Effect of FDI on Economic Growth - With Special Reference to India

Dr. Ashneet Kaur[1], Ms Seema Wadhawan[2]
1. **Assistant Professor, Gitarattan International Business School, ashneetsukhija@gmail.com**
2. **Assistant Professor, Gitarattan International Business School, seema.wadhawan@gitarattan.edu.in**

Abstract: FDI has been consistently increasing after the New Economic Reforms in 1991.Economic growth refer to the increasing percentage of goods and services produced in the economy. Therefore GDP and Consumer Price Index are the two main macro indicators which show the change in economic growth. This research paper tries to establish a cause and effect relationship between Economic Growth and FDI. The data has been gathered from the various secondary sources. Regression analysis has been used to find out the relationship between the variables. The major findings of the research clearly indicate that economic growth has a positive moderate relationship with the shift in FDI.

Keywords – Foreign Direct Investment, Economic Growth, Gross Domestic Product

INTRODUCTION

Foreign Direct Investment: Foreign direct investment is an investment when a distant company/ person try to establish the business in other country and the amount invested in such a project is called FDI. India is one of the sought after investing economy and has manifested itself as one of the growing economies in the world. It has been ranked among the top 10 attractive destinations for inbound investments. After the introduction of the New Economic Policy (1991) the rules for foreign investment have been constantly made investor friendly.
There has been a plethora of initiatives taken up by the government to open a number of novel sectors for investment, mounted the sectoral limit of the current available sectors and simplifying other conditions of the FDI policy. FDI policy reforms are meant to provide ease of doing business, generate employment and accelerate the pace of foreign investment in the country.

Economic growth: Economic growth can be referred when there is creation of the goods and services in an economy. A positive change in the production of capital goods; labor force, technology and human capital can all contribute to economic growth. It is indeed an important indicator of a healthy economy. Economic growth shares a direct and positive relationship with both FDIs and the real effective exchange rate, while there exists an inverse long-run relationship with government expenditure. (Masipa, 2018)
Economic growth is usually measured in terms of aggregated market value of additional goods and services produced using estimates such as GDP. To study the impact of FDI on economic growth, Gross Domestic Product has only been taken as the index of Economic Growth.

Gross Domestic Product: GDP is the monetary value of all the finished goods and services produced within a country's border within a specific period of time GDP includes all private and public consumption, government outlays, investments, additions to private inventories, paid-in construction costs and the foreign balance of trade (exports are added, imports are subtracted). GDP provides a direct indication of the health and growth of the economy, businesses can use GDP as a guide to their business strategy. Investors also watch GDP since it provides a framework for investment decision-making. In India, contributions to GDP are mainly divided into 3 broad sectors – agriculture and allied services, industry and service sector. Foreign direct investment has positive relation with gross domestic product in short and long run in Pakistan (Ahmad et. Al, 2012)

OBJECTIVES OF STUDY

i) To study the trend analysis in FDI since 2007.
ii) To study the impact of FDI on economic growth with reference to GDP since 2007

RESEARCH METHODOLOGY

1. Methodology used for Data Collection

The data is collected with the help of secondary sources for the period of 2007-17. The data have been collected from various sources i.e. websites, journals, published books. It is a time series data and the relevant data is collected for the period of 2007-2017.To the test the hypothesis, linear regression analysis was conducted using FDI equity inflow as the dependent variable, GDP as independent variable.

2. Hypothesis

The following hypothesis is formulated for the study
H_1: There is significant impact of FDI on GDP

LITERATURE REVIEW

Cheong WTLM, Junjun H. (2018) estimated the effect of foreign direct investment (FDI) on economic growth of nine (9) West Africa countries during the period of 1995 to 2015, using panel data approach. As a outcome, the FDI is statistically significant and has a positive effect on economic growth in West Africa countries. Additionally, FDI needs support and directive from the government to have better productive activities in order to avoid its negative effect on GDP of West African countries.
Hiep Ngoc Luu, Vu Quang Trinh and Nam Hoai Vuin their working paper Does Foreign Direct Investment Accelerate Vietnamese Economic Growth? – A Simultaneous Equations Approach (2016) examined the impact of foreign direct investment (FDI) on economic growth in Vietnam over the five-year post-crisis period of 2010-2014. In addition, it also provides a comparative analysis with the pre-crisis period to yield greater insight into how the FDI-growth nexus evolved over time and under different economic conditions. They have used two simple ordinary-least-square (OLS) models, where FDI and economic growth are the dependent variables and are regressed on a number of other factors that seemingly influence FDI and growth. With an awareness of the possible endogeneity bias, we re-estimate our model using the simultaneous equation approach, employing the two-step system generalized method of moment (GMM) estimator. We complement our study by re-estimating the model on the pre-crisis sample during the period 1999-2006. Then, we re-run our regressions on the full-sample setting and take into account the possible effect of the 2007/2008 crisis by incorporating the crisis dummy variables (D2007 and D2008) to shed more light on the impact of the crisis on FDI and economic growth. Overall, we find some evidence of the simultaneous relationship: increased inward FDI promotes economic growth, while at the same time; greater growth could help the country to attract additional FDI capital. However, he found that there is bi-directional relationship only existed in the post-crisis period, and not in the pre-crisis time.
Kapoor (2015) researched on "Impact of FDI & FII on Indian Stock Markets" and concluded that the flow of FDI had no significant impact on stock market but FII in India determines the trend of Indian stock market. There was a negative correlation between FDI & Sensex and FDI & Nifty. But there was a strong positive correlation between FII & Sensex and FII & Nifty.
Kulshrestha (2014), studied impact of FII on Indian Stock Market was conducted and observed that investments by FIIs and the movements of BSE Sensex and CNX Nifty were quite closely correlated. According to findings and results, foreign institutional investors (FIIs) had significant impact on the movement of Indian capital market.
Saqi, Masnoon and Rafique(2013). In his research studied the relationship between FDI and Economic

Growth of Pakistan the data used for this study was from the period of 1981 till 2010. Besides FDI, four other variables including Debt, Trade, Inflation and Domestic Investment have been included in the study, to regress upon GDP of this country. The methodology to test the impact of these variables on Pakistan's economy has been limited to the least squares method. The co-integration of the variables has been ascertained through application of Augmented Dickey Fuller Test and is found to hold in the long run. They found out that Pakistan's economic performance is negatively affected by foreign investment while its domestic investment has benefitted its economy. Moreover, the nation's debt, trade and inflation have found to have negative impact on its GDP.
Vo, Xuan Vinh & Batten, Jonathan. (2009) used a panel data modelling technique to find out the link between Foreign Direct Investment (FDI) and economic growth and also if the relationship changes under different educational, institutional and economic conditions. He stated that FDI has a stronger positive impact on economic growth in countries with a higher level of education attainment, openness to international trade and stock market development, and a lower rate of population growth and lower level of risk. Thus, countries undertaking reform of cross-border capital restrictions and controls and initiating other policy aimed at encouraging FDI need to ensure that broader social policy objectives-such as education and institutional reform-are also undertaken to leverage the benefits from FDI.

DATA PRESENTATION & ANALYSIS

FDI ANNUAL EQUITY INFLOWS

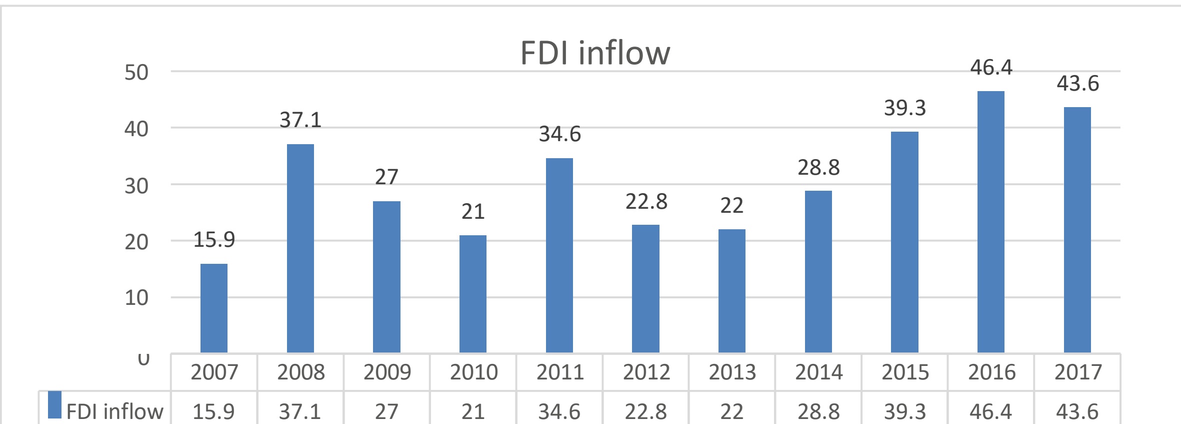

Figure 1- FDI Annual Equity Inflows

The above graph shows that FDI inflow in 2007 was $15.9 billion and increased to $37.1 billion in 2008.The next two years it went on decreasing and it increased to $34.6 billion in the year 2011. In the year 2012 and 2013 FDI equity inflow decreased. After the Make in India, programme was initiated the FDI equity inflow increased till the year 2016. In 2017 FDI equity inflow decreased.

SHARE OF TOP COUNTRIES – FDI EQUITY INFLOW

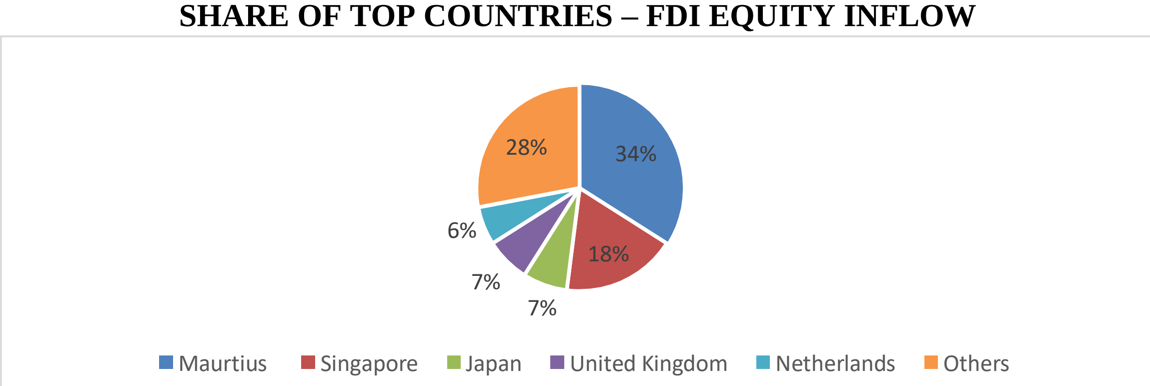

Figure: 2 Share of top countries

The above pie chart shows that High volumes of FDI came via Mauritius and Singapore is the second largest contributor of FDI after Mauritius. Japan and United Kingdom contribute 7%. Netherland contribute 6% of FDI in India.

SECTOR WISE DISTRIBUTION OF FDI EQUITY INFLOW

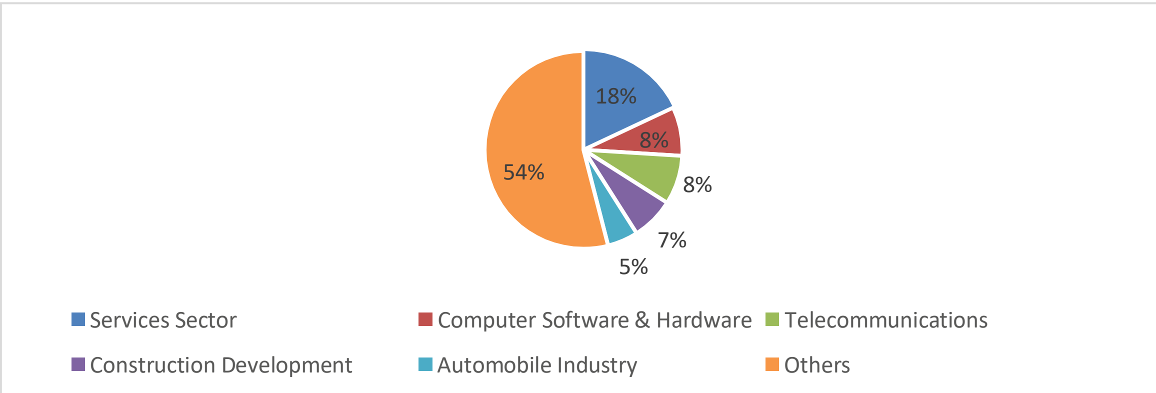

Figure: 3 Sector Wise Distributions

The above result shows that sector wise distribution of FDI equity Inflow in India has taken place maximum in the service sector and followed by many others such as Computer hardware and software, Telecommunication, Construction development and many others.

HYPOTHESIS TESTING

H_1: There is a significant impact of FDI on GDP

IMPACT OF FDI ON GDP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.503	.253	.170	.14094	2.478

b. Dependent Variable: GDP

Table 1: Model Summary

In the above table R shows the correlation between the dependent and the independent variable. The value of R is .503 which shows that there is a positive moderate correlation between FDI and GDP.R square denotes the variation in dependent variable due to independent variable. The value of R square is 25.3 which signify that there is 25%impact of FDI on GDP. Further we also calculate the Durbin Watson which is use to check the multi collinearity among the variables. If the value is between 1.5-2.5 then there is no multi collinearity. In the above table the value is 2.478. Thus, the table shows that

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.183	1.357		2.346	.044		
	FDI	-.383	.219	-.503	-1.748	.114	1.000	1.000

there does not exist multi collinearity between the variables.

Table 2: Coefficients

In the above table the coefficient value has to be determined the value of constant this table indicates the summarize equation of the linear equation. As significance value is .114 which is larger than 0.05 so there is no significance relation between them. If the value is equal to 0.05 then there will be a significant value between the two relations. Based upon the coefficient output obtained the value of VIF is 1.000 meaning the VIF value obtained 1 to 10 from that the conclusion is there is multi collinearity symptoms.

FINDINGS OF THE STUDY

The research paper mainly aims at finding the relationship between FDI and Economic growth. There is a moderate positive correlation between the independent variable (Gross domestic product) and dependent variable (Foreign direct investment), which indicates that there are more factors which impact the flow of FDI in the Indian Economy. Thus there can be a huge further scope of finding the other determinants of FDI.

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