Impact of Flow of FDI on Indian Capital Market

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Abstract:

Foreign direct Investment plays a very vital role in the economic development of both developing as well as developed nations. Large number of the countries are integrated and pursuing their international operations due to foreign direct investment. Fast growing economies like China, Korea and Singapore etc have registered incredible growth at the onset of FDI. As we know that FDI provides an access to the foreign capital but at the same time FDI also helps to provide the most modernize technology available, various tools of innovations and other complementary skills. Now the government plays a very vital role in drafting and executing various policies regarding the inflow of FDI. The FDI policies framed on the part of the government will act as a stimulus so that various foreign countries may be attracted to ensure their investment in India. No doubt that amount of the inflow of FDI will account to our growth in GDP but at the same time the Indian stock market will also be affected due to the inflow of FDI. This paper will attempt to study the impact of foreign direct investment on the Indian stock market. Various statistical tools will be applied in order to analyze the study. The tools to be used are coefficient of correlation, regression analysis. In order to study the impact, Sensex and nifty are used as they are representing the Indian stock market. Data of 12 years 2001-2012 suggests that amount of FDI has a direct impact on both Sensex and Nifty. The study concludes that flow of FDI in India determines the trend of Indian Stock Market.

Keywords: FDI, Stock Market

INTRODUCTION:

Large number of countries has witnessed acceleration in their economic growth. After analyzing the reasons for this it was found that FDI plays a vital role in the economic development of both developing as well as developed nations. Various countries are integrated in the present global competitive environment through FDI. In addition to the economic development and generating an employment in a country FDI also helps in providing most modernized technology available in the market. An opportunity or favorable conditions were made by the government of Indian in 1991 when it opens the doors for the inflow of the foreign capital in India through foreign direct investment. This input was badly needed for India as India turns out to be one of the most attractive destinations of capital investment. Foreign direct investment refers to the investment made by a company based in one country, in to a company based in another country, companies make their investments in the fixed assets have a significant degree of influence and control over the company in to which the investment is made. Foreign Direct Investment (FDI) is fund flow between the countries in the form of inflow or outflow by which one can able to gain some benefit from their investment whereas another can exploit the opportunity to enhance the productivity and find out better position through performance. The FDI may also affect due to the government trade barriers and policies for the foreign investments and leads to less or more effective towards contribution in economy as well as GDP of the economy. The growth of FDI gives opportunities to Indian industry for technological up gradation, gaining access to global managerial skills and practices, optimizing utilization of human resources and competing internationally with higher efficiency.

Now there is positive relationship between economic growth and stock market development and a large number of empirical studies on the role of FDI in host countries suggest that FDI is an important source of capital, complements domestic private investment, is usually associated with new job opportunities and enhancement of technology transfer, and boosts overall economic growth in host countries. We therefore observe triangular causal relationship: (1) FDI stimulates economic growth (2) economic growth promotes stock market development; and (3) implication that FDI promote stock market development.

Need for FDI:

Developing economies like India needs a large inflow of the capital in terms of FDI. This is required for the development of the basic infrastructure like roads, railways, warehouses, banking and insurance services etc. Many countries in the world may not be having appropriate infrastructure due to lack of the funds, now better infrastructure facilities can be easily created if a country allows the foreign giant to invest. We can say that foreign capital is a unique remedy for the scarcity of all resources. Moreover FDI may involve new technologies and expertise may not be

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available in the domestic economy. Another important motivation of FDI is efficiency seeking. Low cost of production, deriving mostly from cheap labour is the driving force of many FDIs in developing countries. It may be kept in mind that FDI would not take place in the absence of required infrastructural facilities to develop the industry. In nutshell we can say that there is significant need of FDI for those countries which are having scarcity of resources, lack of infrastructure facilities, and lack of modernized technology. All these above mentioned resources can be easily raised if a country allows the foreign capital to be invested in their country.

Review of Literature:

The review of literature on impact of FDI is given below:

Chopra (1) has analyzed the impact of economic reforms on FDI in India. He carried out his research from 1980-2000. The result showed that GDP is a very important factor which motivated the FDI in the country. John Andreas (2) studied the impact of FDI inflow on host country economic growth. The paper says that FDI should have a positive impact on economic growth as a result of technology spillovers and capital inflows. He took almost 90 countries and find out that FDI inflow enhances the economic growth in developing economies but not in developed economies. Jayachandran and Sielan (3) find out the relationship between trade, FDI and economic growth of India over the period 1970-2007. The tests showed that there is a casual relationship between the examined variables. The direction of casual relationship is from FDI to growth rate and there is no causality relationship from growth rated to FDI. **Objectives of the study:**

- To study the trends and patterns of foreign capital flow in to India in the form of FDI •
- To study the impact of foreign capital in the form of FDI on the stock market.

RESEARCH METHODOLOGY

This study is based on secondary data. The required data related to FDI and FII have been collected from various sources i.e. Bulletins of Reserve Bank of India, publications from Ministry of Commerce, Govt. of India. The BSE Sensex and CNX Nifty data is down loaded from the websites of bseindia and nseindia respectively. Daily closing index value are taken and averaged to get the index value for each year, which is considered as more representative figure of index for the entire year rather any one day's/month's closing figure of the index. The present study considers 11 years data starting from 2001 to 2011. In order to analyze the collected data the statistical tools such as regression has been used.

Hypothesis

The null hypothesis and alternative hypothesis with respect to BSE Sensex and FDI can be stated as follows:

H01: Flow of FDIs in to India and BSE Sensex trend are independent.

Ha1: Flow of FDIs in to India and BSE Sensex trend are dependent.

H01: Flow of FDIs in to India and Nifty trend are independent.

Ha1: Flow of FDIs in to India and Nifty trend are dependent.

FDI in stock Markets

Indian bourses both securities & commodities are amongst the favorite hunting spots for foreign investors betting on India's growth story. These businesses appeal to investors as they have long term horizons and signify bets on the country's growth. In 2004, 13% of the total PE investments made in the banking & financial services space were in stock exchanges. Since the beginning of 2007, 17 transactions (including consortium deals) took place with a disclosed deal value of more than \$1.15 billion. Out of this, 8 deals with disclosed value of more than \$268 million happened in 2010 only. In 2010, NSE had 12 foreign investors with a total foreign investment of 32% compared to BSE which had 8 foreign investors with share of 27% investments. In the same period, MCX had 22% foreign holding & NCDEX 15% foreign investments. Some of the key US investors active in Indian exchanges are NYSE group, Atlantic LLC, Goldman Sachs, Morgan Stanley, Citigroup, Northwest Venture Partners, George Soros, Argonaut ventures. Fidelity, Intel Capital, Merril Lynch, and Bessemer Capital are some of the US investors. Most of the transactions involving these exchanges have been secondary in nature. The change in regulations (restricting the



single investor holding to 5%) also added to the spurt in secondary deals. The lucrative exchange space continues to attract more players who are looking to increase their market shares. The following table 1 presents the amount of flow of FDI in India in terms of US\$ million. The flow of FDIs has shown an increasing trend during the considered period except during the years i.e. 2001 to 2004 and the year 2010-11. **Table 1.**

	FDI(US \$ MILLION)	BSE SENSEX	NIFTY
2000-01	4029	4269.68	1334.76
2001-02	6130	3331.94	1077.02
2002-03	5035	3206.28	1037.22
2003-04	4322	4493.53	1427.5
2004-05	6051	5740.98	1805.26
2005-06	8961	8280.08	2513.44
2006-07	22,826	12277.32	3572.44
2007-08	34,835	16568.88	4896.59
2008-09	41,874	12365.55	3731.02
2009-10	37,745	15585.21	4657.76
2010-11	32,901	18605.17	5583.54

Impact of flow of FDIs on BSE Sensex -Regression is used to analyse the data.

The table 2 is the model summary reports the strength of the relationship between the model and the dependent variable. R, correlation coefficients, is the linear correlation between the observed and model predicted value of the dependent variable. Its large value indicates a strong relationship. R Square, the coefficient of determination, is the squared value of the correlation coefficients. The value of R^2 is 0.822; it shows that the model 82% explains of the variation. In other words the dependent variables FDI is able to explain around 82% the variation of the dependent variable (SENSEX).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.907 ^a	.822	.802	2559.65781

a. Predictors: (Constant), fdi

	Table-5 ANOVA								
Mode	el	Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	2.726	1	2.726	41.599	.000 ^a			
	Residual	5.897	9	6551848.106					
	Total	3.315	10						

Table-3	ANOVA ^b
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a. Predictors: (Constant), fdi

b. Dependent Variable: sensex

The ANOVA table 3, tests 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 much is less than residual sums of squares, which indicates that around 82% of the variation in SENSEX is explained by the model. However, F statistic is found significant, since the p value (0.000) less than 0.05.

	Table-4 Coefficients ^a									
		Unstandardized Coefficients		Standardized Coefficients						
Mode	1	В	Std. Error	Beta	t	Sig.				
1	(Constant)	3249.345	1241.364		2.618	.028				
	fdi	.337	.052	.907	6.450	.000				

a. Dependent Variable: sensex

Testing the hypothesis:

The null hypothesis and alternative hypothesis with respect to BSE Sensex and FDI can be stated as follows:

H01: Flow of FDIs in to India and BSE Sensex trend are independent.

Ha1: Flow of FDIs in to India and BSE Sensex trend are dependent.

The p-value related to FDI shown in table 4, is .000 less than 0.05 so null hypothesis H01 is not accepted. Hence it is concluded that Flow of FDIs in to India and BSE Sensex trend are dependent.

Impact of flow of FDIs on CNX Nifty

The table 5 is the model summary reports the strength of the relationship between the model and the dependent variable. R.Its large value indicates a strong relationship. R^2 , the coefficient of determination, is the squared value of the correlation coefficient. The value of R^2 is 0.823; it shows that the model explains 82.3% of the variation. In other words the independent variable FDI is able to explain around 82% the variation of the dependent variable (NIFTY).

Table 5-Model	Summary
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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.907 ^a	.823	.803	744.11391

a. Predictors: (Constant), fdi

	Table 6-ANOVA ^b								
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	2.319	1	2.319E7	41.881	.000 ^a			
	Residual	4983349.648	9	553705.516					
	Total	2.817	10						

a. Predictors: (Constant), fdi

b. Dependent Variable: nifty

The ANOVA table 6, tests 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 is much less than residual sums of squares, which indicates that around 82% of the variation in NIFTY is explained by the model. However, F statistic is found significant, since the p value (0.000) less than 0.05.

Unstandardized Coefficien		d Coefficients	Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1046.826	360.875		2.901	.018
	fdi	.098	.015	.907	6.472	.000

a. Dependent Variable: nifty

Testing the hypothesis

The null hypothesis and alternative hypothesis with respect to CNX NIFTY and FDI can be stated as follows: H02: Flow of FDIs in to India and NIFTY trend are independent.

Ha2: Flow of FDIs in to India and NIFTY trend are dependent.

The p-value related to FDI shown in table 7, is .000 less than 0.05 so null hypotheses *H02* is not accepted. Hence it is concluded that Flow of FDIs in to India and CNX NIFTY trend are dependent

FINDINGS OF THE STUDY

- The FDIs flow has shown increasing trend during the considered period of study except in the past two years and during 2002 to 2004.
- There is a strong positive correlation between FDI & sensex and FDI & nifty.
- Flow of FDIs into India and BSE Sensex trend are dependent.
- Flow of FDIs into India and CNX Nifty trend are dependent.

Conclusion:

The inflow of capital in terms of foreign direct investment (FDI) has definitely impacted the economy as well as the capital markets. Foreign direct Investment has provided ample opportunities as far as technological up gradation is concerned. In addition to this India has also gained the global managerial skills which were required badly to sharpen the managerial skills for Indian industry.

From the current study it is quiet evident that there is strong degree of correlation between FDI & Sensex, and FDI & Nifty. From table1 it is quiet clear that larger inflow of FDI means bullish trend in the capital markets. In addition to table1 the statistical tools such as coefficient of correlation as well as regression analysis has proved the significant impact of the inflow of FDI on capital market.

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