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Research Paper

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FOREIGN INSTITUTIONAL INVESTMENT FLOWS AND STOCK MARKET RETURNS: EMPIRICAL EVIDENCE FROM INDIA

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ABSTRACT

In the year 1992, it was financial distress that led to lacunae in India's economic environment. At that time, our domestic resources i.e. the foreign exchange reserves were at all-time low. These were at such a low level that we were not even in a condition to pay our import bills for a week. It was then in Sep, 1992 the FII were allowed to invest in our nation. The Foreign Institutional Investment (FII) acted as a lifesaving herb for our economic health in general and stock market development in particular. Since then, it has been continuously augmenting our domestic resources, have increased the liquidity in our capital market which further led to reduction in cost of capital and stimulated the investment environment in economy. The FIIs are not easy to lure they invest only in country with higher returns. This fact makes it clear that FIIs are affected by stock returns. But at the same time, huge investment by FIIs found to affect the stock returns of a nation. So, the present study has been undertaken to analyse the impact of FII flows on stock market return of the selected companies in twelve different sectors namely automobile, cement fertiliser etc. Granger Causality Test has been applied on the monthly data of variables namely FIIP, FIIS, NFII and NSE return of the selected companies of different sectors for the period ranging from April 2004 to March 2014. Conversely to generalized behaviour in stock market, the FII has impacted the different sectors differently.

KEYWORDS: *Foreign Institutional Investment, Economic Development, GARCH Test, Granger Causality Test, Market Returns.*

INTRODUCTION

Every human being or nation is born with a development perspective. These development perspectives differ among different people or nations. Development in its different variants i.e. technological development, sociological development, cultural development, economic development and political development etc. are eyed upon by different intellectuals from time to time. All of these variants depend on each other. For example to be an economic developed nation it must be technologically advance. Economic development is one of the most cited indicators of a nation's progress. This economic development depends upon many factors like sound economic policies & planning, better utilisation of resources, technological advancement and industrial development etc. Earlier, in India, economic plans & policies were emphasized on to be a self-reliant country. Foreign aid and investment were not the part of Balance of Payment (BOP) of India at that time. With the passage of time, changes like

currency reforms, development of financial sector, and debt crisis of 1980's have influenced the financial sector globally. Consequently, countries all over the world have struck the financial sector reforms, focusing on integration of world economies with each other. This era of globalisation has boosted the global business and also opened the window of liberalisation in emerging economies of the world. Therefore, the liberalised attitude has led to the deregulation of capital markets as well as reduction of foreign exchange control. As a result portfolio flows have increased across the borders. Like other nations these portfolio flows are fulfilling our capital requirements too.

Among these flows the Foreign Institutional Investment (FII) got the maximum currency owing the benefits attached to it. The investment made by FIIs have increased the liquidity in our capital market which further led to reduction in cost of capital, stimulated the investment environment in economy and also strengthened the corporate governance practices (Srikanth & Kishore, 2012). Apart from all these, FIIs also facilitated the flow of sophisticated technology which led to technological advancement (Kumar & Devi, 2012). Compositely, all these things have boosted our economic growth.

Every developing country tries to woo the FIIs seeking the benefits it entails to recipient country. But **"There are no free lunches" accurately quoted by the Dr. Raghuram Rajan (Ex. RBI Governor).** It means FIIs not only benefits the economy but also sets the disorder in recipient country. The FIIs have been criticised from time to time by researchers and policy makers of world. They have been criticised over their trading patterns i.e. feedback trading, herding behaviour and price pressure etc. All these things have created a flux in stock markets of the world. The FII flows have also found to causes inflationary pressure through infusing large money may also create volatility in exchange rate and could worsen the current account position (Samal, 1997). These all vulnerabilities caused by FIIs have put a dent on our economic growth.

One important point to keep in mind is that FII does not easily become the part of any country's financial resources. Only the countries with best profitable economic opportunities available become the main stay of these Foreign Institutional Investors. Many factors have been accounted over for being the reason behind the investment in any particular country. High return on stock indices and low inflation rate (Rai & Bhanumurthy, 2004), IIP, GDP and interest rates (Kulshrestha, 2014) are the main factors in a host make the presence of FIIs inevitable. While the factors in home country such as high inflation rates, lower home interest rates and lower market return impels the FIIs to take advantage of profitable investment opportunities in any other country (Kaur & Dhillon, 2010).

The changing patterns of FII flows had provided both better and bitter tastes to our stock market in the past. Sometimes these flows are found to create volatility in our stock market (Gupta, 2011), but at other times, positively impacted our stock market (Kanojia & Rani, 2014). The above point reveals only one aspect i.e. FII flows has an impact on our stock market either positive or negative. Contrary to this, our stock market also proved to be causing force to the FII flows over the time period (Kumar 2009). So, contrasting results from previous studies is a matter of concern which is needed to be resolved. Driven by these concerns present study is undertaken to analyse the causality relationship between the FII flows and stock market returns.

The rest of this paper is organised as follows. Section 2 reviews the existing relevant literature that has previously investigated the relationship between FII flows and stock market returns. Description of data and research methodology is provided in Section 3. Section 4 outlines the empirical results and its discussion. Finally the concluding remarks and further scope has been presented in section 5.

LITERATURE REVIEW

As the lamp light shows the way in darkness in the same way existing literature provides the base to curve out research methodology to be used to solve a research problem. So, existing literature has been reviewed keeping same thing in mind. Different studies have validated different conclusion to problem under study and offered various suggestion to solve the problem. Some studies established that FII flows have a profound effect on the stock market returns **(Kulshrestha 2014; Samal 1997; Kanojia and Rani 2014; Kumar and Devi 2012).** Contrary to these, there are many studies which concluded the stock market returns to be the causing factor to FII flows **(Kumar 2009; Chakraborty 2007; Agarwal 2013).** The study conducted by **(Chakrabarti, 2007)** indicated the instable equity returns as the cause to changing pattern of FII flows. Evidence of bi-directional causality were also provided by some studies **(Suganthi and Dharshanna 2014; Bohra and Dutt 2011; Mitra 2010; Coondoo and Mukherjee 2004).** According to above studies FII flows are considered to be both the

cause and effect of the stock market returns and vice-versa.

Various studies undertaken revealed that FIIs are not keen only to stock returns but there are also other determinants to the FII investment in Indian stock market. **Srikanth and Kishore (2012)** revealed that higher interest rates and IIP (Index of Industrial Production) are the factors which proved to be the determinants of FII flows into India. **Kaur and Dhillon (2010)** inferred that the factors like return on BSE SENSEX, market capitalization, turnover of Indian stock market, and macroeconomic factors such as Index for Industrial Production (IIP) in India and index of inflation in foreign country have positive impact on FIIs investment in India. While the some other factors such as return on stock market index of home (S&P 500), Wholesale Price Index (WPI) of inflation in India, US 3 month T-bill rate (USTBR) representing home country interest rate showed the negative impact to FIIs investment in India. **Prasanna (2008)** assessed the role of foreign institutional investment particularly among companies included in sensitivity index (Sensex) of BSE and the specific characteristics of these companies which influences in attracting Foreign Institutional Investment. The study revealed that higher publicly traded shares attract more foreign investment. Performance variables like Price-Earnings Ratio and EPS have significant influence on FIIs. The study also observed that there is no influence of foreign promoters or that of financial institutions on FIIs and there is an inverse relationship between promoters' shareholding and FIIs. **Rai and Bhanumurthy (2004)** identified inflation rate (both domestic and foreign) and ex-ante risk to be determinants of the FII flows in India.

Beside this, various suggestions have been offered by the researchers from time to time to reduce the volatility caused by FII flows or to increase the level of these flows. **Kulshrestha (2014)** suggested that in order to avoid volatility in stock market govt. should fix minimum & maximum limits within which FIIs can invest in India. **Samal (1997)** recommended that policy measures should focus more on wooing the domestic investors to participate in equity market rather than the FIIs who create volatility. **Kanojia and Rani (2014)** suggested that the regulatory authorities should make efforts to enhance the efficiency and stability in the stock market which will increase the investor's confidence in the market instrument as a result investment level will go up. The study undertaken by **Rai and Bhanumurthy (2004)** suggested that to increase the FIIs investment in India there is a need to stabilise the volatility in the stock market and to reduce the risk to the possible extent.

RESEARCH GAP

Trading on the motive of present study, the literature reviewed in present study has exposed some gaps**.** Firstly, most of the study are general in nature they have examined the impact of FII on stock indices of different stock markets in the world. None of the study examined the impact of FII on particular scrip of a firm or on a specific sector. Secondly, the studies pertaining to determinants of FII banked only on few factors. The other problem located in the literature is contradictory findings of the studies. It makes it impossible for someone to make a general perception towards causality relationship between the FII and stock market return. Another important shortcoming revealed during the review of literature is that most of studies in India focussed on examining the causal relationship of FII with Sensex. Not many studies have examined this relationship with Nifty or any other stock index. Therefore, the present study has been undertaken to overcome the gaps identified during the review of literature.

DATA AND METHODOLOGY

Monthly time series data ranging from April, 2004 to March, 2014 has been used in the study. The starting period 2004 has been selected as because the FII were allowed to invest in India in September 1992 but in initial period the growth rate in the FII investment was very high as it used to be in case of every variable, so the standard period of last ten years has been selected. The data on FII Flows i.e. FII Inflow, FII outflow and Net FII (in INR) have been collected from SEBI website (www.sebi.gov.in). The data on NSE prices of companies in different sectors has been collected from the website (www.nseindia.com).

First of all data related to FII flows have been sorted out. The FII flows in different companies of various sectors were separated from aggregate data. Then the FII flows in all the firms have been analysed. Then those companies under various sectors have been selected which have regular FII flow during the study period of April, 2004 to March, 2014. One hundred thirty (130) companies under twelve sectors have been selected to ascertain the effect FII flows on the return of these selected companies in the various sectors. After that NSE return of the selected companies has been calculated for empirical analysis. Then on the basis of

return of selected companies' average return of sector has been computed. The selection of NSE is based on the fact that flow of FII was more in NSE as compared to BSE during the study period. The return values of the selected companies have been calculated using the following formulae:

$R_t = (P_t - P_{t-1})/ P_{t-1}$

Here, R_t = Return from market at t period

$P_t - P_{t-1}$ = represents NSE prices of companies under different sectors at end of day t and t-1 respectively.

Then to check the causal relationship between the FII flows and Nifty return of the selected companies i.e. whether the FII flows causes the different sector's return or the returns causes the FII flows Granger Causality test has been used. Before applying the Granger Causality Test, first it has been checked whether the variables under study (i.e. FIIP, FIIS, NFII and Nifty return) are stationary or not. For checking whether the variables are stationary or not, one of the unit root test, the Augmented Dickey Fuller (ADF) test has been used. The following hypotheses have been established to check that

H_0: The variables have unit root (not stationary).

The test has been applied to all the variables one by one. If any variable among any sector is found to be non-stationary then, first differencing of variable has been done to convert it into a stationary variable.

After checking the stationary (criterion) of variables the Granger causality test has been performed with FII activities in selected companies under different sectors and Nifty return of these companies. One important thing to take care of that in time series the lag order in the analysis is quite sensitive to the results. In order to select the lag length for applying Granger Causality Test, lag order selection criteria was used and the lag length was identified to be 2. Granger Causality Test was applied using the following null hypotheses:

H_{01}: The Return does not Granger causes NFII.

H_{02}: The NFII does not Granger Cause Return.

H_{03}: The Return does not Granger causes FIIP.

H_{04}: The FIIP does not Granger Cause Return.

H_{05}: The Return does not Granger causes FIIS.

H_{06}: The FIIS does not Granger Cause Return.

RESULTS AND DISCUSSION

Comparative Analysis of Avg. Monthly Nifty Return and Avg. Monthly Return of various Sectors

The table presents the result of Independent t-Test between the average monthly Nifty return and average monthly return of various sectors. The average monthly return of various sectors has been calculated on the basis of companies selected under these sectors. The main objective of applying the test is to check whether there is any significant difference between both the returns. To check this following hypothesis has been set:

H_0: There is no significant difference between average monthly return of sector and average monthly Nifty Return.

Table 1: A Comparative status of Sector Return vis a vis Nifty Return

Sector	No. of Companies	Sector Avg. Monthly Return (%age)	Avg. Monthly Nifty Return (%age)	Mean Difference	T statistic	Sig. Value
Automobile	12	1.2740	1.2810	-0.0070	-0.008	0.994
Banking & Finance	17	1.2087	1.2810	-0.0723	-0.069	0.945
Cement	6	2.1473	1.2810	0.8663	0.822	0.412
Computer & IT	17	0.7161	1.2810	-0.5649	-0.572	0.568
Engineering	6	0.4297	1.2810	-0.8513	-0.704	0.482
Fertiliser	7	1.4179	1.2810	0.1369	0.123	0.902
Infrastructure	15	1.2951	1.2810	0.0141	0.011	0.991
Media & Entertainment	4	0.8680	1.2810	-0.4130	-0.405	0.686
Oil & Gas	14	0.9334	1.2810	-0.3476	-0.368	0.713
Pharmaceuticals	18	0.6450	1.2810	-0.6360	-0.779	0.437
Power	8	1.1015	1.2810	-0.1795	-0.163	0.871
Telecommunication	6	0.2414	1.2810	-1.0396	-1.146	0.253

Source: Compiled from NSE data series on stock prices

Note: * indicates significance at 0.05 level

The analysis indicates that only three sectors have better average return on investment as compared to avg. Nifty return on monthly basis during the study period. The avg. monthly return has been highest in respect of cement sector followed by fertiliser sector. The T- value computed under Independent t-Test is not statistically significant in respect of selected sectors. Hence H_0 is accepted leading us to conclude that the average monthly return of selected sectors is not significantly different as compared to Nifty return during the study period.

Table 2: Results of ADF Unit Root Test at Level for Various Sectors

Sector	Variables	T-Statistic	Sig. Level (0.05)	p–value	Result
Automobile	FIIP	-6.298054	-3.44802	**0.0000***	Reject H_0
	FIIS	-4.866624	-3.44835	**0.0006***	Reject H_0
	NFII	-8.098286	-3.44802	**0.0000***	Reject H_0
	Return	-6.920865	-3.44802	**0.0000***	Reject H_0
Banking & Finance	FIIP	-5.837589	-3.44802	**0.0000***	Reject H_0
	FIIS	-5.361887	-3.44802	**0.0001***	Reject H_0
	NFII	-7.140461	-3.44835	**0.0000***	Reject H_0
	Return	-8.307594	-3.44835	**0.0000***	Reject H_0
Cement	FIIP	-6.89696	-3.44802	**0.0000***	Reject H_0
	FIIS	-6.21393	-3.44802	**0.0000***	Reject H_0
	NFII	-6.58026	-3.44902	**0.0000***	Reject H_0
	Return	-7.89920	-3.44802	**0.0000***	Reject H_0
Computer & IT	**FIIP**	**-2.471698**	**-3.44868**	0.3415	Accept H_0
	FIIS	-6.306061	-3.44802	**0.0000***	Reject H_0
	NFII	-9.257059	-3.44802	**0.0000***	Reject H_0
	Return	-7.284993	-3.44802	**0.0000***	Reject H_0
Engineering	FIIP	-4.686009	-3.44802	**0.0012***	Reject H_0
	FIIS	-4.804641	-3.44802	**0.0008***	Reject H_0
	NFII	-7.179188	-3.44802	**0.0000***	Reject H_0
	Return	-4.635823	-3.44868	**0.0015***	Reject H_0
Fertiliser	FIIP	-4.740732	-3.44802	**0.0010***	Reject H_0
	FIIS	-4.894486	-3.44802	**0.0006***	Reject H_0
	NFII	-8.833112	-3.44802	**0.0000***	Reject H_0
	Return	-8.232986	-3.44835	**0.0000***	Reject H_0
Infrastructure	**FIIP**	**-3.255311**	**-3.44902**	0.0791	Accept H_0
	FIIS	**-2.351867**	**-3.44868**	0.4027	Accept H_0
	NFII	-8.288797	-3.44802	**0.0000***	Reject H_0
	Return	-7.197762	-3.44802	**0.0000***	Reject H_0
Media & Entertainment	**FIIP**	**-2.310918**	**-3.44868**	0.4245	Accept H_0
	FIIS	6.866724	-3.44802	**0.0000***	Reject H_0
	NFII	-7.070577	-3.44802	**0.0000***	Reject H_0
	Return	-8.292997	-3.44802	**0.0000***	Reject H_0
Oil & Gas	FIIP	-6.22810	-3.44802	**0.0000***	Reject H_0
	FIIS	-4.848219	-3.44802	**0.0007***	Reject H_0
	NFII	-9.820367	-3.44802	**0.0000***	Reject H_0
	Return	-8.377165	-3.44835	**0.0000***	Reject H_0
Pharmaceuticals	FIIP	-5.361435	-3.44802	**0.0001***	Reject H_0
	FIIS	-6.417198	-3.44802	**0.0000***	Reject H_0
	NFII	-6.712594	-3.44802	**0.0000***	Reject H_0
	Return	-7.586801	-3.44802	**0.0000***	Reject H_0
Power	FIIP	-3.938906	-3.44902	**0.0134***	Reject H_0
	FIIS	-3.514063	-3.44902	**0.0425***	Reject H_0
	NFII	-8.673309	-3.44802	**0.0000***	Reject H_0
	Return	-7.383397	-3.44802	**0.0000***	Reject H_0
Telecommunication	FIIP	-3.529412	-3.44835	**0.0408***	Reject H_0
	FIIS	**-3.438407**	**-3.44835**	0.0512	Accept H_0
	NFII	-9.457268	-3.44802	**0.0000***	Reject H_0
	Return	-8.617113	-3.44835	**0.0000***	Reject H_0

* indicates significance at 0.05 level

The table shows that variables NFII and return of selected sectors are stationary at level as the p-values of all these are less than 5%, rejecting the H_0 that the variables have unit root (non-stationary). On the other hand, FIIP is also found to be stationary at level for most of sectors except computer & IT, infrastructure and media & entertainment. The FIIS is non-stationary at level only for infrastructure and telecommunication sectors. So, there is need of first differencing for FIIP and FIIS for the sectors under which these are non-stationary.

Table 3: Results of ADF Unit Root Test at First Difference for Various Sectors

Sector	Variables	T-Statistic	Sig. Level (0.05)	p–value	Result
Computer & IT	FIIP	-13.64840	-3.44868	**0.0000***	Reject H_0
Infrastructure	FIIP	-6.209069	-3.44902	**0.0000***	Reject H_0
	FIIS	12.89658	-3.44868	**0.0000***	Reject H_0
Media & Entertainment	FIIP	-12.68173	-3.44868	**0.0000***	Reject H_0
Telecommuniaction	FIIS	-11.46742	-3.44868	**0.0000***	Reject H_0

* indicates significance at 0.05 level

In order to convert FIIP and FIIS into a stationary series first differencing was done for these. ADF test results for first differencing of variables were found to be stationary as the p-values of it is less than 5% as indicated in table. Thus alternate hypothesis was accepted indicating stationarity of the series.

The table 2 shows the results of Granger Causality test for FIIP and return of various sectors with the lag period of 2. The null hypothesis has been tested on the basis of the p-value. If the p-value is less than 5% then the null hypothesis is rejected meaning thereby there is significant relation between the variables.

Table 4: FIIP and Return of Sectors: Results of Granger Causality Test

Sector	Return doesn't Granger cause FIIP		FIIP doesn't Granger cause Return		Relationship
	F-statistic	p-value	F-statistic	p-value	
Automobile	1.20503	0.3035	0.08197	0.9214	No Relationship
Banking & Finance	1.42983	0.2436	2.72029	0.0702	No Relationship
Cement	0.33330	0.7173	3.64330	**0.0293***	Uni- Directional
Computer & IT	1.25438	0.2892	1.00376	0.3698	No Relationship
Engineering	1.10932	0.3333	1.23258	0.2954	No Relationship
Fertiliser	2.05156	0.1333	3.88944	**0.0233***	Uni- Directional
Infrastructure	4.74179	**0.0105***	0.24359	0.7842	Uni- Directional
Media & Entertainment	2.24543	0.1106	4.11376	**0.0189***	Uni- Directional
Oil & Gas	3.64252	**0.0293***	1.09049	0.3396	Uni- Directional
Pharmaceuticals	4.36539	**0.0149***	0.78456	0.4588	Uni- Directional
Power	2.09659	0.1276	2.72635	0.0698	No Relationship
Telecommunication	3.52968	**0.0326***	1.42590	0.2446	Uni- Directional

Results from the table indicate that FIIP in automobile, banking & finance, computer & IT, engineering and power sector have no relationship with return of these sectors. While for the remaining sectors FIIP is found to have uni-directional relationship with return of these sectors. For the sectors i.e. infrastructure, oil & gas, pharmaceuticals and telecommunication return is found to granger cause FIIP of these sectors. While in case cement, fertiliser and media & entertainment sectors FIIP is found to cause return of these sectors.

Table 5: FIIS and Return of Sectors: Results of Granger Causality Test

Sector	Return doesn't Granger cause FIIS		FIIS doesn't Granger cause Return		Relationship
	F-statistic	p-value	F-statistic	p-value	
Automobile	4.61660	**0.0118***	0.61277	0.5436	Uni directional
Banking & Finance	6.23165	**0.0027***	2.67439	0.0733	Uni- Directional
Cement	5.22003	**0.0068***	3.73411	**0.0269***	Bi- Directional
Computer & IT	1.39767	0.2514	1.23985	0.2933	No Relationship
Engineering	0.48890	0.6146	1.50648	0.2261	No Relationship
Fertiliser	10.3566	**0.00007***	5.59647	**0.0048***	Bi- Directional
Infrastructure	17.5041	**0.0000002***	5.97290	**0.0034***	Bi- Directional
Media & Entertainment	1.04901	0.3537	4.48883	**0.0133***	Uni- Directional
Oil & Gas	15.8399	**0.0000009***	0.53408	0.5877	Uni- Directional
Pharmaceuticals	9.25166	**0.0002***	2.43140	0.0925	Uni- Directional
Power	4.47347	**0.0135***	2.43992	0.0917	Uni- Directional
Telecommunication	3.85894	**0.0240***	1.54857	0.2171	Uni- Directional

The table shows the relationship between the sales turnover of FII and return of the selected sectors. The results reveal that FIIP in computer & IT and engineering sectors do not have any relationship with the return of these sectors. Bi- directional relationship exists between the FIIS and return of cement, fertiliser and infrastructure sectors. In case of these three sectors FIIS causes the return and vice-versa. While, in case of rest of sectors FIIS and return have uni-directional relationship. Return is causing the FIIS in case of automobile, banking & finance, oil & gas, pharmaceutical, power and telecommunication sector. On the other hand, FIIS have an impact on the return of media & entertainment sector.

Table 6: NFII and Return of Sectors: Results of Granger Causality Test

Sector	Return doesn't Granger cause NFII		NFII doesn't Granger cause Return		Relationship
	F-statistic	p-value	F-statistic	p-value	
Automobile	0.00225	0.9978	0.51830	0.5969	No relationship
Banking & Finance	0.29132	0.7478	6.00164	**0.0033***	Uni-Directional
Cement	0.68442	0.5065	0.29125	0.7479	No Relationship
Computer & IT	0.17391	0.8406	0.15412	0.8573	No Relationship
Engineering	0.75678	0.4715	0.33332	0.7172	No Relationship
Fertiliser	0.51338	0.5999	0.06223	0.9397	No Relationship
Infrastructure	0.78709	0.4576	9.81400	**0.0001***	Uni-Directional
Media & Entertainment	0.04441	0.9566	0.38803	0.6793	No Relationship
Oil & Gas	5.42555	**0.0056***	0.44163	0.6441	Uni-Directional
Pharmaceuticals	0.34595	0.7083	0.70653	0.4955	No Relationship
Power	0.14004	0.8695	2.38129	0.0971	No Relationship
Telecommunication	0.20172	0.8176	0.78604	0.4581	No Relationship

Based on the results it can be concluded that the Net FII flow in most of the sectors has no relationship with return. Neither the NFII is affecting the returns, nor the return is affecting the NFII for most of sectors except banking & finance, infrastructure and oil & gas sector. Uni-directional relationship exists between NFII and return of banking & finance and infrastructure sectors as the p-value is less than 5% rejecting null hypothesis that NFII does not Granger causes return meaning thereby NFII Granger cause return in these sectors. On the other side, return is affecting the NFII in case of oil & gas sector.

CONCLUSION

The study has been carried out to examine the causation between the stock market return and FII flows in the selected sectors for the period ranging from April, 2004 to March, 2014 for the 120 observations. The study revealed that engineering & computer & IT sector return do not impact FII flows and vice-versa. While in case of pharmaceutical and telecommunication sector return is found to have an effect on the FIIP & FIIS of these sectors, but no relationship is found to exist between NFII and return of these sectors. Both the cement and fertiliser sectors return have identical relationship with

FII flows. Only the FIIP flows causes the return of these sectors while reverse is not true. In case of FIIS and return both are found to cause each other. No relationship is found to exist between the NFII and return of these sectors from either way.

Talking about rest of the sectors, FIIP does not have any relationship with return of automobile, banking & finance and telecommunication sectors. In case of infrastructure and oil & gas sectors only the return is found to impact the FIIP flows of these sectors not the other way round. Opposite to this, FIIP flows have an impact on return of media & entertainment sector not the other way round.

The automobile, banking & finance, oil & gas and power sector's return is found to have an impact on FIIS flow of these sectors. Opposite to it, FIIS flows have an impact on return of media & entertainment sector not the other way round. While, in case of infrastructure sector both the FIIS and return are found to cause each other meaning thereby bi-directional relationship between them. The study found that NFII flows in case of automobile, media & entertainment and power sector do not cause return of these sectors and vice-versa. In case of baking & finance and infrastructure sectors return causes the NFII flows not from other way round. While, NFII flows are found to have an impact on return of oil & gas sector not the vice-versa.

The study has checked the causation between the FII flows and return of the selected sectors only. Similarly this causation can also be checked for the other sectors also. Beside this, there may be some other factors causing FII in India i.e. interest rate, GDP, exchange rate, inflation rate etc. The causal relation between them can also be checked in the same way, which may also become the scope for further study.

REFERENCES

1. *Adabag, M. C., & Ornelas, J. H. (2004). Behavior and Effects of Foreign Investors on Istanbul Stock Exchange. Retrieved from http://dx.doi.org/10.2139/ssrn.656442*
2. *Bohn, H., & Tesar, L. L. (1996). U.S. Equity Investment in Foreign Markets: Portfolio Rebalancing or Return Chasing? The American Economic Review, 86(2), 77-81.*
3. *Bose, S., & Coondoo, D. (2004). Impact of FII Regulations in India – A Time Series Intervention Analysis of Equity Flows. Money and Finance ICRA Bulletin, 54-83.*
4. *Coondoo, D., & Mukherjee, P. (2003). Volatility of FII in India. Money & Finance ICRA Bulletin, 85-102.*
5. *French, J. J. (2011). The Dynamic Interaction Between Foreign Equity Flows And Returns: Evidence From The Johannesburg Stock Exchange. The International Journal of Business and Finance Research, 5(4), 45-56.*
6. *Froot, K. A., & Ramadorai, T. (2001). The Information Content of International Portfolio Flows. NBER Working Paper No. 8472, 1-42.*
7. *Gupta, A. (2011). Does The Stock Market Rise Or Fall Due To FIIs in India? Journal of Arts, Science & Commerce, 2(2), 99-107.*
8. *Kanojia, S., & Rani, A. (2014). The FII's and Indian Stock Market Return: An Empirical Evaluation. International Journal of Research in Management, Economics and Commerce, 4(6), 91-110.*
9. *Kaur, M., & Dhillon, S. S. (2010). Determinants of Foreign Institutional Investors' Investment in India. Eurasian Journal of Business and Economics, 3(6), 57-70.*
10. *Kulshrestha, H. (2014). Impact of Foreign Institutional Investors (FIIs) on Indian Capital Market. International Journal of Research in Business Management, 2(3), 35-52.*
11. *Kumar, K. V., & Devi, V. R. (2012). Imapct of International Financial Flows on Indian Stock Markets - An Empirical Study. XI Capital Markets Conference. Mumbai: Indian Institute of Capital Markets (UTIICM).*
12. *Pal, P. (1998). Foreign Portfolio Investment in Indian Equity Markets: Has the Economy Benefited? Economic and Political Weekly, 33(11), 589-598.*
13. *Pal, P. (2005). Volatility in the Stock Market in India and Foreign InstitutionaInl Investors: Study of the Post-Election Crash. Economic and Political Weekly, 40(8), 765-772.*
14. *Prasanna, P. K. (2008). Foreign Institutional Investors: Investment Preferences in India. JOAAG, 3(2), 40-51.*
15. *Rai, K., & Bhanumurthy, N. R. (2004). Determinants of Foreign Institutional Investors in India: The Role of Return, Risk and Inflation. The Developing Economies, XLII-4, 479-493.*
16. *Richards, A. (2005). Big Fish in Small Ponds: The Trading Behavior and Price Impact of Foreign Investors in Asian Emerging Equity Markets. Journal of Financial and Quantitative Analysis, 40(1), 1-27.*
17. *Samal, K. C. (1997). Emerging Equity Market in India: Role of Foreign Institutional Investors. Economic and Political Weekly, 32(42), 2729-2732.*
18. *Sehgal, S., & Tripathi, N. (2009). Investment Strategies of Fils in The Indian Equity Market. Vision-The Journal of Business Perspective, 13(1), 11-18.*
19. *Srikanth, M., & Kishore, B. (2012). Net FII Flows into India: A Cause and Effect Study. ASCI Journal of Management, 41(2), 107-120.*