



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B
ECONOMICS AND COMMERCE
Volume 17 Issue 3 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Trends and Patterns of FDI and FII in India- Implications for the Future

By Mr. Tanu Aggarwal & Dr Priya Solomon

Amity University

Abstract- Fiscal crisis in global markets have made the outlook of the Indian economic system more depressive but the idiosyncratic liberalization and globalization gave the emanation to the phenomena of the foreign investments i.e. FDI and FII in India. International economic integration plays vital role in economic development of the country. The foreign capital is one of the important means of the economic development of the country. FDI and FII are the two important investments in the global capital. The Karl Pearson Correlation and multiple Regressions are used to study the relation and impact of FDI, FII and BSE Sensex. The Correlation shows that there is strongly positive correlation between FDI and Sensex and weak negative correlation between FII and Sensex. On the other hand, Multiple Regressions shows that there is no impact of FII and FDI on BSE Sensex.

Keywords: foreign investment, FDI (foreign direct investment), FII (foreign institutional investment) and sensex.

GJMBR-B Classification: JEL Code: F20, F21



Strictly as per the compliance and regulations of:



Trends and Patterns of FDI and FII in India- Implications for the Future

Mr. Tanu Aggarwal^α & Dr. Priya Solomon^σ

Abstract- Fiscal crisis in global markets have made the outlook of the Indian economic system more depressive but the idiosyncratic liberalization and globalization gave the emanation to the phenomena of the foreign investments i.e. FDI and FII in India. International economic integration plays vital role in economic development of the country. The foreign capital is one of the important means of the economic development of the country. FDI and FII are the two important investments in the global capital. The Karl Pearson Correlation and multiple Regressions are used to study the relation and impact of FDI, FII and BSE Sensex. The Correlation shows that there is strongly positive correlation between FDI and Sensex and weak negative correlation between FII and Sensex. On the other hand, Multiple Regressions shows that there is no impact of FII and FDI on BSE Sensex.

Keywords: foreign investment, FDI (foreign direct investment), Fii (foreign institutional investment) and sensex.

I. INTRODUCTION

FDI refers to the capital flows from the rest of the world which are invested in the production capacity of the economy. FDI facilitates international trade and transfer of knowledge skills and technology¹. On the other hand FII refers to the investor or investment fund which is registered in the country outside the one in which the investor is investing.

The FDI is preferred over FII since it is considered as the most important beneficial form foreign investment for economy as a whole. The direct investment augments the capacity to ensure that the capital inflows get translated into additional production. In the case of the foreign institutional investment that flows in the secondary markets affects the increase in capital availability in general and this money is considered as the hot money that comes and goes. Therefore FDI is considered as more stable than FII².

Author α: PhD Scholar of Amity University, Institution Address-Amity University Noida, Sector-125, Noida, Uttar Pradesh 201313.
e-mail: tanuaggarwal35@gmail.com
Author σ: Senior Faculty of Amity University.

¹ Planning commission of India. Report of Steering group on FDI:FII in India(government report)

² Sultana Tabassum Syed Dr. and Pradhasardhi .S. Prof(2012)," Impact of flow of FDI AND FII on Indian Stock Market"," Finance Research", Volume 1 Number 3 July 2012 ISSN-216508226-

a) Routes of FDI³

Automatic Route

The FDI is allowed under the automatic route without the prior approval of the either the government or the Reserve bank of India related to all activities mentioned in the consolidated FDI policy issued by the Government of India from time to time.

Government Route

The activities that are not covered under automatic route require the approval of the government which is considered in the foreign investment portfolio board (FIPB), Department of Economics Affairs, and Ministry of Finance.

b) Routes of FII⁴

Equity Investment

The 100 percent investment is related to equity instrument or can be done through 70 percent (Equity Investment).

100 Percent Debt

The 100 percent investment has to be made in the debt instruments only (Debt Investment).

c) Importance of FDI and FII

The need of the foreign capital is important in the form of the FDI and FII for the development of the infrastructure which includes railways, sea ports, roads and warehouses. The rapid industrialization also takes place from the period 1991 which further strengthened the need of foreign capital. Many of the developing countries suffer because of the problem of the infrastructure. In other countries the interest rate is around 1 to 3 % but in India it is around 7 to 9 % so the investors wants to invest in India where they get maximum return on their investments.

d) Bombay Stock Exchange⁵

The Bombay Stock Exchange is established in 1875. This stock exchange is the Asia's first and largest stock exchange with speed of 6 microseconds. The BSE is also termed as Sensex. It consists of 30 of the largest most actively traded companies on stock exchange.

³ Jasbir Singh Dr., Chadha Sumita Ms. and Sharma Anupama Dr.(2012),"Role of Foreign Direct Investment in India: An Analytical Study"," International Journal of Engineering and Science

⁴ Walia Karan, Walia Rimpi Dr, Jain Monika (2012)."Impact of Foreign Institutional Investors on Stock Market".

⁵ www.bseIndia.com

II. REVIEW OF LITERATURE

Dr. Jasbir Singh, Ms. Sumita Chadha and Dr. Anupama Sharma (2012) focus on the role of the foreign direct investment in India: An Analytical Study. It shows that foreign investment is increasing in terms of FDI and FII and FDI has better performance which attracts maximum amount of foreign capital.

Dr. Syed Tabassum and Prof. S. Pradhasardhi (2012) have examined the impact of flows of FDI and FII on Indian Stock Exchange. The correlation analysis shows that there is strong relation between Sensex and Nifty. The correlation analysis shows that there is strong correlation between FDI, Sensex and Nifty and on the other hand there is moderate positive correlation between FII, Sensex and Nifty.

Vinay Kumar (2014) have precipitated the trend of FDI in India and its Impact on economic growth. The Karl Pearson correlation shows that FDI and FII have weak positive correlation between them and on the other hand FDI have positive correlation with Indian GDP.

Mohammad Iftexhar Khan and Amit Banerji(2014) conducted the study on drivers, impact and pattern of foreign direct investment in India. The unit root test and times series analysis shows that FPI and FDI are non-stationary.

Sirisha S and Malayadri I(2015) have investigated the study on changing trends in flow of FDI. The CAGR(Compounded Annual Growth Rate) percentage is used to show that Luxemburg has highest inflows of FDI and on the other hand communication and manufacturing sector has the highest level inflows of foreign direct investment.

The analytical study of trend of FDI in India has been conducted by Naveen Sood(2015). The correlation and regression shows that FDI and FII is insignificant and on the other hand association and dependence of GDP in India is found to be statistically insignificant.

Kanta Rani and Sanjiv Kumar (2015) analyze the dynamic interaction between foreign investment and Indian Stock Market. The Karl Pearson correlation shows that FDI have high correlation with Sensex and Nifty.

III. OBJECTIVES OF THE STUDY

- To study the trends and pattern of foreign capital (FDI and FII) flow to India.
- To study the correlation between FDI, FII and Sensex.
- To study the impact of FDI and FII on Sensex.

IV. DATA COLLECTION AND RESEARCH METHODOLOGY

The quantitative approach is used which shows that the research design for the current study is descriptive⁶ cum exploratory⁷. The study is based on the secondary sources. The required data related to FDI and FII have been collected from the various sources that is the bulletins of the Reserve bank of India, publications from the Ministry of the Commerce, Government of India. The closing index value of each year is taken from the BSE website. The Karl Pearson coefficient of correlation and Multiple Regression is used to know the relation and impact of FDI and FII on BSE Sensex.

V. HYPOTHESIS⁸ OF THE STUDY

FDI

*Ho*⁹ There is no significant impact of FDI on BSE Sensex.

*H1*¹⁰ There is significant impact of FDI on BSE Sensex.

FII

Ho There is no significant impact of FII on BSE Sensex.

H1 There is significant impact of FII on BSE Sensex.

⁶ Descriptive Research is used to describe the characteristics of the population or phenomena being studied.

⁷ Exploratory research helps to define the best research design and data collection methods and in selection of subjects.

⁸ A hypothesis is a statement created by researchers when they speculate on outcome or experiment.

⁹ Null Hypothesis (It shows there is no observed relationship between two measured phenomena.)

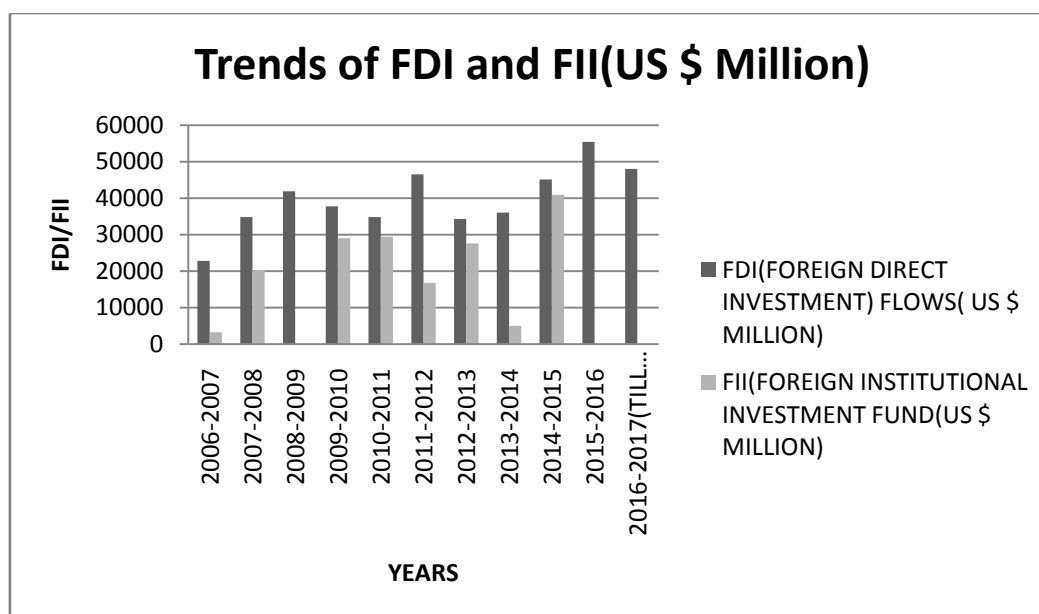
¹⁰ Alternate Hypothesis(It states that the population parameter is different than the value of the population parameter in Null Hypothesis.

Table 1: Trends of FDI and FII (Bse Sensex)

YEARS	FDI(FOREIGN DIRECT INVESTMENT) FLOWS(US \$ MILLION)	FII(FOREIGN INSTITUTIONAL INVESTMENT FUND(US \$ MILLION)
2006-2007	22825	3224
2007-2008	34842	20327
2008-2009	41872	(-)15016
2009-2010	37744	29047
2010-2011	34846	29421
2011-2012	46555	16811
2012-2013	34297	27581
2013-2014	36045	5008
2014-2015	45147	40922
2015-2016	55456	(-)3515
2016-2017(TILL DECEMBER 2016)	48031	(-)3377
TOTAL	437671	150438

Source: RBI Bulletin February 2017

Graph 1

*Interpretation*

The table 1 and Graph 1 presents the amount of flow of the FDI and FII in terms of US\$ million. The flow of the FDI has shown an upward trend during the considered period but during the period 2015-2016 and 2011-2012 the flow of FDI is highest that is 55456 and 46555. The flow of FII has shown the mixed trend, during the period of 2008-09 and 2015-2016 it is negative that is (-) 3515 and (-) 15016. When the flow of the FDI and FII are compared the flow of the FII is less than flow of the FDI in India.

Table 2: Trends of FDI and FII With Bse Sensex (Closing Values)

Years	FDI(Foreign Direct Investment) Flows (Us \$ Million)	FII (Foreign Institutional Investment Fund (Us \$ Million)	Sensex (Closing Values)
2006-2007	22825	3224	13786.91
2007-2008	34842	20327	20286.99
2008-2009	41872	(-)15016	9647.31
2009-2010	37744	29047	17464.81
2010-2011	34846	29421	20509.09
2011-2012	46555	16811	15454.92
2012-2013	34297	27581	19426.71
2013-2014	36045	5008	21170.68
2014-2015	45147	40922	27499.42
2015-2016	55456	(-)3515	26117.54
2016-2017(TILL DECEMBER 2016)	48031	(-)3377	26626.46
TOTAL	437671	150438	217990.84

Source: RBI Bulletin February 2017, BSE SENSEX

*Correlation**Table 3:* Descriptive Statistics

	Mean	Std. Deviation	N
FDI	39788.27	8816.214	11
FII	13676.18	17516.069	11
SENSEX	19817.35	5586.724	11

Authors own compilation from various data sources

Table 4: Correlations

		FDI	FII	SENSEX
FDI	Pearson Correlation	1	-.202	.495
	Sig. (2-tailed)		.552	.122
	N	11	11	11
FII	Pearson Correlation	-.202	1	.293
	Sig. (2-tailed)	.552		.382
	N	11	11	11
SENSEX	Pearson Correlation	.495	.293	1
	Sig. (2-tailed)	.122	.382	
	N	11	11	11

Authors own compilation from various data sources

Interpretation

The Karl Pearson¹¹ is applied to the study of the relationship of the FDI, FII and BSE Sensex. There is a strong positive correlation between FDI and Sensex and FDI and FII. When it comes to the FII there is a weak negative correlation between FII and FDI and FII and Sensex.

VI. MULTIPLE REGRESSIONS OF FDI, FII AND BSE SENSEX

In case of multiple regressions there are more than two independent variables and the multiple regression models would look like:

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

So now it is easy to predict about the BSE Sensex on the basis of these models. The b-values tell that what degree of each dependent variable affects the independent variable if all other independent variables are held constant.

¹¹ A Statistical technique that are used to analyze the strength and direction of relationship between two quantitative variables.

Table 5: Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	FII, FDI ^b	.	Enter

a. Dependent Variable: SENSEX

b. All requested variables entered.

Authors own compilation from various data sources

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.637 ^a	.406	.257	4815.368

a. Predictors: (Constant), FII, FDI

Authors own compilation from various data sources

Interpretation

The model summary helps to know the strength of the relationship between the model and the dependent variable. R (Multiple correlation coefficients) shows that correlation between the observed and the model predicted values of the dependent variable. Its

small values shows the weak relationship. R, square the coefficients of determination is .406, it shows that the model explains 40.6 % variation. In other words the independent variables FDI and FII are able to explain around 40.6 % of the dependent variable Sensex.

Table 7: Anova^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	126612724.066	2	63306362.033	2.730	.125 ^b
Residual	185502176.254	8	23187772.032		
Total	312114900.320	10			

a. Dependent Variable: SENSEX

b. Predictors: (Constant), FII, FDI

Authors own compilation from various data sources

Interpretation

The ANOVA shows the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The residual row displays information about the variation that has not been accounted by the

model. The regression sum of squares is less than residual sum of squares which indicates 40.6% variation in Sensex is explained by the model. According to the F-Statistic (.125) is greater than .05 which is found insignificant.

Table 8: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3474.215	7499.573		.463	.656
FDI	.366	.176	.577	2.075	.072
FII	.131	.089	.409	1.471	.179

a. Dependent Variable: Sensex

Authors own compilation from various data sources

*Interpretation**FII*

The p-value related to FII in Table 7 is .179 which is greater than .05 so null hypothesis related to FII is accepted (there is no significant impact of FII on Sensex) and alternate hypothesis is rejected.

FDI

The p-value related to FDI is .072 which is greater than .05 so null hypothesis related to FDI is accepted (there is no significant impact of FDI on BSE Sensex) and alternate hypothesis is rejected.

VII. CONCLUSION

The FDI and FII helps to develop the Indian economy and also gives the advantages to the Indian industry for the technological up gradation, helps in the utilization of the human and the natural resources with greater efficiency. Since the FDI is consider as the central for the India's integration into global production chains. The current study shows that there is a strongly positive correlation between FDI and Sensex and weak negative correlation between FII and Sensex. Using the multiple regressions the results depicts that there is there is no significant impact of FII and FDI on BSE Sensex.

As the FDI has strongly positive correlation between FDI and Sensex so the government should emphasize on FDI more as it leads to the high economic growth and employment opportunities in the country. In case of FII, the foreign investors can exit from the Indian Market whenever they want as it has been proved that there is no impact of FII on BSE Sensex. So for the developing country like India, FDI is considered as the most beneficial form of foreign investment for the economy as a whole and is of long-term nature.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Kumar S.S," Indian Stock Market in International Diversification", " Indian Journal of Economics", Volume, xxxii, No-327, April, pages 85-102.
2. Annand Bansal and J.S Parischa(2009),"Foreign Institutional Investors Impact of stock prices in India", "Journal of Academics Research in Economics", J(2), 181-189.
3. Jasbir Singh Dr., Chadha Sumita Ms. and Sharma Anupama Dr.(2012),"Role of Foreign Direct Investment in India: An Analytical Study", "International Journal of Engineering and Science(ISSN:2278-472), Volume 1 Issue 5(October 2012).
4. Kumar Vinay (2014)," Trend of FDI in India and its impact on economic growth", "International Journal of Science and Research", " Volume 3 Issue 10 October 2014.
5. Khan Iftekhar Mohammad and Banerji Amit (2014)," A Study on Drivers, Impact and Pattern of FDI in India", "The Journal of Developing Areas", Volume 48 Numbers Fall 2014.
6. Rani Kavita and Kumar Sanjiv(2015),"Analysis of Dynamic Interaction between Foreign Investment and Indian Stock Market", "Journal of International Economics", " Volume 6 Issue 2 July- December 2015
7. Sultana Tabasssum Syed Dr. and Pradhasardhi .S. Prof(2012)," Impact of flow of FDI AND FII on Indian Stock Market", " Finance Research", Volume 1 Number 3 July 2012 ISSN-216508226
8. S Sirisha and I Malayadri (2015)," A Study on the Changing Trends in the flow of FDI", "Arabian Journal of Business and Management Review", J. Business Management Review 2015.
9. Sood Naveen (2015)," Trends of FDI in India: An analytical Study 2001-2014", "International Journal of Commerce and Management", Volume 9 2015 ISSN: 973-5796
10. Walia Karan, Walia Rimpi Dr, Jain Monika(2012)." Impact of Foreign Institutional Investors on Stock Market", "International Journal of Computing and Corporate Research", Volume 2 Issue 5.
11. Web References www.bseIndia.com www.rbi.bulletin.2017.com <http://www.cdslindia.com/publications/FIIFPIInvestmentFinYrData.aspx> www.sebi.gov.in