Impacts of Foreign Direct Investment on Economic Growth in India Since 2013

1Mohammad Haroon Ahmadi 1Lecturer 1Kahkashan-e-sharq institute of higher education

Abstract - This study analyzes the relationship between FDI and GDP growth in India from FY 2013-14 to FY 2018-19 through surveying broad literatures and using regression model (Least Square Method), where the results confirm that there is no significant effect or very little positive growth effects of foreign direct investment (FDI). It is thus important recommendations for policy-makers to remove obstacles and improve the internal capability in order to maximize economic development and growth. Government should create an environment for cooperation and promote competency and discourage the foreign investors.

keywords - Gross domestic product, foreign direct investment, economic growth

I. INTRODUCTION

India is the fastest growing economy of the world currently in spite of China competing with it on all grounds. India has ranked 7th nominal GDP growth rate in 2018, (IMF article IV), but according to the prediction of this organization in 2019 India will achieve 5th rank in the world. The GDP of India at current price in 2018 was 2726 billion U.S dollars that it will increase to 2972 billion U.S dollars in 2019, (according to IMF). On another side the GDP growth rate of India in 2018 was 7.05 percent and according to the predictions it will increase to the 7.257 percent.

When foreign investors come and invest directly in one country it is called Foreign Direct Investment (FDI). Or in generally we can say FDI takes place when an investor establishes foreign business operations or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company. When international companies put huge chunks of money in a market, obviously it will turn a boost for economy grow. On the other hand, more money in economy means government will get more money and will be able to spend higher amounts on improving the living conditions of people, investing more in human resource development, and providing better healthcare facilities, which will in turn help to transform the population into an asset than a liability.

India is a country that lots of countries are want to come for investing more in this country. It has a very big stock market with more stability. Free trade policies are helped this country to have more investment in their country. Many reasons are there for investing more in this country. One of those reason is population. India is the 2nd largest populated country around the world and this country facing of lack of resources. When a country has much more population, in that time government has to manage correctly that population by creating more job opportunities. Beside of supporting domestic market, it needs other countries to invest in the country for creating more job opportunities. Unemployment rate in India was 3.52 percent in FY 2017-2018, (World Bank Indicators) an increase than previous year. 3.52 percent unemployment rate in India is not good for India because of its population, so government has to try more to reduce this rate. Another reason is the cheap wage rate. It is very cheap for other countries to come here for investing more because they can produce their product cheaply by paying less wages for workers in this country.

FDI had 1.54 percent share of GDP in India in FY 2017-2018, (IMF article IV and UNCTAD). That it shows a decrease of 0.42 percent then FY 2016-2017. The total Foreign Direct Investment inflows in India was 42.29 billion U.S dollars in FY 2018-19 that it shows 6 percent increase than FY 2017-18, (UNCTAD). Mauritius and Singapore are the countries that invested more in India since 2013, (RBI official website). In those years Mauritius invested 43.823 billion U.S dollars and Singapore invested 37.833 billion U.S dollars.

II. SURVEY OF LITERATURE

Pekas. P, 2015, this paper is tried to examine the relationship between FDI and GDP growth of Eurozone countries from 2002 to 2012 by using a panel data method. The findings are shown a positive relationship between the variables in the long-run. By using the Fully Modified OLS (FMOLS) and Dynamic OLS (DOLS) methods the elasticity of GDP with respect to FDI was 0.054 percent and 0.147 percent, respectively.

Kaushal, L, 2015, The purpose of this article was to examine the causal relationship between trade openness, financial development and economic growth in India for the post-liberalization period from 1991 to 2013. This paper used an automatic regression vector and a Granges causality test as an economic method for empirical finding. Experimental findings show that the growth of a developing country in India leads to trade openness (export and import). Growth was also seen as an important factor in the impact of private credit, which in turn opens up business. Financial development (private credit and

financing) by allocating resources to promote productivity growth coupled with technology upgrades has a causal impact on business openness. The findings therefore support the philosophy of business development.

Malhotra. B, 2014, examined the impact of FDI on Indian economy. It found a positive relationship between FDI and GDP growth in India by using data from FY 1991-1992 to FY 2011-2012.

Abbes. M and others, 2014, examined the relationship between FDI and GDP growth in 65 countries by using casual interaction and panel Granger causality tests in panel data. They found an inverse relationship between casual integration of the panel study. The results also suggest a one-way causality from FDI to GDP, which could be a good tool for prioritizing resource allocation across sectors to promote foreign direct investment.

Forte. R, 2013, The main conclusion is that direct (external) impacts on economic growth depend on the internal conditions of the host country (for example, human capital, economic and technological conditions, the degree of openness of the economy). Therefore, governments of host countries have an important role to play in enabling conditions to take advantage of positive or mitigating negative effects of FDI on host economic growth.

Mahavidyalaya. S, 2012, examined the role of Foreign Direct Investment in the growth process of several countries including India. In this paper Co-integration model is used to analyze the impact of variables in long run from 1990-91 to 2010-2011. The data were shown a positive relationship between GDP growth and FDI.

Devajit. M, 2012, this paper tried to find out that FDI is an important factor on GDP growth of India by increasing human capital formation, facilitating technology transfers and stimulating domestic investment. It argued a positive relationship between FDI and economic growth of India.

Tiwari. K & Mutascu. M, 2011, examined the impact of FDI on GDP growth in Asian Countries. They used panel data from 1986 to 2008, and they found that both FDI and exports boost the growth process. Other factors like, labor and capital also play a very important role in growth process of Asian countries.

Jayachandran. G, 2010, A Causal Relationship between Trade, Foreign Direct Investment and Economic Growth for India from 1970-2007. In this paper Co-integration model is used to analyze the impact of variables in long run. This paper found that a causal relationship between the variables.

Saini. A, 2010, This study uses a threshold regression model and provides new evidence that the positive effect of foreign direct investment on "starting" growth only after the financial market has developed from a threshold level. Until then, FDI gains are useless.

Beugelsdijk. S, 2008, this study contributed to the literature examining the impact of FDI on host economic growth by distinguishing between the effects of horizontal (market search) FDI and vertical (seeking efficiency) FDI. It estimated the growth effects of US vertical and horizontal MNE activity in 44 host countries over the period 1983–2003 by using traditional FDI aggregates as a benchmark. It found that horizontal and vertical FDI in developed countries have positive and significant growth effects. In addition, our results indicate the superior growth effect of horizontal FDI over vertical FDI.

Chakraborty. C, 2008, examined the relationship between GDP and FDI by using Granger causality tests within a panel cointegration framework. It found that the growth effects of FDI vary widely across sectors, and no relation in primary sector.

Lensink. R and Morrissey, 2006, this article contributes to the literature on FDI and economic growth, they have deviated through previous studies by introducing measures of the instability of direct inflow streams. With the introduction of the model, these are expected to have a negative impact on growth, they estimate the standard model using cross-sectional techniques, panel data, and tool variables. While not all results are fully robust, there is a consistent finding that FDI fluctuations have a negative effect on growth. There is no evidence of a positive effect of direct investment level on strong growth and no effect of human capital.

LI. X and LIU. X, 2005, this study tried to analyze the relationship between GDP and FDI by using panel data of 84 countries among the time period of 1970-1999. Single equation as well as simultaneous methods are used to examine the relationship. It found a positive relationship between these two variables. FDI's interaction with human capital has a positive impact on the economic growth of developing countries, while FDI with the technology gap has a significant negative impact.

Atique. Z and others, 2004, This study was about the impact of FDI on economic growth under foreign trade regimes in Pakistan. Found that impact of Foreign Direct Investment is greater under the export promotion trade regime than to import substitution regime by using data from 1970-2001 for Pakistan.

Athukorala. W, 2003, focused on the Foreign Direct Investment hypotheses in case of Sri Lanka. The data gathered from 1959 to 2002 and the response of civil society and foreign firms. Co-integration and correlation method is used to analyze the impact of FDI for GDP growth. It found a positive relationship between FDI and economic activities and domestic business opportunities.

Sahoo. D and Mathiyazhagan. M, 2003, examined the role of FDI on GDP growth of the economy by using year to year data from 1979-80 to 2000-10. To show the relationship between variables in the long run the Johnsen co-integration has been used. It found that export is playing a major role on GDP growth than FDI.

Rashid. A, 1998, examined the impact of FDI on GDP growth of India in the post liberalization period. Found a direct relationship between FDI and economic activity progress in India by using a vector autoregressive model.

Tsai. P, 1994, tested some famous hypotheses of demand side determinants of FDI and to show how Foreign Direct Investment influence GDP growth in the host countries. It found that those factors that effecting on GDP growth they are changing over time, and found that export was the key factor for GDP growth of a country in 17th and domestic savings in eighties. It argued that the impact of Foreign Direct Investment on GDP growth is different from country to country and debate on modernization and dependency are more ideological than practical.

III. OBJECTIVES

The objectives of this research paper are; Analyzing the impact of FDI on GDP growth of India and studying the trends and patterns of FDI inflows in India.

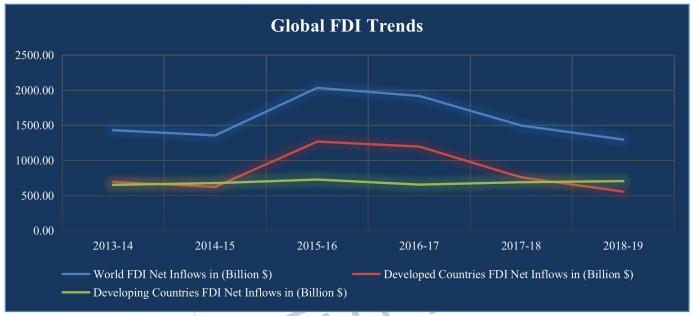
IV. METHODOLOGY

This study used to analyze the impact of FDI on GDP growth of India from Fiscal Year 2013-14 to Fiscal Year 2018-19. All data are secondary data gathered from the IMF Article IV, UCTAD and RBI official website. We used figures and tables to explain the trends between variables. Besides, we used the Least Square Method to see the impact of independent variable "FDI at current price" on dependent variable "GDP growth at current price".

V. DATA ANALYSIS AND THE RESULTS

1. Trends of Global FDI Inflows

Global FDI has experienced 9.4 percent decrease from \$1431.16 billion to \$ 1297.15 billion since 2013. During the same time, developed and developing countries has experienced 19.8 percent decrease, 8.19 percent increase of FDI inflow from \$ 694.85 billion to \$ 556.89 billion and \$ 652.55 billion to \$ 706.04 billion respectively. Developing countries opened their boarders for MNCs to come and invest in their countries. It is because developing countries need more manufacturing or capital intensive goods and technology to make stabilize economy. Investing in developing countries increased because, besides developed countries, developing countries also investing in developing countries like; China investment in Africa. India is also a country that its government has opened economy for MNCs to invest. The share of FDI inflows in India among the world and developing countries were 3.2 and 5.9 percent respectively, in 2018. The major reason for more fluctuations of the FDI inflows



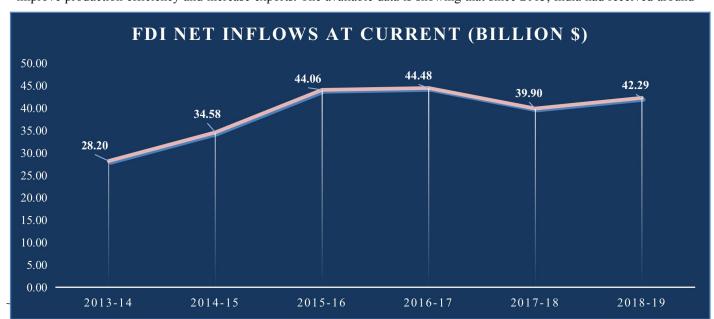
in world are; The fragility of the global economy, policy uncertainty for investors and high geopolitical risks.

Figure 1: Trends of Global FDI Inflows

Source: UNCTAD Report

2. Current Scenario of FDI Inflows in India:

Since the economic reforms that began in 1991, the government of India has made many plans to enlarge the foreign direct flow to improve the Indian economy. An important goal of promoting FDI in India and other developing countries is to improve production efficiency and increase exports. The available data is showing that since 2013, India had received around



233.516 billion U.S dollars FDI from the different countries. In FY 2015-16 India has reached to high percentage of FDI growth rate among the six years, and it shows a 27 percent increase than FY 2014-15.

Figure 2: Trends of FDI Net inflows in India (Billion Dollars)

Source: United Nation Conference on Trade and Development (UNCTD)

The above figure is showing the amount of FDI to India in (billion dollars) and annual growth rate in (percentage). In FY 2017-18 the amount of FDI has decreased to US \$ 39.904 billion from US \$ 44.48 billion that it shows around 10.29 percent decrease in one year. But in FY 2018-19 India has received US \$ 42.286 billion FDI that shows 6 percent increase than FY 2017-18.

The above figure shows the changes in growth rate of FDI since FY 2013-14. The highest growth rate was 27 percent in FY 2015-16 and less growth rate by -10 percent in FY 2017-18.



Figure 3: FDI Annual Growth Rate (%)

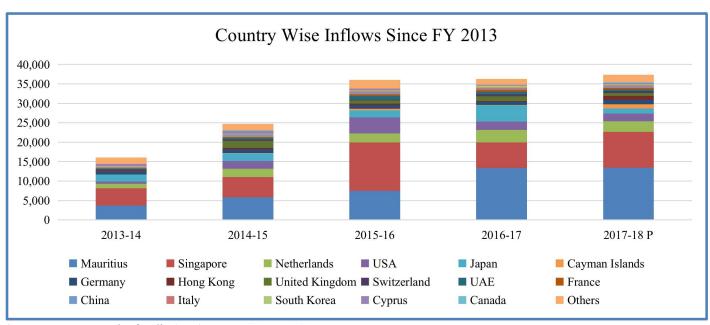
Source: United Nation Conference on Trade and Development (UNCTD)

3. Country wise FDI inflows to India

According to the Reserve Bank of India, Mauritius is a country that invested more than other countries since FY 2013-14 in India. Its total investment was US \$ 43,823 million, and after that Singapore is the second largest investor in India by total investment of US \$ 37,833 million. The below table shows the country wise FDI inflows in India from FY 2013-14 till 2017-18 with its total.

Table 1: Country-Wise Inflows of FDI to India in (Million US\$) since 2013

	Country-Wise Inflows						
	2013-14	2014-15	2015-16	2016-17	2017-18	Total	
Mauritius	3,695	5,878	7,452	13,383	13,415	43,823	
Singapore	4,415	4,415 5,137 12,479 6,529		9,273	37,833		
Netherlands	1,157 2,154 2,330 3,234		2,677	11,552			
USA	617	1,981	4,124	2,138	1,973	10,833	
Japan	1,795	2,019	1,818	4,237	1,313	11,182	
Cayman Islands	25	72	440	49	1,140	1,726	
Germany	650	942	927	845	1,095	4,459	
Hong Kong	85	325	344	134	1,044	1,932	
United Kingdom	111	1,891	842	1,301	716	4,861	
Switzerland	356	292	195	502	506	1,851	
UAE	239	327	961	645	408	2,580	
France	229	347	392	487	403	1,858	
China	121	505	461	198	350	1,635	
Italy	185	167	279	364	308	1,303	
South Korea	189	138	241	466	293	1,327	
Cyprus	546	737	488	282	290	2,343	
Canada	11	153	52	32	274	522	
Others	1,626	1,682	2,243	1,490	1,889	8,930	



Source: Reserve Bank of India (RBI)

Figure 4: Country Wise Inflows since FY 2013

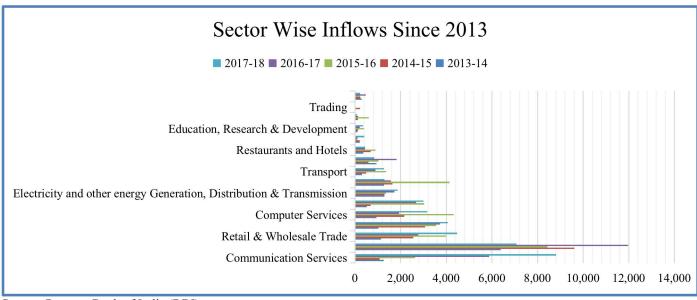
Source: Reserve Bank of India (RBI)

4. Sector-Wise Inflows of FDI to India

According to the Reserve Bank of India (RBI), the amount that received from Foreign Direct Investment has invested on manufacturing, Communication Services, Financial Services, Retail & Wholesale Trade and other sectors respectively. Totally from FY 2013-14 to FY 2017-18 around US \$ 43,471 million, US \$ 19,654, US \$ 15,450 million are invested in manufacturing sector, communication services and Financial Services respectively. The below table is the complete table of sector-wise inflows in India from FY 2013-14 to FY 2017-18.

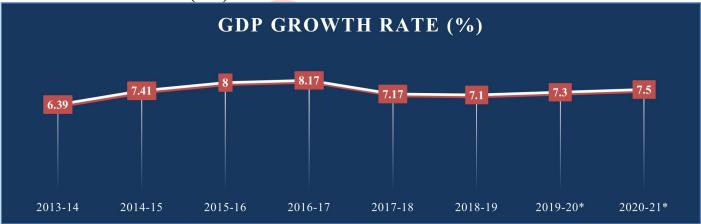
Sector-wise Inflows							
	2013-14	2014-15	2015-16	2016-17	2017-18	Total	
Communication Services	1,256	1,075	2,638	5,876	8,809	19,654	
Manufacturing	6,381	9,613	8,439	11,972	7,066	43,471	
Retail & Wholesale Trade	1,139	2,551	3,998	2,771	4,478	14,937	
Financial Services	1,026	3,075	3,547	3,732	4,070	15,450	
Computer Services	934	2,154	4,319	1,937	3,173	12,517	
Business services	521	680	3,031	2,684	3,005	9,921	
Electricity and other energy							
Generation, Distribution &	1,284	1,284	1,364	1,722	1,870	7,524	
Transmission							
Construction	1,276	1,640	4,141	1,564	1,281	9,902	
Transport	311	482	1,363	891	1,267	4,314	
Miscellaneous Services	941	586	1,022	1,816	835	5,200	
Restaurants and Hotels	361	686	889	430	452	2,818	
Real Estate Activities	201	202	112	105	405	1,025	
Education, Research & Development	107	131	394	205	347	1,184	
Mining	24	129	596	141	82	972	
Trading	0	228	0	0	0	228	
Others	293	232	215	470	226	1,436	

Table 2: Sector-Wise Inflows of FDI to India (Million \$)



Source: Reserve Bank of India (RBI) Figure 5: Sector Wise Inflows Since 2013 Source: Reserve Bank of India (RBI)

5. Gross Domestic Product (GDP) of India



GDP is a monetary measure of the market value of all finished goods and services produced within a specific time period, often annually. GDP of a country also shows that how a country performed in a specific time or we can say this is an important indicator of a country's economic strength. Real GDP adjusts for price changes and is therefore considered a key indicator of economic growth. India is the 3rd largest economy in case of purchasing power parity and has ranked 5th in nominal GDP growth rate in the world. There are some expectations about the future growth of India, that in FY 2019-20 and FY 2020-21 the GDP growth of India will increase from 6.98 percent to 7.26 and 7.49 percent respectively, IMF Article IV. The below figure shows the trends of GDP growth rate.

Figure 6: Trends of GDP growth rate in (%) Source: International Monetary Fund (IMF)

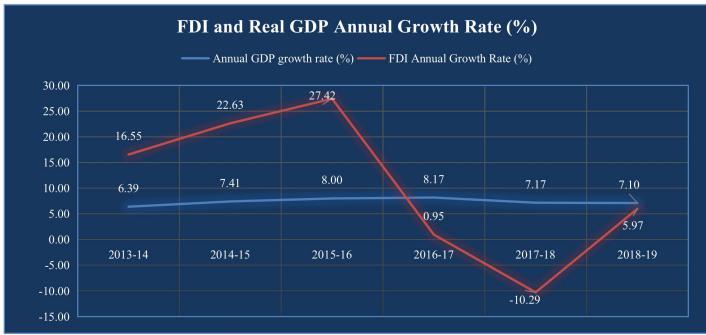
Note: Data of 2019-20* and 2020-21* are estimated values by IMF

The above figure also shows the fluctuations of GDP growth rate in India since 2013. India had a good situation in FY 2016-17 because the GDP growth rate was at the highest point with 8.170 percent. After FY 2016-17 India has experienced a slowdown economy, but expectations are there that the GDP growth rate of India will increase.

6. Relation between FDI and GDP growth in India

GDP and FDI have been analyzed in current prices. In FY 2013-14 the amount of GDP was \$ 1856.72 billion and the share of FDI was 1.52 percent on it. Then GDP growth is increased and the share of FDI also increased till FY 2015-16 by \$ 2103.59 billion and 2.09 percent respectively. But after this time, GDP growth is increased but the share of FDI decreased. The below table is showing the share of FDI on GDP growth of India.

Year	GDP at Current price in (Billion \$)	FDI Net Inflows at Current (Billion \$)	FDI Net Inflows (% of GDP)
2013-14	1856.72	28.20	1.52
2014-15	2039.13	34.58	1.70
2015-16	2103.59	44.06	2.09
2016-17	2289.75	44.48	1.94
2017-18	2652.25	39.90	1.50
2018-19	2716.75	42.29	1.56



Source: IMF and UNCTAD

Figure 7: Trends of FDI and GDP Annual Growth Rate (%)

Source: IMF and UNCTAD

The above figure shows the trends of FDI and GDP growth rate of India from FY 2013-14 to FY 2018-19. As the figure shows, from FY 2013-14 till FY 2015-16 there was a positive relationship between FDI and GDP growth rate, but in FY 2016-17 and FY 2018-19 there was an inverse relationship between these two. These trends show insignificant relationship between these two variables.

For better analyzing of the relationship between dependent and independent variable, we are going to use simple regression function by using Least Square Method.

$$Y = \alpha + \beta X + \mu$$

Where;

Y = GDP Growth at Current Price

X = FDI at Current Price

 $\mu = Error \ Term$

 $\alpha = Intercept$

 β = Slope

Table 4: The relationship between FDI and GDP growth

Dependent Variable: GDP growth at current price								
Method: Least Squares								
Variable	Coefficient	t-Statistic	Prob.	$\mathbf{H_0}$	Ha			
C	1015.069	1.175061	0.3051					
FDI	32.45315	1.478409	0.2134	Accepted	Rejected			
R-squared	0.353346	Adjusted R-	squared	0.191683				

Source: Author's Finding

GDP = 1015.06891648 + 32.4531488255*FDI

The above table is showing the effect of Foreign Direct Investment on GDP growth of India from FY 2013 -14 to FY 2018-19. In here from R-square we can analyze that, this variable can effect just 35.3 percent on GDP growth in India, this impact is very weak in nature, and other factors that is not mentioned in this study may affect 64.77 percent on the GDP growth of India. If FDI growth increases by one unit, the GDP growth will increase by 32.45 unit. On the other hand, if we analyze the relationship between variables, we can understand that there is no any significant relationship between these two variable because p-value is more than 0.05. Or we can interpret that at 95 percent confidence interval there is no significant relationship between Foreign Direct Investment and GDP growth in India and our null hypothesis is accepted.

VI CONCLUSION

India is the fastest growing economy of the world currently in spite of China competing with it on all grounds. India has ranked 7th nominal GDP growth rate in 2018, (IMF article IV), but according to the prediction of this organization in 2019 India will achieve 5th rank in the world. The GDP of India at current price in 2018 was 2726 billion U.S dollars that it will increase to 2972 billion U.S dollars in 2019, (according to IMF). On another side the GDP growth rate of India in 2018 was 7.05 percent and according to the predictions it will increase to the 7.257 percent.

FDI had 1.54 percent share of GDP in India in FY 2017-2018, (IMF article IV and UNCTAD). That it shows a decrease of 0.42 percent then FY 2016-2017. The total Foreign Direct Investment inflows in India was 42.29 billion U.S dollars in FY 2018-19 that it shows 6 percent increase than FY 2017-18, (UNCTAD). Mauritius and Singapore are the countries that

invested more in India since 2013, (RBI official website). In those years Mauritius invested 43.823 billion U.S dollars and Singapore invested 37.833 billion U.S dollars.

From all the above data we can conclude that there is no significant relationship between FDI and economic growth in India in short-run of six years. FDI just can affect 34.33 percent on GDP growth of this country. And one-unit increase in FDI will cause 32.45-unit increase in GDP growth.

VII. RECOMMENDATION

As we know that FDI is a very helpful factor for boosting the growth of an economy. It is because by more foreign investment in the economy, job opportunities, employments are increasing and more technological transfers will be happened too. Besides of that, aggregate demand and output will increase too. But in India in a short period of time we find that there is a very weak positive but not significant relationship between FDI and economic growth. In here we are recommending the government to change its policies regarding the FDI and focusing on the other factors of macroeconomics. Or government has to provide a good competition market in the economy for investors and help its domestic investors by using protectionism.

VIII. REFERENCES

- 1. Abbes. M and others, 2014, Causal Interactions between FDI, and Economic Growth: Evidence from Dynamic Panel Co-Integration, *Procedia Economics and Finance*, Vol. 23, pp. 276-290
- 2. Athukorala. W, 2003, The Impact of Foreign Direct Investment for Economic Growth: A Case Study in Sri Lanka, *Department of Economics of University of Peradeniya*, Sri Lanka, pp. 1-21
- 3. Atique. Z and others, 2004, The Impact of FDI on Economic Growth under Foreign Trade Regimes: A Case Study of Pakistan [with Comments], *The Pakistan Development Review*, Vol. 43, No. 4, pp. 707-718
- 4. Beugelsdijk. S, 2008, The impact of horizontal and vertical FDI on host's country economic growth, *International Business Review*, Vol. 17, pp. 452-472
- 5. Chakraborty. C, 2006, Economic reforms, foreign direct investment and its economic effects in India, *The Kiel Institute for the World Economy*, No.1272, pp. 1-46
- 6. Chakraborty. C, 2008, Economic Reforms, FDI, and Economic Growth in India: A Sector Level Analysis, World Development, Vol. 36, No. 7, pp. 1192-1212
- 7. Devajit. M, 2012, Impact of Foreign Direct Investment on Indian economy, Research Journal of Management Sciences, Vol. 1(2), pp. 29-31
- 8. Forte. R, 2013, The Effects of Foreign Direct Investment On the Host Country's Economic Growth: Theory and Empirical Evidence, *The Singapore Economic Review*, Vol. 58, No. 3, pp.1-28
- 9. Jayachandran. G, 2010, A Causal Relati<mark>onship between Trade, Foreign Direct Investme</mark>nt and Economic Growth for India, *International Research Journal of Finance and Economics*, Vol. 42, pp. 74-88
- 10. Kaushal, L, 2015, The Causal Relationship among Economic Growth, Financial Development and Trade Openess in Indian Economy, *International Journal of Economic Perspectives*, Vol. 9, pp. 5-22
- 11. Lensink. R and Morrissey, 2006, Foreign Direct Investment: Flows, Volatility, and the Impact on Growth, *Review of International Economics*, Vol. 14 (3), pp. 478-493
- 12. LI. X and LIU. X, 2005, Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship, *World Development*, Vol. 33, No. 3, pp. 393-407
- 13. Malhotra, B, 2014, Foreign Direct Investment: Impact on Indian Economy, *Global Journal of Business Management and Information Technology*, Vol. 4, No.1, pp. 17-23
- 14. Pekas. P, 2015, The impact of FDI on economic growth in Eurozone countries, *The Journal of Economic Asymmetries*, Vol. 12, pp. 124-132
- 15. Rashid. A, 1998, Foreign Direct Investment and Economic Activity in India, *Department of Economics, Delhi School of Economics, University of Delhi*, Vol. 33, No. 2, pp. 153-168
- 16. Ray. S, 2012, Impact of Foreign Direct Investment on Economic Growth in India: A Co integration Analysis, *Advances in Information Technology and Management (AITM)*, Vol. 2, No. 1, pp.187-201
- 17. Sahoo. D and Mathiyazhagan. M, 2003, Economic growth in India: does foreign direct investment inflow matter, *The Singapore Economic Review*, Vol. 48, No. 2, pp. 151-171
- 18. Saini. A, 2010, FDI and economic growth: New evidence on the role of financial markets, Economics Letters, Vol. 107, pp. 211-213
- 19. Tiwari. K & Mutascu. M, 2011, Economic Growth and FDI in Asia: A Panel-Data, *Approach Economic Analysis & Policy*, Vol. 41 No. 2, pp. 173-187
- 20. Tsai. P, 1994, Determinants of Foreign Direct Investment and its Impact on Economic Growth, *Journal of Economic Development*, Vol. 19, No. 1, pp 137-163
- 21. https://www.statista.com/statistics/263617/gross-domestic-product-gdp-growth-rate-in-india/
- 22. http://statisticstimes.com/economy/gdp-growth-of-india.php
- 23. https://www.rbi.org.in/Scripts/Annual Publications.aspx? head=Handbook % 20 of % 20 Statistics % 20 on % 20 Indian % 20 Economy
- 24. https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.KD?locations=IN