INFLUENCE OF FDI ON THE GROWTH OF INDIAN ECONOMY

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Abstract: *Foreign Direct Investment is an investment made by firms or individual of one country in the business of another country. Foreign investments have a positive impact on the development of the Indian Economy. Inflows of FDI strengthen the trade network of a country at global level and also provide financial assistance to that country. FDI helps in reducing the balance of payment (BOP) deficit. This paper is to analyze the impact of foreign investments inflows on the economic growth of India. Secondary data has been collected from the period 2002-03 to 2016-17 to achieve the objective. By applying regression technique and with regression model it is found that FDI has a significant impact on the growth of an economy.*

Keywords*:* Foreign Investment, financial assistance, trade network and external economies

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1. INTRODUCTION

Foreign investment means the flow of capital from one country to another by investing in the assets or buying shares of companies of another country. Investments can be done by individual, companies and corporations but mostly it is done by companies as to increase its market share at global level. Foreign investments can be done in two ways: directly and indirectly. Foreign Direct Investments are the investments done physically or by opening plants, purchasing machines; equipments etc. Foreign companies invest directly in the fast growing Indian private companies to get the benefit of cheaper wages and changing environment of India. Foreign Indirect Investments involves investments in stakes of foreign companies by different investors like corporations, private investors and financial institutions. But these investments are less favorable because domestic companies sell the investments, sometimes within few days of purchase. FDI flows records the data of cross border transactions related to direct investments during the given period of time (usually a quarter or a year). FDI inflows means investment made by foreigners in the domestic companies and FDI outflows are the investments made in the external economies. FDI inflows trigger the economic growth of a country. In view of the fact that many developing countries are experiencing lack of monetary funds, low level of technology and skills. FDI is an essential factor for sustainable development and poverty alleviation. Expansion of economy with FDI flows is a good indicator of economic growth as it increases the job opportunities and hence creates employment. United Nations Conference on Trade and Development (UNCTAD) said in its report that India notches to rank no. 9 in terms of FDI received in 2016, at the time global FDI fells. Gross domestic product (GDP) is the primary indicator which explains the health of the country. GDP shows the total value of all the goods and services produced during the period. It doesn't matter whether the companies are of own country or foreign-owned companies, if they are within country's boundaries govt. count the production as a part of its own GDP. GDP is an independent variable. Gross Domestic product calculated at market price and at factor cost. GDP at market price is the sum of gross value added of all resident producers at market prices plus taxes less subsidies on imports. FDI in Economic Growth Provides capital, Removes negative BOP. It brings technology and management skills, Promotes increased employment, Creates competitive environment.

The objectives of the study are

- To study the trend pattern of Foreign Direct Investment from 2002-03 to 2016-17
- To know the impact of FDI on the economic growth of India

2. REVIEWS OF LITERATURE

Sudhir Naib (2005) in his book „Disinvestment in India- Policies, Procedures and Practices" stated that state owned enterprises reforms have many dimensions such as privatization, introduction of competition in product and factor markets, hard budget constraint, financial sector reforms and changes in the relationship between the government and state owned enterprises managers. Reforms are motivated by a variety of goals and present complex strategic choices. These are creating a market economy, encouraging private enterprises, promoting competition, improving self-sufficiency and distribution of income, reducing the influence of labour union etc.

Louzi,B.M & Abadi, A. (2011). In their paper "The Impact of Foreign Direct Investment on Economic Growth in Jordan" they talked about FDI- led Growth in Jordan. Their study is based on time series data from 1990 to 2009. FDI plays vital role in the economic growth of the country. They also explained the situation during 1991-2009 that FDI at global level increased at 25% whereas developing countries as group showed increase at the rate of 22% at constant prices. The first major inflows of FDI started after liberalization in FDI policies. Many studies done earlier showed that FDI and Growth had a positive relation but with their study they concluded one more thing that FDI was not the sole and independent factor that influenced the growth of the country. Net Attitude revealed the investment climate of Jordan. The suggested that appropriate measures should be taken by the govt. such as transparency in trade policies, flexible labour markets, tariff structure etc.

Anitha,R. (2012). In his paper "Foreign Direct Investment and Economic Growth in India" he talked about the role of FDI in the development of developing and underdeveloped countries. FDI in such countries bridges the gap between available financial resources and required financial resources. In his paper he analyzed the trends of FDI inflows in the country from 2010 to 2015. He mentioned the reasons for the poor performance of India in attracting FDI inflows such as political instability, poor infrastructure, tariff laws, labour law etc. in his study he concluded that global share of FDI in India is very less as compared to other developing countries even after increased in the flow of FDI. To improve this situation govt. has to adopt innovative policies and good corporate governance practices to attract more & more foreign capital.

Singh, J., et.al. (2012). In their paper "Role of Foreign Direct Investment in India: An Analytical Study" they showed that FDI played a major role in attracting International Economic Integration in every economy. Main sectors where investments were flowing more were: real estate & business, insurance sector etc. The objective of the study was to know the amount of foreign investments required for growth and analyzing its trend. There are two routes of FDI inflows i.e. automatic route (liberalized route) and government route (or approval route). They also talked about the main determinants of FDI (a) in host country were policy framework, international agreements, trade policies, rules regarding entry & operations etc. (b) economic determinants such as market size, market structure, labour, technology etc. in their study they found that saving rate is very low and route of investment inflows were FDI & FIIs both. The highest amount 6878 billion dollars in India came from Mauritius. They concluded that India should welcome foreign investments as it is favorable for Indian Economy and also helped govt. in achieving their goals such as favourable BOP, removal of poverty, economic development etc.

Malla Reddy (2014) highlighted that FDI through providing capital, strengthening efficiency, and new job opportunities plays are some important things for economic development. FDI as a non debt inflows helps in improving the technical knowledge taking capabilities. Malhotra,B. (2014). In her paper she analyzed the challenges facing by India in positioning itself favourably at global level in context of FDI and also examined the impact of FDI on the Indian Economy. FDI acts as a bridge to fulfill the gap between investment and savings of the country. She suggested that for equal growth govt. has to invest equally in the rural areas as invested in urban areas. Govt. should liberalized FDI policy to make markets more investment friendly.

Bedi, P., & Kharbanda, E. (2014). in their paper they analyzed the status of FDI in India and find the issues & problems why India was a less attractive destination of FDI inflows even after India had low labour cost, talented & skilled workforce. Paper is based on secondary data. Major negative aspects considered while doing business were corruption, inadequate supply of infrastructure, complicated tax structure and restrictive labour regulations. They suggested that this was the right time rather it's been too late for India to make reforms in their policies and make them liberalized so that foreign investment inflows increased as compared to other developing countries. Only then India can think of increase in FDIs in coming years.

Rahaman, A. & Chakraborty, S. (2015). They had done empirical research in Bangladesh to analyze the relationship between foreign direct investments and gross domestic product. FDI is an important medium for accelerating economic growth. FDI had positive impact on the economic growth as it results in HR development, advance technologies came into own country. They used secondary data for analyzing the trend in GDP. The upward Trend was shown during the period 1987-2011. They concluded that inflows of foreign investments in the Bangladesh (as a developing country) is very low and to improve this situation govt. had to take steps i.e. develop skills of labours, develop infrastructure and remove power shortage problem, investment friendly framework etc.

Sharma, M. & Singh, S. (2016). In their paper they examined the major features of FDI and its impact on Indian economy in pre and post liberalization period. They explained the attitude of Indian govt. towards foreign investments from 1950 in 4 phases. Attitude changed a lot from restrictive to open door policy when FERA replaced FEMA. Indian trade turned to new heights after the Second World War. They also talked about economic factors that affect the growth and development of Indian Economy such as GDP, Currency, Stock Market, and Foreign Exchange Reserve etc. After 1990, India realized the power and importance of foreign investments as it was a source of external private finance. They suggested the main sectors where there were opportunities of foreign investments like service sectors, construction & development sector etc.

Dr. Rajni Saluja(2017) has observed Foreign Direct Investment has become sin-quo-non for the economic development of both developed and developing countries. As a result of liberalisation, privatization and globalization model, Indian banks have entered international market and global banks have become part of Indian market. Furthermore, FDI in the banking sector ensures to provide the benefits of technology transfer, better risk management, financial stability and better capitalization, integration into global economy, knowledge transfer and increasing competition.

3. RESEARCH METHODOLOGY

Period of the study: To achieve the objective, data for the period of 2002 to 2017 have been taken.

Analysis Method: The collected data are analyzed with the help of Linear Regression.

Data sources: This study is based on Secondary data; the data is collected from various sources: the Handbook of statistics of Indian economy, publications, journals and internet.

4. DATA ANALYSIS

Table 1: Depicts FDI inflows and its impact on GDP

YEAR	FDI (in rupee billions)	FDI Growth Rate (in %)	GDP (in rupee billions)	GDP Growth Rate (in %)	FDI as percentage of GDP
2002-03	200.98	-	25306.63	-	0.794
2003-04	628.42	212.68	28379.00	12.14	2.214
2004-05	580.57	7.61	32422.09	14.25	1.791
2005-06	687.82	18.47	36933.69	13.92	1.862
2006-07	667.91	2.89	42947.06	16.28	1.555
2007-08	1743.95	161.11	49870.90	16.12	3.497
2008-09	350.61	79.9	56300.63	12.89	0.623
2009-10	2399.51	584.38	64778.28	15.06	3.704
2010-11	1934.82	19.37	77841.16	20.17	2.486
2011-12	1887.38	2.45	87363.29	12.23	2.160
2012-13	2546.53	34.92	99440.13	13.82	2.561
2013-14	1596.5	37.31	112335.22	12.97	1.421
2014-15	4490.72	181.29	124451.28	10.79	3.608
2015-16	2085.79	53.55	136820.35	9.94	1.524
2016-17	2893.94	38.75	151837.05	10.98	1.906

Table1 reveals that the FDI inflows in India have increased at a higher rate from Rs. 200.98 billions in the year 2002-03 to Rs. 2893.94 billions in the year 2016-17. The highest growth rate was recorded in the year 2009-10 i.e. 584.38% and lower in the year 2011-12 i.e. 2.45%. Increased in growth rate of GDP has been recorded between 12.14% in the year 2003-04 and 20.17% in the year 2010-11. GDP starts falling reach to its minimum growth rate (since2002) with 9.94% in 2015-16 and then increased in 2016-17 with rate 10.98%. The FDI as percentage of GDP was recorded between 0.794% in the year 2002-03, which has increased to 3.704% in the year 2009-10. It shows a continuous rise in FDI as percentage of GDP but after financial year 2009-10 it takes a drop & reached at 1.421% in 2013-14. The FDI as percentage of GDP in year 2016-17 was 1.906%.

Graph-1

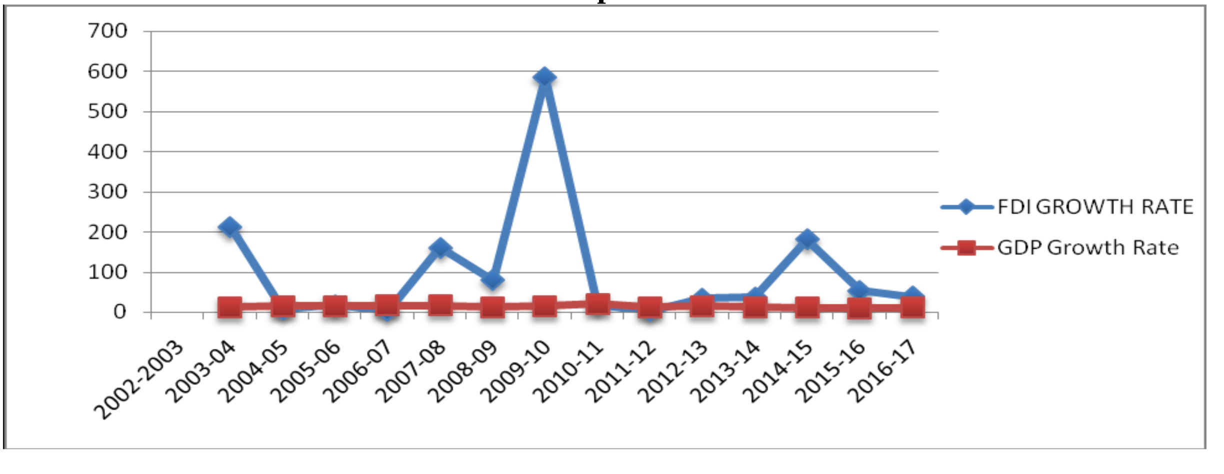

Fig. representing the FDI and GDP growth rate

Regression analysis of FDI and GDP

The impact of foreign investment inflows on the GDP over the financial years from 2002 to 2017

Independent variable: Foreign Direct Investments (FDI)

Dependent variable: Gross Domestic Product (GDP)

Table 2.

Descriptive Statistics			
Mean	Std. Deviation		N
Gross Domestic Product (in billion rupees)	75135.1173	41696.94111	15
Foreign Direct Investments (in billion rupees)	1646.3633	1170.68826	15

Table 3.
Pearson Correlation Coefficients

Gross Domestic Product (in billion rupees)		Foreign Direct Investments (in billion rupees)	
Gross Domestic Product (in billion rupees)		1.000	.782
Foreign Direct Investments (in billion rupees)		.782	1.000
Sig. (1-tailed)	Gross Domestic Product (in billion rupees)	.-----	.000
	Foreign Direct Investments (in billion rupees)	.000	.-----

Table 4.
Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.782[a]	.611	.581	26986.06357	.611	20.424	1	13	.001	1.955

a. Predictors: (Constant), Foreign Direct Investments (in billion rupees)

b. Dependent Variable: Gross Domestic Product (in billion rupees)

Table 3 & 4 indicates the strength of relationship between the model and the dependent variable i.e. GDP. Table 3 shows the correlation between independent variable (i.e. FDI) and dependent variable (i.e. GDP). Value of R = 0.782 which indicates high degree of correlation between predictor (Foreign Investments) and outcome (GDP). In the model summary (Table 4) value of R2 tells about how much variation in GDP is due to the variation in Foreign Investments. Value of R2 = 0.611 in Table 4 indicates that 61.1% variation in GDP is due to the variation in the foreign investments.

Table 5.
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14873669423.494	1	14873669423.494	20.424	.001[b]
	Residual	9467219150.748	13	728247626.981		
	Total	24340888574.242	14			

a. Dependent Variable: Gross Domestic Product (in billion rupees)
b. Predictors: (Constant), Foreign Direct Investments (in billion rupees)

Table 5 represents the **ANOVA analysis** in which value of F = 20.424 which are at significant 5% level of significance as p value is 0.001 (<0.05)

Table 6 of coefficients executes of b-values (unstandardized coeffiecients) that explains the

Table 6.
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29296.715	12305.577	--	2.381	.033
	Foreign Direct Investments (in billion rupees)	27.842	6.161	.782	4.519	.001

a. Dependent Variable: Gross Domestic Product (in billion rupees)

individual contribution of independent variable to the model. The positive value shows the positive relationship between the predictor and outcome variable and vice- versa.

When we replace the B values in equation we find the model as:

GDP = b0 + b1 (foreign investments) = 29296.715 + 27.842

The value of b1 = 27.842 indicates that as FDI increases by one unit, GDP increases by 27.842 units. Therefore, every additional unit of FDI is associated with an extra 27.842 unit's increment in GDP.

The standardized beta values in the table 6 indicate the volume of change in standard deviation outcome due to one standard deviation (S.D) change in predictor. This value indicates that as FDI increases by one S.D (1170.68826), GDP increases by 0.782 std. deviation. This is true only if the effects of other factors held constant.

Testing of hypothesis

H0: **There is no significant impact of FDI on economic growth.**

The P-value related to FDI is less than 0.05. So, Null hypothesis is rejected and concluded that there is significant impact of FDI on the GDP of Indian Economy.

Trend pattern of FDI Table 7. Trend Analysis of FDI

YEAR	FDI	Trend Analysis Base Year 2002-03 (in %)
2002-2003	200.98	100
2003-04	628.42	312.68
2004-05	580.57	288.87
2005-06	687.82	342.23
2006-07	667.91	332.33
2007-08	1743.95	867.72
2008-09	350.61	174.45
2009-10	2399.51	1193.90
2010-11	1934.82	962.69
2011-12	1887.38	939.09
2012-13	2546.53	1267.06
2013-14	1596.5	794.36
2014-15	4490.72	2234.41
2015-16	2085.79	1037.81
2016-17	2893.94	1439.91

Table 7 Shows the trend of foreign investment inflows over the period of time by taking 2002-03 as base year. Above table shows trend percentage of foreign investments goes on increasing with more or less % and reached 867.72%. But in 2008-09 drop in investment was seen. Thereafter India again enjoys investments made in their country. Trend percentage of investments in financial year 2016-17 was 1439.91%.

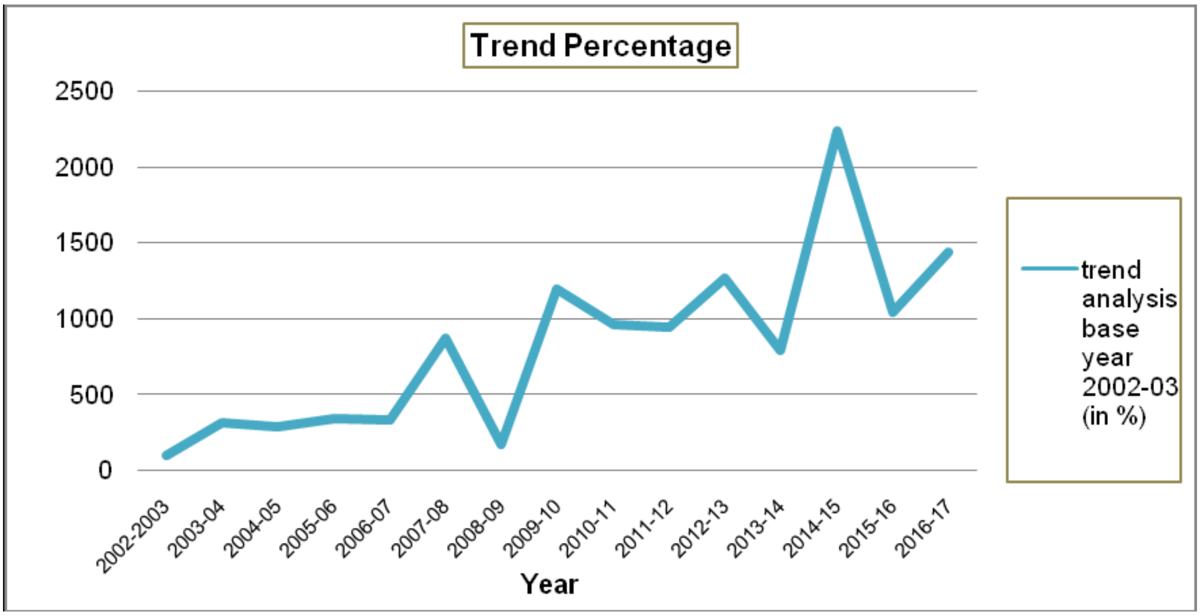

Fig. shows trend of foreign direct investments during 2002-17

5. FINDINGS & CONCLUSIONS

Above analysis shows, foreign direct investment has a significant impact on the economic growth of the country and also FDI has a major contribution in it. Each country tries to bring more and more FDI in their country which will later bring economic growth of the country. For attracting more and more inflows of foreign investment govt. has to work on some aspects such as improvement of infrastructure, liberalized FDI policy, political stability etc. In this regard IFC (International Finance Corporation), the investment arm of the World Bank Group, is planning to invest about US$ 6 billion through 2022 in several sustainable and renewable energy programs in India.

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