

Original Research Article

A Study on the Contribution of Foreign Direct Investment to Economic Growth in Afghanistan

Ahmad Kanishka Zohor¹
Nabila Rashid³

Ebadullah Ebad²

Received: 08 Jan 2021

Approved: 28 Feb 2022

Foreign Direct Investment (FDI) is frequently regarded as a key driver of global economic integration because it brings job opportunities, capital investment, and business experience. The current study examines the impact of foreign direct investment on Afghanistan's economic growth using time-series data from 2007 to 2019, which are collected from the World Bank and the International Monetary Fund's annual macroeconomic data sources for the country. Foreign direct investment (FDI), trade (Trd), inflation (InfR), and real interest rate (Int) are independent variables for regressing on this country's gross domestic product (GDP), while "GDP" is as a dependent variable. The method of ordinary least squares (OLS) was utilized to investigate the impact of these variables on Afghanistan's economic growth. For unit root test, the Augmented Dickey-Fuller (ADF) one was utilized, while co-integration, Granger causality, and the Vector Error Correction Model (VECM) were all used to capture two-way linkages between variables and were shown to hold in the long run. Our findings indicate that foreign direct investment and trade have a negative and significant impact on Afghanistan's economic performance in the short run but that all variables except inflation have a positive and significant impact on economic growth in the long run. According to the study, a rigorous policy mix is required to absorb "FDI" while supporting infant industries and reducing Afghanistan's balance of payments deficit for growth and future development.

Keywords: FDI, GDP, Unit Root, Co-integration, VECM

JEL Classification: C12, C32, F21, F43, G1

¹ Department of Finance and Banking, Faculty of Economics, Jawzjan University, Sheberghan, Afghanistan; zohorkanishka@gmail.com (Corresponding Author)

² Department of Finance and Banking, Faculty of Economics, Jawzjan University, Sheberghan, Afghanistan; ebadullahsh2002@yahoo.com

³ Department of Finance and Banking, Faculty of Economics, Jawzjan University, Sheberghan, Afghanistan; nabila.rashid87@yahoo.com

1 Introduction

Every country's economy relies on foreign direct investment (FDI) and economic growth (GDP). "FDI" is a type of cross-border investment in which an individual from one country has control over or a substantial chunk of influence over the management of a company in another country. Fundamental factors such as stable macroeconomic and political situations and the credibility of policy reforms all seem to be elements that "FDI" is concerned with. "FDI" boosts the economy through creating more jobs, transferring skills and technologies, improving productivity trends, and ensuring long-term development in developing countries (UNCTAD, 2008). It also contributes significantly to the inflow of foreign capital into host countries. It attracts technological transfers, promotes international trade and management skills, and stimulates growth in the host countries. Foreign direct investment (FDI) is becoming more influential for developing countries, which are frequently based on the assumption that increased (FDI) inflows will culminate in particular economic benefits. Foreign direct investment (FDI) has significant social, cultural, economic, and political consequences on host countries. Developing countries have taken a larger role in international investment rule-making in recent years. China and Egypt, for instance, have signed the most bilateral investment treaties of any developing country. The contribution of "FDI" to Afghanistan's economic growth is the topic of this study; assessing such a relationship is critical for a country like Afghanistan, where a trade deficit is the major macroeconomic problem. At the same time, policymakers attempted to liberalize "FDI" in order to attract international investment to Afghanistan. Numerous studies on foreign direct investment and economic growth have been conducted; the results vary depending on the methodologies employed in the research; some researchers noted that "FDI" had a favorable effect on economic growth. For instance, using cross-sectional data, Olofsdotter (1998) examines how "FDI" affects the economic growth in developing economies, she uncovers that an increase in the stock of "FDI" is positively correlated with growth. That effect is stronger for host countries with a higher level of influential capability, as measured by the degree of property rights protection and organizational efficiency in the host country. Vissak (2005) stated there is no consensus on the impacts of "FDI" on the host country's economic growth; however, the number of studies that demonstrate positive effects of "FDI" is far greater than those which show negative ramifications. Tahiri (2017) investigated the impact of "FDI" on Afghanistan's economic growth by using the ordinary least squares (OLS) approach and simple regression for the period of 1996 to 2014, finding a positive correlation

between "FDI" and "GDP." The level of accuracy limited the study. However, the data was gathered from reliable sources and the lack of uniformity in how various organizations collect and store their data. Therefore, the study has not investigated all of the variables in finer detail. Pashtoon (2018) used a multiple linear regression model to examine the impact of foreign direct investment (FDI) on Afghanistan's economic growth spanning 2005 to 2016 and concluded that "FDI" positively impacts Afghanistan's economic growth. Despite the fact that numerous studies have demonstrated that "FDI" has a positive impact on a host country's economic growth, some scholars claim that the linkage between "FDI" and economic growth is ambiguous. For instance, according to Aitken (2001), the net effect of foreign direct investment on the host country is minimal. As a result of the aforementioned studies, the current article is congruent with previous studies regarding FDI's positive influence on a specific country's economy.

A developing country with abundant natural resources, such as Afghanistan, could aid capital formation; domestic investment in this domain would be advantageous to the country's economy. As a result, the Afghanistan Investment Support Agency (AISA) was founded in 2003 to encourage domestic investment and attract foreign direct investment. According to the (AISA), there have been 24707 domestic industries and 1943 international firms registered in Afghanistan between 2003 and 2011, with investments amounting to over \$5 billion and \$552 million across various sectors of the economy. AISA (2014) had also provided statistics since 2001, and reports "FDI" has increased steadily, rising from \$ 0.68 million in 2001 to \$271 million in 2005.

The Islamic Republic of Afghanistan's government emphasizes that the private sector's development is critical for the country's economic recovery, which has been severely harmed by decades of war and poor management. Nevertheless, significant progress has been made to construct a business-friendly landscape for both domestic and international investments. Definite sectors in the region (such as mining and hydrocarbons) lack a regulatory environment that fully supports investment due to security concerns. In the face of these hurdles, Afghanistan's investment climate has recently proved unprecedented levels of flexibility. All similar studies refer to the fact that the private sector is considered the growth engine. (Sigar, 2018)

The first section of this article offers an introduction to "FDI" as well as the many dimensions of "FDI" flows to developing nations, including Afghanistan. The second section of the paper is a literature review that includes scholars' theoretical and empirical approaches to "FDI" and economic growth nexus. The third section describes research methodology

and provides theoretical clarity on several types of tests concerning stationarity and co-integration. It also includes a theoretical model that depicts an economy's growth rate "GDP" as a function of "FDI" as well as other variables and hypotheses. In section four, the empirical results in terms of data regressing, estimations and outputs are discussed. The final portion contains the conclusion and recommendations.

2 Literature Review

Wani (2017) conducted a study on the determinants of "FDI" in Afghanistan, demonstrating capital inflow. Their analysis used the (OLS) approach and found a positive relationship between "FDI" and other determinants, except for the inflation rate, which had a negative impact. Hussian (2017) looked into the impact of foreign direct investment on Pakistan's economic growth, using time-series data from 1991 to 2015. Data analysis approaches employed in the study included correlation and multiple regression analysis. The study's findings revealed that "FDI," along with some other variables, positively impacts Pakistan's economic growth, excluding the real interest rate, which has a negative influence. Manamba Epaphra (2017) investigated the impact of "FDI" on growth in developing countries. Although his research focused on Africa, it can be applied to all developing countries. According to his multiple regression, the contribution of "FDI" to growth is estimated to be positive. However, he claims that some countries do not show a positive contribution of "FDI" to growth because some "FDI" impacts in the host country, such as technology, knowledge acquisition, and the international image cannot be quantified and may take a long time to affect growth. The interest rate is defined by Finan (2016), as a credit cost in the economy, more specifically as a charge for a price per year levied by a creditor on borrowers who obtain a loan.

Muhammad Tahir (2015) used time series econometric approaches to examine the relationship between international remittances, foreign direct investment, imports, and economic development from 1977 to 2013. According to the findings, foreign settlements and foreign direct investment have a significant role in Pakistan's economic growth. Arisoy (2012) investigates the effects of "FDI" on total factor productivity and economic growth in Turkey from 1960 to 2005. Through technical spillovers and capital accumulations, empirical findings suggest that "FDI" positively contributes to economic growth and total factor productivities. Zilinske (2010) carried out a study to show that foreign direct investments might have both positive and negative effects; according to his research, foreign direct investment (FDI)

positively impacted a country's economic growth, whereas mergers and acquisitions hurt the host country's economic growth.

According to Lensink (2003), "FDI" has a significant negative impact on the host country. As a result, the impact of foreign direct investment on the host country's economic development is still debatable. Zhang (2001) stated "FDI" boosts economic growth in countries with well-developed domestic infrastructure and more liberal trade and "FDI" policies. Kowalski (2000) claims that inflation keeps a country's economy stable; when inflation is high, it might be seen as a rising economic crisis. De Mello (1999) conducted a study centered in China that used data from 1996 to 2001. Based on his findings, it was concluded that "FDI" has both positive and negative impacts.

The findings raise a contentious issue because, as he concludes, we cannot say definitively whether "FDI" has a positive or negative impact on an economy. As a result, he described it as contradictory findings. Countries with "FDI" are said to positively impact capital inflow, job creation, income level, and a range of other factors. His research also showed that the capacity of a host country to support "FDI" is determined by the host country's social, economic, political, and technological aspects or conditions. It is entirely dependent on the host country's aptitude to attract "FDI." According to V. N. Balasubramanyam (1996), "FDI" has more growth-increasing impacts in countries where the labor force is highly educated, and export promotion trade policies are used rather than import substitution trade policies. Numerous studies have been conducted to determine the impact of "FDI" on the economy, but no consensus has emerged. Some studies have concluded that "FDI" has a positive impact on the economy, while others have a negative impact. Furthermore, some studies have revealed that the impact of "FDI" is contingent on the host country's absorptive capacity, which includes the host country's political, economic, and technological conditions.

The overcoming literature on the impact of foreign direct investment on the economic growth of developing countries, particularly Afghanistan, is substantial. The current literature also sheds light on the channels through which "FDI" is carried out, which contributes significantly to a country's economic growth.

3 Research Methodology

In this study, secondary data is the primary source of information. The data for the gross domestic product (GDP), foreign direct investment (FDI), trade (Trd), and the inflation rate (InfR) were derived from the World Bank's Indicators website (The World Bank, 2020). Furthermore, real interest rate "IntR" has been collected through IMF (IMF, 2020). Since the data used in

this study spans the years 2006 to 2018, time-series data for each of the variables, as it sets "GDP," "FDI," "trade," "InfR," and "IntR" applied, in the short and long runs respectively. The following tests are employed to evaluate whether our data is stationary, whether they have co-integrating rank, ultimately, to examine the association of numerous factors in the time series, and finally, to identify relationships between the concerning variables.

3.1 Stationary Test

A series' stationarity is a notable phenomenon since it can impact its behavior. The statistical features of a series across time, such as mean and variance, are time-series stationarity. If both remain constant throughout time, the series is deemed stationary; otherwise, it is regarded as non-stationary. A series is signed as $I(0)$ if it is stationary without differencing, but a series that has initial differences stationary symbolizes $I(1)$. The augmented dickey-fuller (ADF) test was proposed and used to analyze multivariate time series and prepare evidence concerning when the variables are integrated. (Melina Dritsaki, 2004)

3.2 Model Specification and Estimation of OLS Framework

This study employed an econometric model with "GDP" as the dependent variable and the rest as independent variables, with subscription representing the respective variables at time "t," as demonstrated in the equation below.

$$GDP_{i,t} = \alpha + \beta_1 \cdot FDI_i + \beta_2 \cdot Trd_i + \beta_3 \cdot InfR_i + \beta_4 \cdot IntR_i + \varepsilon_{i,t} \quad (1)$$

Where:

GDP = Gross Domestic Product (in logarithmic form).

FDI = Foreign Direct Investment (net inflows in percentage form).

Trd = Trade (as a percentage).

InfR = Inflation rate (GDP deflator).

IntR = Real interest rate (in percentage form). α = Constant

i = Time Period

ε = Error term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of independent variables

3.3 Johansen Tests for Co-Integration

Co-integration, or the existence of a long-run relationship between two or more variables, is explained by the Johansen test. This method uses the trace test to compare the null hypothesis of "r" co-integrating relations to the alternative of "n" co-integrating relations, where "r" stands for the trace test

and "n" stands for the number of variables in the formula, for $r = 0, 1, 2, \dots, n-1$. Its equation was calculated using the following formula:

$$LR_{tr} \left(\frac{r}{n} \right) = -T * \sum_{i=r+1}^n \log(1 - \alpha_i) \quad (2)$$

3.4 Granger Causality

Granger causality¹ is a statistical concept of causality that is based on prediction. According to Granger causality, if a signal X_1 "Granger-causes" (or "G-causes") a signal X_2 , then past values of X_1 should contain information that helps predict X_2 above and beyond the information contained in past values of X_2 alone. Its mathematical formulation is based on linear regression modeling of stochastic processes. G-causality is normally tested in the context of linear regression models. For illustration, consider a bivariate linear autoregressive model of two variables X_1 and X_2 .

$$X_1(t) = \sum_{j=1}^p A_{11j} X_1(t-j) + \sum_{j=1}^p A_{12j} X_2(t-j) + E_1(t) \quad (3)$$

$$X_2(t) = \sum_{j=1}^p A_{21j} X_1(t-j) + \sum_{j=1}^p A_{22j} X_2(t-j) + E_2(t) \quad (4)$$

Where p is the maximum number of lagged observations included in the model (the model order), matrix A contains the model's coefficients, and E_1 and E_2 are residuals (prediction errors) for each time series. If the variance of E_1 (E_2) is reduced by the inclusion of the X_2 (X_1) terms in the first (second) equation, then X_2 (X_1) Granger-(G) causes X_1 (X_2). In other words, X_2 G causes X_1 if the coefficients in A_{12} are jointly significantly different from zero. Moreover, Granger (1987) explains co-integration exists if the residuals are stationary.

3.5 Vector Error Correction Model (VECM)

If two series have co-integration, we know there is a long-term equilibrium relationship between them, so it makes sense to use "VECM" to evaluate the co-integrated series' short-run changes and deviations from equilibrium. Below is a representation of the "VECM" linear regression model.

$$\Delta Y_t = \alpha_1 + p_1 e_i + \sum_{i=0}^n \beta_i \Delta Y_{t-i} + \sum_{i=0}^n \delta_i \Delta X_{t-i} + \sum_{i=0}^n \gamma_i Z_{t-i} \quad (5)$$

$$\Delta Y_t = \alpha_2 + p_2 e_{i-1} + \sum_{i=0}^n \beta_i \Delta Y_{t-i} + \sum_{i=0}^n \delta_i \Delta X_{t-i} + \sum_{i=0}^n \gamma_i Z_{t-i} \quad (6)$$

The number of co-integrating vectors is displayed in the 'VECM' co-integration rank. Two linearly independent non-stationary variable combinations with a rank of two, for instance, will be stationary. Suppose the

¹ http://www.scholarpedia.org/article/Granger_causality

"ECM" coefficient is negative and large (i.e., e_{i-1}) in the previous equations. In that case, any short-run oscillations between the independent variables and the dependent variable will result in a stable long-run relationship among the variables.

3.6 Breusch-Godfrey LM test

The Breusch–Godfrey test, also known as an LM test for serial correlation, is a test for autocorrelation in the errors of a regression model. This test will determine whether or not the research model is auto-correlated. As a result, the validity of our model requires this test.

3.7 Hypothesis

$$3.7.1 \frac{\partial FDI}{\partial GDP} < 0$$

This study predicts that "FDI" inflows can hurt 'GDP,' implying that "FDI" will harm the country's economic growth. On the other hand, "FDI: is positively associated with "GDP," then an increase in FDI will boost Afghanistan's economic growth.

$$3.7.2 \frac{\partial Trd}{\partial GDP} < 0$$

One of the major factors influencing economic growth has been chosen as trade. We've grown accustomed to thinking about trade as a proportion of GDP, and we expect this variable to be negative due to a balance-of-payments deficit in favor of exporters, interpreted as high imports relative to exports.

$$3.7.3 \frac{\partial InfR}{\partial GDP} < 0$$

According to some research, if inflation is high, it might be seen as a worsening level of an issue for the economy. As a result, because Afghanistan is a consumer country, the study assumes that inflation hurts the country's economic growth rate.

$$3.7.4 \frac{\partial IntR}{\partial GDP} < 0$$

Investors are less likely to invest in infrastructural sectors of the country's national economy, especially in distant locations, due to insecurity. As a result, the real interest rate is inversely connected with the country's economic growth.

4 Empirical Results

We opted to test for the stationary nature of the variables before applying the ordinary least squares (OLS) approach to estimate the regression equation

coefficients. The Augmented Dickey-Fuller (ADF) test, given below, is used to determine if the time series data is stationary.

Table 1
Summary of ADF Unit Root Test Results

Series	ADF Test Statistics	Augmented Lags
GDP	-4.458***	0
FDI	-5.127***	0
ΔTrd	-3.400**	1
ΔInfR	-3.99***	1
IntR	-3.087***	0

Source: Research Findings

Table 1 shows that, except for "GDP," "FDI," and "IntR," which are all stationary at levels, "Trd" and "InfR" variables have unit roots and are non-stationary at levels. At I (0), "GDP" and "FDI" are stationary with a 1 percent significance level, whereas "IntR" is stationary with a 5 percent significance level, the results indicate that "InfR" is stationary at 1 percent, whereas "IntR" is stationary at a 5 percent level of significance when using "ADF" at the first difference. As illustrated below, the time series is subjected to the "ADF" test before being imperiled to the conventional least square approach.

Table 2
Summary of results for time series of 2006-2018

GDP	Coefficients	t-Statistic	P-value
FDI	-18.6889	-2.85	0.021
Trd	-1.885204	-3.24	0.012
InfR	-2.712882	-0.87	0.409
IntR	-4.339147	-1.27	0.241
_cons	25.24162	49.36	0.000
Adjusted R ²		0.7938	
Durbin Watson Statistic		1.59232	
F-Statistic		12.55	
Probability (F-Statistic)		0.0016	

Source: Research Findings

The (OLS) model's outcomes foreign direct investment (FDI), Trade (Trd), inflation rate (InfR), and real interest rate (IntR), are the four independent

variables in Table 2 that account for 79.38 percent of the variance in Afghanistan's economic growth, as represented by R². It means that other variables influencing "GDP" but not included in this study account for 20.62 percent of the variance in the dependent variable. The study's findings show a negative and significant short-run relationship between our focus variable "FDI" and the dependent variable "GDP," as well as a negative and significant short-run relationship between trade and "GDP" and a negative and insignificant short-run relationship between inflation and real interest rate and "GDP." The Johansen trace statistic test is used next to see a co-integration relationship between variables. This test's exhibit is in Table 3.

Table 3

Johansen tests for Co-integration

A constant with the co-integration vector			
R	T	Critical values	D
$r \leq 0$	153.7152	76.07	R
$r \leq 1$	87.4598	53.12	R
$r \leq 2$	42.4377	34.91	R
$r \leq 3$	16.1207*	19.96	F
$r \leq 4$	3.4715	9.42	F

Source: Research Findings

The trace statistic with the constant within the co-integration vectors has been used to test the number of co-integration vectors (r). The estimated trace statistic (T) is linked to the number of co-integration vectors. The critical values are determined at a significance level of 5 percent. At a 5 percent level of significance, the column labeled "D" shows our decisions to reject (R) or fail to reject (F). Table 3 shows that if one critical value is less than 5 percent significant, the co-integration rank is one. The co-integration rank is two if two of the critical values are less than 5 percent significant level, and so on. The Johansen test accepted the alternative hypothesis for the top three ranks in comparing trace statistics with a 5 percent critical value, showing that there is no co-integration among them.

On the other hand, the null hypothesis is ranked third, implying the existence of co-integrations. To put it another way, the series is co-integrating among variables and has a long-term equilibrium relationship, implying that they are moving in lockstep in the long run. As a result, we infer that the long-run equilibrium of the negative relationship between our focal variables "FDI" and "GDP" exists. Therefore, we have used the residuals-based "ADF" test for

stationary co-integration to double-check the existence of co-integration among variables.

Table 4
Residuals stationary test

With Intercept	
R	T
ADF Test Statistic	-4.181
Probability	0.006

Note: McKinnon critical values for an intercept at 1 percent level = -3.750

Source: Research Findings

At all levels, the "ADF" test statistic is bigger than the critical value, demonstrating that the error term is stationary at a high significance level, as shown in Table 4. The notion is that a co-integrating vector with a coefficient that can be directly translated as the long-term equilibrium can exist. We'll use the vector error correction model "VECM," which is given below because the series in Table 3 is co-integrating among the variables.

Table 5
Vector Error Correction Model

Co-integrating equations			
Equation	Parms	chi2	P>chi2
_ce1	4	1011.732	0.0000
Identification: beta is exactly identified			
Johansen normalization restriction imposed			
Beta	Coef.	Z	P> z
_ce1			
GDP	1	.	.
FDI	0.094192	8.26	0.000
Trd	0.002388	3.26	0.001
InfR	-0.096307	-10.18	0.000
IntR	0.112592	10.87	0.000
_cons	-0.255057	-172.91	0.000

Source: Research Findings

For Afghanistan, the long-run relationship between gross domestic product (GDP), foreign direct investment (FDI), trade (Trd), inflation rate (InfR), and

real interest rate (IntR) for one co-integrating vector is shown below for the period 2007-2019. (Standard errors are displayed in parenthesis).

$$\text{GDP} = 0.094192\text{FDI} + 0.002388\text{Trd} - 0.096307\text{InfR} + 0.112592\text{IntR} - 0.255057 \\ (0.011402) \quad (0.000732) \quad (0.009462) \quad (0.010361) \quad (0.001476) \quad (7)$$

All of the coefficients in Table 5 were significant at a significance level of 1 percent. It is because, because the coefficients are long-run elasticities, the estimated model produced a consistent result. As a result, a 1 percent increase in "FDI" will likely result in a 0.094192 percent increase in "GDP." A positive balance of payments can generally have a positive impact on the economy. As a result, a 1 percent increase in the "Trd" will likely result in a 0.002388 percent increase in the "GDP." An appropriate percentage of inflation in an economic system is thought to boost economic performance in the long run, whereas an inappropriate percentage of inflation is assumed to reduce economic performance in the long run.

Consequently, a 1 percent increase in "InfR" causes a 0.096307 percent drop in GDP. Compared to other countries, higher interest rates give lenders in an economy a better return. As a result, a 1 percent increase in "IntR" leads to a 0.112592 percent increase in "GDP."

We used a diagnostic test known as the Breusch-Godfrey test, as shown in Table 6 below, to evaluate the validity of some modeling assumptions.

Table 6
Breusch-Godfrey LM test for autocorrelation

lags (p)	chi2	df	Prob > chi2
1	0.508	1	0.4761

Source: Research Findings

According to the test, the probability of the Breusch-Godfrey LM test is greater than 1, 5, and 10 percent of the critical values. As a result, the null hypothesis can be accepted, implying that the model has no serial correlation.

5 Conclusion and Recommendations

This paper looks into the relationship between economic growth (GDP) and foreign direct investment, trade, inflation, and real interest rates. Using annual data from 2007 to 2019, empirical results show that gross domestic product, foreign direct investment, and real interest rate variables are stationary at levels, whereas trade and inflation rate variables have a unit-root and the series are non-stationary at levels, according to the Augmented Dickey-Fuller "ADF" test. However, at the first difference, "ADF" is used

again, and the results show that the inflation rate is stationary at 1 percent, while the real interest rate is stationary at a 5 percent level of significance. According to the Johansen test results, three variable probability values involving "GDP," "FDI," and "Trd" are at 0.7607, 0.5312, and 0.3491, respectively, higher than the 5 percent significant level. At the same time, "InfR" and "IntR" are less than the 5 percent significant level, at 0.1996 and 0.0942, respectively, indicating that the co-integration rank is one. The Granger causality test and the vector error correction model "VECM" are also used. The results show that variables can have a co-integrating vector that can be translated directly into long-term equilibrium. In other words, Afghanistan's economic growth is linked to foreign direct investment, trade, inflation, and real interest rates over time. However, we can see that our focus variables "FDI" and "GDP" have a short-run relationship using the (OLS) model. There is also a significant and negative short-run relationship between "GDP" and "FDI" as well as a significant and negative short-run relationship between "GDP" and "Trd.". In addition, in the short run, there are negative and insignificant relationships between "InfR", "IntR" and economic growth (GDP).

Furthermore, in our study, the relationship between the variables was shown to be held in the long run.

The alignment of our study with other papers, particularly those Zilinske (2010) and De Mello (1999) which were based on a literature review, is in the negative short-run association of "FDI" with Afghanistan's economic performance (GDP) and trade, whereas in the long run, all variables except inflation are positively conjugated on economic growth, which is dependent on the social, economic, political, and technological aspects or conditions of Afghanistan. The current study's lack of alignment with previous revisions, particularly Lensink (2003) stated that "FDI" has a significant negative impact on the host country, and this issue is still debatable. This review contradicts our long-term findings, which found a positive relationship between "FDI" and all plotted variables except inflation.

The novelty of our study in comparison to certain other studies is the period, which spans 2007 to 2019. Co-integration, Granger causality, and the Vector Error Correction Model (VECM) were used to capture two-way linkages among variables using the ordinary least squares (OLS) method. The validity of some modeling assumptions was assessed using the Breusch-Godfrey test.

The majority of the benefits of foreign investments appear to be diluted as profits are repatriated to the investor country. It can be explained by the host country's limited capacity to attract knowledge and technology transfer for further development, particularly in a country like Afghanistan, where bureaucracy, insecurity, brain drain, and a lack of legal protection for investors' property rights are all prevalent. Consequently, to limit "FDI" into Afghanistan, a stimulating local saving and investment platform based on the country's economic structure and policies should be designed and implemented. As a result, the study recommends that reliance on foreign direct investment be limited. Moreover, to accomplish growth and future development in Afghanistan, a sound policy mix is required to absorb "FDI" in the context of fiscal policies and technical expertise, technology, and support for infant industries.

References

- AISA. (2014). Invest In Afghanistan. Retrieved from <https://investinafghanistan.af/why-invest-in-afghanistan/>
- Aitken, B. a. (2001). Do Domestic Firms Benefit from Foreign Investment. *American Economic Review*, Vol. 89, 605-618.
- Arisoy, I. (2012). The Impact of Foreign Direct Investment on Total Factor Productivity and Economic Growth in Turkey. *The Journal of Developing Areas*, 46(1), 17-29.
- De Mello, R. L. (1999). Foreign Direct Investment-led Growth: Evidence from Time Series and Panel Data. *Oxford Economic Papers*, 51(1), 133-151.
- Finan, M. B. (2016). A Basic Course in the Theory of Interest and Derivatives Markets: A Preparation for the Actuarial Exam FM/2.pdf. Russellville, Arkansas.
- Granger, R. F. (1987). Co-Integration and Error Correction: Representation, Estimation, and Testing. *Econometrica*, 55(2), 251-276.
- Hussian, N. A. (2017). Impact of Foreign Direct Investment on the Economic Growth of Pakistan. *American Journal of Economics*, 7(4), 163-170.
- IMF. (2020). Annual Reports (2006-2018), Islamic Republic of Afghanistan. Washington. Retrieved from International Monetary Fund.
- Kowalski, E. (2000). HONORS PROJECTS. Retrieved from Digitalcommons: https://digitalcommons.iwu.edu/econ_honproj/74/
- Lensink, N. H. (2003). Foreign Direct Investment, Financial Development and Economic Growth. *Journal of Development Studies*, 40(1), 142-163.
- Manamba Epaphra, A. H. (2017). Analysis of Foreign Direct Investment, Agricultural Sector and Economic Growth in Tanzania. *Modern Economy*, 8, 111-140.
- Melina Dritsaki, C. D. (2004). A Causal Relationship between Trade, Foreign Direct Investment and Economic Growth in Greece. *American Journal of Applied Sciences*, 1(3), 230-235.
- Muhammad Tahir, I. K. (2015). Foreign Remittances, Foreign Direct Investment, Foreign Imports and Economic Growth in Pakistan: A Time Series Analysis. *ARAB ECONOMICS AND BUSINESS JOURNAL*, 80-89.
- Olofsdotter, K. (1998). Foreign Direct Investment, Country Capabilities and Economic Growth. *Weltwirtschaftliches Archive*, 134(3), 534-537.
- Pashtoon, R. (2018). Impact of Foreign Direct Investment on the Economic Growth of Afghanistan. Retrieved from https://www.researchgate.net/publication/336497286_Impact_of_FDI_on_Economic_Growth_of_Afghanistan_2
- Sigar. (2018). Special Inspector General for Afghanistan Reconstruction. Retrieved from Sigar: <https://www.sigar.mil/interactive-reports/private-sector-development-and-economic-growth/index.html>
- Tahiri, N. R. (2017). Impact of Foreign Direct Investment on Economic of Afghanistan. Retrieved from Munich Personal RePEc Archive: <https://mpra.ub.uni-muenchen.de/82264/>
- The World Bank. (2020). Annual Reports (2006-2018), Islamic Republic of Afghanistan. Retrieved from The World Bank: <https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS?locations=AF>
- UNCTAD. (2008). World Investment Report. Retrieved from SHOP.UN.ORG: <https://shop.un.org/ru/node/28532>
- V. N. Balasubramanyam, M. S. (1996). Foreign Direct Investment and Growth in EP and is Countries. *THE ECONOMIC JOURNAL*, 106(434), 92-105.
- Vissak, T. a. (2005). The Negative Impact of Foreign Direct Investment on the Estonian Economy. *Problems of Economic Transition*, 48(2), 43-66.
- Wani, N. U. (2017). Determinants of FDI in Afghanistan: An Empirical Analysis. *Munich Personal RePEc Archive*, 1-20.
- Zhang, K. (2001). How Does Foreign Investment Affect Economic Growth in China? *Economics of Transition*, 9, 679-693.
- Zilinske. (2010). Negative and Positive Effects of Foreign Direct Investment. *Journal of Economics & Management*, 3, 23-34.