

# Impact of Foreign Direct Investment (FDI) on Economic Growth: The Case of Pakistan

Zulkarnain Rafique Ahmad<sup>1</sup> & Fatima Tariq<sup>2</sup>

<sup>1</sup>Faculty of Economics, Forman Christian College

<sup>2</sup>Lecturer, Faculty of Economics, Forman Christian College

---

## ABSTRACT

Pakistan experienced irregular development pattern throughout its history. As the normal growth during the most recent 45 years is around 5.5 percent. Pakistan has been confronting a lot of issues in large scale management involving both external and internal threats. Not only, gaps have been identified internally between receipts and public expenditures, savings and investments, population growth, FDI and capital formation in Pakistan but success in establishing financial markets has also not been achieved suitably. Foreign Direct Investment (FDI) as a development upgrading factor has received much consideration in the developed world. However, the influence of FDI on economic growth in the developing countries including Pakistan is still a major concern which needs to be addressed. Thus, the present study was designed to assess the impact of FDI on economic growth. This study employs data set for the period of 1971 till 2017 to assess the impact of FDI on EG in Pakistan. The methodology to test the impact of FDI on EG in Pakistan's economy has been limited to multiple regression method. The findings of the study reported that FDI has positive impact on economic growth. Thus, Pakistan government must focus more on enhancing human capita for the nation by giving careful consideration to fiscal policies and through investing more on business development.

**KEYWORDS:** Foreign Direct Investment (FDI), economic growth (EG), human capita, unemployment, Pakistan.

---

Date of Submission: 02-12-2020

Date of Acceptance: 17-12-2020

---

## I. Introduction

Inflation is a complex monetary phenomenon that has led to increased consideration of the macroeconomists, policymakers and the scholars from both developed and developing countries (Barro, 1995). It is a fundamental subject of the macroeconomics and one of the major concern of the policymakers and the general population. Practitioners claim that influence of inflation, population, foreign direct investment and employment tend to play a role or influence the growth of economy. Pakistan experienced irregular development pattern throughout its history. As the normal growth during the most recent 45 years is around 5.5 percent. Pakistan has been confronting a lot of issues in large scale management involving both external and internal threats. Not only, gaps have been identified internally between receipts and public expenditures, savings and investments, population growth, FDI and capital formation in Pakistan but success in establishing financial markets has also not been achieved suitably (Malik & Chowdhury, 2001). Moreover, Pakistan also has to face imbalance between exports and imports as well as exchange rate problems as external threats which makes it seem impossible to achieve the task of sustainable growth pattern in Pakistan. High inflation rate is also considered as an ill for economic growth in Pakistan as high inflation has been witnessed since its independence (Yaya, 2010). The average inflation rate during last 45 years is around 8.82 percent (Figure 1).

### Figure 1 Inflation Rate Trend

Moreover, the unemployment rate in Pakistan was 5.7 % in 1990s which raised to 6.8 % in 2000 due to low financial development and incurred as the aftereffect of monetary fixing in Pakistan. The unemployment rate remained at 6 % during the last three years however, it is 5.9% in 2019 (Figure 2).

### Figure 2 Unemployment Rate Trend

In order to deal with the concern of expanded inflation and increased unemployment, government officials rely on two sources to minimize inflation, reduce unemployment rate and improve economic growth of the country (Ismail & Amjad, 2014). First is through foreign direct investment (FDI), the most imperative form as a source for emerging nations is "foreign direct investment" (FDI). Many emerging nations consider FDI as a growth improving factor (Yaya, 2010). Similarly, the second source relates to be through government spending to improve the growth of the economy. The condition of FDI relates to be dismal in Pakistan, as FDI situation in Pakistan is not improving due to political instability (Shahid, 2014). The major apprehension for Pakistan is to rely heavily on FDI's due to availability of less employment opportunities, scarce knowledge and skills related

to management and technology along with decrease in FDI reserves. Pakistan received 16 billion remittances in 2014; these inflows have financed 38 % of the nation's import bill, 95 % of the general exchange shortfall, and contributed more than 6 % in Pakistan's national pay (State Bank of Pakistan, Annual Report 2014). The economy of Pakistan has pulled in a sizable measure of net outside inflows as of late, in any case, because of the delicate recuperation of the world economy and local security concerns, the progressions of remote venture decreased to its ordinary examples. In addition, imports likewise assume a huge job in the development procedure. In this manner, setting up a connection between settlements, FDI, imports, and financial development might be valuable for arrangement creators. This depict that FDI have an influence on EG, government spending and GDP. There are two incomprehensible perspectives have been identified with the understanding among FDI and EG. One group of the scholars claims that there is a positive impact and later the other group found the connection between the two to be negative. There are various focal points to the host country, for example, increase in production activity and decrease in unemployment resulting in improvement of foundation for the host country (Blank, 1993; Khan & Senhadji, 2001). Esther and Folorunso (2011) have examined the effect of FDI on financial development in Nigeria. Their results highlighted that FDI had a significant influence on the growth level of Nigeria. In any case, they likewise report that the degree to which FDI impacts the level of growth decidedly could be controlled by human capita. Iqbal et al., 2010 inspected effect of remote direct speculation on monetary development and fare for the period of 1998 – 2009 in Pakistan. The aftereffects of research affirmed beneficial outcome of outside direct speculation on fare and financial development in Pakistan. Federico and Alfredo (2007) surveyed the effect of Italy's outward FDI on nearby (residential) growth of 1996 and 2001 for 12 manufacturing firms and 103 managerial regions. Their findings highlighted that controlling for the local mechanical structure and zone fixed impacts, FDI is related with quicker nearby work development, generally to the national business normal. They likewise discovered that work in little plants was not contrarily impacted by larger amounts of FDI. Their discoveries did not augment the possibility that FDI was negative to neighborhood work development in the nation of origin. One convincing argument that FDI comprises of a bundle of capital, innovation management, and market access. FDI should be aimed at those sectors and key frameworks that appreciate genuine and potential similar favorable position. In those divisions with near bit of leeway, FDI would make economies of scale and linkage impacts and raise profitability. For FDI, reimbursement is required just if financial specialists make benefit and when they make benefit, they tend to reinvest their benefit as opposed to transmit abroad. Another advantage of FDI is certainty building impact. While the neighborhood financial condition decides the general level of speculation trust in a nation, inflows of FDI could strengthen the certainty, adding to the formation of a prudent cycle that influences nearby and remote venture as well as outside exchange and generation.

Henceforth, considering the literature above it has been seen that various studies tend to be related to independent influence of inflation on EG, unemployment on EG, FDI on EG and government spending on EG. However, a gap in the research tends to exist as no study has investigated the influence of FDI, government spending, inflation and unemployment altogether on the EG in context of Pakistan. Therefore, based on previous literature, the present study was designed based on the hypotheses: H1 = FDI has positive influence on EG.

## II. Methodology

The data utilized in the study was secondary in nature. The information regarding the variables, proxies and data sources are shown in (Table 1). The utilized data was from the time period of 1971 till 2017. Economic Growth was the dependent while Foreign Direct Investment (FDI) was the independent factor for the current study. FDIs are inflows that show the investment into the host nation from outsiders.

**Table 1 Variables Data Sources and Proxy**

<b>Dependent Variable</b>	<b>Proxy</b>	<b>Data Source</b>
Economic Growth	GDP per capita (US\$)	World Bank national accounts data, and OECD National Accounts data files.
<b>Independent Variable</b>		
Foreign Direct Investment	FDI rate	World Bank national accounts data

**Note:** Table 1 show data sources. Time series data has been utilized in the study in order to meet the objectives.

Regression method is perceived to be a powerful statistical technique that simply allows the researchers to investigate and examine the accord among variables. The regression model which was employed in the study play a crucial role in the influence of FDI on economic growth from the context of Pakistan. Furthermore, the functional form of the model is as follows:

The economic growth is the dependent or outcome variable which is measured using GDP and it is a function of FDI. Multiple regression method was employed to fulfil the study objective as to assess the influence of independent variables on EC. The aforementioned model established would assess the influence of all

independent variables on EG with reference to the Pakistani context. Regression analysis relates to be the most widely used method.

$$GDP_t = \alpha_t + \beta_1 FDI_t + \varepsilon$$

Where,

$\alpha$  = Intercept

$\beta$  = Regression coefficient of variables

$\varepsilon$  = Error term

FDI = Foreign Direct Investment

Descriptive statistics was also conducted show information related to different sorts of outlines and charts to outwardly show the information with the goal that they can be all the more effectively comprehended.

### III. Results and Discussions

The results of the present study concerning descriptive are shown in (Table 2).

**Table 2 Descriptive Statistics**

Variables	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
GDP	6.145939	0.6735344	4.608166	7.274916	.9555618	2.636562
FDI	-0.784495	1.153009	-4.663633	1.299735	2.179261	7.642697

The mean for GDP came out to be 6.145, where the standard deviation for GDP is 0.673. Moreover, in statistics skewness is a measure which constitutes about the data symmetry which shows that all the variables were positively skewed. Kurtosis for all the variables is very much close to 3 and constitutes normal distribution. The below graph also shows the scatter plot where it can be seen that as the value of FDI tends to increase there is also an increase in GDP as well (Figure 3).

**Figure 3 Relation between FDI and GDP**

The results shown in Figure 4 shows that overall the model came out to be quite significant (P-value < 0.05). The coefficient of determination ( $R^2$ ) which shows the overall impact of the independent variables (IVs) on the dependent variable (DV) or as to how much change has been brought upon in DV due to the IV. Moreover, the results of the regression show that 24.31 percent of the change in the EG is due to FDI. Furthermore, moving towards the independent results regarding the variables, FDI came out to be highly significant (P-value < 0.05). Likewise, the results show that as reserves of FDI in the country increase by 1%, the GDP per capita tends to increase as well by 10%. The results show a positive significant concurrence among FDI and EG and this establishes that H1 is supported by the study. The results of the present study regarding FDI influence on EG are in line with other studies (Faras and Ghali, 2009; Anwara and Nguyen, 2010; Esther and Folorunso; 2011; Tahir and Imran; 2014). Tahir and Imran (2014) results propose that exchange receptiveness has contributed essentially to the development procedure of the emerging nations and furthermore discovered that residential investment assume a significant job during the time spent monetary development. Our studies results have stayed consistent with our underlying expectations and have demonstrated that FDI has a positive influence to growth out in this economy (Table 3).

**Table 3 Regression Model**

Source	SS df	MS	Number of obs =	47
	F(1, 45)	= 14.45		
Model	1657196.22	1 1657196.22	Prob> F	= 0.0004
Residual	5159478.24	45 114655.072	R-squared	= 0.2431
	Adj R-squared	= 0.2263		
Total	6816674.46	46 148188.575	Root MSE	= 338.61
GDP	Coef.	Std. Err. t	P>t [95% Conf.	Interval]
LogFDI	236.5111	62.21015 3.80	0.000 111.2135	361.8088
cons	398.4133	68.36967 5.83	0.000 260.7097	536.1168

For an emerging economy like Pakistan that is abundant in numerous resources may help from capital arrangement. Residential interest in such manner would profit the nation's economy, and in this way reliance on outside venture ought to stay restricted. FDI can add to the domestic inventory of information and its very existence creates a large group of externalities such as upgrading efficiency and intensity of the host nation. The expanding significance of universal capital streams and particularly FDI is by all accounts another significant factor of external improvement ways that need not be overlooked. FDI can contribute in growth in both indirect

and direct ways. To start with, introduction of new technology by MNCs has high skill content. This reflects by new vintages of capital, quality control and accuracy underway with expanded training ability up gradation. Moreover, they purchased with them a bundle of market knowledge and marketing skill from their long-standing knowledge and more extensive presentation to overall aggressive markets. The aberrant commitments of FDI in enhancing the overall learning of the host economy, these export overflows and incorporate efficiency. Pakistan has a perfect geopolitical area, and with a mega foundation venture in advancement, the onus is on the following organization to create arrangements and consider opening its courses to other neighboring countries other than China. Pakistan can produce a generous measure of salary while giving exchange courses to India, Afghanistan, and Iran. This participation will likewise be useful for stability in the area and will lead toward more noteworthy compromise between angry neighbors. It's additionally time for Pakistan to genuinely put resources into the R&D work (R&D), the foundation of an all global competitive, knowledge driven economy. Interest in the R&D division can prompt the improvement of new items and administrations driving development, making people employed, and improving national welfare.

#### IV. Conclusion

The findings of the present study concluded that the impact of FDI is demonstrated to be significant and positive on EG. Financial arrangements restricting FDI in Pakistan and empowering local saving and investment must be formulated. The government need to take immense measures for guaranteeing sociopolitical security to provide a realistic and fascinating business environment for both domestic and global investors. This will help to implement a lawful system for ensuring the genuine rights and advantages of financial specialists and redefining practicalities identified with business and venture.

#### References

- [1]. Acero, Plaza and Raquel Almudena (1993), Análisis de las diferencias interprovinciales del desempleo en España (Analysis of the differences of unemployment in Spain in between different provinces). Cuadernos de Economía, Volume 21, No. 60, pp. 121-136.
- [2]. Alfaro, L. (2003), Foreign Direct Investment and Growth: Does the Sector Matter?, Harvard University, Harvard Business School, Working Paper.
- [3]. Ang, J. B., (2008). Financial Development and the FDI-Growth Nexus: The Malaysian Experience, Applied Economics, 41 (13), pp: 1595–1601
- [4]. Anwara, S., Nguyen, L. (2010), Foreign direct investment and economic growth in Vietnam, Asia Pacific Business Review, Vol. 16(1-2): 183–202.
- [5]. Barro, R. J. (1990). Government spending in a simple model of endogenous growth. *Journal of political economy*, 98(5, Part 2), S103-S125.
- [6]. Barro, R. J. (1995). Inflation and Economic Growth, NBER Working Paper 5326.
- [7]. Balamurali, N., Bogahawatte, C. (2004), Foreign Direct Investment and Economic Growth in Sri Lanka, Sri Lankan Journal of Agricultural Economics, 6(1): 37-50.
- [8]. Benneth, O. (2007). Fiscal policy and poverty reduction: some policy options for Nigeria, African Economic Research Consortium. Aerc research Paper, (164).
- [9]. Blonigen, A., & Piger, J. (2011). Determinants of Foreign Direct Investment. NBER Working Paper No. 16704.
- [10]. Crespo Nuno, Fontoura, P, Maria (2007). Determinants Factors of FDI Spillovers- What We Really Know? World Development, 35, 3, 410-425.
- [11]. Chakraborty, C., Basu, P. (2002), Foreign direct investment and growth in India: A cointegration approach, Applied Economics, 34(9), 1061–1073.
- [12]. Cutler, D.M and L.F. Katz.(1990). Macroeconomic Performance and the Disadvantaged. Brookings Papers on Economic Activity, vol.2, pp.1-61.
- [13]. Esther O. Adegbite, Folorunso. S. Ayadi, The role of foreign direct investment in economic development: A study of Nigeria, World Journal of Entrepreneurship, Management and Sustainable Development, 6(1/2), (2011), 133-147.
- [14]. Faras, R., Ghali, K. (2009), Foreign Direct Investment and Economic Growth: The Case of the GCC Countries, International Research Journal of Finance and Economics, 29: 134-145.
- [15]. Federico and Alfredo (2007) Outward FDI and Local Employment Growth in Italy. Bank of Italy, Economic Research Department Temi di discussione (Economic Working Papers 613).
- [16]. Hermes, N and Lensink, R., (2003). Foreign Direct Investment, Financial Development and Economic Growth, Journal of Development Studies, 40 (1), pp: 142-163.
- [17]. Ismail, A., & Amjad, S. (2014). Determinants of terrorism in Pakistan: An empirical investigation. *Economic Modelling*, 37, 320-331.
- [18]. Siddiqui, H., & Iqbal, J. (2010). Trade Openness and Growth: An Analysis of Transmission Mechanism in Pakistan. MPRA Paper No. 24534.
- [19]. Shahid, M. (2014). Effect of inflation and unemployment on economic growth in Pakistan. *Journal of economics and sustainable development*, 5(15), 103-106.
- [20]. Iqbal, M. S., Shaikh, F. M., Shar, A. H., 2010. Causality Relationship between Foreign Direct Investment, Trade and Economic Growth in Pakistan, Asian Social Science 9, p. 82
- [21]. Kaldor, M. (1963), Capital Accumulation and Economic Growth, in Proceedings of a Conference Held by the International Economics Association, Friedrich A. Lutz and Douglas C. Hague (editors). London, Macmillan
- [22]. Karimi, M., Yusop, Z. (2009), FDI and Economic Growth in Malaysia, MPRA Paper No. 14999.
- [23]. Khathlan, A. K. (2012). The Link between Remittances and Economic Growth in Pakistan: A Boon to Economic Stability. British Journal of Economics, Management & Trade 2 (3), 167-185.
- [24]. Khan, A. Q. K., Khattak, N. U. R. K., & Hussain, A. H. (2008). Inter-dependencies and Causality in the Macroeconomic Variables: Evidence from Pakistan (1960-2005). *Sarhad J. Agric.* 24 (1): 199-205.

- [25]. Kernal, A. (1989). Fiscal Imbalances as an obstacle to privatization effort. *Pakistan Development Review*.
- [26]. Lee, C. C., & Chang, C. P. (2009). FDI, financial development, and economic growth: international evidence. *Journal of applied economics*, 12(2), 249-271.
- [27]. Ljunwal and Li, (2007). Financial Sector Development, FDI and Economic Growth in China, OCER Working Paper-E2007005, Perking University.
- [28]. Malik, G. and Chowdhury, A. (2001). Inflation and Economic Growth: Evidence from Four South Asian Countries, *Asia-Pacific Development Journal*, 8 (1), 123-135.
- [29]. Umaru, A., & Zubairu, A. A. (2012). Effect of Inflation on the Growth and Development of the Nigerian Economy: An Empirical Analysis. *International Journal of Business and Social Science*, 3 (10).
- [30]. Won, Y., Hsiao, F., Yang, D. (2008), FDI Inflows, Exports and Economic Growth in First and Second Generation ANIEs: Panel Data Causality Analyses, KIEP Working Paper, 08-02: 11-86.
- [31]. Yaya, K. (2010). Budget Deficits and Economic Growth: Causality Evidence and Policy Implications for WAEMU Countries, *European Journal of Economics, Finance and Administrative Sciences*, ISSN 1450-2887 (no.18).
- [32]. Zakiya Mishal, Ziad Abulaila, The Impact of Foreign Direct Investment and Imports on Economic Growth: The Case of Jordan, *Journal of Economic and Administrative Sciences*, 23(1), (2007), 1-31.