



IMPACT OF FOREIGN INSTITUTIONAL INVESTORS AND DOMESTIC INSTITUTIONAL INVESTORS ON INDIAN STOCK MARKET

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ABSTRACT:

Indian Stock Market is one of the indicators for the economic development. Developing countries like India attract Foreign Institutional Investors (FIIs) every year. It also plays a significant role in the development of Indian stock market. In this context, the paper attempts to assess the impact of foreign Institutional Investors and Domestic Institutional Investors (DIIs) in Indian stock market. The study is conducted using monthly data on BSE Sensex and FII and DII activity over a period of 9 years spanning from April 2007 to April 2015. It provides the evidence of significant Causality between FII activity and effects on Indian Capital Market, where DII effect is very less. The analysis also finds that the movements in the Indian Capital Market are fairly explained by the FII net inflows.

KEYWORDS: Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DIIs), BSE SENSEX.

INTRODUCTION

During September 1992 Foreign Institutional Investors (FIIs) were permitted to invest in all the listed securities traded in Indian capital market. As per the RBI, Report on Currency & Finance (2003-04), since 1991 there has been constant movement on the way to the incorporating of the Indian economy with the world economy. During that period the investment regulations for FIIs has become more liberal resulted India attracted a huge amount of foreign capital from developed countries. Foreign Institutional Investors mainly refers to those institutions mainly deals with securities, financial assets and made the investment from outside the domestic country in order to generate more revenues. SEBI defined FII as "Means an institution established or incorporated outside India which proposes to make an investment in India in securities. Provided that a domestic asset management company or domestic portfolio manager who manages funds raised or collected or brought from outside India for investment in India on behalf of a sub account shall be deemed to be a Foreign Institutional Investor." As per SEBI, annual report, 2006-07, the cumulative net investment by FIIs in Indian stock market since 1993 has crossed US\$ 50 billion at the end of March 2007. It observed that International capital inflows have a twofold impact on the health of the recipient economy. On the positive side, these capital inflows raise the level of economic development by enhancing the domestic investment and widen financial intermediation. At the same time, it also encompass several threats to the domestic economy as well as towards a financial system of the recipient economy like inflation, appreciation in the exchange rate, overheating of the economy and possibility of sudden withdrawal. Literature review (Reddy, Saleem 2013; Walia, Jain 2012) also evident that FII has numerous advantages like it lowers cost of Capital, helps in accessing to cheap global credit, supplements domestic savings and investments, leads to higher asset prices in the Indian market, also led to considerable amount of reforms in the capital

market and financial sector. However Domestic Institutional Investors means those institutional investors which deal with investment in securities and financial assets of the country to earn a profit. Present Paper is an attempt to study and analyze the impact of Foreign Institutional Investment (FIIs) and Domestic Institutional Investors (DIIs) on Indian stock market (BSE). Available empirical evidence suggests that FIIs inflows are influencing more the performance of stock markets comparatively DII.

LITERATURE REVIEW:

(Abid & Jhawar, 2017) cites that most of the economies have a high volume of FIIs and these provide high escalation to the economies. Using correlation and statistical analysis, the study finds the existence of a significant relationship between Indian stock market and FII, which in turn endorse the Indian economy. (Jeyanthi, 2016) viewed that FIIs contribution to the Indian stock market has great influences and there is a positive correlation between FIIs investment in equity and NSE capital market segment. (Dahlquist et al. 2003) analyzed foreign ownership and firm characteristics for the Swedish market. Authors observed that foreigners have a greater existence in large firms, paying low dividends and in firms with large cash holdings firm size is driven by liquidity. They measured international presence by foreign listings and export sales. They reiterated that foreigners tend to underweight the firms with a dominant owner.

(Walia et al., 2012) viewed that FIIs are influencing the Sensex movement to a great extent. Further, Pearson correlation values of the study indicate positive correlation between the foreign institutional investments and the movement of Sensex and it is evident that the Sensex has increased when there are positive inflows of FIIs and there was decrease in Sensex when there were negative FII inflows. (Covirg et al., 2007) concluded that foreign fund managers have less information about the domestic stocks than the domestic fund managers. The authors studied that ownership by foreign funds is related to the size of foreign sales, index memberships and stocks with a foreign listing. Most of the existing literature on FIIs in India found that the equity return has a significant and positive impact on FIIs, and stock returns are strongly correlated in India. (Rai & Bhanumurthy, 2006) analyzed the determinants of foreign institutional investment in India using monthly data from January 1994 to November 2004. The study revealed the positive association of FIIs investment with a return on BSE Sensex, inflation in the US (home country) and negative association with inflation in India (host country), return on S&P 500 index, ex-ante risk on BSE and ex-ante risk on S&P 500 index. However, the ex-post risk neither in the US nor in India affected FII inflow to India. But the study did not find any causation running from FII inflow to stock market returns. The study concluded that stabilizing the stock market volatility and minimizing the ex-ante risk would help in attracting more FII inflows. Otherwise, there would be an adverse impact of non-fundamental factors of FII behavior which in turn would affect the real economy in the long-run.

OBJECTIVES

- To determine whether the FII, DII and BSE-Sensex growth are stationary or not.
- To study the causal relation among FII, DII and BSE-Sensex growth
- To find out the impact of FII, DII on BSE-Sensex growth.

HYPOTHESES

To test the above objectives following null hypotheses were developed:

- Ho1: FII, DII & BSE-Sensex growth series are not stationary.
- Ho2: FII does not Granger Cause BSE-Sensex growth
- Ho3: DII does not Granger Cause BSE-Sensex

METHODOLOGY:

The monthly data of net FII DII and net growth of BSE Sensex have been collected for the study and time span of study is taken from April 2007 to April 2015. The data consists of

i) monthly BSE SENSEX growth, difference between closing price and the opening price of the respective month, ii) Net sales/ purchase of FII is written as NET FII iii) Net Sales/purchase of DII is written as NET DII. Data has been collected from SEBI and BSE historical data. In the course of analysis of the study, statistical tools comprising econometric tools like Augmented Dickey Fuller (ADF) Unit Root Test, Johansen Co-integration Test, and Granger Causality Test, Correlation Analysis, Regression Analysis have been applied. Eviews 7.0 Package Program and SPSS have been used for analysis the data in order to draw a valid conclusion of the above-mentioned objectives.

ANALYSIS AND INTERPRETATION

Table1: Unit root test

Variables	Unit root	ADF	Value 1% Level	5% Level	10% Level	P value*
Growth of BSE Sensex	Constant	-9.323375	-3.499910	-2.891871	-2.583017	0.0000
	Trend & Intercept	-9.294443	-4.056461	-3.457301	-3.154562	0.0000
	None	-9.311400	-2.589273	-1.944211	-1.614532	0.0000
NETFII	Constant	-6.830240	-3.499910	-2.891871	-2.583017	0.0000
	Trend & Intercept	-7.751444	4.056461	-3.457301	-3.154562	0.0000
	None	-6.552456	-2.589273	-1.944211	-1.614532	0.0000
NETDII	Constant	-6.409801	-3.499910	-2.891871	-2.583017	0.0000
	Trend & Intercept	-7.833247	-4.056461	3.457301	-3.154562	0.0000
	None	-6.430367	-2.589273	-1.944211	-1.614532	0.0000

Augmented Dickey-Fuller Unit Root Test was conducted at 5% level of significance. Lag lengths and model were chosen according to the Schwarz Information Criterion (SIC). The critical values are based on (MacKinnon, 1999); an asterisk indicates significance at 5 percent level. Results of unit root test observed from the table1 that all variables are stationary in ADF Test and have no unit root because P values are less than 0.05. Now Granger causality test can be applied for the three variables as these variables are stationary.

TABLE-2: GRANGER CAUSALITY TEST

Null hypothesis	Lag	F statistics	Prob.	Accept/Reject	Causal Relationship Results Discussion
NETFII does not Granger Cause BSESENSEX Growth	2	2.74613	0.06956	Reject	NETFII does Granger cause BSESENSEX growth
BSE SENSEX Growth does not Granger Cause NETFII	2	2.34069	0.10210	Accept	BSE SENSEX Growth does not Granger Cause NETFII
NETDII does not Granger Cause BSESENSEX Growth	2	2.49970	0.08780	Reject	NETDII does Granger Cause UPDOWN
BSE SENSEX Growth does not Granger Cause NETDII	2	1.89442	0.15635	Accept	BSE SENSEX Growth does not Granger Cause NETDII
NETDII does not Granger Cause NETFII	2	0.92035	0.40209	Accept	NETDII does not Granger Cause

					NETFII
NETFII does not Granger Cause NETDII	2	0.74604	0.47715	Accept	NETFII does not Granger Cause NETDII

Granger Causality Test, the purpose is whether there is a causality relationship between variables is shown in Table 2 above. It is observed that NETFII does cause BSESENSEX growth at 7% level of significant but BSESENSEX growth does not NETFII at 7% level of significance. NETDII does Cause BSESENSEX growth at 9% level of significance. NETDII does not Granger Cause NETFII and NETFII also does not Granger Cause NETDII.

MULTIPLE REGRESSION ANALYSIS

The following multiple regression equations is used in the model to describe the relationship between dependent and independent variables:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2$$

Y= BSE SENSEX Growth (dependent variables)

α = Intercept

β_1 = coefficient of NET FII

x1= NET FII

β_2 = coefficient of NET DII

x2= NET DII

TABLE-3

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.644 ^a	.415	.403	886.52408

TABLE-4

ANOVA					
Model	Sum Squares	Df	Mean Square	F	Sig.
Regression	5.241E7	2	2.621E7	33.346	.000 ^a
Residual	7.388E7	94	785924.946		
Total	1.263E8	96			

TABLE-5

Coefficient					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	-173.667	101.184		-1.716	.089
FII	.107	.020	.874	5.249	.000
DII	.050	.030	.276	1.656	.101

TABLE-6

Coefficients		
Model	Collinearity Statistics	
	Tolerance	VIF
FII	.225	4.450
DII	.225	4.450

From the Table 3 above, r-squared value is 0.415, indicating that, 41.5% of the variation in BSE Sensex growth is explained by NET FII and NETDII. It is found in the Table-4 that model is highly significant. It indicates model is linear. In table-5, it is seen that B coefficient of FII is highly significant at any level of significance. So FII is significantly influencing BSE SENSEX growth. But DII is not significantly influenced BSE SENSEX growth at 5% level of significance. It is considered significant at 11% level of significance which is very high. Moreover, FII and DII are found collinearity effect as VIF is very high (table-6). In order to remove collinearity effect, DII variable is dropped from the model. So it is considered bivariate data in the following table

BIVARIATE REGRESSION ANALYSIS

The following bivariate regression equation is used in the model to describe the relationship between dependent and independent variables:

$Y = \alpha + \beta_1 x_1$
 Y= BSE SENSEX Growth (dependent variables)
 α = Intercept
 β_1 = coefficient of NET FII
 x_1 = NET FII

TABLE-7

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.631 ^a	.398	.392	894.62265

TABLE-8

Model	ANOVA				
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.026E7	1	5.026E7	62.796	.000 ^a
Residual	7.603E7	95	800349.678		
Total	1.263E8	96			

TABLE-9

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	-108.349	94.035		-1.152	.252
FII	.077	.010	.631	7.924	.000

From Table 7 above, the r-squared value is 0.398, indicating that, 39.8% of the variation in BSE Sensex growth is explained by NET FII and NET DII. It is found in the table-8 that model is highly significant. It indicates model is linear. It is seen that B coefficient of FII is highly significant at any level of significant (table-9). So FII is significantly influencing BSESENSEX growth.

CONCLUSION

The present study focuses on the relationship between Stock market growth and institutional investors (foreign as well as domestic) to know whether time series data are stationary or not. It is found that all the three series viz NET FII, NET DII and BSE SENSEX growth are stationary. After applying Granger causality test it is found that FII significantly causes Stock market growth. But DII causes stock market growth at higher degree level of significant. Using multivariate regression analysis it is observed that FII is significantly more impact on the stock market than DII. So an investor should carefully monitor the movement of FII on Indian stock market while investing in share market.

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