

IMPACT OF FDI ON INDIAN ECONOMY

Dr. Bhagyashree Padhi¹, Manas Ranjan Pati²

¹Basic Science & Humanities Engineering, Gandhi Engineering College (GEC, Bhubaneswar)

²Basic Science & Humanities Engineering, Gandhi Engineering College (GEC, Bhubaneswar)

Abstract

Purpose: There have been many researches on FDI in India and its impact on Indian economy. Our study's purpose is to examine the impact of FDI on not only Indian growth variables but also on other factors which are human development index and population as well. We wanted to know how much FDI is responsible in the changes of their individual variance.

Design/ Methodology/ Approach: We used a model in which clubbed the FDI factors (foreign exchange reserves, exchange rate, import and export) into one and from it we saw the impact its making on Indian economic variables. In this study we included GDP, HDI, population, inflation and Sensex index as economic variables. we used regression model for our data analysis

Findings: We get to know that there is a considerable impact of FDI on HDI, population and Sensex index. Though there is an impact on import export also but not to that much extent.

Practical implication: This study can help the policy makers as to how much of the total FDI should be invested in which area, where the optimum use of the investments is not happening.

Keywords: Foreign Direct Investment, HDI, Population, Sensex Index, Foreign Exchange Reserves.

I. INTRODUCTION

FDI plays a pivotal role in a country. It provides a boost to working of the economy. Requirement of FDI relies on saving and investment rate of a country and in order to fulfil the gap between investment and saving, FDI plays an important role and acts as a bridge to fulfil the gap between investment and savings (Dwivedi & Kumar, 2017). Domestic saving limitations can be covered through foreign capital during the economic development process and through that it also provides superior and better technology that promotes better efficiency to the existing production capacity and thereby generate new production opportunity. It creates a window of transparency between the nations and hence accelerating bilateral trade among the countries (Hargreaves & Dermott, 1999).

In the past two decades, the entire globe has witnessed the growing potential of foreign direct investment. In simple terms FDI means to the net inflows of funds into the home country which in turn leads to economic development (Noorbakhsh et al., 2001). It is a type of investment where the foreign funds are brought into an enterprise which operates in a different nation of origin from the investor. It is an important tool for any economy which acts as a lube for the economy. According to Investopedia, Foreign direct investment (FDI) is an investment which is made by a company or individual in any country in commercial interests into another country. FDI can be of two kinds namely inward foreign direct investment and outward foreign direct investment (Zekarias, Seiko Minota, 2016). As Borensztein, Gregorio, & Lee, 1998, says under the neoclassical growth model approach, FDI encourages economic development by the increase of volume of funds. In the endogenous growth model, FDI uplifts fiscal development by creating technological dispersal from the developed countries to the home country. As condensed in Salisu, et al. (1996), FDI is the combined collection of various technological knowledge, which can elevate the existing reserve of insight in the beneficiary economy through skill attainment, labour training.

There are various methods of FDI which are through setup of new business in the foreign nation, through acquiring of the share of the foreign country and through merger or acquisition of other organization of the foreign nation. Since the last thirty years, foreign direct investment (FDI) has emerged as a popular and important factor in the developing nations (Acharyya, 2009). A type of investment which caters putting of foreign funds into a venture which operates from a different country of origin that from the investor (Cai, 1999). It is an important vehicle for any developing nation as it acts as a lubricant for an economy.

This paper studies what impact does FDI has in the host country and also the difficulties in analysing these impacts. Though FDI has both pros and cons but to analyse these scenarios the problems that we face are the cross-cultural diversities and the endogeneity. The impact of FDI on India is derived by using the variables-human capital index, econometric values, time series data, Inflation, Gross domestic product. By usage of these variables, the econometric model can be designed. The second component proceeds towards reviewing the literature on FDI and its effect on the economic growth of India.

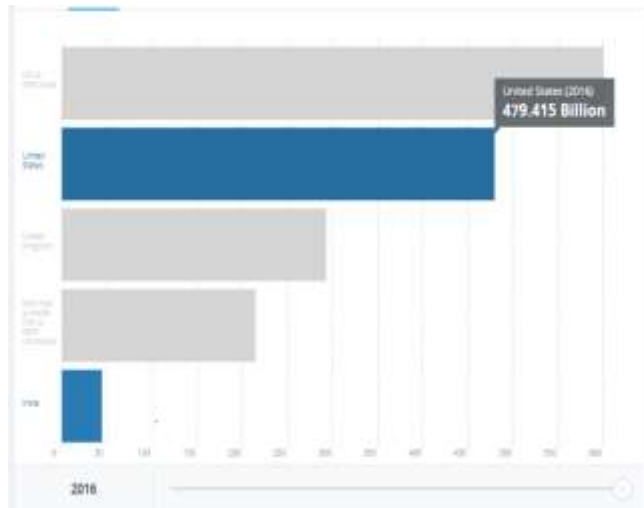
II. REVIEW OF LITERATURE

The overall footprint of FDI is immense. With capital base increased in the host economy, the anticipation from FDI is growth increasing through encouraging the inculcation and availability of latest knowledge and technologies in the process of production. According to (Feenstra & Markusen, 1994) when talking about the new input, the growth of output effects the usage of a wide types of goods which are transitional in FDI related manufacturing sector. Talking about the technologies, FDI is the main source of productivity and innovation.

With the further expansion in FDI by multinational enterprise(MNE's) especially from the eighties have actually contributed to the growth and changes in technologies, greater freedom in trade and commitment of money pertaining to a specific venture and privatisation of economies of developing countries like India.

According to (Bhandari, 2007) research, which is related to finding out the effect of FDI in income inequality and unemployment especially in Central Asia and Eastern Europe for the period of 1990 to 2002. The end result was that FDI has a tremendous effect on the unemployment of the country.

When compared with developing nations, FDI benefits are enjoyed by developed countries like the USA and Japan where there are higher levels of human capital.



Source: World Bank data

After analysing the above data, it is certain that the developed nations are equipped with more skilled human capital (India, with just 44.45 billion FDI for the year 2016). The above data also shows that countries such as United Kingdom and East Asia countries have an increasingly amount of FDI expansion due to increase in the human capital.

During April-September, 2017-18, FDI inflows grew 17 percent on year at USD 25.35 billion. In the financial year 2016-17, total FDI inflows hit an all-time high of USD 60.08 billion, as compared with USD 55.46 billion a year ago (Money control, 2018)

The above data suggests that the increased ration of FDI inflow in the economy is due to various factors such as government policies, technology, human capital etc. Hence it suggests that due to better productivity in one or more of the factors leads to increased FDI and also providing boost to economic growth of the country

In the research done by Debabrata Sutradhar, 2014 titled growth of service sector in India which was article which was published under the journal Artha J soc sci, states that service sector attracts FDI with superior part in the world. India being a major part of this circumference pulls majority of its FDI in service sector. With the introduction of liberalization. FDI is presuming more important role in developing countries. World bank documents that FDI flows has increases in especially in developing countries has increased by six folds.

While measuring the outcome of Foreign Direct Investment on the fiscal expansion, a major plausible problem is the endogeneity of the arbitrary values. There is a solution for this problem where two common methods can be used. The first being bilateral causality testing and the second being assessment of a concurrent equation system in which the FDI equation includes different variables such as Sensex rates, human capital, exchange rate instability and framework of the country.

The above review of literature proposes that the upshot of FDI on the fiscal escalation of the country remains extremely important and debatable. Hence the above research shows the favourable reaction of FDI on the host country and also its economic growth.

Moreover, there are various gaps identified in the literature such as infrastructure, human capital and technology which are considered crucial factors of economic growth of the country, hence this study shows the positive impacts of FDI with these factors to recognize whether it affects progress by itself or by these parameters.

The foremostenacity of this paper is to study the factors influencing FDI in terms of growth and Human development of Indian economy. It subsidises of FDI inflow as a unit of percentage of real GDP as a base or dependent variable to demonstrate economic growth or development. The bilateral relationship between FDI and economic growth is correlated to real Sensex, Human development index, Population, Inflation and real GDP per capita is calculated by using econometric values and Time series data.

Ensuring attraction and magnetising foreign direct investment to the country is an integral and important segment of economic growth and development for India, by implementing crucial strategic reforms (mostly economic reforms). To ensure immense and huge number of employment opportunities, domestic capital and production level, FDI is an important factor that should always be in check, most importantly for developing economies. It can be said that FDI is a important phase towards economic growth and development of the country.

Relationship between FDI and Sensex

In past research studies we have seen that FDI impacts approximately 3 percent of Sensex variance whereas BSE influences 2 percent of FDI variance. The co-integration regressions symbolize the existence of a long run relationship between stock prices and Foreign Direct Investment (Ahmed, 2008).The indicated study as well displays that FDI does impact movement in stock prices at the movements of stock prices do not have considerable impact on FDI. Therefore, on the basis of regression analysis we can find that FDI has positive and favourable influence on Sensex prices.

H1: There is a relationship between Sensex and FDI.

Relationship between FDI and HDI

There have been numerous studies in the last years have showed the impact of FDI on economic growth and progress of both developing and developed countries (Basu & Azmat, 2004). But, research on the stimulus of FDI on an increased conception of socio-economic development such as human development is missed (Sahoo & Sethi, 2017). Taking this research gap into consideration we tried to examine the effect of FDI on HDI. Present study proposes the effect of FDI on human development (by considering human development index) for India for the period of 2007-2017.

H2: There is a relationship between FDI and HDI

Relationship between FDI and Population

India having the second largest population in the world is a potential large market and a dominant and large host for FDI inflow. Attainment of investment from abroad has always been a major driving force for growth and development for the country (Agrawal et al., 2011).The gross inflows of FDI are favourably affected by population in low and middle-income countries (Alsan et al., 2006).The study indicates that raising standard of living is contributed by employment of people in the nation which is determined by increasing FDI inflows. Hence the study indicates positive relationship between FDI and population.

H3: There is a relationship between FDI and population.

Relationship between FDI and Inflation

The rate of inflation is a critical factor in influencing the inflow of foreign investment in the country. The microeconomic variables improve balance of payments and reduce inflation including restrictive fiscal and monetary policies by lowering down the valuation (Serven and Solimano 1992).A stable inflation always an attractive opportunity for foreign investors, so we can say that high inflow of FDI would mean that the country would be having lower production cost, labour cost, which will lead to higher profits (Singh and Giri, 2016).

H4: There is a relationship between FDI and inflation.

Relationship between FDI and GDP

The key objective of this study is to analyse the relationship between FDI and GDP for India. Increased FDI inflow in India in recent period can be debated to be aided by the fairly stable GDP growth rate, where it performed as a major boost towards a justifiable high domestic investment. In the short run, the growth effects of FDI on GDP are less pronounced (Chakraborty, Mukherjee, 2013). Therefore, the direction for conducting a long run analysis is recommended. Thus, present study identified the essential aspect of economic and financial implications by considering foreign investment. Our research is assuming that there is a relationship between and economic growth in terms of (Lenuta CARP, 2012). The test done by (Edward et al, 2005). H5: There is a relationship between FDI and GDP.

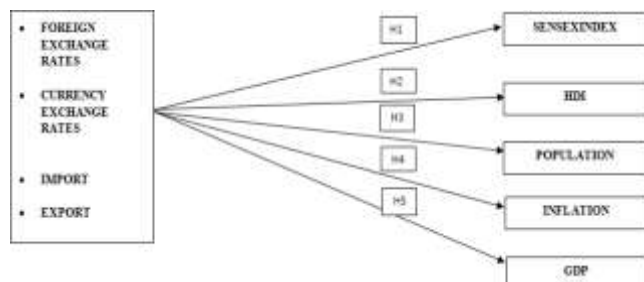
III. METHODOLOGY

The present study examines how FDI impacts the Indian economy by describing various factors of FDI inflows and growth factors of economy. To analyse the relationship between them, the study gives the picture of descriptive design in nature. There are various variables included in the previous studies which were explored by various researchers such as Foreign Exchange rates, Trade balances of India (export and import rates), Import and Export. The economy variables are Sensex rates(Sandy and Steensma 2010), Human development index (Dasgupta, 2012), Population(Marcell et al., 2006), Inflation rates (Singhania et al., 2011)and GDP values (Agrawal et al., 2011). The data has been collected through various sources like Trading Economics, The World Bank, and open government data. The data has been collected to find the relation between the variables of FDI inflow and economic parameters for the period of ten years from 2007 to 2017. The data were analysed through regression techniques by using SPSS tool

Data Analysis

Model	R	Std. Error of the Estimate	Change Statistics					Remarks
			R Square Change	F Change	df1	df2	Sig. F Change	
SENSEX INDEX	.961a	2356.44065	.924	18.362	4	6	.002	H1 accepted
HDI	.986a	.00539	.973	54.079	4	6	.000	H2 accepted
POPULATION	.989a	10168360.43727	.978	66.908	4	6	.000	H3 accepted
INFLATION	.809a	2.72537	.655	2.850	4	6	.122	H4 rejected
GDP	.714a	2.16851	.509	1.556	4	6	.299	H5 rejected

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We have used regression analysis and based on that we got the above table. We use this analysis to show the empirical findings for this paper. In this regression model the level of significance of GDP of last decade i.e. 2007- 2017 is 0.299. The R square value of this economic variable is 0.509 which means that FDI has not created any major impact on GDP for the given interval (2007-2017). The coefficient estimate of inflation is not significant because the p value is more than 0.05. Thus, it explains the reason why the R square value is 0.655 which gives us the insight that FDI has created an impact on Inflation but not to that extent that we can consider it. The econometric result for the variable Sensex index using regression analysis from which we can determine that FDI has made a positive impact for the last decade on Sensex index and that is why the R square value is close to 1. In this regression model the levels of HDI over the period 2007-2017 serve as a dependent variable. When looking at the above table the coefficient of determination, R square has a very high value which indicates that 97.3% of the variance in HDI can be explained by HDI. Similarly looking at the p value of population which is significant because it is less than 0.05 also the coefficient of determination is the highest among all the considered variables which gives an inference that 97.8% of the variance in population is due to FDI which further proves that FDI has made a major and a positive impact on population.

1) Sensex Index

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-22133.124	8109.703		-2.729	.034
FER	-.892	.450	-.675	-1.982	.095
Exchange Rates	1116.268	263.482	1.560	4.237	.005
Export	.004	.013	.330	.317	.762
Import	-.003	.008	-.349	-.405	.699

From the above table we see that the impact of FER is -0.675, Exchange rate is 1.560, Export rate is 0.330, and Import rate is -0.349 on Sensex index. Looking at the significant values of these indicators we see that the major impact is made by only FER and Exchange rate. Thus, we get an insight from the above information as to why the R square value of Sensex index is 0.924 or 92.4%. FER has a negative impact and exchange rate has a positive impact.

2) Human Development Index

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.509	.019		27.429	.000
FER	2.833E-006	.000	.560	2.752	.033
ExchangeRates	.000	.001	.144	.654	.537
Export	4.601E-008	.000	.944	1.518	.180
Import	-2.296E-008	.000	-.664	-1.290	.244

In the above table independent variables are FER, Exchange rate, Export, Import. Looking at the significant values we see that FER has value less than 0.05 thus we say FER has an impact on HDI. This gives a little information as to why the R square value of HDI is 0.973.

3) Population

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10813563.77	34994468.520		30.901	.000
FER	5756.248	1941.470	.544	2.965	.025
Exchange Rates	636057.177	1136958.954	.111	.559	.596
Export	7.395	57.175	.072	.129	.901

						1
	Import	22.066	33.557	.305	.658	.535

In the above table the dependent variable is population and the independent variables are FER, exchange rates, export, import rates with significant value of 0.025, 0.596, 0.901, 0.535 respectively by which we can infer that FER has an impact on Population as it has the lowest significant level.

4) Inflation

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	18.374	9.379		1.959	.098
FER	.000	.001	.329	.453	.667
Exchange Rates	-.302	.305	-.779	-.991	.360
Export	-2.099E-005	.000	-3.044	-1.370	.220
Import	1.472E-005	.000	3.011	1.636	.153

In the above table the dependent variable is GDP and the independent variables are FER, exchange rate, export, import with significant values of 0.667, 0.360, 0.220, 0.153 respectively and we can clearly see that none of the variables has a significant value of less than 0.05 or 5%, hence, there is no impact of inflation from these variables.

5) Gross Domestic Product

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.637	7.463		.085	.935
FER	-.001	.000	-1.943	-2.238	.067
Exchange Rates	.403	.242	1.562	1.664	.147
Export	2.368E-006	.000	.515	.194	.852
Import	-1.600E-006	.000	-.491	-.224	.831

In the above table the dependent variable is GDP and the independent variables are FER, exchange rate, export, import with significant values of 0.67, 0.147, 0.852, 0.831 respectively and we can clearly see that none of the variables has a significant value of less than 0.05 or 5% so there is no impact of GDP from these variables.

IV. DISCUSSIONS

From the above analysis, the study shows that the FDI had partially impacted the economic parameters of India. The input variable of FDI includes the foreign exchange reserve, exchange rates export and import. Foreign exchange reserves are important to stabilise the Indian rupee. The present research depicts that FER is positively significant to HDI and population while insignificance to inflation and negatively significance to Sensex index but insignificant to GDP which reveals that exchange reserves are used in stabilising the INR. It means a negative impact of foreign exchange reserves on Sensex shows positive sign

towards economy by reserving money for future consequences. For export import it has no impact on the output variables with respect to FDI. We know that India is over populated country and thus we have huge demand. FDI comes into the picture to satisfy this demand. Since the demand is high prices will also be high and thus the exchange rates would be affected negatively or positively, in context of Indian scenario it will be affected positively. Similarly, in case of HDI, if inflow of FDI through reserves increases, investment in enhancing living standard of people is also increased and qualitative improvement of workforce are the core influencers that are increasing productivity as well as accelerating the economic growth of the society. The features of Human qualitative index are reflected as assets. For these features can lead to productivity and expand the production, income as well as welfare. Thus, inflow of FDI in India helps in improving the above stated factors. So, we can safely say it has a positive effect on HDI.

As we have already seen that larger population have larger demands which needs external funding to satisfy the needs, In this case FDI. So, because of this reason FER will get increased and thus we can say population has a positive impact on FER.

Thus, the study infers that FDI had improved the value of Sensex index as it increases overall values of market which indicate positive direction in economy by expanding capital in concerned businesses. Another economic variable HDI, which is also compound statistic (composite index) referring to education, life expectancy and per capita income indicators, which are used to rank the nations into four stages of human growth and development. Through, FDI inflow in India we see that the amenities to the common man has improved a lot. The life expectancy is also increased; the living standard has also increased a lot. So, we get the knowledge regarding FDI that it has a positive and major impact on HDI. As we know that India is growing country in terms of population, so a growing population will generate huge demand of good and services. Through increased inflow of FDI those demands can be satiated, which has been reflected in the present study positively. Ironically, the analysis depicts that FDI has no positive impact on GDP. This exhibit, that money inflow through FDI may not be utilised in correct direction or reaching to the common people. It is benefiting to only the upper middle class and business class people. Similarly, the price trends of economy had no relation with inflow of FDI, which in turn suggest that only high purchasing power can rule the economy. Thus, the monetary inflow of Foreign investment can uplift economy by optimally utilization of money.

V. CONCLUSION

The study tries to evaluate empirically, the relationship between foreign direct investment (FDI) and economic growth in India by using yearly data for a decade from 2006-07 to 2016-17. The study identified that the major factor influencing the inflow of FDI to India, which is poised of various variables collected under FDI and Indian economy.

A tactical feature of investment is required for India's sustainable economic growth and development which can be brought on board by Foreign Direct Investment (FDI) through creation of jobs and enhancement of skilful labour.

On the other hand, it can be seen that the result of sectoral level output, export and productivity is trifling due to stumpy flow of FDI into India

both at the macro level as well as at sectoral level. Hence, for FDI to be notable benefactor to the economic growth, India would do better by concentrating on the government and public policies by opening up the export oriented sectors and improving human resources for constructing a steadfast macroeconomic framework and situations which would be favourable for systematic and productive investments to amplify the process of economic growth and development.

The future study for understanding the impact of FDI on Indian economy could be analysed by taking variables such as Human development index data for a period of more than ten years. The study could be further analysed by comparing the FDI growth of various other countries' economies, to get a better understanding of what policies can be implemented to magnetise FDI inflows.

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