDI and FII for various years is collected through the RBI bulletin for various years of around 18 years.
- The closing index value of NSE Nifty is been collected from the historical data of NSE websites respectively.

7. Analysis and Interpretation

Table 1: Foreign capital Flows (FDI and FII) between years 2000 to 2017

Years	FDI (Foreign Direct Investment) Flows (US \$ Million)	FII (Foreign Direct Institutional Investment) Flows (US \$ Million)
2000 - 2001	4,029	1,847
2001 - 2002	6,131	1,505
2002 - 2003	5,035	377
2003 - 2004	4,322	10,918
2004 - 2005	6,051	8,686
2005 - 2006	9,697	9,926
2006 - 2007	22,826	3,225
2007 - 2008	34,843	20,328
2008 - 2009	41,873	-15,017
2009 - 2010	37,745	29,048
2010 - 2011	34,847	29,422
2011 - 2012	46,553	16,813
2012 - 2013	34,298	27,582
2013 - 2014	36,046	5,009
2014 - 2015	44,291	40,923
2015 - 2016	55,559	-4,016
2016 - 2017	60,220	7,766
2017 - 2018 (Till dec 2017)	60,974	22,165

Source: RBI bulletin

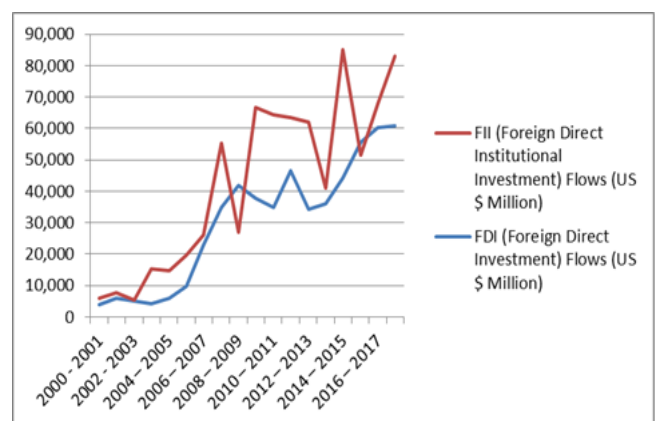


Fig 1: Shows the foreign capital inflows of FDI and FII for various years during 2000 to 2017

Table 2: Closing values of BSE and NSE between years 2000 to 2017

Years	BSE Sensex (Closing Values)	NSE Nifty (Closing Values)
2000 - 2001	3,972.12	1,263.55
2001 - 2002	3,262.33	1,059.05
2002 - 2003	3,377.28	1,093.50
2003 - 2004	5,838.96	1,879.75
2004 – 2005	6,602.69	2,080.50
2005 – 2006	9,397.93	2,836.55
2006 – 2007	13,786.91	3,966.40
2007 – 2008	20,286.99	6,138.60
2008 – 2009	9,647.31	2,959.15
2009 – 2010	17,464.81	5,201.05
2010 – 2011	20,509.09	6,134.50
2011 – 2012	15,454.92	4,624.30
2012 – 2013	19,426.71	5,905.10
2013 – 2014	21170.68	6,304.00
2014 – 2015	27,499.42	8,282.70
2015 – 2016	26,117.54	7,946.35
2016 – 2017	26,626.46	81,85. 80
2017 – 2018 (Till dec 2017)	34,056.83	10,530.70

Source: BSE and NSE website

Table 3: Descriptive Statistics

	Mean	Std. Deviation	N
FDI (Foreign Direct Investment) Flows (US \$ Million)	30296.6667	20102.00981	18
FII (Foreign Direct Institutional Investment) Flows (US \$ Million)	12028.1667	14067.78110	18
BSE Sensex (Closing Values)	15805.4989	9390.76970	18
NSE Nifty (Closing Values)	4799.5306	2845.87021	18

Karl Pearson Correlation Coefficient

Table 4: Correlations

		FDI Flows (US \$ Million)	FII Flows (US \$ Million)	NSE Nifty
FDI Flows (US \$ Million)	Pearson Correlation	1	.260	.899**
	Sig. (2-tailed)		.298	.000
	N	18	18	18
FII Flows (US \$ Million)	Pearson Correlation	.260	1	.489*
	Sig. (2-tailed)	.298		.039
	N	18	18	18
NSE Nifty	Pearson Correlation	.899**	.489*	1
	Sig. (2-tailed)	.000	.039	
	N	18	18	18

Interpretation for FDI

- Correlation between Nifty and FDI is positive that is (correlation) = 0.899 with P = 0.00 which is less than 0.05.
- The test is significant at 5% levels, That means it is statistically significant with positive correlation between Nifty and FDI.

Interpretation for FII

- Correlation between Nifty and FII is positive with r(correlation) = 0.489 and P = 0.039, which is less than 0.05, that means it is significant at the 5% levels.
- So it can be clearly said that there is statistically significant with positive correlation that exists between Nifty and FII.

7.1 Multiple Regressions of FDI, FII and BSE Sensex

Multiple regression Model:

$BSE\ Sensex = b_0 + b_1 (FDI) + b_2 (FII)$

The b values tell that at what degree of dependent variable affects the independent variable if all other independent variables are held constant.

The Dependent variable considered here is: Nifty

Table 5: Variables Entered/Removed ^a

Model	Variables Entered	Variables Removed	Method
1	FII Flows (US \$ Million), FDI Flows (US \$ Million) ^b	.	Enter

a. Dependent Variable: NSE Nifty (Closing Values)

b. All requested variables entered.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.938 ^a	.879	.863	1053.16571

a. Predictors: (Constant), FII (Foreign Direct Institutional Investment) Flows (US \$ Million), FDI (Foreign Direct Investment) Flows (US \$ Million)

Interpretation

- The obtained R squared value is considerably high with the numerical value 0.863, which explains 86.3% of the variation.
- In other words the independent variables FDI and FII are able to explain around 86.3% of the dependent variable

which is the NSE Nifty.

Table 7: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	121045243.135	2	60522621.568	54.566	.000 ^b
Residual	16637370.105	15	1109158.007		
Total	137682613.241	17			

a. Dependent Variable: NSE Nifty (Closing Values)
 b. Predictors: (Constant), FII (Foreign Direct Institutional Investment) Flows (US \$ Million), FDI (Foreign Direct Investment) Flows (US \$ Million)

Interpretation

According to the F-Statistic value (0.00) is lesser than 0.05 levels which is found quite significant from the table of Anova.

Table 8: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	579.635	474.209		1.222	.240
1 FDI Flows (US \$ Million)	.117	.013	.828	8.913	.000
FII Flows (US \$ Million)	.055	.019	.274	2.950	.010

a. Dependent Variable: NSE Nifty (Closing Values)

Interpretation

For the equation given $BSE\ Sensex = b_0 + b_1 (FDI) + b_2 (FII)$
 $BSE\ Sensex = 579 + 0.117 (FDI) + 0.055 (FII)$
 So it can be said that the above regression equation which is represented is significant at 5% levels as it is mentioned in the ANOVA table.

8. Conclusion

Foreign capital plugs the gap in availability of domestic money for capital investments. India is short of domestic capital by a couple of trillion dollars. FDI involves longer-term investment while FII funds can flow out overnight. The results of the study support the fact that there is a strong positive correlation between FDI and Nifty and also a strong positive correlation between FII and Nifty, which is also statistically significant. And finally by analyzing the Multiple Regression Model it has been found that there is a considerably positive significant impact between FDI, FII and the NSE Nifty.

Since the data considered is for almost 18 years, if the government should emphasize on the FDI investments as well as the FII investments. With which the domestic markets will have more employment opportunities, exposed to the new technologies, competition is given for the existing domestic markets, and also there will be more efficient utilization of the resources etc. In this study there is also a favorable environment for FII also, as there is positive relation.

9. References

1. Venkatraja B. Macroeconomic Dynamics of Foreign Institutional Investment: An Indian Perspective, Journal of Poverty, Investment and Development, ISSN 2422-846X. 2018, 41.
2. Pooja Nagpal, Chandrika R, Ravindra HV. An empirical study on impact of flow of fdi & fii on Indian stock market. 2016; 3(1):ISSN 2394 - 4250.

3. Kirti Verma. Role of foreign direct investment in india, International Journal of Science Technology and Management. 2015; 4:11.
4. RBI Website
5. NSE Nifty Website
6. Times of India Website