A Report

On

"Foreign Investment and Economic Growth"

International Economics

"It is declared that we, the group members, are submitting our original work in terms of project report on the topic assigned to us to fulfil the partial requirement of the course ECON F311 (International Economics). We all are equally responsible for the contents included in it and declare that all contents are plagiarism free. Wherever necessary, all the references are duly quoted within the text and bibliography is provided at the end."

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1.INTRODUCTION

Foreign Direct Investment (FDI) is basically direct investments made by an individual or a firm in one country (host country) into business interests located in another country (home country). With FDI, home countries are directly involved in day to day operations in host country. Apart from capital investments, it might also involve provisions of management and technology as well.

FDI can have various impacts on the growth of the economy. Most of these impacts are asserted to be positive. FDI is an important medium of technology transfer from developed to developing countries. It also promotes domestic investments. However, this can also be viewed as the other way around, i.e. economic growth in a nation attracts more FDI.

FDI plays a vital part in the growth of an economy. It has greatly impacted the process of globalization in the past couple decades. The rapid growth of FDI can be attributed to various reasons like healthy economic growth, relaxation in FDI norms, cheap labour forces, technological and innovation capabilities in many developing countries like India.

In India, FDI inflows started in the post 1991 period, under the Foreign Exchange Management Act (FEMA), with the aim of bringing together the intended investments and actual savings of the nation. FDI is an important monetary source for economic growth in India. Currently, India stands at 63rd position in the World Bank's Ease of Doing Business (EoDB) rankings.

The objective of this report is to analyse the role of economic growth in the Foreign Direct Investment in India. The report considers the post liberalization time frame i.e. 1991-2018. The report uses linear simple regression analysis between the FDI and the economic growth (GDP) in India for the abovementioned analysis. The data for this report was obtained by various trusted sources like World Bank Index (WDI) Databases.

The report has been divided into three parts. The first part comprises of the overview and review of the currently available literature. The second part deals with the data and empirical findings using linear regression methods. The third part consists of conclusions and some policy implications that can be useful for further growth in FDI and GDP of the nation.

2. REVIEW OF LITERATURE:

V N Balasubramanyam and Vidya Mahambare in there working paper discussed majorly the determinants of FDI in context to Indian economy. Further, the change in FDI among these factors during pre and post liberalization period is also discussed. Following this they concluded that FDI is an effective mechanism for the transfer of technology and know-how to developing countries. (Mahambare, 2002)

Sebastian Morris in his paper argues that it is the regions with metropolitan cities that attracts large amount of FDI due to having advantage in ‘headquartering’ MNCs. Empirical support for this argument was also provided by a study of foreign investment intentions, and the distribution of investment projects. The study concluded that there are vast gains to be made by attracting FDI, especially in services, high tech, and skilled labour seeking industries. (Morris, 2004)

Laura Alfaro in her paper discussed if the sector which attracted more FDI affects the economic growth of a region. An empirical analysis using cross-country data for the period 1981-1999 suggests that the effect of total FDI exerts on growth is not clear. FDI in primary sector however tends to have a negative effect on growth while it has a positive effect manufacturing sector. While the evidence from the service sector were not clear. (Alfaro, 2003)

Monica Singhania and Akshay Gupta used the best fit model (ARIMA) in explaining the variation of FDI inflows in India using macroeconomic variables like GDP, inflation rate, interest rate, patents, money growth and foreign trade. There paper concluded that of all macroeconomic variables taken only GDP, inflation rate and scientific research have significant impact of FDI inflow in India. (Singhania, 2011)

Dr. Jasbir Singh, Ms. Sumita Chadha, Dr. Anupama Sharma in there study discussed 2 main objectives: a) to know the requirement of amount of foreign investment by India, for its economic Development and (b) to analyze the trend and role of FDI & FIIs in improving the quality and availability of goods. After analyzing the data collected from secondary sources like reports and publication of Govt. and RBI it was concluded that maximum global foreign investment’s flows are attracted by the developed countries rather than developing and under developing countries. (Singh, 2012)

Basu P, Nayak N.C, Archana V in there journal discusses the shift in flow of FDI and the progress India made to attract FDI.The study reveals how India is cost-effective and hot destination for R&D activities. Panel Data model and seemingly unrelated Regression (SUR) were used to give a detailed view of FDI space in India (Basu, 2007)

V.N. Balasubramanyam and David Sapsford discusses that when the level of FDI in India and China are compared, it was found that FDI in India is one-tenth of that in China. The study finds that's India may not require high FDI, given India's factor endowments and the structure and composition of her economy. (Balasubramanyam, 2007)

3. DATABASE AND METHODOLOGY

3.1 Database:

Data for GDP in current LCU (Rupees) and total net inflow of Foreign Direct Investment (FDI) as percentage of GDP was taken for a period of 25 years from 1994-2018 for India. The data sources are as follows:

- GDP (current LCU): World Bank national accounts data, and OECD National Accounts data files.
- Foreign direct investment, net inflows (% of GDP): International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates.

3.2 Methodology

The net inflow of FDI is used as an indicator for Foreign Investment and GDP (current Indian Rupees) is used as an indicator of economic growth for the time period 1994-2018. Since data was available on net inflows of FDI as % of GDP, the net inflow of FDI in Indian rupees has been calculated accordingly by multiplying total GDP and net inflows of FDI as % of GDP for each year. How GDP affects net inflows of FDI is analyzed by using linear regression analysis, where net inflow of FDI is taken to be the dependent variable and GDP to be the independent variable. We want to analyze whether higher GDP leads to higher FDI inflow in the economy.

4. EMPERICAL ANALYSIS

Data:

The following tables shows the data used to study empirical relations in the report.

Time Period	GDP (current Indian Rupees)	Foreign direct investment, net inflows (% of GDP)	Net inflow of FDI, Indian Rupees
1994-1995	10275700835200.00	0.30	30558485593.52
1995-1996	12055827046700.00	0.59	71730512551.94
1996-1997	13948160080800.00	0.62	86126965123.46
1997-1998	15452939128200.00	0.86	132927502912.50
1998-1999	17722970541300.00	0.63	110819244959.51
1999-2000	19882616204800.00	0.47	93974158468.68
2000-2001	21398857418400.00	0.77	163746759787.52
2001-2002	23152430125100.00	1.06	244577243090.81
2002-2003	24926138443300.00	1.01	252145782643.25
2003-2004	27925302082200.00	0.61	169196400614.08
2004-2005	31863320000000.00	0.77	243946019626.06
2005-2006	36321250000000.00	0.89	321842827743.96
2006-2007	42546290000000.00	2.13	906307632278.43
2007-2008	48986620000000.00	2.07	1015686507516.43
2008-2009	55141520000000.00	3.62	1996410945314.02
2009-2010	63664070000000.00	2.65	1688111982863.11
2010-2011	76344720000000.00	1.64	1248262355286.26
2011-2012	87363287113700.00	2.00	1749070276311.30
2012-2013	99440131041500.00	1.31	1305583625506.88
2013-2014	112335216116400.00	1.52	1703311882613.79
2014-2015	124679592925500.00	1.70	2114140471376.91
2015-2016	137718738788600.00	2.09	2881235435482.26

2016-2017	153623860142700.00	1.94	2981925310719.76
2017-2018	170950048183200.00	1.51	2575710974735.90
2018-2019	190539667329859.00	1.54	2943541972159.07

Table 1: Empirical Relations

We now plot graphs to observe trends in GDP and net inflow of FDIs during the period 1994-2018.

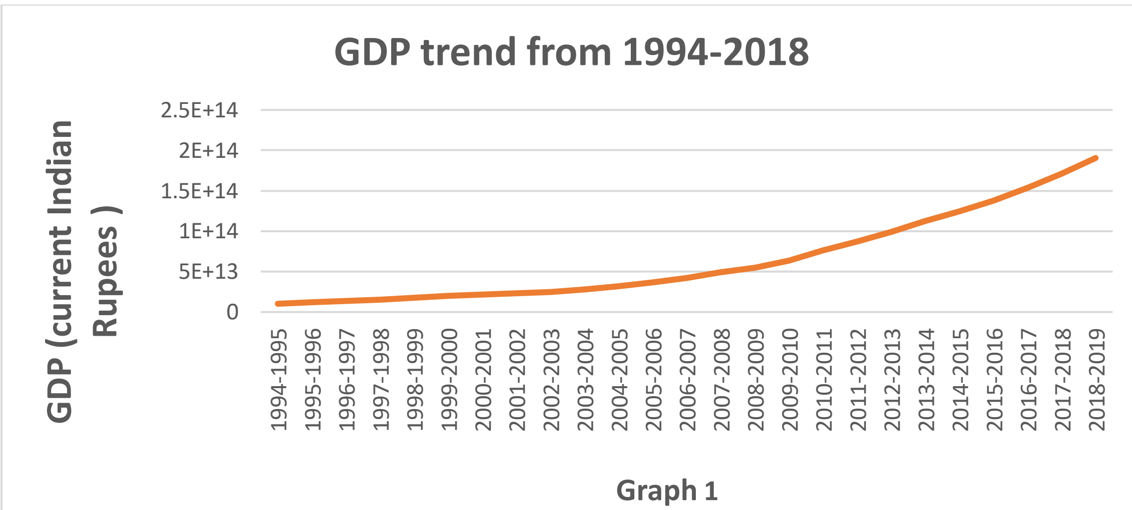

Fig. 1: GDP Trend

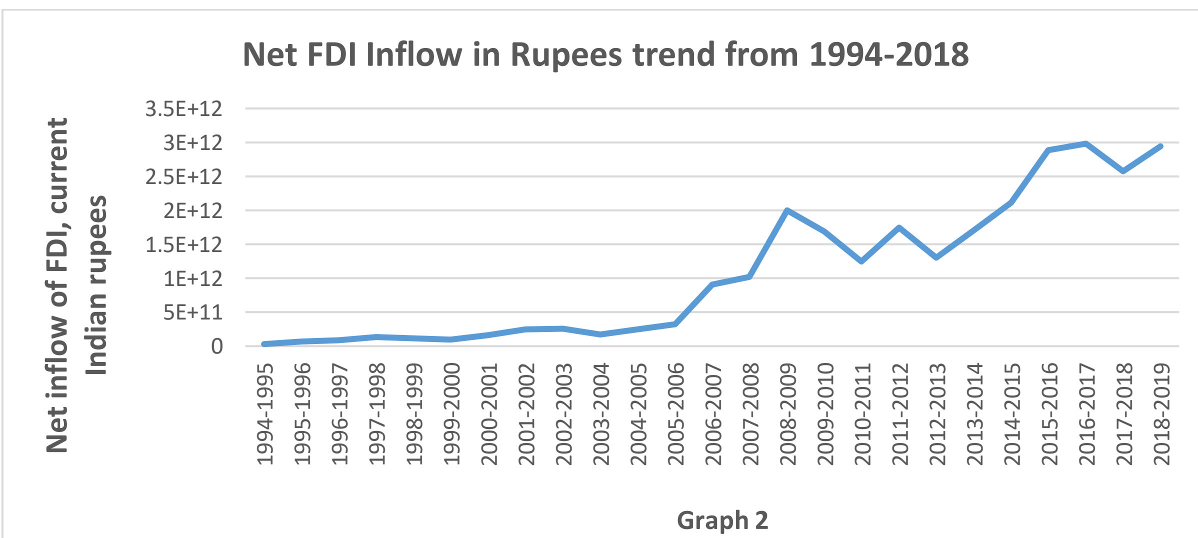

Fig. 2: Net FDI inflow in Rupees Trend

4.1 Observations:

It can be observed from Graph 1 that GDP has greatly and constantly increased from 1994 to 2018. This is due to various policies to promote economic growth and development undertaken by India, after liberalization in 1991.

It is true that increased inflow of FDI has paved the way for financial and economic development of the country and FDI as a whole is increasing. But, from graph 2 it can be observed that the journey in growth of inflow of FDI has not been smooth for India, due to various policy, economic and external factors.

It can be seen that there is a sharp dip in inflow of FDI during the period 2008-2010. This was majorly due to financial crisis of 2008. This led to the Great Recession where housing prices fell by almost 31.8%. In India after agriculture, the real estate sector is the second largest industry and it is asserted to be the most promising sector even today (Mamata, 2011). Despite the recession, India's realty sector received considerable amount of FDI, but it reached its lowest point in 2010.

In 2011-12, Foreign Direct Investment rose by about 34.4%. experts believe that this was because India remains a preferred investment destination. They feared that this may not continue for long due to moderation in this financial year.

There is also a significant dip in inflow of FDI in 2017-18. The main reason for this was the demonetization carried out by the government in November 2016. This is because after demonetization the economy lacks credibility and becomes somewhat unstable. Old currency is not immediately replaced by new currency and investors have less confidence in the economy. This is a short-term phenomenon as FDI inflows increased the following years.

Linear Regression Analysis during the period 1994-2018

The objective of our study is to analyse how economic growth affects the inflow of foreign investment in India. To study economic growth, we take GDP at current Indian Rupees and inflow of FDI for foreign investment, as indicators. On plotting GDP along x-axis and inflow of FDI along y-axis, we get the following scatter plot.

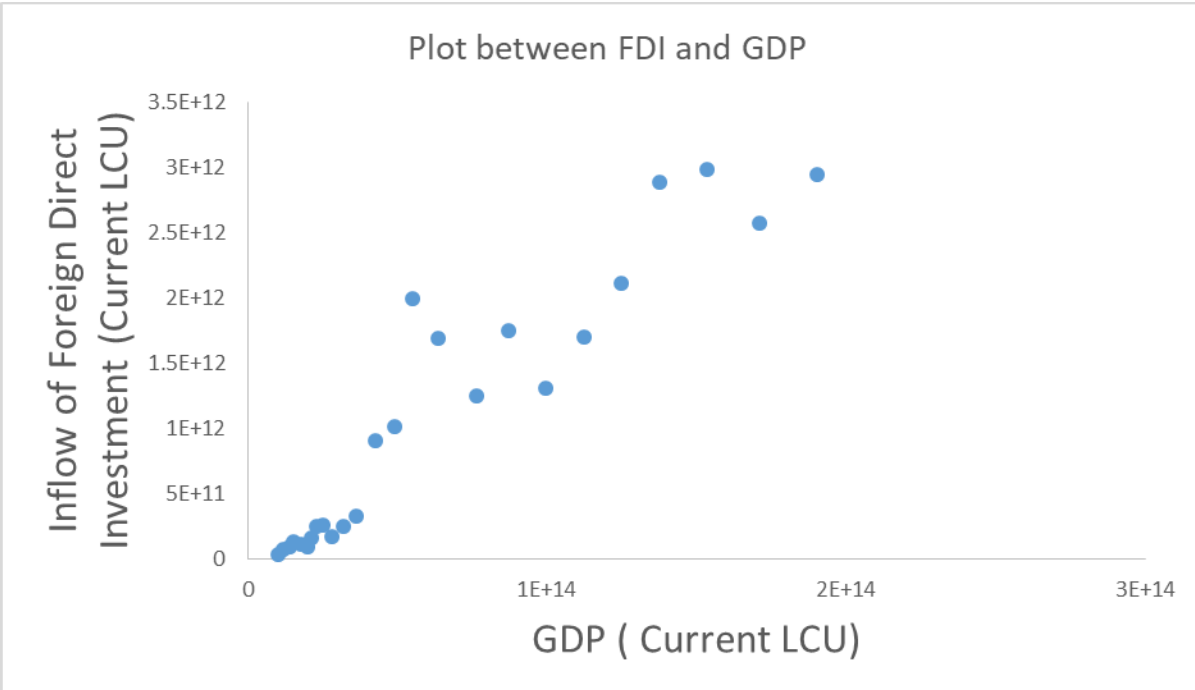

Fig.3: FDI and GDP

It can be noted that there is a relationship between net inflow of FDI and GDP. The following table shows the correlation matrix.

Correlation Matrix	*Inflow of FDI*	*GDP (current LCU)*
Inflow of FDI	1.00	
GDP (current LCU)	0.94	1.00

Table 2: FDI and GDP

The value of 0.94 suggest that there is a strong correlation between GDP and net inflow of FDI in the economy. We will now use linear regression to find how GDP affects inflow of FDI in India, using the data during time-period 1994-2018. The linear equation is:

$$\mathbf{FDI_t = a + b*GDP_t}$$

Inflow of FDI at time t is taken as the dependent variable and GDP at time t is taken as an independent variable. The result of linear regression is summarized as follows:

Regression Statistics	*R*
Multiple R	0.942417982
R Square	0.888151653
Adjusted R Square	0.883288681
Standard Error	3.55859E+11
Observations	25

Table 3: Regression Statistics

Column1	*Coefficients*	*Standard Error*	*t Stat*	*P-value*
Intercept	-76614099884	1.11381E+11	-0.687853807	0.498423813
GDP (current LCU)	0.017887272	0.001323584	13.51427326	1.99155E-12

Table 4: Linear Regression Summary

From the above results it can be seen the R square has a high value of 0.8881, which means that 88.81% variation in FDI is explained by GDP. A very small p-value for GDP variable indicates that it is a good fit, although p-value of the constant is a bit high. The linear equation is of the form:

FDI = 0.0179*GDP - 8E+10

The following graph shows best-fit line for linear regression.

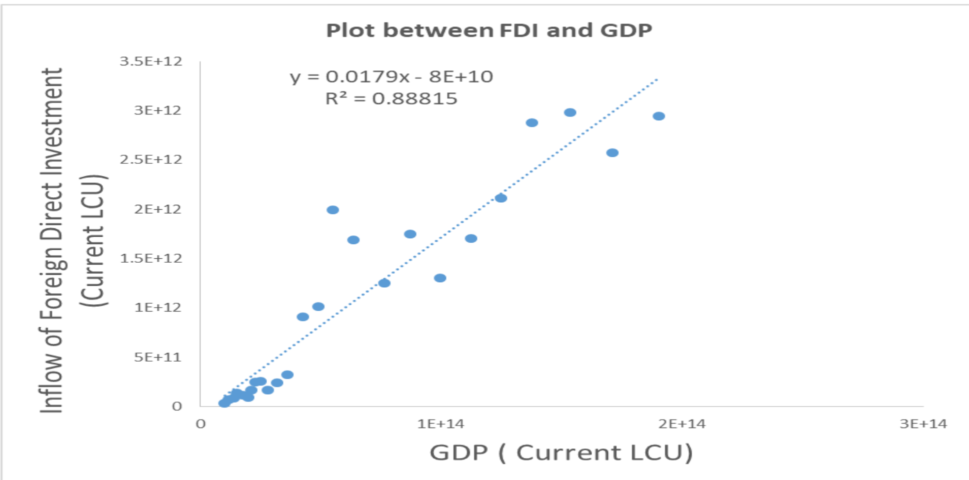

Fig. 4: FDI and GDP regression

It can be seen that GDP and inflow of FDI are positively related. A unit increase in GDP increases inflow of FDI by 0.0179 units. We can conclude that increase in economic growth in-turn attracts foreign investors and increases economic foreign investments in the economy.

5. CONCLUSION AND POLICY IMPLICATION:

5.1 Conclusion

The purpose of this report is to analyse the impact of GDP on foreign direct investment (FDI) in India over the time period 1994-2019. Based on the empirical results, it was discovered that even though GDP and FDI are positively correlated, GDP has no statistically significant impact on FDI, This is mainly due to considering ceteris paribus. Other factors which affect FDI flow to India are Coal Production, Total Wages paid, Electricity generated, Inflation, Deficit in Balance of Payment, Trade Openness etc.,.

FDI assumes a significant job in the long haul advancement of a nation not just as a source of capital yet in addition for upgrading competitiveness of the local economy through transfer of technology, strengthening infrastructure, raising productivity and generating new employment opportunities. The tremendous market size, accessibility of highly skilled HR, sound financial arrangement, abundant and diversified natural resources all these factors enable India to attract FDI. Further, it was discovered that despite the fact that there has been expanded progression of FDI into the nation during the post liberalization period, the worldwide share of FDI in India is very less at the point when it is contrasted with developing nations.

Absence of proper infrastructure, unstable government and world of politics, high corporate tax rates and restricted export processing zones are viewed as the serious issues for low FDI into the nation. To conquer this circumstance, the Government should change the sectoral cap and bring more sectors under the automatic route. Further, India should consent to the arrangement of Double Taxation treaties with different nations so as to build bilateral trade. Therefore, in this manner there is an immediate need to adopt innovative policies and better corporate governance practices on par with international standards, by the Government, to attract more and more foreign capital into various sectors of the economy to make India a developed economy.

5.2 Policy Implications

After liberalization of Trade policies in India, there has been a positive impact on GDP growth rate in Indian economy. FDI has helped India to attain a financial stability and economic growth with the help of investments in various sectors. FDI has improved the economic phase of India.

An Indian company may receive Foreign Direct Investment under the two routes as given under:

1. **Automatic Route:** FDI in sectors /activities to the extent permitted under the automatic route does not require any approval either of the Government or the RBI.

2. **Government Route:** FDI in activities which are not covered under the automatic route requires approval of the Government which is considered by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, Ministry of Finance.

Few policy implications which were taken in pat are given in the below figure

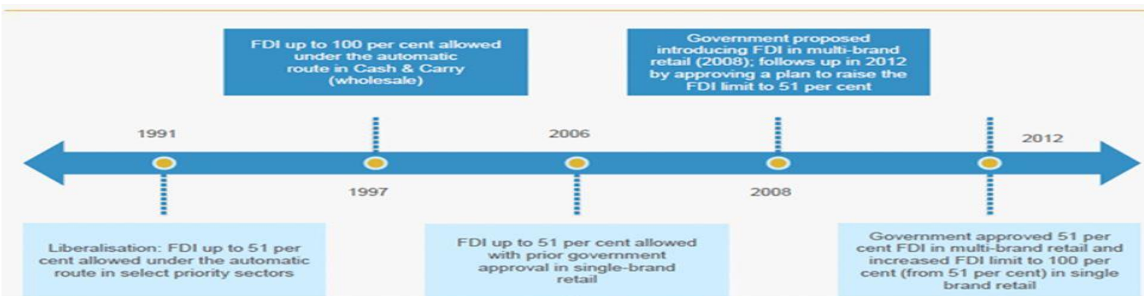

Fig. 5: Changes in FDI policies in retail sector

General measures required to increase FDI in India are:

1. Flexible Labor Laws needed.
2. Re look at Sectoral Caps.
3. Geographical Disparities of FDI should be removed.
4. Promote Greenfield Projects.
5. Develop Debt Market.
6. Education Sector should be opened to FDI.
7. Strengthen research and development in the country.

Recent changes taken in FDI policy are: (28th AUG 2019)

i. The change in FDI policy will result in making India an attractive FDI destination, leading to benefits of increase in investments, employment and growth.

ii. In the coal sector, for sale of coal, 100% FDI under automatic route for coal mining.

iii. FDI now being permitted under automatic route in contract manufacturing will be a big boost to Manufacturing sector in India.

iv. Easing local sourcing norms for FDI in Single Brand Retail Trading (SBRT) was announced in Union Budget Speech of the Finance Minister. This will lead to greater flexibility and ease of operations for SBRT entities, besides creating a level playing field for companies with higher exports in a base year. In addition, permitting online sales prior to opening of brick and mortar stores brings policy in sync with current market practices. Online sales will also lead to creation of jobs in logistics, digital payments, customer care, training and product skilling.

v. The above amendments to the FDI Policy are meant to liberalize and simplify the FDI policy to provide ease of doing business in the country, leading to larger FDI inflows and thereby contributing to the growth of investment, income and employment.

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