

The Role of Foreign Direct Investment in Pakistan's Economic Growth and Its Impact on Employment

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Abstract: Foreign direct investment (FDI) plays a significant role in promoting the economic growth and employment level of a country. The current study was conducted to analyze the impact of FDI on economic growth and employment level of Pakistan. Time series and secondary data were used ranging from 1990 to 2017. The data of Gross domestic product (GDP) and FDI inflow was collected from the World development data indicator (WDI), while data on employment (EMP) from international labor organization (ILO) estimates. ADF test and AR root test methods were used for FDI, GDP, and EMP. Using the regression results of the VAR model, variable relations were explained among each other with their lag values. The results of GDP L1 value show that GDP positively affects FDI, FDI L1 shows that FDI positively affects GDP, and EMP L1 shows that employment positively affects FDI. Using GDP as a dependent variable, the result of FDI L2 value shows that FDI negatively affects GDP, EMP L1 value shows, employment positively affects GDP, and GDP L1 value shows that GDP positively affects GDP. Using EMP as the dependent variable, the results of GDP L1 value shows a positive effect on employment, FDI L1 value shows that FDI has a positive effect on employment, and EMP L1 value shows that employment has a positive effect on employment. Taking together all results, it has been predicted that FDI plays a positive role in enhancing economic growth and employment in Pakistan.

Keywords: FDI, Economic Growth, Employment, Pakistan

I. INTRODUCTION

Foreign direct investment is an investment made to acquire a lasting or long-term interest in enterprises, operating outside the economy of the investor. Foreign Direct Investment has emerged as the most significant source of external resource flows to developing countries over the 1990s and has become a major element of capital development in the developing countries (Kumar and Pardhan, 2002). FDI is the most important indicator of the economic health of a country and has a significant role in its economic development. The role of FDI in boosting economic growth has increased over the past years due to globalization. According to the UNCTAD conference (2013), the inflows of FDI in 2012 have increased by 6.5 times in less developed countries as compared to the FDI inflows in 1990 (UNCTAD, 2013). The share of global FDI inflows towards developing countries increased from 17% to 52% from 1990 to 2012 (UNCTAD 1996; 2013).

Foreign direct investment is considered as an important source of capital inflows in developing countries. Along with its numerous other impacts, FDI also affects the employment

level of the host country. FDI is also considered a major source to bring technology and innovations (Sun, 2001). FDI contributes to the employment level of a country. Developing economies such as Pakistan face the constant challenge of job creation. The economic survey of Pakistan reported an increase in unemployment during the last decade. In the year 2006, 2.68 million people in Pakistan were unemployed and this figure increased to 3.58 million in 2013 and 3.62 million in 2014-15. Tackling unemployment is very important because it is the root cause of many other social problems including crime (Narayan & Symth, 2004; Tang 2009). Investment plays a crucial role in generating increased opportunities for employment in the economy and promoting sustainable economic growth for the country (Shaari, 2012). In the beginning, due to FDI, employment opportunities increase, increasing the employment level which has a direct influence on economic growth which further has an impact on GDP per capita. This process of welfare and economic growth leads to economic development. This economic development leads to industrialization in the economy and these developments induce foreign direct investment and this cycle moves on. FDI can create economic growth through the creation of physical assets in the economy and other advantages like; technology transfers, capital formation, human resource development, employment creation, tax payments, and expanded international trade.

There are two ways in which an open economy can increase its level of investment: by increasing domestic savings or by attracting FDI. Alike other developing countries of the world, the saving-investment gap in Pakistan is large. In 2014-15, savings accounted for 14.5% of GDP, but investments showed a bit more with 15.1% of GDP. This saving-investment gap calls upon the need to rely on foreign investment, in addition to domestic investment. FDI has become an important source of inflow of private foreign capital for developing countries, including Pakistan over the last three decades. Pakistan has attracted a significant amount of FDI up to 2007. The total amount of FDI inflow was just 949 million US\$ in 2003 which increased to 5409.8 million US\$ in 2007. However, this rise in FDI faced a decline in 2008 in the wake of global financial crises in all developing countries. Again FDI inflow has been increased in Pakistan up to 1698.6 million US\$ due to direct investment for CPEC (PES, 2014). Chinese companies or investors are investing in Pakistan in different sectors. Important areas of FDI are i) telecom ii) energy (oil and gas, power, petroleum refineries) iii) banking and finance

iv) food and beverages. These four groups accounted for over 80 percent of FDI inflows in Pakistan. The magnitude of the foreign investment reflected the confidence of global investors on the current and prospects of Pakistan's economy. Vacaflares (2011) argued that the role that FDI plays a vital role in increasing economic growth and creating employment opportunities in the recipient country via technological spillovers. However, many studies show that FDI has no effect (or adverse effect) on the employment level of a country (Jenkins 2006; Rizvi 2009). Based on theoretical considerations, it can be safely concluded that FDI directly affects the employment level in the recipient country. It helps to improve the status of domestic employment by creating new jobs and skill transfers. It brings new and improved jobs in areas with high unemployment.

Similar to many other developing countries, Pakistan has thrown its doors wide open to FDI, which is expected to bring huge benefits. However, unlike China and India, Pakistan has not been successful in obtaining substantial and consistent FDI inflows. Furthermore, the inadequate inflows that the country has received have not been utilized appropriately to enhance economic performance (Le and Ataulah, 2006).

Foreign Direct Investment (FDI) became the largest source of capital formation in the world especially in developing countries like Pakistan. FDI is an important part of the economic development of Pakistan's economies especially if it is complemented by sound economic policies and greater openness to trade. FDI is taken as the biggest form of production in the sense of technology transfers, unemployment reduction, skill acquisition, and market competition. Khan (2007) recognized that FDI plays an important role to improve the economic growth of developing countries. FDI produces a positive effect on economic growth in developing countries

Economic growth depends on FDI type and its structural arrangement (Chakraborty & Nunnenkamp, 2008). But the type of FDI and its structure is scarcely deliberated in preceding studies on the FDI-economic growth interconnection in Pakistan. This study is designed to evaluate the impact of FDI on economic growth and employment. The study will be focused to evaluate the economic variables affecting foreign investment, economic growth, and employment.

The rest of the paper is organized as follows: Section-2 reviews the previous studies on this topic. Section-3 elaborates on the material and methods used in this study. Section-4 provides the results and discussion. Section-5 concludes this study with policy implications.

II. THEORETICAL AND LITERATURE REVIEW

FDI is one of the major forms of up-to-date global capital flows. FDI refers to a country's investors (natural or legal persons) that invest capital or other factors of production into other countries and control the operation of enterprises

Management and access to long-term economic effects to establish a company or business in a country or region outside the home country. In the 1960s, Western scholars gradually started their theoretical studies on foreign direct investment. The scholars discussed the causes, behavior patterns, mechanisms, and results of FDI respectively, forming a relatively complete international direct Investment theory system.

Azam & Khattack (2005) reported a study in which the objectives of the study were to earn maximum profit and the host countries were interested in the benefits of FDI which were in the form of managerial skills and advanced technology, increased employment opportunities, and increase in government revenue, etc (Azam and Khattack 2005). Jalil and Ma (2008) worked to discover the correlation between financial development and economic growth for China and Pakistan, during 1960-2005. ARDL approach to co-integration was conducted, to establish the existence of a long-run relationship. The study used deposit liability ratio (DLR) and credit to the private sector (CPS) as a proxy for financial development. Results of both countries, DLR and CPS had an important influence on the economic growth of Pakistan but, CPS had an insignificant impact while DLR had an insignificant effect on growth in China (Jalil and Ali, M., 2008).

Falki (2009) reported that foreign direct investment is an important catalyst for economic growth in developing countries. The correlation between variables was analyzed by using the "Production function" while the 1980-2006 Time period was used. The results indicate that a negative and statistically insignificant relationship was found between GDP and the economic growth of Pakistan (Falki 2009). Hussain, et.al (2010) analyzed the role of the public and private investment and the impact of the political and macroeconomic uncertainty on the economic growth of Pakistan. Variables contained; Public investment (IG), Private Investment (IP), Public consumption (CG), Gross Domestic Product (GDP), Macroeconomic uncertainty (derived by the percentage change in annual inflation rate based on the consumer price index), and Dummy of Political shocks (DPS).

In the long term, both as well as public and private investment funds showed an encouraging impact on individual economic growth but were driven by private investment income when compared to the public fund. Government utilization outflow, economic insecurity, and political uncertainty hindered the economic growth of Pakistan. In the short-run, the private investment surely stimuli the growth but there was a negative and insignificant influence of the public venture and government utilization outflow on the growth. A positive association was obtained between economic uncertainty and GDP (Sial, Hashmi, and Anwar 2010). Rehman, et.al (2011) examined the empirical relation between foreign direct investment and the economic growth of Pakistan. Time series data was used from 1976-2005. The impact of inward foreign direct investment on economic growth was investigated using

the Linear regression model. Results showed a statistically significant and positive relationship between FDI and GDP (Rehman et al., 2011).

Ayyoub, et.al (2011) examined the existence of inflation growth relationship in the economy of Pakistan and to analyze empirically the impact of inflation on GDP growth of the economy. Annual time-series data was used from the period 1972-73 to 2009-10. The OLS model was used. The results of the study showed predominant inflation was destructive to the GDP growth of the economy after a positive threshold level (Ayyoub, Chaudhry, and Farooq 2011). Khalid, et.al (2012) analyzed macroeconomic factors that boosted the FDI for Pakistan by the co-integration and error correction model above 28 years, i.e. between 1980 and 2008. The results indicate that due to the low quality of human capital in Pakistan; the direct effect of FDI on economic growth becomes negative (Zaman et al. 2012).

Bibi et al., (2012) focused on the existence of perfect mobility of capital the saving increase, in one country will enhance investment in numerous other countries. The Cointegration technique was used from the period of 1970-2009. Tests the presence of capital mobility and flops to analyze one-one relation between local investment and local saving. Trade openness is found to be one of the determinants of investment (Salma Bibi 2012). Jan, et.al (2012) investigated the relationship between physical infrastructure and the economic development of Pakistan, using the Cobb-Douglas production function. The variables of the employed labor force, gross private fixed capital formation, and physical infrastructure have a statistically significant and positive effect on the economic development of Pakistan (Jan et al. 2012).

Aurangzeb & Haq (2012) investigated the impact of investment on the economic growth of Pakistan using data ranging from 1981 to 2010. Multiple regression techniques were used to analyze the relationship between the dependent variable (gross domestic production) and independent variables (public investment, private investment, and foreign direct investment). It was concluded all independent variables had a significant and positive impact on economic growth. The granger causality test found the bi-directional relationship of gross domestic product with foreign direct investment & public investment while the unidirectional relationship of gross domestic product was found with private investment (Aurangzeb & Ul Haq 2012).

Sial, et.al (2012) analyzed the role of public and private investment and the impact of political macroeconomic uncertainty on the economic growth of Pakistan. Vector autoregressive approach (VAR) was used to evaluate the relationship between the long run and the short run between variables. In the long-run public and private investment presented a positive influence on economic growth but the growth was largely determined by private speculation comparative to public investment. Government consumption expenditure, economic uncertainty, and political instability

affect the economic growth of Pakistan. In the short-run, the private investment positively influences the growth of Pakistan but there was a negative and insignificant effect of the public investment and government utilization expenditure on growth. There was a positive relationship found between economic uncertainty (a proxy for inflation) and GDP in the short-run (Sial, et.al, 2012).

III. MATERIAL AND METHODS

3.1 Variable selection

FDI has a key role in job creation and enhancement of the employment level in a country. Since the mid-nineties, FDI inflow to Pakistan has shown a marked increase, because Pakistan is experiencing difficulties in creating employment opportunities, there is a need to analyze the role that foreign inflow can play an important role to increase economic growth and employment generation. Employment level (EMP) is defined as the part of the labor force which is employed. FDI can be defined as the total amount of foreign inflow to a country and GDP is defined as the approximate value of all the goods and services that an economy produces over a given period.

3.2 Data sources

Time series and secondary data was used from 1990-2017. The data of GDP (% growth) annual and FDI inflow (% growth) was collected from the World development data indicator base (WDI). The data on employment was used from international labor organization (ILO) estimates.

3.3 Empirical Model

Contemporaneous causality or, more precisely, the structural relationships between the variables are analyzed in the context of so-called structural VAR (SVAR) models which impose special restrictions on the covariance matrix and depending on the model on other matrices as well, so that the system is identified. There is only one unique solution for the model and it is clear, how the causalities work. It explains how each variable depends on each other and how everything causes everything. A simple model is written as :

$$\begin{pmatrix} Y_{1t} \\ Y_{2t} \end{pmatrix} = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix} \begin{pmatrix} Y_{1t-1} \\ Y_{2t-1} \end{pmatrix} + \begin{pmatrix} \epsilon_{1t} \\ \epsilon_{2t} \end{pmatrix}$$

Or more capacity,

$$y_t = A_1 y_t + \epsilon_t$$

Where,

$$y_t = \begin{pmatrix} Y_{1t} \\ Y_{2t} \end{pmatrix}, A_1 = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix} \text{ and } \begin{pmatrix} \epsilon_{1t} \\ \epsilon_{2t} \end{pmatrix}$$

3.4 Analysis Techniques

To examine the data, methodology analysis was done using the logarithmic form to eliminate possible heteroskedasticity. The natural logarithm of the above three indicators was treated as LFDI, LGDP, and LEMP. ADF test has been used

to evaluate the relevant data of the research either its stationary and AR root test was used to evaluate the stability of the model.

IV. RESULTS & DISCUSSION

4.1 ADF Tests

The present study has used annual time series data. Such data sets are usually non-stationary. To evaluate the stationary of the variable for applying any statistical method of estimation, the present study has used the Augmented Dickey-Fuller (ADF) test of stationary. The specific result of the ADF test for LFDI, LGDP, and LEMP are presented in table 1.

Table 1 ADF test result

Variables	ADF variables	Model type	1% threshold	5% threshold
LFDI	-2.733322	Contains constant and trend items	-3.711457	-2.981038
LGDP	-3.686337	Contains constant and trend items	-3.752946	-2.998064
LEMP	-1.2683	Contains constant and trend items	-3.699871	-2.976263
Δ LFDI	-3.367168	Contain constant item and trend item	-3.711457	-2.981038
Δ GDP	-6.102006	Contains constant items, and trend	-3.711457	-2.981038
Δ LEMP	-4.390100	Contains constant items, excluding trend	-3.711457	-2.981038

The results of Table 1 show that the time series of indicators LFDI and LEMP is not stable at level 1%. After the first order of the differential, the sequence is stable. Among them, Δ LFDI and Δ LEMP were flat at a 5% significant level and the Δ GDP was stable at a significant level of 5%. Therefore, Δ LFDI, Δ GDP and Δ LEMP data were used to create the VAR model.

To check the stationary of variable, the AR root test was used for further testing, i.e. if all the root of the model less than 1 and lies within the circle, it is stable. The graphical representation of the unit root test is presented in Figure 1.

Inverse Roots of AR Characteristic Polynomial

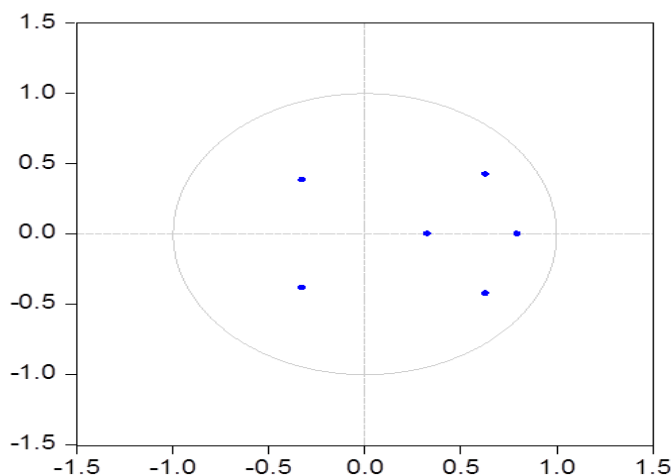


Figure 1 unit root test representation

The model is stable, demonstrating that there are long term and stable relationship.

4.2 Impulse Response Function Analysis

ADF and AR root test shows that the model is stable, indicating that there are three variables which have long term stability. To check the long term stability, we further analyzed impulse response function and variance decomposition analysis to the interaction among three variables. The impulse response function was a shock to VAR systems which was applied to each variable to evaluate its effect on the VAR system.

Response of DLGDP to DLFDI

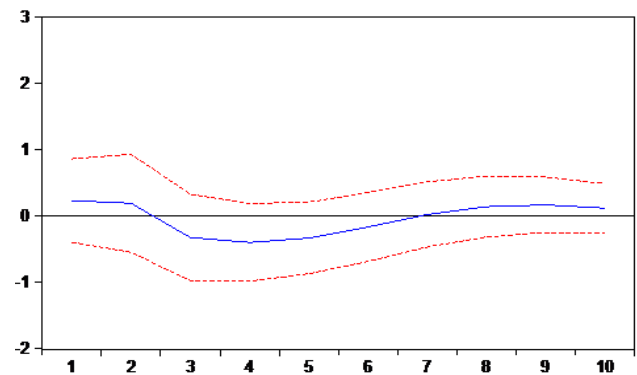


Fig 2: Impulse response of GDP to FDI

According to Figure 2, the FDI has a positive impact on economic growth. After the positive impact of FDI on GDP, economic growth will fluctuate in the short term. FDI has a lagging effect on economic growth. The increase in FDI will bring about a significant effect on economic growth in the long run, but in the short term, the effect will become weak. A positive response is formed in the first to the second phase and a negative response is formed in the third to sixth phase. Maximum positive and negative responses are achieved in the second and fourth phases respectively. Starting from the eighth period, a positive response to economic growth continued to be formed but the degree of response becomes too weak. Overall, FDI has a positive driving effect on economic growth in the long term.

Response of DLEMP to DLFDI

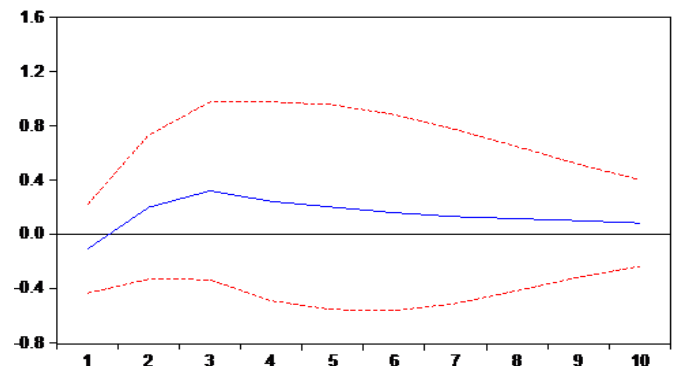


Figure 3 Impulse response of employment to FDI

According to figure 3, FDI has a positive impulse which revealed that the number of people employed in the industries in Pakistan has certain going down in the short term, the maximum negative response in the first phase, and maximum positive response in the third phase. After gradually converged from the first negative phase to the third-largest phase, there may have some structural problems in the short term. However in the long run, the increase in FDI lead to an increase in the number of people employed.

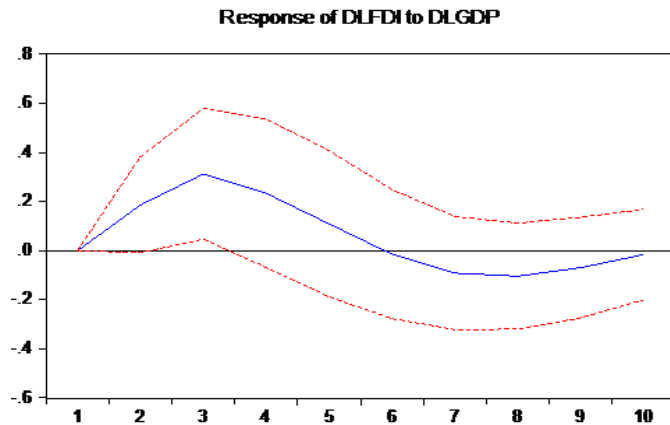


Figure 4 Impulse response of FDI to GDP

According to figure 4, the GDP has a positive impulse on FDI. It means that economic growth has a positive response to FDI, which leads to an increased FDI inflow in Pakistan. There is a maximum positive response in the third phase and maximum negative response in the eighth phase. It shows that in the short-run GDP has increased by increasing FDI but converge slightly negative in phase eighth. However, in the long run, economic growth not necessary to lead an increased FDI. The factor affecting FDI inflow and economic growth are relatively complex such as economic, political, exchange rate fluctuation, change in production cost, change in the market environment, etc. These factors interact with each other on FDI.

4.3 Regression results of VAR model

The regression results of the vector autoregressive model explore the relation of the variables among each other with their lag values.

Table2: Result of Vector Auto-Regressive Model

Variables	Coefficients	Standard error	P. Value
GDP			
L1	0.0976831	0.0509453	0.055
L2	0.0276848	0.0553908	0.617
FDI			
L1	0.9194013	0.1903418	0.000
L2	-0.2861159	0.1870568	0.126
EMP			

L1	0.1649176	0.0925789	0.075
L2	-0.11893	0.0877982	0.176

Taking FDI as a dependent variable while GDP and EMP as independent variables, The results of GDP L1 value show that GDP positively affects FDI (table 2), which indicates that as the growth rate increases, multinational firms have more chance to flourish, resulting in the foreign investors to increase more investment. Several studies argue that the higher the growth rate, the higher the foreign investment made. FDI has greater importance to improve the economic growth that depends on its exogenous factors like skilled labor and its impact on country and condition-specific (De Mello 1999). FDI has a positive relationship with GDP and its impact depends upon the absorptive capacity of the host country, level of human capital, and development of the financial markets (Farkas 2012). For developing economies, the positive impact of foreign direct investment is considered as a means for growth and escalation productivity (Muhammad 2007). FDI has a positive impact on economic growth leads to an increase in economic growth (Hameed and Bashir (2012). FDI inflow increases the economic growth of the country not just in developing countries but also increased in developed countries (Johnson 2006). Finally, Alfaro et al. (2004) highlight financial markets as they found that FDI encourages economic growth in those economies where financial markets were sufficiently developed.

The result of FDI LI shows that FDI significantly has a positive effect on FDI which indicates that when FDI inflow increase more, FDI increases, ultimately leading to more chances for a foreign investor to invest in the host country. For example, As FDI inflow from china is increases because of CPEC this has to increase other countries like Turkey. As the inflow of FDI of the foreign country increases more economic growth of the country increases than other countries investors want to invest more in the host country, which will lead to increase more economic growth.

The result of EMP L1 also shows that employment positively affects FDI, which indicates that as FDI inflow increases, employment also increases resulting in more technology and job opportunity for workers. According to Habib & Sarwar (2013) who analyzed the long-run relation between employment level and FDI in Pakistan, FDI positively and significantly affects employment level in the long-run. The reason for this positive relationship was the availability of greater employment opportunities due to the inflow of foreign capital. Theoretically, if one says that FDI promotes economic growth then it should contribute towards generating employment opportunities as well. Rizvi & Nishat (2009) investigated the relationship between FDI and employment and concluded a positive relationship between them. Craigwell (2006) suggested that an increase in FDI leads to the generation of increased employment.

Table 3 Result of Vector Auto-Regressive Model

Variable	Coefficients	Standard error	P.value
FDI			
L1	0.5967525	0.7271383	0.412
L2	-1.724426	0.714589	0.016
EMP			
L1	0.8191067	0.3536674	0.021
L2	-0.385973	0.3354043	0.250
GDP			
L1	0.1257609	0.1946196	0.518
L2	-0.2491696	0.2116023	0.239

Table 3 shows that the dependent variable is GDP while FDI and EMP are independent variables. The result of FDI L2 value shows statistically significant results that FDI negatively affects GDP which indicates that when FDI increases GDP decreases. Numerous experiential studies explored the negative impact of the growth on foreign direct investment. For instance Buchanan et.al (2012), Wint and William (2002), and Jensen (2003), all found a negative and significant effect of growth in magnetizing foreign direct investment in emergent countries. Jensen et.al. (2003) and Tasi(1994) explored negative associations among profitable growth and foreign investment due to the scaling effect, countries that grow with a higher rate experienced a reduction in FDI. Katrekilidis et al. (1997) found that when some industrialized economies were in depression during the 1980s, so they experience improvement in FDI. In these cases, low economic growth leads to higher FDI inflows. A depressing link between economic growth and FDI could appear if lower economic development is associated with a better opportunity for further earnings. For instance, if we thought lower growth country, comparatively capital-poor but profuse in the supply of economical (unemployed or underemployed) labor, human capital, and innate assets. There may be a chance for foreign investors to earn profit from comparatively less utilized capital. In these cases, foreign investment is drained to the lower growth economies in expectations of recognizing unemployed chances for profit.

The result of the EMP L1 value shows that employment positively affects GDP because P-value 0.021 is significant. When the economic growth increase, it leads to increase productivity and investment prospects which result in to increase in the high-income level of the labor force. It means that when the inflow of FDI, more people working in different sectors of the economy which leads to increase economic growth. While the result of GDP L1 value shows that GDP positive effect on GDP but statistically insignificant because P-value is 0.518. It shows that increase economic growth once a time again economic growth of the country increases due to the inflow of FDI and employment level.

Table 4 Result of Vector Auto-Regressive Model

Variables	Coefficient	Standard error	P.value
GDP			
L1	0.1974957	0.1008183	0.050
L2	-0.2828867	0.1096158	0.010
FDI			
L1	0.634687	0.37766775	0.092
L2	-0.33195339	0.3701766	0.370
EMP			
L1	1.068895	0.1832093	0.000
L2	-0.249828	0.1737486	0.150

According to table 4, the dependent variable is employment while GDP and FDI are independent. The result of GDP L1 value shows a positive effect on employment and statistically significant because P-value is 0.050. The relation between GDP and Employment is positive i.e. increase economic growth leads to an increase in employment opportunity. According to Sarwar et al. (2016), GDP positively and significantly affects the employment level. Several studies argue that employment affects economic growth with FDI. Shaari et al. (2012), reported that FDI increased both the employment level and economic growth of the country. Similarly, Habib et al. (2013) also analyzed the long-run relation between employment level and FDI in Pakistan. The study used the exchange rate and GDP per capital besides FDI and employment level. The reason for this positive relationship was the availability of greater employment opportunities due to the inflow of foreign capital. Furthermore, a positive and significant relationship was also found between employment and GDP.

The result of the FDI L1 value shows that FDI has a positive effect on employment because P-value is 0.092. Several studies conclude that FDI positively affects on employment level of an economy. It shows that when the FDI inflow increases in the host country, economic growth will increase which leads to an increase in employment. Mehra (2013) examined the impact of FDI on GDP and the level of employment for India The impact of FDI on GDP, total employment, employment in the public and private sectors were separately analyzed by estimating four separate equations. He concluded that FDI has a positive effect on employment and the promotion of economic growth. Similarly, Vacaflores (2011) reported that FDI played a vital role in generating employment opportunities in twelve Latin American states. The results indicated that FDI has contributed positively and significantly towards employment generation in the host countries. While the result of the EMP L1 value shows that employment positively affects employment because P-value is 0.000. The above result shows that the overall model is significant. FDI plays a positive role in economic growth and employment.

4.4 Analysis of Variance decomposition model

Variance decomposition is an information calculation process that decomposes the system's predicted mean-squared variance into the contribution of each variable in the system.

Variance decomposition can describe the relative importance of shocks in the dynamic changes in FDI, employment, and economic growth. The variance decomposition model was performed based on the VAR model. The decomposition results are shown in table 5.

Table 5 variance decomposition table

Period s	FDI variance Decomposition				GDP variance decomposition				Employment variance decomposition			
	Standard error	Δ LFDI (%)	Δ LGDP (%)	Δ LEMP (%)	Standard error	Δ LFDI (%)	Δ LGDP (%)	Δ LEMP (%)	Standard error	Δ LFDI (%)	Δ LGDP (%)	Δ LEMP (%)
1	0.41667	100.000	0.00000	0.00000	1.13035	1.72034	98.2796	0.00000	0.87899	4.64163	23.8549	71.5034
2	0.52802	71.5655	26.6890	1.74547	1.38864	12.8287	78.6662	8.50506	1.29326	3.57789	32.7361	63.6859
3	0.67429	46.5612	46.8959	6.54285	1.68343	21.0901	54.0967	24.8130	1.52650	2.77310	31.9490	65.2778
4	0.85457	35.4632	46.9033	17.6334	1.79112	18.6442	51.3266	30.0291	1.75209	4.75407	26.0121	69.2338
5	0.92596	30.6755	42.5839	26.7405	1.81518	19.9297	50.7757	29.2945	1.92490	5.36601	22.3672	72.2667
6	0.95226	29.0802	40.2657	30.6540	1.89838	19.9162	52.4985	27.5852	1.99322	6.29298	21.3262	72.3808
7	0.96695	28.2234	40.8359	30.9406	1.96064	19.0580	54.9344	26.0075	2.03089	7.56056	20.5424	71.8970
8	0.98705	27.2076	43.0928	29.6995	2.03164	19.7770	54.6912	25.5317	2.07082	9.52243	20.3390	70.1384
9	1.03200	26.0036	45.8339	28.1623	2.10461	21.1066	50.9725	27.9208	2.09454	10.8209	20.5761	68.6028
10	1.08622	25.5336	46.0908	28.3754	2.13905	21.4199	49.9480	28.6320	2.11173	11.8117	20.3469	67.8412

The first column of the table 5 is the prediction periods. Variance decomposition of FDI, GDP, and Employment represents as the dependent variable with column FDI, GDP, Employment as a variable of interest for each stage of the prediction error contribution, each row bond the sum of 100%.

According to table 5, the fluctuation of FDI is only affected by its fluctuations in the first period, and the impact of economic growth and employment levels on the fluctuation of FDI (i.e., the contribution to the forecast error) is only shown in the second period. This kind of impact on its own FDI is very weak, and it has gradually increased since then. However, from the seventh period, the impact has stabilized at about 33.07%. It shows that the impact of economic growth and employment fluctuations on FDI is very weak. The reason is that there are many macro and micro uncertainties affecting FDI, while the impact of Pakistan's economic growth and employment on FDI is limited.

The economic growth has been affected by FDI instability since the first period. It has been relatively strong in the first period due to its volatility, gradually weakened in the second to third periods, and gradually strengthened by the influence of FDI. This also shows that FDI has a certain lag effect on Pakistan's economic growth, which is consistent with the conclusions drawn earlier. However, since the fifth period, it has stabilized at about 19%. The relative degree of influence is relatively strong, indicating that FDI has a strong driving

effect on Pakistan's economic growth. In the beginning, due to foreign direct investment employment opportunities increase, hence employment level increases which have a direct influence on economic growth which further has an impact on GDP per capita. It means that welfare exists as the living standard of people increases. This process of welfare and economic growth leads to economic development. This economic development leads to industrialization in the economy and these developments induce foreign direct investment and this cycle moves on.

Concerning the number of employed persons, employment has been affected by its fluctuations and the impact of fluctuations in GDP and FDI since the first period. In the first period, it has been greatly affected by its fluctuations. This may have a direct relationship with the structure of human capital, which is unlikely to have significant improvement in a short period. However, with the continuation of time, the number of employed people in the current period will reduce the impact on employment in the following periods. In the first period, the impact of FDI fluctuations on employment has a smaller impact on employment, which is 4.64%, because FDI has a certain lag in time. The impact of FDI fluctuation shocks gradually increased, reaching the maximum (11.81%) in the tenth period. With the continuation of time, the degree of influence has gradually diminished. This also shows that FDI has an important impact on Pakistan's employment.

Foreign direct investment is considered an important source of capital inflows in developing countries. Along with its several impacts, FDI also affects the employment level of the host country.

V. CONCLUSION AND POLICY IMPLICATIONS

This study aimed to analyze the impact of foreign direct investment on economic growth and employment in Pakistan. The study analyzed the current situation of foreign investment and evaluated the economic variables which affect foreign investment, economic growth, and employment by evaluating the role of FDI in establishing the relationship with economic growth and employment in Pakistan. In conclusion, the findings of this study describe that FDI positively affects GDP and employment. By increasing FDI, GDP and employment also increase, therefore, the Government should introduce supporting policies for FDI to generate employment resulting in increased GDP. FDI positively and significantly affects the employment level in the long-run. The reason for this positive relationship was the availability of greater employment opportunities due to the inflow of foreign capital. Theoretically, if one says that FDI promotes economic growth then it should contribute towards generating employment opportunities as well.

Policy Implications

Our findings are likely to offer a prospect to outline some policy suggestions. The regression results define that the Inflow of FDI increases Economic growth resulting in a positive effect on employment. Hence, the establishment should positively give attention to introduce supporting policies for the foreign countries for FDI. It wants efficient and encouraging FDI attractive strategies from the public sector to restore the assurance of the investors. The findings of this study suggest some policy implication:

- Policymakers of host countries should make free trade policies that attract FDI to increase growth.
- The government should open up vocational training centers and introduce a world-class education system. Better education and training opportunities can help generate employment opportunities from FDI.
- Our results show that GDP positively affects FDI, Government should make a Business-friendly environment on a priority basis to attract large FDI.
- The favorable outcome of FDI on employment depends on the balance between the crowding-in effects of FDI i.e. opening up of new avenues for domestic entrepreneurs and the crowding-out effects of FDI i.e. displacement of local firms due to increased competition from foreign firms.

REFERENCES

- [1] Alfaro, L., Chanda, A., Kalemli-Ozcan, S., Sayek, S. (2004). "FDI and Economic Growth: The Role of Local Financial Markets," *Journal of International Economics*, 64, 1, pp. 89-112.

- [2] Buchanan, Bonnie G., Quan V Le, and Meenakshi R. (2012). Foreign direct investment and institutional quality: Some empirical evidence. *International Review of Financial Analysis* 21: 81–89.
- [3] Chakraborty, C. and P. Nunnenkamp (2008) Economic Reforms, FDI, and Economic Growth in India: A Sector Level Analysis. *World Development* 36:7,1192–1212.
- [4] Craigwell, R., 2006. Foreign Direct Investment and Employment in the English and Dutch-speaking Caribbean, [Online]. Available at: http://www.ilocarib.org.tt/cef/background%20papers/FDI_.pdfm
- [5] De Mello, L.R. Jr (1999), "Foreign direct investment-led growth: evidence from time series and panel data", *Oxford Economic Paper* No. 51, University of Kent at Canterbury, Canterbury, Kent, pp. 133-51.
- [6] Farkas, B. (2012). Absorptive Capacities and the Impact of FDI on Economic Growth. *DIW Berlin Discussion Paper* No. 1202. Available at SSRN:<https://ssrn.com/abstract=2038182> or <http://dx.doi.org/10.2139/ssrn.2038182>
- [7] Habib, D.M. & Sarwar, S. (2013). Impact of foreign direct investment on employment level in Pakistan: A time series analysis. *Journal of Law Policy and Globalization*, 10, 46-56.
- [8] Jenkins, R. (2006). "Globalization, FDI and employment in Vietnam". *Transnational Corporations*, 15(1), 115-142. J
- [9] Jensen. N. (2003) Democratic governance and multinational corporations: Political regimes and inflows of foreign direct investment, *International Organization*, 57(3): 587-616.
- [10] Johnson, A. (2006). "The Effects of FDI Inflows on Host Country Economic Growth." *The Royal Institute of technology. Centre of Excellence ... (August): 1–57.*
- [11] Khan A., (2007), "Foreign Direct Investment and Economic Growth: The role of Domestic Financial sector", *PIDE Working Paper* 2007:18
- [12] Kumar, N. and Pradhan, J.P. (2002), "FDI, externalities and economic growth in developing countries: some empirical explorations and implications for WTO negotiations on investment", *Discussion Paper* No. 27/2002, *Research and Information System for Developing Countries (RIS)*, Ministry of External Affairs, Government of India, New Delhi
- [13] Le, M. H. and A. Ataullah (2006) Foreign Capital and Economic Performance of Pakistan. *The Lahore Journal of Economics* 7:1, 1–32. <http://58.194.176.234/gjtzx/uploadfile/200904/20090401152909166.pdf>.
- [14] Mehra, N. (2013). Impact of foreign direct investment on employment and gross domestic product in India. *International Journal of Economics and Research*, 4 (4), 29-38
- [15] Narayan, P.K. and Smyth, R. (2004). Crime rates, male youth unemployment and real income in Australia: evidence from granger causality tests. *Applied Economics*, 36(18), 2079-2095
- [16] Pakistan Economic Survey. (2014-15). Govt. of Pakistan, Econ. Advisor's Wing, Finance Div. Islamabad, Pakistan. Pakistan labor force survey 7th July 2015 uploaded by file:///D:/reseach%20china/research%20on%20employment/PK_cp_%20Key%20Indicators%20on%20Labour%20Force%20(Pakistan).pdf
- [17] Rizvi, S.Z.A. and Nishat, M. (2009). The impact of foreign direct investment on employment opportunities. *Sci.Int.(Lahore)*,28(4),51-59, 2016
- [18] Sarwar et al.(2016) , Foreign Direct Investment And Employment Nexus: Evidence From Pakistan: *Sci.Int.(Lahore)*,28(4),51-59, 2016 ISSN 1013-5316;CODEN: SINTE 8
- [19] Shaari, M. S., Hussain, N. E. & Halim, M. S. B. A. (2012). The impact of foreign direct on the unemployment rate and economic growth in Malaysia. *Journal of Applied Sciences Research*, 8(9), 4900-4906.
- [20] Sun, H. (1998). Macro- economic impact of direct foreign investment in China : 1979-96. *The World Economy*, 21(5), 675-694.

- [21] Tang, C.F. (2009). The linkages among inflation, unemployment and crime rates in Malaysia. *Int. Journal of Economics and Management*, 3(1), 50-61
- [22] Tsai, P.-L. (1994). Determinants of foreign direct investment and its impact on economic growth. *Journal of Economic Development*, 19(1): 137-163.
- [23] UNCTAD, 1996. *World Investment Report 1996: Investment, trade and international policy arrangement*. New York and Geneva: United Nations
- [24] UNCTAD, 2013. *World Investment Report 2013: Global value chains: investment and trade for development*. New York and Geneva: United Nations.
- [25] UNCTAD, United Nations Conference on trade and development (2012), *World investment report*, New York: United Nations.
- [26] Vacaflores, D. E. (2011). Was Latin America correct in relying in foreign direct investment to improve employment rates? *Applied Econometrics and International Development*, 11(2), 101 - 122.
- [27] Wint and Williams (2002) Attracting FDI to developing countries: A changing role for government? *International Journal of Public Sector Management*, 15(5): 361- 374.
- [28] World development indicators, www.worldbank.org/data.