Volume: 2, Issue: 5 Page: 75-86 YEAR: 2020 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Foreign Direct Investment and Domestic Investment On the Economic Growth of the Uzbekistan - A VECM Analysis

AUTHOR(S): ¹ KOBILOV ANVAR ESHPULOTOVICH AND ² KURBONOV OYBEK ABDUSATTAROVICH

Abstract

The present paper deals with the relationship between FDI, GDP and DI using a vector error-correction model (VECM). The empirical model is based on quarterly data for the period 2010-2019 in Uzbekistan. The result of the Johansen cointegration rank test shows that there exists a long-run relationship among the three variables. The Granger causality test indicates a positive significant bidirectional relationship between GDP and Domestic Investment. GDP Granger causes FDI and a change in the GDP indicates in advance a change in the level of FDI The variance decomposition indicates that fluctuations in FDI are explained by the shocks in GDP (55.0 per cent) and Uzbekistan's domestic investment has a greater impact on growth than FDI.

Keywords: Foreign Direct Investment, Domestic Investment, economic growth, vector error correction model,

IJARBAS Accepted 13 May 2020 Published 18 May 2020 DOI: 10.5281/zenodo.3832977

Published By

Numerational Journey of the second se

1 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

IJARBAS - International

About Author

Author: ¹ **KOBILOV ANVAR ESHPULOTOVICH**, PHD CANDIDATE OF THE KARSHI STATE UNIVERSITY,UZBEKISTAN. e-mail: <u>kobilovanvar@gmail.com</u> ² **KURBONOV OYBEK ABDUSATTAROVICH**, RESEACHER OF THE KARSHI STATE UNIVERSITY, UZBEKISTAN. e-mail: <u>kurbonovoybek@gmail.com</u>

2 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Published By



1. Introduction

The level of economic development of any country directly depends on the scale and pace of investment activity in that country. Improving the mechanism for attracting foreign direct investment in the world, their access to promising sectors the study of the problems of incentives and their effective use is one of the current topics of today.

In the context of globalization, the role of investment cooperation between countries in international economic relations is growing. Attracting and effective use of foreign investment plays an important role in ensuring sustainable economic growth in the world. Particular attention is paid to attracting foreign direct investment, especially in developing countries with high economic growth rates.

There are relatively few studies on the real impact of FTI on the economy of Uzbekistan using econometric instruments. Therefore, for Uzbekistan on the path of development, it is important to conduct an in-depth analysis of the impact of FDI on economic development, the introduction of effective mechanisms for the positive use of FDI.

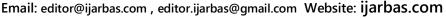
For many years, Uzbekistan has been one of the most inconvenient countries for investors to invest in, but since the 3rd quarter of 2016, the country has been opening up to the outside world and demonstrating its investment potential. In order to attract new investors, many practical measures are being taken to improve the investment climate in the country.

It is unique in that it has the largest domestic market among Central Asian countries, young and cheap labour force, rich in natural resources and fast-growing infrastructure. Rapid reforms in the tax and customs systems, the rise of Uzbekistan from 166th to 72nd place in the Doing Business ranking in 2019, as well as currency liberalization reforms since September 2017 are seen as a positive signal for foreign investors to enter the country's market. However, despite this, the volume of foreign direct investment (FDI) attracted to the country remains low.

Despite a large amount of literature on the subject, the role of FDI in economic growth remains highly controversial. These studies include many countries with different levels of development, and temporal analysis more or less long. Despite the alleged benefits of FDI on the host country economic growth, the empirical literature has not succeeded in establishing a definitive positive impact (Campos and Kinoshita, 2002). According to Weisskopf studies (1972a, 1972b), FDI had a positive effect on economic growth while a negative effect on domestic savings. While Pesmazoglou's (1972) study of 43 countries found a high positive correlation between GDP and gross fixed capital investment, Kim's (1972) study follow that FDI for the Korean economy increases tax and export earnings while providing sustainable economic growth.

According to Rothgeb's (1988) study of African and Latin African countries, a strong positive correlation was observed between FDI and economic growth, with strong coefficients of this correlation in the construction, transport, and telecommunications sectors of selected countries. Smits's (1988) study of underdeveloped countries recognized a strong link between exports, GDP, and FDI.

Borensztein E et al. (1998) observed in 69 countries that FDI had a more positive effect on economic growth than domestic investment, while Metwally and Tamaschke (1994) found that economic growth was achieved in 3 North African countries based on high utilization of FDI. Moreover, according to a study by Noorbakhsh et al. (2001) on 36 countries with rich natural resources and a favourable investment climate, FDI has had a positive





impact on sustainable macroeconomic growth, domestic market development and foreign trade.

There are a variety of empirical studies that focuses on the influence of FDI on the host country economic growth. Most of these studies have been able to prove a positive effect on the host country economic growth due to FDI. This is true even for countries with differences in terms of geographical, political, economic development, etc. It is also shown in this sample that studies are conducted based on different variables and many of them depend on the countries characteristics.

While Schneider's (2005) study of 47 states on the impact of FDI on economic growth is uncertain, Lessmann's (2013) study on 55 countries FDI stimulates inequality between regions for low and middle-income countries. De Mello'S (1999) study in 16 countries from OECD and 17 non OECD countries (Africa and America) shows FDI positively effects to economic growth within OECD countries, but negatively in other countries.

Trang T and et al examines and provides additional and relevant quantitative evidence on the impact of foreign direct investment (FDI) on economic growth, both in the short run and the long run in developing countries of the lower-middle-income group in 2000–2014. Various econometric methods are employed such as the panel-based unit root test, Johansen cointegration test, Vector Error Correction Model (VECM), and Fully Modified OLS (FMOLS) to ensure the robustness of the findings. The results of this study show that FDI helps stimulate economic growth in the long run, although it has a negative impact in the short run for the countries.

Some other economists like Leff (1969) and Griffin (1970) have analyzed its negative impacts on growth. Mencinger, (2000 & 2008) outlined the structural current account deficit in NMS countries, and believed that foreign direct investment can have a negative effect on the current account balance of NMS.

The present paper contributes to the existing literature by applying a multivariate VAR system with the error correction model (ECM) and time series techniques of cointegration and innovation accounting to explore the possible links between FDI, domestic investment and economic growth in Uzbekistan. Specifically, we use the impulse response function and variance decomposition plus the Grange causality testing procedures to investigate whether:

-Is there causality between economic growth, FDI and domestic investment, and what is its level?

-Which factor is more important for economic growth in Uzbekistan, FDI or domestic investment?

The organization of the paper is as follows. Section 2 offers an overview on FDI inflows, domestic investment and economic growth in Uzbekistan. This is followed by econometric analysis in section 3. The final section of the paper presents the conclusion and some policy implications.

2. An overview of the FDI inflows, domestic investment, and economic growth in Uzbekistan: 2010-2019

Uzbekistan continues to go unnoticed as a destination for investment, the volume of FDI is significantly lower than in comparable countries. However, FDI inflows to Uzbekistan are mainly concentrated in the oil and gas industry - in recent years 10 years it accounted for more than 40% of the total FDI. Investments in other industries are critical to modernization



industrial base and increase its productivity. According to the State Committee of Statistics of the Republic of Uzbekistan, the amount of FDI inflows into Uzbekistan totalled \$USD 18,2 billion during the period 2010-2019, with 10903 foreign and joint-venture companies operating in Uzbekistan.

Until recently, Uzbekistan was not on the map of investors due to the closed economy and adverse investment climate. Before 2017, foreign investors faced such kind of barriers to doing business in the country: (i) restrictions on currency conversion and repatriation of profits, (ii) regulatory complexity and opacity and non-compliance with the principles of supremacy law, (iii) low reliability and complexity connect electricity, gas supply and water supply, (iv) preferential customs conditions for some market participants and complex customs clearance procedures, (v) high tax burden and complexity of the tax regime.

Although the volume of FDI attracted to Uzbekistan is small compared to the existing opportunities, significant growth was observed during the selected period. However, in 2018, the volume of FDI declined by 14.2% compared to 2017. The positive reforms carried out by the government to increase investment attractiveness have begun to yield their first results by 2019. Particularly, in 2019, the volume of FDI rocketed by 3 times compared to 2018. As a result of the establishment of a separate ministry for foreign investment in the structure of public administration and its regional structures in all regions, districts and cities, the Uzbek ambassadors to foreign countries were tasked to promote the country's investment potential. From 2018, foreign investment flow is also observed in agriculture, services, tourism, construction. Uzbekistan ranks third in Central Asia after Kazakhstan and Turkmenistan in terms of FDI inflows into the economy, and as a result of existing opportunities and effective reforms, it is expected that in the near future it will become the hegemon in the region in terms of FDI inflows. Total direct foreign investment expected at up to \$ 65 billion over the next 10 years, of which up to \$ 20 billion in non-primary industries.

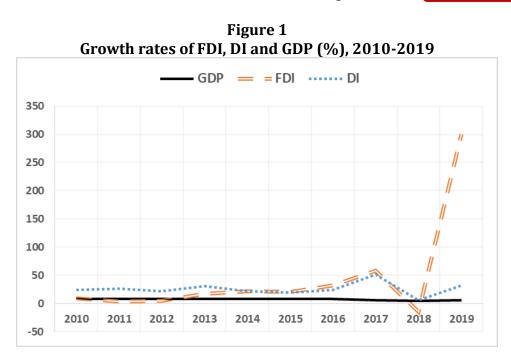
While the share of FDI in GDP was in the range of 3.6-7.18% in 2010-2018, in 2019 FDI reached its highest point in relation to GDP (11.5%). Significant growth was also observed in domestic investment during the selected years. The highest growth on this indicator was observed in 2017 (51.3 percent), the lowest growth rate was observed in 2018 (5.8 percent). Data on the share of domestic investment in GDP in the selected period fluctuated in the range of 10.35-13.22 percent, and the minimum value was observed in 2018, the maximum value in 2016.

In 2010-2016, high growth rates of GDP were observed and the data fluctuated in the range of 7.8-8.5 percent. In 2017-2018, the growth rate slowed to 5.3: 5.1 percent, respectively, while in 2019, the country's economy grew by 5.6 percent.

5 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Published By





3. Empirical analysis and findings

3.1. Data and Unit root test

In order to test the relationship between FDI, GDP and DI volume in Uzbekistan, we used quarterly data covering the period 2010-2019. We used all variables in billion sum, as provided by State Committee of Statistics. The GDP deflator adjusted the time series in order to express the real value.

In this paper, we employ the augmented Dickey-Fuller (ADF) test to test the stationarity of the three-time series FDI, DI and GDP. Indicators of the three series appear to be non-stationary in level form. Therefore, we investigate the stationarity of the first difference of the three series by testing for unit roots. The ADF tests are performed on both the level and first differenced observations by estimating the following three models:

Model does not have trend and intercept:

$$\Delta y_t = \gamma y_{t-1} + \sum_{i=1}^{\kappa} \beta_i \, \Delta y_{t-1} + \varepsilon_t \tag{1}$$

Model with intercept only:

$$\Delta y_t = \alpha_0 + \gamma y_{t-1} + \sum_{i=1}^k \beta_i \, \Delta y_{t-1} + \varepsilon_t \tag{2}$$

Model with trend and intercept:

 $\begin{array}{l} \Delta y_t = \propto_0 + \propto_2 \ \gamma y_{t-1} + \sum_{i=1}^k \beta_i \ \Delta y_{t-1} + \varepsilon_t \\ \text{where:} \\ \Delta y_t = y_t - y_{t-1} \text{ is the first difference of the series } y_t; \\ \Delta y_{t-1} = y_{t-1} - y_{t-2} \text{ is the first difference of } y_{t-1}, \text{ etc.}; \\ \alpha, \gamma \text{ and } \beta_i \text{ -are parameters to be estimated;} \\ \varepsilon_t \text{ -is a stochastic disturbance term.} \end{array}$

6 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Email: editor@ijarbas.com , editor.ijarbas@gmail.com Website: ijarbas.com

Published By

(3)



Augmented Dickey-Fuller test fora unit root					
Variables	Model 1	Model 2	Model 3		
	No constant& No trend	Constant &No	Constant & Trend		
		trend			
	1. ADF test for unit ro	oot on the level se	ries		
GDP	-0.228	-1.499	-4.373		
FDI	1.347	0.742	-0.466		
DI	-0.176	-1.584	-5.250		
	2. ADF test for unit root on	the first differen	ced series		
GDP	-9.11	-9.05	8.94		
FDI	-10.73	-10.95	-12.123		
DI	-14.46	-14.25	-14.44		

Table 1

Note: *** denotes significance at the 1 per cent levels.

The results of the ADF test (Table 1) show that the null hypothesis of a unit root is: (i) accepted for the level series of GDP in all three models; (ii) rejected for the level series of FDI in model (1) and model (2), and (iii) rejected for the level series of DI in model (3). The results based on the first differenced data indicate that all three series are stationary and integrated of order one, which further suggest the possibility of a cointegration relationships.

Volume: 2, Issue: 5, Year: 2020 Page: 75-86

3.2 Testing for cointegration of variables

Before application of Johansen cointegration test, it is important to find the lag length of the VAR through some lag selection criteria in order to have parsimonious model. Numbers of lag selection criteria have been used in the literature, e.g., Akaike Information Criterion (AIK), Hannan-Quinn information Criterion (HQ), Sequential modified LR test statistics, Schwarz information Criterion (SIC), Final Prediction error (FPE). However, one or more than criteria may be used for lag selection. Schwarz information criterion (SIC), final prediction error (FPE), and Hannan-Quinn information criterion (HQ) confirm lag length one (1)

Now, the cointegration test is performed to investigate any long-run equilibrium relationships among the three variables of FDI, DI and GDP. After a careful search and trial, a model with 1 lags, constant and centred seasonal dummy variable was chosen. The result of the Johansen cointegration rank test is summarized in Table 2, which indicates the presence of two cointegrating vectors at 5 per cent levels of significance, respectively (i.e., the null hypotheses of no cointegration is rejected for rank of zero and less than or equal to (2). This means that there exists a long-run relationship among the three variables. The positive result requires the modelling of vector error correction model (VECM) and not a VAR model.

Table 2	2
---------	---

Unrestricted Cointegration Rank Test (Trace)					
Hypothesized		Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.590336	50.23952	29.79707	0.0001	
At most 1 *	0.315270	16.32762	15.49471	0.0374	
At most 2	0.049668	1.935873	3.841465	0.1641	

Cointegration testing
Unrestricted Cointegration Rank Test (Trace)

7 International Journal of Academic Research in Business, Arts and Science Published By (IJARBAS.COM)



Trace test indicates 2 cointegrating eqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis	(1999)	p-values
---------------------------	--------	----------

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.590336	33.91190	21.13162	0.0005
At most 1 *	0.315270	14.39174	14.26460	0.0477
At most 2	0.049668	1.935873	3.841465	0.1641

Unrectricted Cointegration Danl	Toot (Maximum)	Figanyalua)
Unrestricted Cointegration Rank	k Test (Maximum I	cigenvalue

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

3.3 The error correction model

To analyse the causal relationship between the three variables FDI, DI and GDP, we use an error correction model (ECM) of the following VAR system:

$$\Delta FDI_{t} = \alpha_{1} + \alpha_{fdi}\hat{e}_{t-1} + \sum_{i=1}^{\kappa} \alpha_{11}(i)\Delta FDI_{t-i} + \sum_{i=1}^{\kappa} \alpha_{12}(i)\Delta DI_{t-i} + \sum_{i=1}^{\kappa} \alpha_{13}(i)\Delta GDP_{t-i} + \beta_{1}D_{t} + \varepsilon_{fdit}$$
(1)

$$\Delta DI_{t} = \alpha_{2} + \alpha_{di}\hat{e}_{t-1} + \sum_{i=1}^{k} \alpha_{21}(i)\Delta FDI_{t-i} + \sum_{i=1}^{k} \alpha_{22}(i)\Delta DI_{t-i} + \sum_{i=1}^{k} \alpha_{23}(i)\Delta GDP_{t-i} + \beta_{2}D_{t} + \varepsilon_{fdit}$$
(2)

$$\Delta GDP_{t} = \alpha_{3} + \alpha_{gdp} \hat{e}_{t-1} + \sum_{i=1}^{k} \alpha_{31}(i) \Delta FDI_{t-i} + \sum_{i=1}^{k} \alpha_{32}(i) \Delta DI_{t-i} + \sum_{i=1}^{k} \alpha_{33}(i) \Delta GDP_{t-i} + \beta_{3}D_{t} + \varepsilon_{fdit}$$
(3)

Where

FDI_t =FDI inflows in Uzbekistan in year t;

 DI_t =enterprise and population capital in gross capital formation represents domestic investment in year t, but excludes any forms of foreign investment;

GDP_t =Gross Domestic Product in year t;

 \hat{e}_{t-1} = the error correction term;

D_t = the centred seasonal dummy variable;

 $\alpha_{1}, \alpha_{ij}(i)$ and β_{i} = the parameters;

 ε_{fdit} , ε_{dit} and ε_{gdpt} =white noise disturbance terms that may be correlated with each other.

According to Table 3, in the first part, the coefficients obtained through the VECM in the long run relationship. Both the long term coefficients of GDP and of the DI are significant.

8	International Journal of Academic Research in Business, Arts and Science	Published By
	(IJARBAS.COM)	-rtional law
	Email: editor@ijarbas.com , editor.ijarbas@gmail.com Website: ijarbas.com	International Journal of B



In the second part of the table, the error correction term (CointEq1, CointEq2) is significant and has a negative sign, which means that the series are cointegrated and go together toward long-term equilibrium. Basically, it is the negative response required for balancing the FDI series on the long-term. As the error correction term is negative and significant, this means that we have causality in at least one direction.

Table 3

The results of the VECM

Cointegrating Eq:	CointEq1		
FDI(-1)	1.000000		
GDP(-1)	-0.601991		
	(3.83113)		
	[-0.15713]		
DI(-1)	-8.646280		
	(1.21384)		
	[-7.12308]		
С	1574.886		
Error Correction:	D(FDI)	D(GDPI)	D(DI)
CointEq1	-0.906731	0.213577	-0.097985
-	(0.78768)	(0.06394)	(0.04379)
	[-1.15115]	[3.34001]	[-2.23762]
CointEq2	-1.938839	-1.938839	-0.054066
	(0.36173)	(0.36173	(0.03492)
	[-5.35997]	[-5.35997]	[-1.54846]
D(FDI(-1))	-0.981277	0.072162	0.087935
	(2.36685)	(0.19214)	(0.13158)
	[-0.41459]	[0.37556]	[0.66829]
D(GDP(-1))	0.113419	-0.174202	0.140933
	(0.78320)	(0.06358)	(0.04354)
	[0.14482]	[-2.73984]	[3.23681]
D(DI(-1))	4.937039	1.563892	-1.836021
	(8.45129)	(0.68609)	(0.46984)
	[0.58418]	[2.27943]	[-3.90777]
-squared	0.835694	0.929366	0.937237
dj. R-squared	0.733981	0.885640	0.898384
um sq. resids	4.39E+09	28918299	13561536
E. equation	14455.01	1173.483	803.6090
-statistic	8.216201	21.25429	24.12252
og likelihood	-375.9813	-288.0940	-274.8424
kaike AIC	22.28464	17.26251	16.50528

Vector Error Correction Estimates Included observations: 35 after adjustments Standard errors in () & t-statistics in []

9 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Email: editor@ijarbas.com , editor.ijarbas@gmail.com Website: ijarbas.com

Published By



	Volume: 2, Issue	e: 5, Year: 2020 Pag	ge: 75-86 JARBAS - Inter	nationa
Schwarz SC	22.90678	17.88465	17.12742	
Mean dependent	3910.180	709.8686	340.1229	
S.D. dependent	28026.09	3470.076	2520.946	
Determinant resid cov	ariance (dof adj.)	4.85E+19		
Determinant resid cov	ariance	1.05E+19		
Log likelihood		-915.4261		
Akaike information cri	iterion	54.88149		
Schwarz criterion		56.88123		
Number of coefficients		45		

3.4. Granger causality test and variance decomposition

According to the Granger causality test results for the three variables, the effects of GDP and FDI on DI are statistically significant, at the same time, the effect of DI on GDP are statistically significant too and causal links between GDP and DI are bi-directional. The main point that GDP Granger causes FDI and a change in the GDP indicates in advance a change in the level of FDI. The result is similar to the ones in the literature that assigns GDP (or market size) as a determinant of FDI. **Table 4**

Granger causality Wald tests				
Excluded	F	Df	df_r	Prob > F
GDP	3.1074	5	19	0.0324
DI	1.7323	5	19	0.1756
All	13.618	10	19	0.0000
FDI	2.4078	5	19	0.0749
DI	7.0794	5	19	0.0007
ALL	4.3604	10	19	0.0029
FDI	7.7073	5	19	0.0004
GDP	16.805	5	19	0.0000
All	16.013	10	19	0.0000
	GDP DI All FDI DI ALL FDI GDP	ExcludedFGDP3.1074DI1.7323All13.618FDI2.4078DI7.0794ALL4.3604FDI7.7073GDP16.805	ExcludedFDfGDP3.10745DI1.73235All13.61810FDI2.40785DI7.07945ALL4.360410FDI7.70735GDP16.8055	ExcludedFDfdf_rGDP3.1074519DI1.7323519All13.6181019FDI2.4078519DI7.0794519ALL4.36041019FDI7.7073519GDP16.805519

The variance decomposition allows the identification of the percentage proportions in the variance of a variable that is driven by the shocks that occur in the other variables. The variance decomposition shows in what degree a variable changes under the impact of the own shocks or the other variables' shock. One disadvantage of this method is that the variance of a variable is fully explained only based on the variables introduced in the analysis, without quantifying the potential impact on other omitted variables. Under these circumstances, a careful interpretation of the results is recommended. The results obtained for the variance decomposition are shown in Table 5.

Within a long run forecasting horizon, the variance decomposition results indicate, in the case of Uzbekistan, the innovations in FDI are mainly explained by GDP (55.0 percent) than its own past values (44.2 percent) and only 0.8 percent due to past domestic investment. The innovations in GDP also mainly explained by its own past values (45.9 percent), but total share of FDI and DI is high. These results suggest the strength of the relationship between FDI, domestic investment and economic growth are different. In the case of Uzbekistan,



influences of FDI on economic growth are less than domestic investment (23.8 percent versus 30.3 percent).

GDP shows stronger influences on Uzbekistan's domestic investment than FDI does (30.4 percent versus 3.2 per cent). The relationship between GDP and DI is strong, with 30.4 percent influence from GDP to DI and 30.3 percent in reverse. **Table 5**

Per cent of	Typical shock in:			
forecast error variance in:	FDI	DI	GDP	
FDI	76,6	12,8	10,6	
DI	37,3	47,7	15,0	
GDP	30,8	26,0	43,2	

Variance decomposition percentage of ten-quarter error variance

Conclusion

The present paper investigates relationship between FDI, GDP and domestic investment based on a vector error-correction model, using quarterly data for the period 2010-2019 in Uzbekistan.

Using a VAR system with ECM, we find that:

i) FDI plays an important role in complementing domestic investment in Uzbekistan, the larger FDI the greater the domestic investment. Further, FDI has a significant effect on Uzbekistan's economic growth;

ii) Uzbekistan's domestic investment and economic growth are positively correlated, great economic growth spurs large domestic investment, and vice versa;

iii) GDP of Uzbekistan has much impact on FDI inflows in the long run. The causal link between GDP and DI is bi-directional.

iv) Uzbekistan's domestic investment has a greater impact on growth than FDI. These lend some support to the theoretical view that FDI has complementary effects on domestic investment, and that long-run economic growth is positively associated with FDI.

In order to further increase the volume of foreign investment in Uzbekistan, a number of measures should be taken in the country. Firstly, the ongoing reforms to improve the investment climate need to be continued and further strengthened. Secondly, to promote the country's investment potential among foreign investors and foreign banks, taking into account the existing opportunities of all regions in order to eliminate investment disparities between the regions of the country. Thirdly, it is necessary to work to increase the investment attractiveness of industries with low investment flows, to place investment projects for the production of high-tech, export-oriented and import-substituting products in the newly created free economic zones.

References

Borensztein E., De Gregorio J., Lee J. W. (1998). How does foreign direct investment affect economic growth? Journal of International Economics, 45 (1): 115 – 135

Campos, N. and Kinoshita, Y. (2002). "Foreign direct investment as technology transferred: some panel evidence from the transition economies". The Manchester School, vol. 70 (3), pp 398 – 419

De Mello, L. (1999). "Foreign direct investment – led growth: evidence from time series and panel data". Oxford Economic Papers, vol. 51, pp 133 – 151

Griffin K. (1970). Foreign Capital, Domestic Savings and Economic Development, Bulletin of

 11
 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)
 Published By

 Email: editor@ijarbas.com , editor.ijarbas@gmail.com Website: ijarbas.com
 Image: Comparison of the second secon

HERITIONAL JUNIO

the Oxford University Institute of Economics & Statistics, 32(2): 99 – 112

- Leff, N.H. (1969). Dependency Rates and Saving Rates". American Economic Review. New York: American Economic Association. 59(5).
- Lessmann C. (2013). Foreign direct investment and regional inequality: A panel data analysis. China Economic Review, 24 (1): 129 – 149
- Mencinger, J. (2003): »Does Foreign Direct Investments Always Enhance Economic Growth? Kyklos, Vol 56, 2003
- Metwally M. Tamaschke R. (1994). The interaction among foreign debt, capital flows and growth: Case studies, Journal of Policy Modeling, 16(6): 597 608
- Noorbakhsh F., Paloni A., Youssef A. (2001). Human Capital and FDI Inflows to Developing Countries: New Empirical Evidence, World Development, 29(9): 1593 – 1610
- Pesmazoglou J. (1972). Growth, investment and saving rations: Some long and medium term associations by groups of countries, Bulletin of the Oxford University Institute of Economics & Statistics, 34(4): 309 328
- Rothgeb J. (1988). Direct foreign investment in mining and manufacturing in underdeveloped states, The Social Science Journal, 25 (1): 21 43
- Smits W.J.B. (1988). Foreign direct investment and export and import value A cross section study for thirty less developed countries, De Economist, 136 (1): 91 117
- Schneider P.H. (2005). International trade, economic growth and intellectualproperty rights: A panel data study of developed and developing countries, Journal of Development Economics, 78 (2): 529 – 547
- Trang T., Duc H., Anh T., Thang C. (2019). Foreign Direct Investment and Economic Growth in the Short Run and Long Run: Empirical Evidence from Developing Countries. Journal of Risk Management, 12(4):176-187.
- Weisskopf T. (1972a). The impact of foreign capital inflow on domestic savings in underdeveloped countries, Journal of International Economics, 2(1):25-38
- Weisskopf T. (1972b). An Econometric Test of Alternative Constrains on the Growth of Underdeveloped Countries, The Review of Economics and Statistics, 54(1): 67-78

Cite this article:

Author(s), ¹ KOBILOV ANVAR ESHPULOTOVICH, ² KURBONOV OYBEK ABDUSATTAROVICH, (2020). "Foreign Direct Investment and Domestic Investment On the Economic Growth of the Uzbekistan - A VECM Analysis". Name of the Journal: International Journal of Academic Research in Business, Arts and Science, (IJARBAS.COM), P, 75- 86. DOI: http://doi.org/10.5281/zenodo.3832977, Issue: 5, Vol.: 2, Article: 8, Month: May, Year: 2020. Retrieved from https://www.ijarbas.com/all-issues/

Published by



AND ThoughtWares Consulting & Multi Services International (TWCMSI)

12 International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Published By

