

## **FDI AND ECONOMIC GROWTH: A COMPARATIVE ANALYSIS OF EMERGING ECONOMIES OF ASIA AND DEVELOPED ECONOMIES OF EUROPE AND AMERICA**

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***Abstract:** The article examines the relationship between FDI and economic growth in emerging economies of Asia and Developed economies of Europe and America, taking data of 19 Asian emerging economies and 21 Developed economies of Europe and America over a period ranging from 1980 to 2013 from UNCTAD data base. The other variables used are outward FDI, Exports of Goods and Services (EXGS) and Imports of Goods and Services (IMPGS). GDP percapita (GDP) is taken as a proxy for Economic Growth. The results reveal that the FDI, both inward and outward, are significant in increasing GDP in Developed countries but are negatively affecting GDP in emerging economies of Asia.*

***JEL classification:** C33; C32; F43; F21; O11*

### **INTRODUCTION**

The decade of eighties saw a remarkable change in the policies of underdeveloped and developing countries. They started with the process of liberalization, privatization and globalization (LPG) of the economies. Thanks to the pressures from IMF and other international bodies to reduce subsidies and make trade free (Damooei and Tavakoli, 2006). There has been increasing competition amongst these countries to attract FDI to their countries. It has been widely acclaimed that foreign investment is a wonder pill, which will free under developed countries of all their ills (World investment report 2011, 2011). The advantage of FDI is that is the technology transfer that accompanies new investments most often. Therefore, host economies expect improvements in productivity as well as indirect spillover effects that it follows (Ahmed, 2012). The East Asian crisis of nineties proved contrary and some of the countries slowed down the process of LPG.

The relationship between FDI and Economic Growth is widely debated in economic literature (Belloumi, 2013; Sainia, Lawa and Ahmadc, 2010). Prasad *et al.* (2003) believed that financial globalization can contribute significantly to promoting growth in

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developing countries by augmenting domestic savings, reducing cost of capital, transferring technology, developing domestic financial sector and fostering human capital formation. At the same time, sudden and large inflows of capital cause major destabilization at the macroeconomic level. It may push up monetary aggregates, aggravate inflationary pressures, destabilize exchange rates, exacerbate the current account position, adversely affect the domestic financial sector, and disrupt domestic growth trajectories in case of sudden stop (Reddy, 2008 cited in Pradhan, 2011).

## LITERATURE REVIEW

Panagiotis (2015) studied the relation between FDI and Economic growth for Euro zone countries for the period of 2002–2012. His objectives were, to analyze the relationship between the FDI and economic growth and, to estimate the effects of foreign direct investments on economic growth in the Eurozone countries. The paper uses panel data estimations to test the relationship between the variables. The results reveal that there is a positive long-run cointegrating relationship between FDI and economic growth. He used the Fully Modified OLS (FMOLS) and Dynamic OLS (DOLS) methods to find out the elasticity of GDP with respect to FDI which worked out to be 0.054% and 0.147%, respectively. The results revealed a positive relationship between FDI and economic growth in these countries

Damooei and Tavakoli (2006) aimed to estimate output elasticity of FDI for Philippines and Thailand and did a comparative analysis. They used CES generalization of Cobb-Douglas production function. They found that output response is positive and same in both the countries. They suggest that since Philippine economy is not liberalized it can gain more by liberalizing and by attracting more FDI in the country.

Belloumi (2013), examined the relationship between foreign direct investment (FDI), trade openness and economic growth in host countries for Tunisia by applying the Auto Regressive Distributed Lag (ARDL) approach and cointegration for the period from 1970 to 2008. The results suggest that there exists long run relationship between FDI and Economic growth. According to Sethi (2006) Capital flows are most helpful when the magnitude of those flows is steady and stable. The international capital flow such as direct and portfolio flows has huge contribution to influence the economic behavior of the countries positively. He attempts to explain the effects of private capital inflows (FINV) on some macroeconomic variables in India using the time series data between April 1995 to Dec. 2006. The study also examines the impact of international capital flows on economic growth, trends and composition and suggest policy implication thereof. Cointegration test confirms the presence of long-run equilibrium relationships between a few pair of variables like private capital inflows (FINV) and economic growth (IIP as proxy of GDP) and FINV and Exchange Rate (EXR). The Granger causality test shows unidirectional causality from FINV to Exchange Rate (EXR) and bi-directional causality from FINV and growth (IIP). Finally study found that Foreign Direct Investment (FDI) is positively affecting the economic growth, while

Foreign Institutional Investment (FII) is negatively affecting the growth. The empirical analysis shows that FDI plays unambiguous role in contributing to economic growth. It concludes that capital inflows have not contributed much towards industrial production or economic growth. There are two reasons for this, one the amount of capital inflows to the country has not been enough. Two, the amount of capital that does flow in, is not utilized to its full potential

Fosu and Magnus (2006), examined the long-run impact of FDI and trade on economic growth in Ghana. Using an augmented aggregate production function (APF) growth model, they used the bounds testing (ARDL) approach to cointegration from 1970 to 2002. They used GDP per capita (Y) as dependent variable and FDI, the sum of export and import values to GDP ratio (TRP); total labour force (L); gross fixed capital formation (GFCF) and D is dummy variable for economic liberalisation are independent variables. The results indicated the impact of FDI on growth to be negative while trade was found to have significant positive impact on growth.

Hong (2014), used GMM technique to study the impact of FDI on economic development of China for the data period from 1994-2010. He used dynamic panel data for 254 cities of China. He found that FDI promotes economic growth in China, while openness of trade doesnot induce FDI significantly.

Yalta (2013) uses simulation based inference to investigate the relationship between FDI and GDP in China for the 1982–2008 period, both in a bivariate and a multivariate framework. He used maximum entropy bootstrap based approach, to avoid pre-test. The results show that a statistically significant relationship between FDI and GDP growth does not exist.

Kudina and Pitelisb (2014), tested empirically relationship between de-industrialisation and relative performance of groups of countries, and FDI inflows in emerging economies. In 2010, FDI inflows into developing and emerging economies exceeded that to the developed economies for the first time. Using a panel dataset over the period 1996–2004 uses dynamic panel data model, they find that relative de-industrialisation of developed economies will increase FDI inflows into emerging economies, while the relative under-performance of developed countries will reduce it.

Tiwai and Mutascu (2011), examines the impact of FDI on Economic growth in Asian countries for a period of 1986-2008. They made an attempt to study whether FDI led growth is better or export led growth? They started with the production function  $Y=f(K, L)$ . Where Y denotes GDP percapita, K denotes gross fixed capital formation as percentage of GDP and L denotes amount of labour. To the basic production function they added FDI and Exports (X) and the augmented production function becomes  $Y=f(K, L, FDI, X)$ . Their results reveal that FDI and Exports enhance economic growth of these countries at the same time capital and labour are also contributing to growth.

Xiaoying Li And Xiaming Liu (2005), examines FDI – Growth nexus with a panel data of 84 countries over a period of 1970-99. They used both single equation and

simultaneous equation methodology and found that there existed significant endogenous relationship between FDI and GDP from mid-eighties onwards.

Makki and Somwaru (2004), studied the impact of FDI and trade on Economic growth, since they are considered as catalysts of growth. With the help of panel data for 36 countries from 1970 to 2000 from World Development Indicators (WDI), they used seemingly unrelated regression (SUR) method and instrumental variable (three-stage least squares, TSLS) approach to deal with endogeneity problem. They found that FDI and trade contribute positively to economic growth. They also conclude that benefits would be enhanced if host countries have better skilled labour force.

### **NEED AND IMPORTANCE OF THE STUDY**

The relationship between FDI and Economic growth has been studied many researchers, but the results are mixed and not conclusive. Many researchers have found positive relation between the two (Makki and Somwaru (2004), Tiwai and Mutascu (2011)); some have found negative relation while for many the results were inconclusive. Moreover, the analysis is confined to one particular country or one particular region. With country specific annual analysis, number of observations is bound to be small and for time series econometric modelling we need large number of observations. Therefore, in the present paper a panel data of 19 Asian countries and 21 European and American developed economies is taken.

### **OBJECTIVES**

- 1) To study the impact of foreign investment inflows on economic development (measured by GDP) of the emerging economies of Asia.
- 2) To study the impact of foreign investment inflows on economic development (measured by GDP) of the Developed economies of Europe and North America and compare the results of the two groups of countries.

### **METHODOLOGY**

#### **Model Specification and Data**

Data on approximately all the Emerging countries of Asia and Developed countries of Europe and North America is collected from UNCTAD Data base for the period of 1980-2013. Some of the countries were removed due to lack of data and finally we had a sample of 19 Asian Countries and 21 developed countries from Europe and America.

Econometric technique of panel data regression is used to study the relationship between . In the model GDP is dependent variable while IFDI i.e. inward FDI is independent variable. Exports, imports, and outward FDI (OFDI) are also included as control variables. Since it is proved in literature that trade has got positive impact on GDP (Dritsaki and Dritsaki, 2013) exports and imports are included. OFDI is included to study if it has got any impact on GDP. The coefficients of IFDI and exports (EX) are

expected to be positive while the coefficients of imports (IMP) and OFDI are expected to be negative. For both the groups of countries first Fixed effects regression model is estimated first followed by random effects and then Hausman test.

## RESULTS AND DISCUSSION

The results of panel data regression are tabulated in table 1. The Hausman test statistic for Emerging economies was 3.52915 with significance of 0.47. Therefore the results revealed that Fixed Effects model is more suitable than random effects model. For developed economies of Europe and America the test statistic was 100.22 with significance of 0. This suggests using of fixed effects model. However, results of both the models are summarized in table 1.

The results show that IFDI and OFDI, both are significant in Emerging economies, but with negative coefficient. EXGS and IMPGS both are also highly significant and are positively contributing to growth. In case of Developed economies of Europe and America, the results for IFDI and OFDI are opposite. Both the coefficients are significant and positive. EXGS is highly significant and positive but IMPGS is not significant. This suggests that for these countries, exports are contributing to growth but imports are not significant.

**Table 1**  
**Results of Panel Data Regression**

Variable	Emerging Economies of Asia		Developed Economies of Europe and America	
	Fixed Effects Model	Random Effects Model	Fixed Effects Model	Random Effects Model
C	80167.32 (-20.66)	79987.21 (-2.46)	515666.5 (-29.46)	505164.3 (3.46207)
IFDI	-2.26831 (-3.42)	-2.30447 (-3.48)	2.96 (4.155)	3.123082 4.386299
OFDI	-1.5301 (-1.93)	-1.53296 (-1.938)	2.879595 (4.91)	2.788783 4.756182
EXGS	0.47806 (4.26)	0.476165 (-4.249)	7.879011 (6.69)	8.018364 6.830228
IMPGS	4.753042 (8.74)	4.7892 (-8.827)	-0.129808 (-0.081)	-0.045467 -0.028786
R Square	0.893244	0.691509	0.980085	0.727868
Adjusted R Square	0.889468	0.689581	0.979391	0.726333
F-statistic	236.5612	358.6538	1412.824	474.0885
Prob (F-statistic)	0	0	0	0

## CONCLUSIONS

The results reveal that the FDI both inward and outward are significant in increasing GDP in Developed countries but are negatively affecting GDP in Emerging economies of Asia. EXGS and IMPGS has got significant and positive coefficient in both the types

of countries. The results reveal that the factors that lead to increasing GDP in Developed Economies may not lead to similar results in emerging economies. These economies are having totally different environmental factors compared to the developed economies and one single pill for all may not work.

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