CAUSAL FACTOR ANALYSIS OF FOREIGN DIRECT INVESTMENT INFLOWS INTO INDIA: AN ECONOMETRIC ANALYSIS

Namrata Shrivastava, Ph. D.

Astt. Professor (Economics)

Abstract

This paper basically highlights the determinant factors of Foreign Direct Investment and how these factors are affecting Foreign Direct Investment which is the most important factors of economic growth. The study intends to examine the relationship between Foreign Direct Investment inflows and its selected determinants are. The study is based on the secondary time series data collected for thirty five years ranging from 1980-81 to 2014-15. The collected data was analysed by using linear and Log -Linear regression analysis. The results revealed that Foreign Direct Investment inflows exhibited a mixed pattern. A significant relationship was found between MSIZE, EXP as % GDP, FOREX, and EXTDEBT and these variables were positively related. IIP, REER, and TRADEOPEN were found statistically significant and however its coefficient was bearing negative sign. Equations were formulated using the regression analysis and they were found to be of good fit to predict the Foreign Direct Investment inflows. Appropriate measures should be taken by the policy makers to improve these variables under study which will result in increased foreign capital inflow in the country.

Section I: Introduction

The global financial capital markets have led to the changes in the composition of capital flows of the developing economies. FDI has gained wide recognition as a striking measure of economic growth and development in both developed and developing countries. According to the World Investment Report (2015), despite a significant decrease in FDI inflows of developed countries and economies in transition, the inflows to developing economies remained at historically high levels in 2014.

The history of FDI in India can be traced back to the establishment of East India Company by British. British capital came to India during the colonial era of Britain in India. The importance of FDI was recognised right from when India had attained its independence. But the major economic reforms took place in 1990's when India adopted liberalisation and globalisation policies, after which the FDI inflows into India grew rapidly.FDI supplements domestic investment and contributes to growth process of the economy. It is a non-debt foreign asset. The role of the FDI is quite important with regard to transfer of technology and knowhow. Recent years have witnessed significant change in the direction of world FDI, as

developing country starts favorite for MNEs to set up their business. There are different theories that explain the motive and factor behind the investment decision away from home country. In the other words, FDI refers to the net inflows in an enterprise operating in other than that of the investor. It is the sum of equity capital, other long-term capital and short term capital as shown in the balance of payment. FDI acts as a bridge to fulfill the gap between domestic investment and domestic saving.

Transitional economics including India need FDI inflow for its overall development. Liberalization policy of early 90s paved the way for foreign fund including FDI. FDI inflow has been increasing tremendously after the massive liberalization program following exchange rate crisis in India. The main objective of the liberalization program was to bring the stability, economic growth and development via Liberalization, Privatization and Globalization (LPG) process. Neoclassical growth model considers FDI to have just short term effect on growth rate whereas the new Growth Theory evaluates FDI endogenously in the model and regards it as having long term impact on growth rate through technology and spillover effect (**Hsiao and Hsiao, 2006; Jayachandran and Seilan, 2010**).

There are different factors that affect the FDI inflow into a country. However, the linkages differ from one country to another country depending upon the level of development (**Denekas et al., 2007**). For FDI inflows in India, there are many possible determinates which influence the FDI inflow into India. The possible determents are selected after the extensive literature study and summarized below.

The present paper has been divided into five sections. Section- I is devoted to Introduction of research Problem. Review of literature has been done in Section-II. Section-III belongs to research methodology. The main determinants of FDI in Indian economy for the period 1980-81 to 2014-15 are presented in section IV. Section V is devoted for summary and conclusion of the problem at hand.

Section II: Literature Review

The relevant review of literature is studies on various determinants of FDI inflows in India.

GDP is the more important factor influencing FDI inflows. The changes in the level of real GDP of a host country reflect the purchasing power of a country and its market size. **Root and Ahmed (1979), Bhattacharya et al. (1996)** suggest that a growing market increases the prospectus of market potential and a large market size would generate

economies of scale. While, **Scaperlanda and Maurer (1969)** suggest that FDI respond positively to the market size and many empirical studies in developing host countries have confirmed this hypothesis.

The OLI paradigm is dynamic. The continuous incorporation of new companies to the internalization process and the changing and more and more respective policies in developing countries are giving rise to new trends in the way of carrying out FDI **Dunning (1973); Dunning and Narula (1996).** In the survey approach the aim is that instead of relying on a deductive approach, the investing firm's motives are unfolded by directly asking them to identify the reasons for their foreign investment decision. This approach was very popular in the 1960s and **1970s Dunning, (1973).** Later, several other attempts were made to test the importance of location factors in affecting FDI decisions, such as **Chen (1983), Majumdar (1980) and Zhang and Yuk (1998)**. **Froot and Stein (1991)** studied the effect the exchange rate valuation on FDI. They concluded that, within an adequate capital market model, the host countries with weaker currencies attract more FDI because of depreciation effects which make the asset of the home country more expensive than the ones in the host country. **Wint and Williams (1994)** have observed that stable economy attracts more FDI this a low inflation environment ids desired in countries that promote FDI as a source of capital flow. Therefore the study expects a negative relationship in the regression analysis. **Gross and Trevieno (1996)** have described a relatively high interest rate in a host country has a positive impact on inward FDI. However the direction of the impact could be in a reserve if the foreign investors depend on host countries capital market for raising FDI fund. The researcher has used prime lending rates because investors are lenders and borrowers.

Similarly **Nakamura and Oyama (1998),** have proved in case of the foreign exchange market, an appreciation in exchange rate would cause a depreciation of domestic currency against US dollar. Normally trade in Malaysia usually uses the term of US dollar in their transaction. So, FDI is hypothesized to increase in response to the depreciation in **Malaysian Ringgit. Nakamura and Oyama (1998)** suggest that the exchange rate is the choice for MNCs to select FDI destinations. **Garibaldi et al. (1999)** growth technical innovation and enterprise reconstructing as well as capital accumulation are possible through the FDI. **Bajpai and Sachs (2000),** advice policy makers in India to through open the doors to FDI, which is supposed to bring "huge advantage with little or no downside".

Nair-Reichert and Wienhold (2001) and another researchers, mainly focuses on the casuality running from FDI to GDP. The two-way link between FDI and GDP stems from the fact that increased FDI promotes growth in host countries, whereas brighter growth prospects in the host countries attract an increased flow of FDI. **Carkovic and Levine (2002)** explain FDI doesn't induce economic growth independently but some other factors are responsible for the relationship between FDI and economic growth. Case studies of Argentina and Estonia states that although MNC s employ more and more skilled labor and higher spending on training but it shows the little effect on the growth of the economy. **Alfaro (2003)** states about the impact of FDI on economic growth in various sectors of the economy. He told impact of FDI on economic growth varies across the sectors i.e. primary sector, secondary sector and tertiary sector. The impact of FDI on primary sector is not equal to another two sectors of the economy. Similarly the impact of FDI on secondary sector (Industrial sector) is not equal to primary sector (Agricultural sector), tertiary sector (Service sector) and vice versa. **Alfaro, (2003),** argue that FDI provides growth only where there are sufficiently developed financial markets. **Pan Y. (2003)** has observed that the impacts of source and host country factors on the inflow of foreign direct investment (FDI) into China between 1984 and 1996. The author has explained that exchange rate is not found to be a significant determinant for aggregate FDI inflow in China. **Dimitrios and Pantelis (2003)** have proved that real gross national product is the most important determinant of outward FDI. This study has proved by taking the time series data for five European Union members and four non-European Union countries. This research paper has taken dependent variables are Income, Interest rate, Exchange rate, Technology, Human capital and also taken the dummy variable. OLS method is used by researcher and the stationary of all used date series has been tested by applying the Phillips-Person unit root test (Phillips and Person, 1988) and also used Durbin-Watson statistics which indicates the absence of autocorrelation. Lastly, the results verify that the outward FDI position of countries is influenced by national characteristics and that the same types of endowments have different significance for different countries.

Nonnemberg et al. (2004) express about Foreign Direct Investment that more FDI inflow is possible through strong GDP growth but FDI doesn't induce the economic growth. On the other words, GDP growth can induce FDI inflow, FDI does not necessarily induce the economic growth. **Indian Express (2005)** states the opinion of the policy makers, ministers about FDI. According to the former Finance minister, P. Chidambaram, "FDI works wonders

in China and can do so in India". Various economists, including **Moran (2005)** has explained this in case of both open economy as well as closed economy. FDI will more effects on the host economy/country if it would be free trade i.e. open economy. So the positive benefits of FDI to be transferred to the host country. If economy is closed then there is negative impact on growth of the economy. **Fedderke and Romm (2006)** have argued that FDI can develop the economic growth by generating the lacking sources (technology, skill and resources) through the spillover effect. Determinants of Foreign Direct Investment in South Africa lie in the net rate of return, as well as the risk profile of foreign direct investment liabilities. Policy handles are both direct and powerful. They have used the VECM method for determining the impact of FDI on growth and determinants of FDI. The data sources of their research is South African Reserve Bank and they have taken variables political instability and the property rights from 1960 to 2002, tested by Agumented Dickey-Fuller test. **Akinboade (2006)** have emphasized "low inflation is taken to be a sign of internal economic stability in the host country. Any forms of instability introduce a form of uncertainty that distort investor perception of the future profitability in the country.

Seetanah and Khaadaroo (2007) have given their opinion through study that FDI provides a pump-priming method to economic growth i.e. though FDI is small; it is helpful for economic growth. . **Chakraborty and Nunnenkamp (2008)** stated that growth of FDI impact on various sectors like primary sector, secondary sector which refers to manufacturing sectors and service sectors. They have stated the transitory effects of FDI on output on service sector where as FDI stocks and output are mutually reinforcing in the manufacturing sector and casual relationship is absent in primary sector. They have used Co-integration causality test for deriving the economic reform, FDI and economic growth in India and panel data source is Reserve Bank of India (RBI).

Singhania and Gupta (2011) have examined GDP growth and inflation positively impact the inflow of FDI in India and scientific growth negatively impact on FDI in India. This research paper also explained 63% variation in FDI inflows into India. He has explained his paper by taking some major independent variables like Gross Domestic Product (GDP), Openness (Free Trade) i.e. sum of total imports and exports, Inflation rate, Interest rate, Money growth and Scientific (Technological) progress and dependent variable as Foreign Direct Investment (FDI). He uses ARIMA model for measure the determinants of FDI inflows in India. **Lokesha and Leelavathy (2012)** provide an explanation for determinants of

FDI inflows into as well as outflows from India. It analyzes the dynamics of several FDI determinants in relation to the inflows and outflows. It reviews the key results of research regarding the determinants of FDI. The study concludes that FDI inflows into India are simultaneously determined by the policy framework, market size, economic factors as well as economic stability and political factors. **Faik (2012).** Turkey research paper shows the explanations about FDI in Turkey economics. This paper has taken the dependent/explanatory variables are GDP growth, Labour cost, the electricity price growth, the growth in average prices of High sulphur fuel oil, Cookin coal, Stem coal and Natural gas, Export growth, Import growth, Discount rate. This paper has given the result by using Markov Resime-Switching Models (MSMs) by taking time series data IMF-IFS, 2011 CD ROM.

Sharmiladevi and Saifilali (2013) have explained the determinants of FDI inflows of India by taking Ordinary Lists Square (OLS) method. The author has taken FDI as a dependent variable and the independent variables are Gross Domestic Product (GDP), export, Inflation rate, Index of Industrial Product (IIP) and exchange rate. The data are collected from Reserve Bank of India data base and stated that 5% significance level of that independent variable, i.e. these variables are the important determinants of FDI inflows in India. He also uses the Breusch-pagan-Godfrey Test for heteroskedasticty, Durbin Watson test and serial correlation LM test. Lastly he rejects the null hypothesis and states that these independent variables are having a direct influence upon India's credibility in the international arena in terms of attracting more FDI. **Kali Ram Gola et al., (2013)** has explained the FDI plays an important role to develop a country. This paper based on India. The aim of their study was to investigate the impact of FDI on economic growth in India. They defined the pattern and trends of the main determinants and dimensions of investment flow in India. They also discussed FDI inflow in India as compared to China, Singapore, Brazil and Russia and told India's share in global FDI has increased continuously but growth of India always less than the other developing country. The study has taken data from different sources like World Investment Reports, Asian Development Bank's Reports, Various Bulletins of Reserve Bank of India, Publications from ministry of Commerce, Govt. of India websites. The study has been taken data for the period between 1991-2011. **Alam and Shah (2013)** have described the bi-directional relationship between market size and labor costs in short run where as in long run labor costs yield significant confidents indicates the interaction of four variables.

This study has taken the panel data of OECD member countries and tests it using by Granger Causality test. The OECD countries including Australia, Belgium, Canda, France, Italy, Japan, Norway, Spain, The USA and UK. This study has used Granger Casuality test including Durbin Watson statistics, Unit root tests and Co-integration test. They have used independent variables, which are affects on FDI, are market size, Labor cost, Labor productivity, Corporate tax rate, Trade openness, Political stability, Real effective exchange rate, Inflation and Quality of infrastructure and FDI as the dependent variable which is depends on the variations of independent variables. **Das (2014)** proposed amendment to Insurance Laws Bill, 2008 in the parliament, making provisions to hike Foreign Direct Investment (FDI) cap from 29% to 49% in the insurance sector and facilitating the process of disinvestment of public sector general insurance companies.

Section III: Research Methodology

The study is based on secondary sources of the statistics. This becomes more essential when the numbers of variables are large; it requires adequate degree of freedom to carry out the traditional statistical tests of significance. Thus, to cater this need of the research a period of 35 years was thoughtfully selected. The data for the purpose of analysis will constitute time series incorporating a period of 1980-81 to 2014-15. The present study aims at analysing the Long run relationship between Foreign Direct Investment Inflows in India. Since the study is based on secondary statistics Union of India was purposively selected. Thus Union of India constitutes as study units. The data used in the study are annual data for the period 1981 to 2015 sourced from the various publication of RBI Handbook, Ministry of commerce and Industry Govt. of India, DIPP and Shodhganga, Stasticstimes.com, Ministry of Finance Govt. of India UNCTADSTAT. In addition to this data can also be explored from some other sources of publication.

Objectives of the Study : The overall objective of the study is to investigate into the causal factors responsible for Foreign Direct Investment inflows in the Indian economy. However, the specific objectives of the present study are as under:

1. To identify the determinants of FDI inflows in the economy during the period.

2. To see the impact of the variables on the inflows of FDI during the period.

Hypothesis of the study:

    I.   Structure and pattern of variables is remained same.

    II.   Causal relationship between foreign direct investment inflows and its determinants is absent.

Model Specification

MODEL- I:

$$FDI_t = \beta_0 + \beta_{1(\text{MSIZE}})_t + \beta_2 (\text{INFLATION})_t + \beta_{3(} \text{TRADEOPEN})_t + \beta_{4(\text{REER})}X_t + \beta_{5(}$$
$$\text{IIP})X_t + \varepsilon_i$$

$$\log (FDI)_t = \beta_0 + \beta_1 \log_{(\text{MSIZE})_t} + \beta_2 \log (\text{INFLATION})_t + \beta_3 \log(\text{TRADEOPEN})_t + \beta_4 \log$$
$$(\text{REER})_t + \beta_5 \quad \log (\text{IIP})_t + \varepsilon_i$$

MODEL- II:

$$FDI_t = \beta_0 + \beta_{1(\text{MSIZE}})_t + \beta_2 (\text{TRADEOPEN})_t + \beta_{3(\text{REER}})_t + \varepsilon_i$$
$$\log (FDI)_t = \beta_0 + \beta_1 \log_{(\text{MSIZE})_t} + \beta_2 \log (\text{TRADEOPEN})_t + \beta_3 \log(_{\text{REER}})_t + \varepsilon_i$$

MODEL- III:

$$FDI_t = \beta_0 + \beta_{1 (\text{MSIZE}})_t + \beta_2 (\text{EXE GDP})_t + \beta_{3 (}\text{EX DEB})_t + \beta_{4 (\text{FOREX})_t} + \beta_{5(} \text{REER})_t + \varepsilon_i$$
$$\log (FDI)_t = \beta_0 + \beta_1 \log_{(\text{MSIZE})_t} + \beta_2 \log (\text{EXE GDP})_t + \beta_3 \log(\text{EX DEB})_t + \beta_4 \log_{(\text{FOREX})_t}$$
$$+ \beta_5 \log (\text{REER})_t + \varepsilon_i$$

Variable Specification

FDI	:	Foreign Direct Investment Inflows
MSIZE	:	Market size proxy used Gross Domestic Product
EXT DEBT	:	External Debt
IIP	:	Index of Industrial Production
EXP GDP	:	Export as % of GDP
TRADE OPEN	:	Trade Openness (X+ M/GDP*100)
INFLATION	:	Inflation % CPI
REER	:	Real Effective Exchange Rate
FOREX	:	Foreign Exchange Reserve

Multiple Regression Analysis :

To examine impact of caused factor multiple regression analysis is used. The general linear regression model is just an extension of simple regression model. However the derivation of the required results from these (normal) equations involves algebraic complexities. With the use of matrix algebra, the derivation of the results becomes much easier.

Generalising the two and three variable linear regression models, the k- variable regression model involving the dependent variable Y and k-1 explanatory variables X_1, X_2, …,X_k may be written as

$$Y_i = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \cdots .. + \beta_k X_{kt} + u_i$$

$$\beta = (X'X)^{-1}X'Y$$

Here is the vector of required least squired estimators $\square_{\square \ \square \ \square}$, $\square_\square$, $\square_\square$, $\square_\square$, ….., $\square_{\square \ \square}$

$$\text{S.E. } \beta_i = \sqrt{(var\ \beta t)} = \sigma^2_u (X'X)^{-1}$$

Section IV: Determinants of FDI in Indian economy

The regression results model I of Overall period have been presented in table 1 to 2. The results of the present study are in partial conformity with earlier study. MSIZE was found statistically significant at 1% level, IIP was found statistically significant at 10 % level, and however its coefficient was bearing negative sign. Rest of the parameters was found statistically insignificant. The entire five explanatory variables taken together explain 93.1 % variation in dependent variable. The log version has improved the fit slightly as the coefficient of determination was 93.4%. MSIZE was found statistically significant at 10 % level. Rest of the parameters was found statistically insignificant.

The regression results model II of Overall period have been presented in table 3 to 4. The results of the present study are in partial conformity with earlier study. MSIZE was found statistically significant at 1 % level. Trade Openness was found negative and statistically significant at 5 % level. Rest of the parameters was found statistically insignificant. The entire three explanatory variables taken together explain 85.7 % variation in dependent variable. The log version shows improvement in the fit as the coefficient of determination has improved as 92.4%. In overall period MSIZE was found statistically significant at 1 % level. The coefficient of REER was found negative and statistically significant at 1 % level. Rest of the parameters was found statistically insignificant.

Table 1: Regression estimates of Linear model –I

Version		Constant	MSIZE	IIP	REER	TRADEOPEN	INFLATION	R-square	Adjusted R-square	D-W Statistics
I	Coef.	-46601.872*	.031*					.867	.863	.876
	s.e.	(6747.601)	(.002)							
II	Coef.	-29827.438*	.084*	-367.157*				.927	.923	1.570
	s.e.	(6012.088)	(.010)	(71.072)						
III	Coef.	-18993.943	.089*	-405.741**	-106.751			.927	.920	1.588
	s.e.	(49344.134)	(.025)	(188.729)	(482.495)					
IV	Coef.	-12820.158	.097*	-466.060**	-171.473	.031		.928	.919	1.606
	s.e.	(51246.785)	(.030)	(221.900)	(503.004)	(.058)				
V	Coef.	-34605.434	.087*	-389.955***	-64.264	.029	1091.422	.931	.919	1.757
	s.e.	(54906.425)	(.031)	(232.122)	(511.195)	(.058)	(1006.672)			

* Significant at 1% level of significance ** Significant at 5% level of significance *** Significant at 10% level of significance

Table 2: Regression estimates of log-linear model

Version		Constant	MSIZE	IIP	REER	INFLATION	TRADEOPEN	R-square	Adjusted R-square	D-W Statistics
I	Coeff.	-18.137*	3.455*					.930	.928	.733
	s.e.	(1.050)	(.165)							
II	Coeff.	-17.762*	3.357*	.097				.930	.925	.733
	s.e.	(3.552)	(.902)	(.874)						
III	Coeff.	-16.632*	2.287***	1.479	1.163			.931	.925	.725
	s.e.	(3.806)	(1.549)	(1.845)	(1.365)					

IV	Coeff.	-16.329***	2.219***	1.539	1.069	.168		.932	.923	.688
	s.e.	(3.874)	(1.567)	(1.866)	(1.387)	(.267)				
V	Coeff.	-20.389*	3.382***	.309	.736	.128	.107	.934	.923	.699
	s.e.	(5.928)	(2.029)	(2.311)	(1.439)	(.271)	(.118)			

* Significant at 1% level of significance ** Significant at 5% level of significance ***
Significant at 10% level of significance

The regression results model III of Overall period have been presented in table 5 to 6. The results of the present study are in partial conformity with earlier study. FOREX was found statistically significant at 1 % level. MSIZE was found negative and statistically significant at 5 % level. Export as % of GDP was found statistically significant at 5 % level. External Debt was found statistically significant at 10% level. Rest of the parameters was found statistically insignificant. The entire five explanatory variables taken together explain 95.4% variation in dependent variable. The log version shows slight improvement in the fit as the coefficient of determination has improved as 95.5%. In log version overall period FOREX and REER were found statistically significant at 1 % level. Export as % of GDP was found statistically significant at 5 % level. Rest of the parameters was found statistically insignificant.

Table 3: Regression estimates of Linear model –II

Version		Constant	MSIZE	REER	TRADEOPEN	R-square	Adjusted R-square	D-W Statistics
I	Coeff.	-10463.413*	.008*			.826	.820	.816
	s.e.	(1991.690)	(.001)					
II	Coeff.	-20298.254*	.008*	115.745***		.839	.829	.849
	s.e.	(6231.414)	(.001)	(69.689)				
III	Coeff.	-10421.684***	.008*	27.350	-.035**	.857	.843	1.064
	s.e.	(7793.821)	(.001)	(80.421)	(.018)			

* Significant at 1% level of significance   ** Significant at 5% level of significance ***
Significant at 10% level of significance

Table 4: Regression estimates of log-linear model

Version		Constant	MSIZE	REER	TRADEOPEN	R-square	Adjusted R-square	D-W Statistics
I	Coeff.	-21.106*	3.833*			.897	.894	.821
	s.e.	(1.435)	(.226)					
II	Coeff.	-11.792*	3.103*	-2.562*		.924	.920	1.143
	s.e.	(3.030)	(.292)	(.759)				
III	Coeff.	-11.925*	3.111*	-2.535*	.007	.924	.917	1.142
	s.e.	(3.806)	(.331)	(.894)	(.112)			

* Significant at 1% level of significance ** Significant at 5% level of significance ***

Significant at 10% level of significance

Table 5: Regression estimates of Linear model –III

Version		Constant	FOREX	EX DEBT	MSIZE	EXE GDP	REER	R-square	Adjusted R-square	D-W Statistics
I	Coeff.	-4066.886	8.727*					.934	.932	1.342
	s.e.	(3153.148)	(.402)							
II	Coeff.	-7239.844***	7.581*	61.064				.936	.932	1.427
	s.e.	(5249.572)	(1.563)	(80.476)						
III	Coeff.	15380.096***	10.926*	148.223**	-.019**			.946	.941	1.634
	s.e.	(10399.691)	(1.989)	(82.728)	(.008)					
IV	Coeff.	27909.034*	15.909*	124.908**	-.034*	3058.810**		.954	.948	1.828
	s.e.	(11174.287)	(2.862)	(78.224)	(.010)	(1332.718)				
V	Coeff.	28179.318	15.925*	125.125**	-.034**	3058.161**	-2.073	.954	.946	1.828
	s.e.	(35250.433)	(3.530)	(83.960)	(.014)	(1357.864)	(255.982)			

* Significant at 1% level of significance ** Significant at 5% level of significance ***

Significant at 10% level of significance

Table 6: Regression estimates of log-linear model

Version		Constant	MSIZE	FOREX	EX DEB	REER	EXE GDP	R-square	Adjusted R-square	D-W Statistics
I	Coef.	-18.137*	3.455*					.930	.928	.733
	s.e.	(1.050)	(.165)							
II	Coef.	-9.010**	1.789***	.486**				.940	.936	.905
	s.e.	(4.043)	(.732)	(.209)						
III	Coef.	-14.524**	2.882**	.366**	-.532			.942	.936	.893
	s.e.	(6.689)	(1.285)	(.238)	(.515)					
IV	Coef.	-8.325	1.083	.798**	.051	1.513**		.948	.941	1.064
	s.e.	(7.312)	(1.591)	(.332)	(.593)	(.838)				
V	Coef.	-13.240**	1.712	.812*	-.158	2.224*	.178**	.955	.947	1.177
	s.e.	(7.247)	(1.526)	(.313)	(.567)	(.853)	(.081)			

* Significant at 1% level of significance ** Significant at 5% level of significance *** Significant at 10% level of significance

Section V: Summary and Conclusion

The Present paper analysed the determinants of FDI inflows in India. Paper has discussed the changes in the various determinants of FDI over the period 1980-2015. Using multiple regression analysis, the relationship between FDI determinants and FDI inflows was analysed. As the variables have higher degree of correlation leading to problem of multicolinearity, step wise regression was performed to understand the individual and combined impact of various factors. The regression results of model I suggests that the entire five explanatory variables taken together explain 93.4 % variation in dependent variable. MSIZE was found statistically significant at 1% level, IIP was found statistically significant at 10 % level, and however its coefficient was bearing negative sign. The log version MSIZE was found statistically significant at 10 % level. The regression results of model II suggests that the entire three explanatory variables taken together explain 92.4 % variation in dependent variable. MSIZE was found statistically significant at 1 % level. Trade Openness

Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies

was found negative and statistically significant at 5 % level. The log version MSIZE was found statistically significant at 1 % level. The coefficient of REER was found negative and statistically significant at 1 % level. The regression results of model III suggests that the entire five explanatory variables taken together explain 95.5 % variation in dependent variable. FOREX was found statistically significant at 1 % level. MSIZE was found negative and statistically significant at 5 % level. Export as % of GDP was found statistically significant at 5 % level. External Debt was found statistically significant at 10% level. The log version FOREX and REER were found statistically significant at 1 % level. Export as % of GDP was found statistically significant at 5 % level. We found that the MSIZE, EXP as % GDP, FOREX, and EXT DEBT are important for attracting higher inflows of FDI. These variables were positively correlated. Some variables like IIP, REER, and TRADE OPEN were found statistically significant and however its coefficient was bearing negative sign.

Hopefully, Make in India is a step towards attracting foreign capital; likewise Government should formulate constructive policies. The government should be pursuing policies to control over an inefficient bureaucracy, red-tapism, and the widespread corruption, so that India can gain the investor's confidence and attract more FDI inflows to India.

References

Akinboade O. and Makina D., 2006. Mean reversion and structural breaks in real exchange rates: South African evidence. Applied Financial Economics, 16(4), pp. 347-358.

Alam, A. and Shah, S.Z.A., 2013. Determinants of foreign direct investment in OECD member countries. Journal of Economic Studies, 40(4), pp. 515-527.

Alfaro, L., 2003. Foreign Direct Investment and Growth: Does the sector Matter? Harvard Business School. Boston. MA.

Bajpai, N. and Sachs, J.D., 2000. Foreign Direct Investment in India: Issues and Problems. Development Discussion Paper. 759. Harvard Institute for International Development. Harvard University. Cambridge. MA.

Bhattacharya, A., Montiel, P. and Sharma, S., 1996. Private Capital Flows to Sub-Saharan Africa: An Overview of Trends and Determinants. World Bank. Washington DC. Mimeo.

Bilgilia, F., Tulucea, N.S.H. and Doganb, I., 2012. The determinants of FDI in Turkey: A Markov Regime-Switching approach, tSciVerseScienceDirectdoi:10.1016/j.econmod. 2012.04.009.

Carkovic, M. and Levine, R., 2002. Does foreign direct investment accelerate economic growth? Working Paper. University of Minnesota. Minneapolis and Saint Paul. MN.

Chakraborty, C. and Nunnenkamp, P., 2008. Economic Reforms, FDI, and Economic growth in India: A Sector Level Analysis. World Development, 36(7), pp. 1192-1212.

Chen, E., 1983. Multinational Corporations Technology and Employment. Macmillan. London.

Das, D.K., 2014. China and the Asian Economies: Interactive Dynamics, Synergy and Symbiotic Growth. London and New York: Routledge.

Dunning, J.H., 1973. The determinants of international production. Oxford Economic Papers. November.

Dunning, J.H. and Narula, R., eds., 199. Foreign Direct Investment and Governments. Routledge. London.

Fedderke, J.W. and Romm, A., 2006. Growth impact and determinants of foreign direct investment into South Africa, 1956-2003. Economic Modeling, 23(5), pp. 738-60.

Froot, K.A. and Stein, J.C., 1991. Exchange rates and foreign direct investment: An imperfect capital markets approach. Quarterly Journal of Economics, 106 (November), pp. 1191-1217.

Froot, K. and Stein, J., 1991. Exchange Rate and Foreign Direct Investment: An Imperfect capital Markets Approach. Quaterly Jounal of Economics. pp. 1191-1217.

Galán, J.I. y González-Benito, J., 2006. Distinctive determinant factors of Spanish FDI in Latin America. Journal of World Business, Vol. 41, No. 2, pp. 171-189.

Garibaldi, P., Mora, N., Sahay, R. and Zettelmeyer, J., 1991. What Moves Capital to Transition Economics. IMF Conference. A decade of transition. Wasington. DC. February.

Gert, G. Wagner, Joachim R. Frick and Jürgen Schupp, 2007. The German Socio-Economic Panel Study (SOEP) – Scope, Evolution and Enhancements. Journal of Applied Social Science Studies. Berlin, Vol. 127(1), pp. 139-169.

Gola, K.R., Dharwal, M. and Agarwal, A., 2013. Role of Foreign Direct Investment in the Development of Indian Economy. Gyanpratha- ACCMAN Journal of Management, 5(1).

Grosse, R. and Trevino, L.J., 1996. Foreign direct investment in the United States: an analysis by country of origin. Journal of International Business Studies, pp. 139-155.

Hsiao, F.S.T. and M-C.W. Hsiao, 2006. FDI, Exports, and GDP in East and Southeast Asia –Panel Data versus Time-Series Causality Analysis. Journal of Asian Economics, 17, pp. 1082-1106.

Jayachandran, G. and Seilan, A., 2010. A causal relationship between trade, foreign direct investment and economic growth for India. International research journal of finance and economics, 42, pp. 74-88.

Kyrkilis, D. and Pantelidis, P., 2003. Macroeconomic determinants of outward foreign direct investment. International Journal of Social Economics, 30(7), pp. 827-836.

Lokesha B.K., Leelavathy, D.S., 2012. Determinants of Foreign Direct Investment: a macro perspective. Shri Ram Centre for industrial Relations and Human Resources.

Majumdar, B.A., 1980. A case study of the industrial organization theory of Foreign Direct Investment". Weltwirtschaftliches Archive, No. 2.

Moran, T.H., Graham, E.D. and Blomsstrom, M., 2005. Does Foreign Direct Investment Promote Development? Institute for International Economics-Center for Global Development. Washington. DC. 411.

Nair-Reichert, U. and Wienhold, D., 2001. Causality tests for cross-country panels: a new look at FDI and economic growth in developing countries. Oxford Bulletin of Economics of statistics, 63(2), pp. 153-171.

Nakamura, S. and Oyama, T., 1998. The Determinants of Foreign Direct Investment from Japan and the United States to East Asian Countries, and the Linkage between FDI and Trade. Bank of Japan Working Paper, pp. 98-11.

Nonnenberg, M. and Mendonca, M., 2004. The determinants of direct foreign investment in developing countries. Proceedings of the 32th Brazilian Economics Meeting. Brazil.

Phillips, P.C.B. and Perron, P., 1988. Testing for Unit Roots in Time Series Regression. Biometrika, 75, pp. 335-346.

Root, F.R. and Ahmed, A., 1979. Empirical Determinants of Manufacturing Direct foreign Investment in Developing countries. Economic Development and Cultural Change, 27, pp. 751-767.

Scaperlanda, A. and Maurer, L., 1969. The determinants of US Direct investment in the EEC. American Economic Review, 59, pp. 558-568.

Seetanah, B. and Khadaroo, A.J., 2007. Foreign direct investment and growth: new evidences from Sub-Saharan Afarican countries. Paper Presented at Economic Development in Africa 2007. CSAE Conference.

Sharmiladevi, J.C. and Saifilali, M.I., 2013. An Empirical Examination of the Determinants of Foreign Direct Investment in India. The International Journal of economics and Business Studies.

Singhania, M. and Gupta, A., 2011. Determinants of foreign direct investment in India. Journal of International Trade Law and Policy, 10(1), pp. 64-82.

Wint and Williams, 1994. International Investment Location Decisions. The case of US Firms. Journal of International Economics, Vol. 33, pp. 57-76.

Zhang, X. and Yuk, H.P, 1998. Determinants of Hong Kong manufacturing investment in China: a survey. Marketing Intelligence & Planning, 16(4). Indian Express, November 11, 2005.

The Hindu, Nov. 17, 2014.