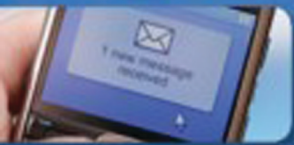


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Foreign Direct investment and Growth in Developing Nation- “A case study of India”**Prof. S.C Singh***Professor, Faculty of Management Studies, BHU, Varanasi, (U.P.) India***Pradeep Kumar***Ph.D. Research Scholar, Faculty of Management Studies, BHU, Varanasi, (U.P.) India***Abstract**

The growth of nation is directly depends on the flow of Investment in that country. The direct form of the Investment made by nation is called as Foreign Direct Investment. India is a nation where nearly 130 crores people are living and natural resources are also available in abundance. Therefore it is one of the favored investment destinations for the foreign companies. After liberalization in 1992 the amount and size of the Investment was increasing in India till the year 2008 and then it declined towards the end of 2010, but due to lower exposure of the Indian economy the impact of the recession on India was less. Due to all these factors together the FDI in India started rising again since then. This research paper tries to find out the relationship between these economic indicators with FDI and assumes a conceptual model where these economic variables are considered independent and FDI is considered dependent variable. This paper also finds out the strength of the relation between the FDI and other economic indicators, so that early proactive measures can be taken to avoid the bad impact when FDI flow decreases in economy and thereby amount of FDI can be increases.

Keywords: Economic development, Economic Indicator, FDI, India's economy.

Introduction

The flow of FDI has increased in India from the opening of the economy and removal of the economic barrier in last two decade till the major economies caught in the hand of economic slowdown. India is also one of those nations which survived in tough conditions, where the flow of FDI was almost constant or increasing, showing contradiction to recessionary phenomenon. The economic growth before last year was increasing with FDI and similar trend was also noticed in Inflation and Exchange rate. So, there must be a connection among these economic variables and Foreign Direct Investment. If it can be proven that there is

relationship among these economic variable with FDI with the extent of the Impact of FDI on these economic variable then some progressive and proactive policy measures can be taken to take care of the fragile Indian economy. Though, In India some researches has already been done in this area but the thrust area was qualitative or sometime descriptive and lack of empirical evidences that explained a little bit impact of the Foreign Direct Investment on economic indicators. Literature review in this paper also suggest that different researches has been focused in different aspect of the foreign direct Investment, but the impact of the FDI on the economic variable like Exchange Rate, WPI and CPI has not been

measured collectively. Therefore, it is really very necessary to measure the extent and impact of the FDI on the key economic variables like CPI, WPI, GDP and Exchange rate.

Review of the literature:

A number of scholars evaluated the FDI and its effect on the different countries economy. Balasubramanyam et al. (1996), Borenszetein et al. (1998), Zhang (1999), Bengoa and Sanchez- Robles (2003), Choe (2003), Alfaro et al. (2004), John Andreas (2004), Salisu A. Afees (2004), Chen Kun – Ming, Rau Hsiu- Hua and Lin Chia- Chng (2005), Chowdhury and Mavrotas (2005), Thai Tri do (2005), Frimpong and Oteng- Abayie (2006) and Miguel D. Ramirez (2006) evaluated the FDI and its effects.

Balasubramanayam et al. studies the effect of FDI on economic growth of the country., (1996). Borensztein et al. (1998) investigated the variation of FDI among different countries. Zhang (1999) investigated the causation in 10 East Asian economies. Bengoa and Sanchez –Robles (2003) explored the correlation of FDI with economic growth. Human capital, economic stability and liberalized markets. Choe (2003) analyzed causal relationships between economic growth and FDI. Alfaro et al. (2004) examine the links among FDI, financial market and economic growth. John Andreas (2004) evaluated the potential of FDI inflow to affect host country economic growth. Salisu A. Afees (2004) examines the determinants and impact of foreign direct investment on economic growth in the developing countries. Chen kun Ming, Rau “Hsiu-Hua and Lin chia – ching (2005)

studied the effect of exchange rate movement of FDI .

Chowdhury and Mavrotas (2005) studied the effect of FDI on different developing countries. Thai tri do (2005) examines the impact of FDI on Vietnamese economy. Frimpong and Oteng- Abayie (2006) studies the relationship of FDI and GDP growth. Miguel D. Ramirez (2006) evaluated the impact of FDI on labour productivity functions.

Bengoa and Sanchez –Robles (2003) used the data on 80 countries for the period 1979- 98 for the evaluation. Choe (2003) used the data of 80 countries over the period of 1971- 1995, and applied a panel VAR model. Alfaro et al. (2004) used cross country data from 1975-19995. John Andreas (2004) performed both cross section and panel data analysis on a dataset covering 90 countries during the period 1980 to 2002. Salisu A. Afees (2004) used Nigeria as a case study for the evaluation. Chen Kun –Ming, Rau Hsiu-Hua and Lin Chia-Ching (2005) perform the study on Chinese and Taiwan’s economy for FDI.

Chowdhury and Mavrotas (2005) performed his study on the Chile, Malaysia and Thailand. Thai tri do (2005) used the FDI data of Vietnams from 1975 to 2004 and applied partial adjustment model and time series data for evaluation purpose. Frimpong and Oteng –Abayie (2006) performed there study in the Ghana . Miguel D. Ramirez (2006) used the data from Mexico for the 1960- 2001 period is estimated that includes the impact of changes in the stock of private and foreign

capital per worker and used error correction model for the evaluation of the data.

Balasubramanyam et al . (1996) finds that significant results supporting the assumption that FDI is more important for economic growth in exports promotion than in importing – substituting countries. this implies that the impact of FDI varies across countries and that trade policy can affect the role of FDI in economic growth. Borensztein et al. (1998) suggest that the differences in the technological absorptive ability may explain the variation in growth effects of FDI across countries. In their analytical frame-work, the level of human capital is assumed to induce higher growth rate given the amount of FDI.

This hypothesis is supported by their empirical findings. Zhang (1999) finds that FDI appears to enhance economic growth in the long run for mainland China, Hong Kong, Indonesia, Japan and Taiwan and in the short run for Singapore. Benga and Sanchez-Robles (2003) reveals that FDI is positively correlated with economic growth, but host countries require human capital, economic stability, and liberalized markets in order to benefit from long term FDI flows using data of 80 countries for the period 1979-1998.

Though, the scholars revealed a number of facts related to FDI. Researchers also unearth the effect of the FDI on the economic indicators but not many studies have been concentrated on the Indian subcontinent to evaluate these effect. The present study will investigate the effect of the economic indicators of India on the FDI.

Objectives of the Study:

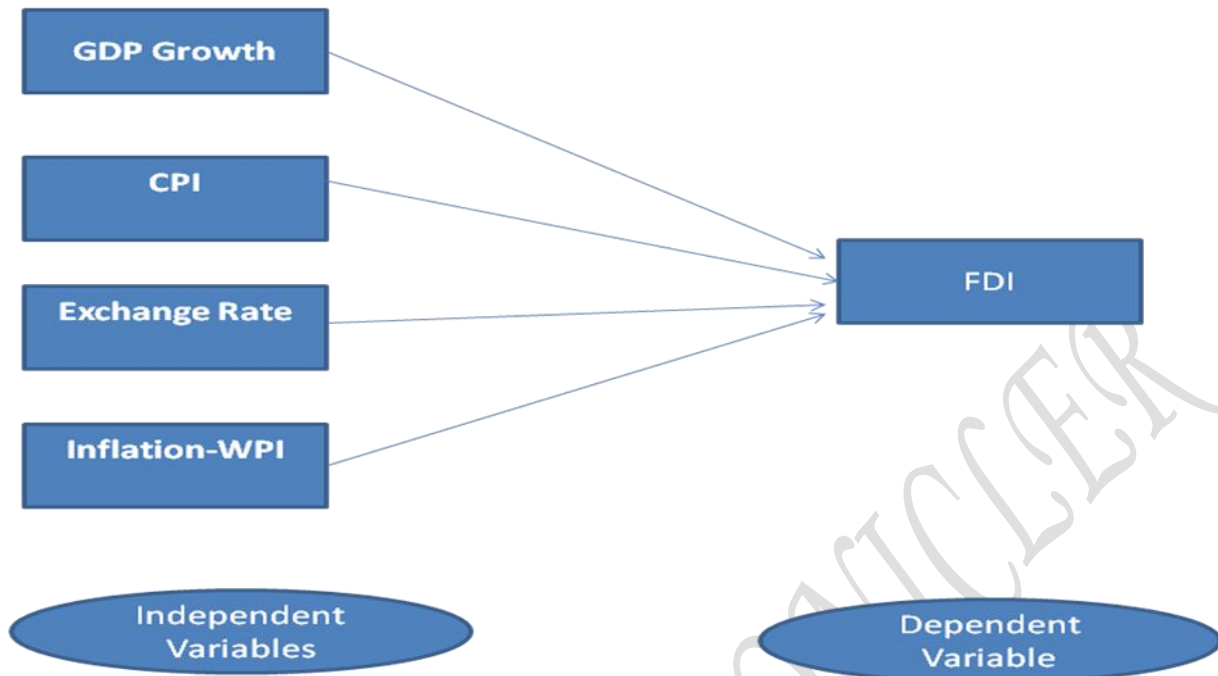
1. To establish relationship between FDI and Economic indicators like WPI, CPI, Exchange rate and GDP.
2. To determine the strength of the relationship between FDI and Economic indicators like WPI, CPI, Exchange rate and GDP.
3. To find out the impact of the FDI flow in a nation on the Economic indicators like WPI, CPI, Exchange rate and GDP.

Research Hypothesis:

1. There is no relationship between the flow of FDI and Economic indicators like WPI, CPI, Exchange rate and GDP.
2. There is no impact of FDI on Economic indicators like WPI, CPI, Exchange rate and GDP.
3. The relation between Economic indicators like WPI, CPI, Exchange rate and GDP is significantly weak.

Conceptual Research Model:

The following model assumes that the economic indicator of a country like Consumer Price Index, Gross Domestic Product, Exchange Rate of domestic country against foreign country changes with the amount of Inward Foreign direct Investment in a country. Therefore, this model also assumes that there is certainly positive or negative relationship between the above mentioned economic indicators and inward Foreign direct Investment in a country. This research paper is trying to establish the relationship between these economic indicator and FDI in a country and see the effect of these economic indicators on the FDI by regressing these economic indicators on FDI in India.



Findings and Analysis

This part of the study reveals the findings and analysis after evaluating the data of GDP, CPI, Exchange rate, Inflation (WPI), and FDI from the period of 2000-2001 to 2010-2011. Table 1 shows the result of the descriptive statistics. These tests have been performed to check the normality of the data.

Table 1:-Descriptive Statistics

	Mean	Std. Deviation	N
Annual Average GDP rate at Factor Cost	7.56	1.939	11
Annual Average WPI	6.27	2.025	11
Annual Average CPI	7.23	3.052	11
Annual Average Exchange Rate	46.20	3.185	11
Annual Average FDI in Million USD	2.95E4	23555.982	11

This table one indicates that the mean Annual Average GDP rate cost at factor cost is 7.56, which is more than the average of the worlds GDP growth of the other countries. This indicates that India is moving towards developed economies, with some deviation that is 1.939. From this table also indicate that there is large fluctuation in exchange rate and then Annual Average CPI that is 3.052. Then comes the Annual Average WPI that is 2.025. So, the area of concern is majorly inflation rate.

Table 2:-Correlations

	Annual Average GDP rate at Factor Cost	Annual Average WPI	Annual Average CPI	Annual Average Exchange Rate	Annual Average FDI in Million USD
Pearson Correlation	1.000	-.003	.051	-.624	.233
	Annual Average WPI	1.000	.443	.023	.498
	Annual Average CPI	.051	1.000	.327	.776
	Annual Average Exchange Rate	-.624	.023	1.000	.449
	Annual Average FDI in Million USD	.233	.498	.776	1.000
Sig. (1-tailed)	Annual Average GDP rate at Factor Cost	.496	.441	.020	.245
	Annual Average WPI	.496	.086	.473	.060
	Annual Average CPI	.441	.086	.163	.002
	Annual Average Exchange Rate	.020	.473	.163	.083
	Annual Average FDI in Million USD	.245	.060	.002	.083
N	Annual Average GDP rate at Factor Cost	11	11	11	11
	Annual Average WPI	11	11	11	11
	Annual Average CPI	11	11	11	11
	Annual Average Exchange Rate	11	11	11	11
	Annual Average FDI in Million USD	11	11	11	11

Hypothesis 1: There is no relationship between the flow of FDI and Economic indicators like WPI, CPI, Exchange rate and GDP.

Inference-

From table 2 it can be inferred that our hypothesis was wrong and there is clear relation between the Growth rate of a country and other economic variables stated earlier. Table 2 also shows the strength and direction of the relationship. It is clear from the table that there is negative correlation

between Growth rate and Annual Average, but the correlation is weak it means that when inflation is low the growth rate is progressive, but in general it is assumed that the growth rate and inflation goes side by side, But still a very high inflation is not good because foreign investors may not be ready to invest in a country having high inflation which is the current scenario in India.

From this table it is also evident that there is positive correlation between Growth rate and Average annual CPI

that is .051 which is significantly weak but this is positively correlated. Again the correlation between Exchange rate and GDP growth rate is negative and significantly high, this indicate that there is negative impact of volatile exchange rate and increasing Exchange rate, it is also quite

evident from the current scenario in India, where the exchange rate of Dollars against Rupees is on the higher side and it is decreasing the inflow of the foreign capital in India. When all these factors are summed up then it is found that the relation between Growth Rate and FDI inflow is very significant, hence it means that FDI inflow is mainly causes increase in GDP growth rate of a country.

Table 3:-Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.717 ^a	.514	.191	1.745	.514	1.589	4	6	.291

a. Predictors: (Constant), Annual Average FDI in Million USD, Annual Average Exchange Rate, Annual Average WPI, Annual Average CPI

Table 4:-ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.350	4	4.838	1.589	.291 ^a
	Residual	18.263	6	3.044		
	Total	37.614	10			

a. Predictors: (Constant), Annual Average FDI in Million USD, Annual Average Exchange Rate, Annual Average WPI, Annual Average CPI

b. Dependent Variable: Annual Average GDP rate at Factor Cost

Hypothesis 2: There is no significant impact of FDI on Economic indicators like WPI, CPI, Exchange rate and GDP.

Inference- The regression model from here is shows that the value of R square is .514, it shows that the independent variables are able to explain only around 51% variation in the dependent variable. This is not a good symbol and it can be said that there are some

other variables in the economy which affect the GDP growth rate other than those are studied in the study.

The F statistics shows the significance level of .291>.05(P-Values), therefore null hypothesis can be rejected that there is no significant impact of the variables used in the study on the GDP Growth rate. Though, they are correlated and affecting GDP rate

but their combined effect is not significant and the increase in FDI can be attributed to some other factors as well. The value of R is .717 very high it means that the multiple correlation is very high and it can be said

that the variables taken in the study are very highly correlated with each other, which should not be there as it is violation of assumptions of regression.

Table 5:- Coefficients

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.551	9.581		2.562	.043
	Annual Average WPI	-.063	.327	-.066	-.192	.854
	Annual Average CPI	.354	.288	.558	1.228	.265
	Annual Average Exchange Rate	-.397	.201	-.651	-1.976	.096
	Annual Average FDI in Million USD	-2.804E-5	.000	-.341	-.669	.528

a. Dependent Variable: Annual Average GDP rate at Factor Cost

Hypothesis 3: The relation between Economic indicators like WPI, CPI, Exchange rate and GDP is significantly week.

Inference- The regression equation from the model will be $Y = 24.551 - .063X_1 + .354X_2 - .397X_3 - 2.80X_4$. The beta coefficient in the model suggests the relative importance of the variables. Therefore from the study it can be stated that the most important variable is Annual average CPI with value .558 and then Annual average WPI with value -.066, therefore inflation can be attributed to the growth of GDP growth rate. Then comes Average annual FDI and Annual average Exchange rate with values -.341 and -.651. this indicate that inflation effects the GDP growth rate most and then

FDI inflow and then Exchange rate movement.

Now from this table 5, it can be said that Annual Average Exchange Rate is significant $.096 < .05$ (P-Value) and therefore it can be said that this variable has significant impact on GDP growth rate a, The value of inflation CPI is $.265 > .05$ (P-Values) and WPI is $.854 > .05$ (P-Values), this indicates that their effect is insignificant and the value of Annual average FDI inflow is $.528 > .05$ (P-values) it also indicates that this is also insignificant and it less effect the GDP growth rate. Therefore, it can be suggested that our null hypothesis can be accepted that these variable on the GDP growth rate is less significant.

Conclusion

The study reveals that there is quite significant impact of the economic indicators on the FDI. As the findings shows that the attractive exchange rates, consistent GDP growth, good consumer price index and a controlled Inflation rate attract the huge FDI in India. As he findings shows that the average FDI in India during 2000 to 2011 is 17.60 billion US \$, is satisfactory figure in itself. At the same time the average GDP growth of 7.45% during the same period shows that there is a visible impact of GDP on the FDI.

This study also suggest that there is correlation between the variables taken for the study and GDP growth rate but their effect is not as significant as it perceived during the period of the study. It also suggests that there are some other factors which influence the GDP growth rate and their significant level may be high. This does not indicate that they are not at all effect GDP growth rate but their

contribution is less as suggest from the values of the R-Square which is only around 51%. Hence, it can be suggested that there is contribution of the other variables.

The limitation of this study is that the variables taken in this study are limited and therefore does not shows the much impact on the dependent variable GDP growth rate as suggested from the R-Square value which is around 51%. Therefore there may be some other variable in the study. The time taken for the study is around 10 years and it may not fit for predicting a particular trend get to know the impact of the variables on the GDP growth rate. The value of the R suggest that multiple correlation also exist, therefore we also the correlation between the independent variables must be taken account. As far as general thinking is concerned FDI flow is the major contributor in predicting the GDP growth rate but in our study it is proved insignificant. Therefore future work can be done by taking these limitations in mind by the future researchers.

References:

1. Arellano M.(2003), Panel Data Econometrics: Advanced texts in Econometrics, Oxfords University Press, 1st edition, Oxford, Great Britain.
2. Balasubramanyam,V.N, Salisu, M & Sapford,D. (1996). Foreign Direct Investment and Growth in EP and IS countries. Economic journal, 106(1), 92-105.
3. Benoga, M., & Sanchez-Robles,B.(2003). Foreign Direct Investment, Economic freedom and growth: New evidences from latin America. Euopean Journal of Political Economy,19(3), 529-545.
4. Borensztein, E., Gregorio, J.,& Lee,J.(1998). How does Foreign Direct Investment affect economic growth. Journal of International economics, 45(1), 115-135.
5. Chen Kun-Ming, Rau Hsiu-Hua and Lin Chia-Ching(2005): "The impact of exchange rate movements on FDI: Market-Oriented versus Cost-Oriented, the Developing Economies" XLIV-3,pp. 269-287.

6. Choe J.I.(2003), Do Foreign Direct Investment and gross Domestic Investment Promotes Economic Growth?, Review of Development economies, No. 7 (1), pp. 44-57.
7. Chowdhury A. & mavrotas G. (2003), FDI and Growth: What causes What?, World Institute for Development Economies Research of the United Nation (UNU/WIDER), Conference on sharing global prosperity, Helsinki, 6-7 September 2003.
8. Frimpong J.M & Oteng-Abayie E.F. (2006), Bivariate Causality Analysis Between FDI Inflows and Economic growth in Ghana, Munich Personal RePEc Archive, University of Munich, Germany.
9. Jonson Andreas (2004): ‘‘ The Effect of FDI inflow on host Country Economic Growth’’, <http://www.infra.kth.se/cesis/research/publication/working>.
10. Salisu,A.Afees (2002): ‘‘The determinants and Impacts of Foreign Direct Investment on Economic Growth of Developing Countries: A case study of Nigeria’’, Indian Journal of Econometrics, pp. 333-342.

Appendix

Table Showing Economic Indicators and Foreign Direct investment in India

Years	Annual GDP at factor cost	Annual Average WPI	Annual Average CPI	Annual Average Exchange Rate of Rupee against Dollar	Average annual FDI (in US\$ million)
2002-2003	3.99	3.40	4.10	48.62	5,035
2003-2004	8.06	5.50	3.80	46.60	4,322
2004-2005	6.97	6.50	3.90	45.28	6,051
2005-2006	9.48	4.40	4.20	44.01	8,961
2006-2007	9.57	6.50	6.80	45.17	22,826
2007-2008	9.32	4.82	6.20	41.20	34,835
2008-2009	6.72	8.00	9.10	43.41	41,874
2009-2010	8.59	4.10	12.30	48.32	37,745
2010-2011	9.32	9.60	10.50	45.65	34,847
2011-2012	6.21	8.8	8.4	46.61	46,847
2012-2013	4.96	7.4	10.2	53.34	81664

Source : Reserve Bank of India, Finance Ministry, Central Statistical Organisation etc.; doesn't include discrepancies in capital formation

The fiscal deficit for 2008-09 and 2009-10 are based on the Budget 2012-13 Document; Ministry of Finance; Economic Survey 2012-13