

A time series analysis of determinants of FDI in Afghanistan: Which one matters the most, security or economic growth?

Abdul Fareed Delawari*

Department of Economics, International Islamic University of Malaysia, Kuala Lumpur, Malaysia

ARTICLE INFO

Article history:

Received 13 March 2018

Received in revised form

18 April 2018

Accepted 20 April 2018

Published 31 May 2018

Keywords:

Foreign direct investment

Security

Economic growth

ARDL model

ABSTRACT

Afghanistan has been practicing market economic system since 2002. Since then, the government has been initiating different policies and announced various incentives to attract foreign direct investment (FDI) to the country. However, the outcome has not been satisfactory due to several political and economic factors. This paper explores the relationship between security, economic growth and FDI in Afghanistan, using ARDL model. The paper covers a period from 2002 to 2016. The empirical results of this study show that there is a negative long-term relationship between security and FDI. Hence, the author concludes that, to attract FDI to the country, insuring security should be the top priority of the government of Afghanistan.

1. Introduction

It has been a long time that either developed and developing countries are implementing different policies and have selected different approaches to gain high economic growth and development. Among all, the important one is policy of liberalization and allowing foreign direct investments (FDI). In 2016 global FDI decreased 7% to USD 1625 billion compared to 2015 which is a contribution of 2.2 % to the global GDP (OECD, 2017). In 2015 the amount of FDI inflows to south Asia increased and the major destination was India and Bangladesh, with 44 and 2.2 billion US Dollar respectively. Meanwhile, FDI flows to central and north Asia continued to decrease due to political and economic instability (UNESCAP, 2016). However, central and north Asia experienced a dramatic upward in FDI from 28 billion US Dollar of 2015 to 59 billion US Dollar in 2016 which shows a recovery in the region (UNESCAP, 2017). Figures which represent the contribution of FDI to the global economy is quite significant which accompany many other advantages to a country.

FDI has been known as the source of transferring modern technology, experience especially organizational experience to the economy of the host countries. According to Kurtishi (2013), talked about technological benefits that FDI can bring to a country and (Nenovski, Kostovski and Dejanoski, 2016) mentioned its effect on human capital accumulation. Considering FDI from investors point of view, it can be observed that the movement of capital and multinational firms increased throughout the globe by accelerating the globalization and technology development. They have been looking for new potentials markets, opportunities with relatively low cost. On the other hand, most developing countries are trying to attract FDI to fill the capital and technological gap through implementing liberal policies which allow local and foreigners to start a business easily. However, it is not enough and need to combine with policy of capacity building and investing on infrastructures which are vital to attract FDI to developing countries in the long run (Lall and Narula, 2004). Consequently, to attract FDI as momentum for economic growth,

*Corresponding author.

E-mail address: fareedmonib@gmail.com

there are prerequisites which have to be done by the host country, it means that some values need to be created and some incentives need to be taken through initiating and implementing rules and regulations and reasonable infrastructures. Moreover, the factors such as productivity which is outcome of high skilled labor force which itself resulted from a good education system, security to insure investors that their money are safe, transparency and accountability, strong infrastructures, geographical location, finally availability of inexpensive raw material and labor. They are all important because investors need certainty and sustainability in both political and economic perspectives. Investors need to be assured about success and profitability of their investment projects. It is not only important from investor point of view but for the host country as well, because productivity of foreign investment to the host country is dependent to the condition of the host country (Buckley, clegg and Wang, 2002).

The new constitution of Afghanistan considers Market Economy as economic system of the country, even though there is no consensus among the Afghan community about this choice (Fishstein and Amiryar, 2015). The constitution was approved in December 13, 2003 and defined Afghanistan in the modern era of 21st century after decades of war and political anarchy. Post-2001 have been the period of reconstruction and development, however, beside other problems security has been considered as a key challenge throughout the period. Billions of Dollars have been spent by donors directly under PRT and NGEOS or indirectly through Afghan government budget. Less amount of this fund spent through the Afghan government due to lack of capacity and confidence of donors on program implementation by government (Mcnerney, 2006; ANDS, 2006).

Thanks to political and economic supports of international community and through dispatching more than 100-150 thousand of foreign troops and billions of US Dollars financial aid committed in different international conferences such as in Bonn, Tokyo, London, Paris and other international conferences for post-war reconstruction of Afghanistan paved the way for remarkable flows of FDI which reached its peak at \$ 271 million in 2005 and its minimum amount belongs to 2013 by only \$ 37.639 million. If one looks to the trend of the flows of FDI to Afghanistan from 2001 to 2016, lots of volatility can be observed. Specially, in 2008 it decreased due to global financial crisis or it was 2010 that NATO included the USA announced gradual withdraw of their forces from Afghanistan (Reuters, 2010). While the insurgents' attacks tended to increase, it was a shock to FDI inflows to Afghanistan which continued till 2014 when President Ghani administration signed a security agreement with the USA. Based on that agreement the USA can have military bases in Afghanistan till 2024 (US-Af SDCA, article 26, 2014). Meanwhile, High Investment Council (HIC) established under private investment law of Afghanistan, and later, HIC initiated the Afghanistan Investment Support Agency (AISA) in order to accelerate the process of attracting more investment-specially FDI. Moreover, some remarkable attempts have been done by initiating some democratic investment laws and imposing low tax on FDI. Under Private Investment Law of Afghanistan established in (2005) it is allowed for all qualified foreign and domestic companies which are interested to invest in any sector of the economy are equally protected by law against discriminatory actions of the government. However, considering high growth in the last decade and huge potentials available, the amount of FDI flows in Afghanistan is not remarkable.

Since there is no empirical study to show the reason behind this relative failure, the purpose of this paper is to study the determinants of FDI to Afghanistan using data from UNCTAD and Global Terrorism Database. Based on literature and current political and economic situation of Afghanistan the author will try to find out the relationship between FDI and two important variables namely security and economic growth. Contents of this paper include review of the related work, variables, source of data and hypothesis followed by method of estimation, model, estimation, results and the paper will end with conclusion and future work.

2. Related Works

2.1. Theoretical literature

Economic liberalisation is a multidimensional phenomenon which has three characteristics namely liberalisation of export and import (trade), liberalisation of investment (FDI), and the size of government interference in the economy (Budget). For better understanding, the first characteristic could be shown as ratio of trade in GDP, the second as the ratio of FDI in GDP, and the final one as the ratio of government budget in GDP. These ratios could indicate how much an economy is open (Jafari, Farhadi & Zimmermann, 2017). Moreover, globalization is another important issue which scholars have been talking about for many years. Penalver (2002) talked about globalization and stressed that globalization is a combination of four key factors which are the openness of global trade, immigration (labor force), worldwide communication and cross border financial flows. Concentrating on financial inflows, it can be understood that cross border financial flows contain investment in capital market (portfolio investment), debt, and FDI. In new-classical growth model, long run economic growth depends on technology while FDI is considered a short run facilitator. However, new growth models have considered FDI as a long run contributor of economic growth as FDI facilitates the developing countries to access advance technology (Buckley, Clegg, Wang and Cross, 2002).

2.2. Empirical Literature

2.2.1. FDI and Economic Growth

Several empirical studies show that FDI has been playing an incredible role in economic growth of all countries particularly, the transfer of technology, asset, intellectual capital, and innovation. FDI has created advancement effects on productivity, employment and income in receiving countries (Poon and Thompson, 1998). Despite that empirical studies indicate the movement of capital from the developed countries to developing countries. However, evidences gained by Ghosh and Vanden Berg (2006), show that the USA is the destination of huge amount of FDI while it is a super power in technology. It means that the fact about the destination of FDI is not applicable in this scenario because it indicates the complexity of relationship between FDI and economic development. Hence, study about the FDI and issues related to the needs in a system of equations. These systems of equations need to precisely take into account endogenous and exogenous factors which could affect FDI attraction. Hence, it implies that beyond all benefits that FDI brings to a country, it creates variety of opportunities and enables companies to get access to new international markets (Lipsey, 2004).

Through an empirical study, Niels and Robert (2003) found that FDI could enhance economic growth in the host country. However, it depends on condition of the host country from human capital and export to advance financial facilities. As a country gets stronger in the mentioned dimensions, the impact of FDI on economic growth will be greater. Ghosh and Vanden Berg (2006) have conducted a research to find the relationship between FDI and economic growth in the USA covering the period from 1970 to 2001. Empirical evidences of this study indicate that the impact of FDI on economic growth is significantly positive. However, the regression test showed that the same steady growth will not prolong in the future. Another study with the same context on Latin American and Asian countries shows that effect of FDI on economic growth is related to the economic condition of the host country (inflation, trade, school enrolment). The Granger-Causality test showed that the relationship between FDI and economic growth is unidirectional, and it is from economic growth to FDI. However, in the case of Latin America it is bidirectional; meaning that based on causality test both FDI and economic growth has direct effect on each other (Al Nasser, 2010).

An empirical study conducted to find out the relationship between real GDP per capita, export, FDI, and public education expenditure in Malaysia. The result of applying Granger and Toda-Yamamoto causality in this study indicate that export, FDI and education expenditure cause economic growth in

Malaysia (Yosuff, 2014). Moreover, Co-integration test indicates that trade openness, FDI and Gross Domestic Investment (GDI) have relationship with economic growth in Thailand. Conducting Granger causality test in another part of this study shows unidirectional relationship between GDI and economic growth while this relationship is bidirectional between FDI, trade liberalisation and economic growth. The result of variance decomposition analysis in this research indicates that FDI is the most significant determinant of economic growth in Thailand (Yosuff and Nuh, 2015).

An applied research on selected central and eastern Europe showed that FDI is one of important indicators of economic growth and gives a positive image about sustainability of the country's economy (Halvacek and Bal-Domanska, 2016). Nenovski, Kostovski and Dejanoska (2014) through an empirical study found that the impact of foreign direct investment and economic development in Macedonia is positively significant. They concluded from the empirical results that FDI has huge impact on Macedonia's economy as a whole, from employment, technology, human capital and innovation to competitiveness.

2.2.2 Determinants of FDI inflows

Many researches have been conducted in different countries to determine the most influential factors that affect FDI flows to a country. These factors are many and vary from country to country due to the differences in social-economical dynamics of the countries. An empirical study by Panigrahi and Panada (2012) on three Asian countries namely China, India and Malaysia shows that gross domestic capital formation is the only common factor that affect FDI inflow in these countries. Another study with the same concept shows that GDP, exchange rate, trade openness and interest rate in the USA are the determinants of inward FDI to India among 6 tested variables (Sandhu and Gupta, 2015). Addison and Heshmati (2003) using panel data technique on developing countries found that democratisation and ICT increase FDI inflow to developing countries. In another study Muttaleb (2007) concluded that GDP growth, business friendly environment, modern infrastructure can successfully attract FDI to the host country. Some other related findings are as follow: Exchange rate and infrastructure (Mohammadvandnahidi, Jaberikhosroshahi and Norouzi, 2012), GDP per capita growth rate, telephone main lines and openness have positive impact while inflation and tax rate have negative impact on attracting FDI to the host countries (Demirhan and Masca, 2008). Hence, factors which enable businesses to operate smoothly, reduce the production cost and increase the quantity and quality of products are considered as important determinants of FDI in a country.

However, these are not the only concern of investors because these factors help them to boost their investment and increase their profitability capabilities. Prior to that, investors want to ensure that security is maintained, and their investments are safe (they take calculated risk). They will ask whether their capital will be protected in the selected country. Particularly, this concern is raised by deteriorating security in some countries after 9/11 terrorist attack. Many researches have been done on the expected relationship between the level of security and economic growth and its impact on attracting FDI. Qian and Baek (2011) looked at the economic effect of 9/11 and concluded that global economy was affected by this accident especially economy of developing countries. They believe that existing high political risk discourage investors and has negative impact on FDI inflows. These risks could be dispossession and nationalisation of foreign properties, unsuccessful policy implementation and despotic rules and regulations related to FDI, security, violence in political level and terrorist activities affect FDI. Shahzad, Zakaria, Rehman, Ahmed and Fida (2016) by studying flows of FDI before and after 9/11 found that there is a negative relation between terrorism and FDI.

In a comprehensive study, Alomar and El-Sakka (2011) using panel data of 136 Less Developed Countries (LDCs) found that terrorism has negative effect on attracting FDI to a host country. In a study by Serfaraz (2017), it has been concluded from empirical evidences that even though FDI has contributed to economic growth of Pakistan, it is affected by sectarian terrorism. Finally, using OLS method Wani and Tahiri (2017) found positive relationship between domestic gross capital formation, total debt service

and total external debt with FDI of Afghanistan while impact of inflation is negative. In brief, by doing an in-depth study of related work, one can understand that the determinants of FDI inflows are a lot and vary from country to country. In fact, it depends on social-economic and political dynamics of the countries.

3. Variables, Data and Hypothesis

It has just been mentioned that the determinants of FDI are different among countries and there is no exact theory for that. Accordingly, two variables namely security and growth have been chosen to check their relationship with FDI. There are some limitations which prevent the author to include several variables in the model such as small number of observations available due to security problem in the past and lack of institutional capacity to produce data in Afghanistan. There is no data available before 2002 or there are some but not reliable. Considering after 2002 there are some data from local and international sources, but they are not quarterly. On the other hand, Afghanistan does not have normal economic situation due to security and political instability. This situation undermined the relationship between economic variables, as the result number of nonmilitary attacks, those which targeted non-military targets- attacks to media, private properties, business community, education, water supply system and transportation are considered as non-military attack, will be representing security in our analysis. Moreover, based on literature, growth (of Afghanistan) will be included as an important variable to present the overall performance of the economy. Definition of variables that are going to be used in our analysis are defined as follow; *fdip*- Shows the annual FDI of Afghanistan as the percentage of GDP, *nonm_at*-indicates the annual number of non-military attacks (Security), *gdp_g*- represents the annual GDP growth of Afghanistan.

It is hypothesized that there is a negative long-term relationship between FDI as percentage of GDP and security. However, the author expects a positive long-term relationship between FDI and growth. The data is annual data which cover period of 2002 to 2016 which is obtained from United Nation Conference on Trade and Development Statistics (UNCTAD Statistics) website and Global Terrorism Database.

4. Method of Estimation

Using the available data, this paper will represent a time series analysis to find the relationship between the specified variables. To achieve the objective, it is needed to look at the long-term relationship between variables. Prior to that, one should figure out the order of the variable through Unit Root Test (Dickey and Fuller, 1981) using Augmented Dickey-Fuller Test (ADF). If the variables were in the same order, test for Cointegration (Johansen, 1992) will be conducted to check long run relationship between variables and use VECM model to check the speed of adjustment between variables in the long run. If the data were not in the same order, for instance some were I(0) and some I(1), it will need to proceed with Autoregressive-Distributed Lag (ARDL) model. This model has been introduced by Pesaran and Shin (1999) and Pesaran et al. (2001). ARDL model can be modelled as below (Pesaran and Shin, 1999):

$$y_{it} = \sum_{j=1}^p \lambda_{ij} y_{i,t-j} + \sum_{j=0}^q \delta_{ij} x_{i,t-j} + \mu_i + \varepsilon_{it} \quad (1)$$

Bound Test will be conducted and will find cointegration equation to check possibility of long-term relationship and their relationship in the long run. The base for all analysis is a system of VAR which is mostly used in time series analysis. This model was introduced by Christopher A. Sims (1980) who believed that lots of restrictions has disabled lots of economic models to describe the economic facts and relationships. He introduced the VAR which requires less theoretical or hypothetical restrictions. Considering two variables the general reduced form of VAR is as below (Asteriou and Hall, 2011):

$$Y_t = \alpha_{10} + \alpha_{11}Y_{t-1} \dots + \alpha_{1n}Y_{t-n} + \varepsilon_{1t} \quad (2)$$

$$X_t = \alpha_{20} + \alpha_{21}Y_{t-1} \dots + \alpha_{2n}Y_{t-n} + \varepsilon_{2t} \quad (3)$$

5. Model, Estimation and Result

As it has been mentioned first of all Unit Root need to be conducted whose result is as below:

Table 1: ADF test statistics

Variables	Stationary		Included in the Test Equation	Order
	At level	At first difference		
Fdip		-3.227***	Non	I(1)
nonm_at		-3.347***	Non	I(1)
gdp_g	-9.829***		Intercept	I(0)

Note: *, **, and *** show 10%, 5% and 1% of significance level respectively

Null hypothesis is that the data has a unit root (not stationary) which for (fdip) and (nonm_at) is accepted at level but rejected in first difference. This indicates that fdip and nonm_at are I(1) which means both are stationary at first difference. However, the null hypothesis has rejected at level for gdp_g. This means that gdp_g is I(0) which means gdp_g is stationary at level. From the above table one can conclude that variables are not in the same order of integration so VECM is not a proper model for study of the long-term relationship between variables but ARDL model is. The general form the ARDL model for the current analysis is as follow:

$$fdip_t = \beta_0 + \sum_{p=1}^n \beta_{1p}fdip_{t-p} + \alpha_0gdp_g_t + \sum_{p=1}^n \alpha_pgdp_g_{t-p} + \delta_0nonm_at_t + \sum_{p=1}^n \delta_pnonm_at_{t-p} + \mu_t \quad (4)$$

In the above model “t” shows the time, “n” shows number of lag terms and β_0 is the intercept. β_1 , α_0 , α_p , δ_p and δ_0 are coefficients of variables and their lags. According to the limited data available, Eviews 9 is suggested an ARDL(2,2,2) considering AIC. Its empirical result is as below:

Table 2: Result of ARDL (2,2,2) model

Variable	Coefficient	t-statistic	Prob.
fdip(-1)	0.690683	3.945436	0.0169*
fdip(-2)	-0.342291	-3.108461	0.0343*
gdp_g	-0.017646	-0.026035	0.5351
gdp_g(-1)	-0.115356	-5.131067	0.0068*
gdp_g(-2)	0.022541	1.987343	0.1178
nonm_at	0.000201	0.130125	0.9027
nonm_t(-1)	-0.001389	-0.923543	0.4080
nonm_t(-2)	-0.004970	-3.158489	0.0342*
c	2.666510	2.593196	0.0605
R-squared		0.983892	
F-statistic		30.54097	
Prob(F-statistic)		0.002512*	

Note: *, shows 5% significance level

To proceed further, it is needed to make sure that there is no serial correlation between the error terms. Existence of serial correlation will effect the variance of estimated coefficient which could affect the hypothesis testing (Asteriou and Hall, 2011). Hence, Q- statistic is being checked to ensure the possibility of any auto correlation. The result of the autocorrelation is as below:

Table 3: Q-statistic probabilities result (a test of autocorrelation)

Hypothesis	Number of lags ¹	AC	PAC	Q-Stat	Prob
Null hypothesis= no serial correlation, Alternative hypothesis= serial correlation	1	-0.400	-0.400	2.6001	0.107*
	2	-0.217	-0.449	3.4381	0.179*
	3	0.146	-0.238	3.8534	0.278*
	4	-0.072	-0.308	3.9647	0.411*

Note= *, shows the acceptance of null hypothesis at 5% of significance level

¹= The number of lags has utomatically selected by Eviews software

The above table shows that the probabilities are greater than 0.05, thus it can be concluded that The null hypothesis is accepted for the model and the alternative hypothesis-existence of serial correlation, is rejected. That means, it can be continued to check for the existence of long-term relationship between variables. When the error terms are independently distributed, so the upcoming hypothesis tests will be valid. The result of the Bound test is as follow:

Table 4: Bound test result

Hypothesis	Test Statistic	Value	K
Null hypothesis= no long-run relationships exist	F-statistic	6.436612	2
	Significance	Critical Value Bounds	0 Bound
Alternative hupothesis= Long-run relationship exist	10%	3.17	4.14
	5%	3.79	4.85*
	2.5%	4.41	5.52**
	1%	5.15	6.36***

Note: *, **, ***, shows that the null hypothesis is rejected at 5%, 2.5% and 1% of significance level respectively

Based on empirical result, one can strongly reject the null hypothesis “no long-term relationships” in the model because F-statistic is greater than 5% and even 1% critical value in the upper bound. After noticing long-term relationship, it is possible to find error correction coefficient in order to check the relationship between variables in the long run. Using Eviews 9, the result is as follow:

Table 5: ARDL cointegrating and long run form

Variable	Coefficient	t-Statistic	Prob.
D(fdip_(-1))	0.342291	3.155895	0.0343*
D(gdp_g)	-0.017646	-0.677791	0.5351
D(gdp_g(-1))	-0.022541	-1.987343	0.1178
D(nonm_at)	0.000201	0.130125	0.9027
D(nonm_(-1))	0.004970	3.158489	0.0342*
ContEq(-1)	-0.651608	-4.019238	0.0159*
Cointeq=fdip-(-0.1695gdp_g-0.0094nonm_at+4.0922)			

Note:*, shows 5% of significance level

Looking at the result, as it is expected, cointegration equation is negative (-0.652). Moreover, it is necessary to see the result and notice the significance of their relationship in the long run, which is the objective of this paper. The relationship between variables in the long-run are as follow:

Table 6: Estimated long run coefficients

Variable	Coefficient	t-Statistic	Prob.
gdp_g	-0.169522	-2.511716	0.0659
nonm_at	-0.009449	-5.154584	0.0067*
c	4.092199	4.462894	0.0111*

Note: *, shows 5% of significance level

The above result clearly indicates that there is a negative but significant long-term relationship at 5% between FDI and non-military attacks (security) in Afghanistan. This result supported proposed hypothesis about the negative relationship between FDI and security. To interpret the coefficient, one non-military attack will reduce FDI as a percentage of GDP by 0.0009449 percent in the long run. Meanwhile, the result for growth is relatively significant (0.0659) but the sign of coefficient is not what was hypothesized.

6. Conclusion and Future Work

Despite all the limitations, this paper has tried to scholarly analyse the economic situation of Afghanistan, specifically the important determinants of FDI to the country. It can be confidently claimed that this paper is one of the few conducted empirical researches about FDI in Afghanistan using time series analysis. The paper using ADF Test, found that variables are not in the same order, so ARDL model and Bound test were used to check for existing long-term relationship between the variables. The empirical result of Bound Test shows that there is long run relation between variables and finally using the cointegration equation the paper found that there is long run but negative relationship between non-military attacks and FDI as a percentage of GDP in Afghanistan. Based on founded result, ensuring the security should be at the top of priorities if the government expect to attract foreign investors to Afghanistan. Considering huge potentials and opportunities in Afghanistan, investors would like to invest in Afghanistan despite inappropriate infrastructure, but they most likely will not invest if the country is not secure.

Surprisingly, despite all security challenges and political instability, there are investors who have already invested in Afghanistan. There are numerous unanswered questions that need to be answered related to these types of investments. For instance, what motivates these investors to invest in such an insecure country? Looking to the trend of FDI flows to Afghanistan, especially its downward trend after 2010 when NATO included the USA, announced gradual withdrawal of their troops from Afghanistan till signing of a new agreement in 2014, one might think; is there any relationship between existing and signing of long-term security and cooperative agreement between Afghanistan and Western powers specially the USA and FDI follows to Afghanistan?

References

- Addison, T., & Heshmati, A. (2003). *The new global determinants of FDI flows to developing countries: The importance of ICT and democratization* (No. 2003/45). WIDER Discussion Papers//World Institute for Development Economics (UNU-WIDER).
- Afghanistan National Development Strategy (2006), Retrieved from www.af.undp.org/content/dam/afghanistan/docs/ANDS_Full_Eng.pdf
- Alomar, M., & El-Sakka, M. (2011). The impact of terrorism on the FDI inflows to less developed countries: A panel study. *European Journal of Economics, Finance and Administrative Sciences*, 28(1), 16-126.

- Al Nasser, O. (2010). How Does Foreign Direct Investment Affect Economic Growth? The Role of Local Conditions. *Latin American Business Review*, 11(2), 111-139.
- Asteriou, D., & Hall, S. G. (2011). *Applied Econometrics*. Palgrave Macmillan.
- Buckley, P. J., Clegg, J., Wang, C., & Cross, A. R. (2002). FDI, regional differences and economic growth: panel data evidence from China. *Transnational Corporations*, 11(1), 1-28.
- Demirhan, E., & Masca, M. (2008). Determinants of foreign direct investment flows to developing countries: a cross-sectional analysis. *Prague Economic Papers*, 4(4), 356-369.
- Dickey, D. A., & Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica: Journal of the Econometric Society*, 1057-1072.
- Fishstein, P., & Amiryar, M. E. (2015). *Afghan Economic Policy, Institutions, and Society Since 2001*. US Institute of Peace.
- Ghosh, Roy. and Van den Berg, Hendrik (2006). Foreign Direct Investment and Economic Growth: A Time-Series Approach”, *Global Economic Journal*, 6(1), 1-19.
- Hermes, N. and Lensink, R. (2003). Foreign Direct Investment and Economic Growth. *Journal of Development studies*, Vol 40/1, 142-163.
- Hlavacek, P. & Bal-Domanska, B. (2016). Impact of Foreign Direct Investment on Economic growth in Central and Eastern European Countries. *Journal of Enzinerine Ekonominka- Engineering Economics*, 27(3), 294-3030.
- Jafari, Y., Farhadi, M., & Zimmermann, A. (2017). Economic liberalization and environmental Kuznets curve: some empirical evidence. *Journal of Economic Development*, 42(1), 3.
- Johansen, S. (1992). Cointegration in partial systems and the efficiency of single-equation analysis. *Journal of econometrics*, 52(3), 389-402.
- Kurtishi, S. (2013) The Effects of Foreign Direct Investments for Host Country’s Economy. *European Journal of Interdisciplinary Studies*, 5(1), p.26-38.
- Lala, Sanjaya. and Narula, Rajneesh (2004) “Foreign Direct Investment and Its Role in Economic Development: Do We Need a New Agenda”, *The European Journal of Development Research*, 16(3), 447-464.
- Lipsey, R. E. (2004) “Home- and Host-Country Effects of Foreign Direct Investment”, retrieved 15.3.2017 from www.nber.org/chapters/c9543.pdf
- McNerney, M. J. (2006). *Stabilization and reconstruction in Afghanistan: are PRTs a model or a muddle?* ARMY WAR COLL CARLISLE BARRACKS PA
- Mohammadvandnahidi, M. R., Jaberikhosroshahi, N., & Norouzi, D. (2012). The Determinants of Foreign Direct Investment in Iran: Bounds Testing Approach. *Economic research-Ekonomiska istraživanja*, 25(3), 560-579.
- Mottaleb, K. A. (2007). Determinants of Foreign Direct Investment and Its Impact on Economic Growth in Developing Countries.” Retrieved from <http://mpr.ub.uni-muenchen.de/9457/>

Nonovski, Tome. Kostovski, Ninko. and Dejanoski, Dobrila (2016) "Relationship Between Foreign Direct Investment and Gross Domestic Products in Case of Republic of Macedonia. *Journal of Sustainable Development*, 6(16), 19-21.

OECD report (2017), retrieved from <http://www.oecd.org>

Penalver, M. (2002, December). Globalization, FDI and Growth: A Regional and Country Perspective. *In Capacity Development Workshop on the State, the Private Sector and Civil Society: Partnerships for Development and Democracy*. Retrieved from <http://www.unpan1.un.org/intradoc/groups/public/documents/un/unpan006429.pdf>

Pesaran, M. H., Shin, Y., & Smith, R. P. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94(446), 621-634.

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289-326.

Poon, J. P. and E. Thompson (1998) "Foreign Investment and Economic Growth: Evidence from Asia and Latin America", *Journal of Economic Development*, Vol. 23 (2), pp. 141-160.

Private Investment law of Afghanistan (2005), retrieved from <http://moci.gov.af/Content/files/Private%20Investment%20Law.pdf>

Qian, X., & Baek, K. (2011). An analysis on political risks and the flow of foreign direct investment in developing and industrialized economies. *Economics, Management, and Financial Markets*, 4, 60-91.

Reuters (2010), retrieved from <https://www.reuters.com/article/uk-nato-afghan/nato-agrees-afghan-security-transfer-plan-idUKTRE63M1JO20100423>

Sandhu, N. Gupta, N. (2016). Determinants of Inward Foreign Direct Investment", *SCMS Journal of Indian Management*, 13(4), 83-94.

Security and defense cooperation agreement between the USA and Afghanistan, retrieved from <https://www.state.gov/documents/organization/244487.pdf>

Serfraz, A. (2017). *What is the effect of foreign direct investment inflows on economic growth in Pakistan? An empirical analysis in the light of religious sectarianism as catalyst for terrorism* (No. 59). Discussion Papers, Zentrum für Ökonomische und Soziologische Studien.

Shahzad, S. J. H., Zakaria, M., Rehman, M. U., Ahmed, T., & Fida, B. A. (2016). Relationship between FDI, Terrorism and Economic Growth in Pakistan: Pre and Post 9/11 Analysis. *Social Indicators Research*, 127(1), 179-194.

Sims, C. A. (1980). Macroeconomics and reality. *Econometrica: Journal of the Econometric Society*, 48(1), 1-48.

Stylianon, T. (2014). Dynamic relationship between growth foreign direct investment and export in the US: An Approach with structural Breaks. *Journal of Applied Economics*, 13(2), 23-36.

UNESCAP report (2016), retrieved from <http://www.unescap.org>

UNESCAP report (2017), retrieved from <http://www.unescap.org>

- Wani, M., Haq, N. U., & Rehman, M. (2017). Determinants of FDI in Afghanistan: An Empirical Analysis. Retrieved from <https://mpa.ub.uni-muenchen.de/81975/pdf>
- Yusoff, Mohammed (2014) "Foreign Direct Investment, Exports, Education, and Growth in Malaysia", *Global Business and Economics Review*, 16(2), 111-122.
- Yusoff, M. & Nuh, R. (2015). Foreign Direct Investment, Trade Openness, and Economic Growth: Empirical Evidence from Thailand. *Journal of Foreign Trade Review*, 50(2), 73-84.