

Improvement of the investment climate in Uzbekistan

Mejora del clima de inversión en Uzbekistán

Sherzod Mustafakulov*

Tashkent State University of Economics - Uzbekistan
sh.mustafakulov@tsue.uz

ABSTRACT

The aim of the research work is to develop scientific and practical recommendations for perfection of scientific-methodic bases of raising attractiveness of Uzbekistan's investment climate.

Keywords: Foreign investment, investor rights protection, investment attractiveness, regional investment attractiveness.

RESUMEN

El objetivo del trabajo de investigación es desarrollar recomendaciones científicas y prácticas para la perfección de las bases científico-metódicas para aumentar el atractivo del clima de inversión de Uzbekistán.

Palabras clave: inversión extranjera, protección de los derechos de los inversores, atractivo de la inversión, atractivo de la inversión regional.

* Corresponding author. Vice Rector at Tashkent State University of Economics

Recibido: 07/08/2019 Aceptado: 11/09/2019

Introduction

In world practice, the investment attractiveness of countries is determined by the investment potential and investment risk, which is characterized by a number of important factors. Foreign investors make decisions based on such indices as Doing Business (World Bank), Global Competitiveness Index (1, Doing business), which characterize the investment climate of the countries in exporting direct investments to a particular state economy.

In the period of independent development, accelerating investment activity, providing incentives and guarantees to national and foreign investors, as well as ensuring the effectiveness of these processes, including annual national and regional reforms, will be the key condition for radical restructuring of the economy, ensuring stable and high growth rates in Uzbekistan. measures on development and consistent implementation of investment programs were implemented. Institutional changes have been developed, such as regulatory documents, standards and requirements, and management structures have been improved to ensure that foreign investment in the economy and the formation of the infrastructure meet international requirements. In particular, on March 31, 2017 the State Committee for Investment of the Republic of Uzbekistan was established. As a result of these important measures, total investment in fixed assets in 2016 increased 3.2 times compared to 2010, and per capita investment increased almost three times. Improvement of the investment climate, active attraction of foreign, first and foremost, direct foreign investments into the sectors and regions of the country's economy are identified in the Strategy of Action of the Republic of Uzbekistan for 2017-2021 (2, The Decree of the President of the Republic of Uzbekistan).

Improving the investment attractiveness of Uzbekistan, along with the harmonization of legal and regulatory documents with international standards, is one of the ways to increase investment attractiveness of the country in rating indicators of Doing Business (World Bank), Global Competitiveness Index (World Economic Forum).

The following tasks will be addressed during research on trends in improving the investment climate in Uzbekistan:

- analysis of Uzbekistan's Doing Business (World Bank) indicators;
- Analyze the impact of Uzbekistan's ratings on the Global Competitiveness Index (World Economic Forum) on investment attractiveness of the country;
- Analysis of the socio-economic, innovative and investment potential of the regions of the country using economic and mathematical models.

Research methodology

The study used analysis and synthesis, induction and deduction, economic and mathematical modeling, statistical data grouping, comparative analysis, sampling observation, correlation and regression analysis, scientific abstraction, and other methods.

The extent to which the subject is studied

Scientific and methodological aspects of increasing the attractiveness of the investment climate are led by many foreign scientists: OA Biyakov, VV Bocharov, A. Margolin. Glushkova, Yu.Doroshenko, NI Klimova, ES Gubanova, Yu.Korchagin, I.P. Researched by Malichenko, VV Bykovsky, BA Chub, SA Kostornichenko and others.

Successful and effective implementation of investment policy in regulating regional economic development of Uzbekistan: A. Bekmurodov, GK Saidova, A. Sadykov, Sh. .Imomov, Sh.Kh.Nazarov, DGGozibekov made a worthy contribution.

These economists will determine the investment attractiveness, analyze its horizontal and vertical composition, evaluate the economic potential of the country and calculate the effectiveness of the use of economic resources of the regions, socio-economic modeling of regional industrial complexes, and develop a methodology for regional development. activation of investment in regions, financial reporting and investment management system illuminated related to the improvement of the analysis of trends.

From today's realities, taking into account trends in foreign direct investment to ensure economic growth, addressing issues of effective use of advanced scientific and technological achievements in determining the attractiveness of the investment climate, as well as improving existing methods for identifying risks and risks in the country and its regions. There is enough research related to the formation and definition of scientific theoretical expression of investment activity, investment potential, investment capacity. The inadequacy of this requires the implementation of in-depth scientific and methodological research on the subject.

Analysis and Results

According to the World Bank's Doing Business rating, Uzbekistan is ranked 41st, Business Registration (12th), Loans (60th), Credit Insolvency (91st), It ranks among the top 100 countries in terms of real estate registration (71st place) and minority investor protection (64th place). The country ranked 82nd in business performance in 2016, 87th in 2017 and 74th in 189 countries in 2018. We can see the 13th place in the overall ranking. However, there has been a 3-point decline in international trade. Linking this to the above, we can see that the share of small business and private entrepreneurship in the export of goods and services changed in a straight proportion, and the share of imports of goods and services reversed.

Table 1. Indicators of Doing Business in Uzbekistan Doing Business 2016–2019

Directions	DB 2016 Rating Index	DB 2017 Rating Index	DB 2018 Rating Index	DB 2019 Rating Index
Business registration	23	25	11	12
Permission for construction	147	147	135	134
Electrical connection	78	83	27	35
Registration of private property	81	75	73	71
To get a loan	42	44	55	60
Investor rights protection	78	70	62	64
Taxation and taxation	139	138	78	64
International trade	166	165	168	165
Ensure the implementation of contracts	37	38	39	41
Allow for insolvency	72	77	87	91

**Doing business <https://russian.doingbusiness.org/ru/rankings>*

As you can see in the table, in 2019 our country was ranked 12th in the business registration process. In particular, there are 3 procedures required to register a business in Uzbekistan and it takes no more than 4 business days to register. Charter capital is not required for business registration. Comparing these figures with other Central Asian countries, we see the advantages of doing business in Uzbekistan.

Indicators in Uzbekistan on construction permits are unsatisfactory, and in 2019 it holds 134 positions. Although this figure has improved since 2016-2018, only 17 of the number of procedures (16 in Europe and Central Asia) require 246 days for permission, which necessitates government reforms in this area.

Looking at foreign experience, the tendency to hire private sector engineers or specialized construction firms in the public service sector, which started in high-income countries such as Australia, Japan and the UK, has been accelerating in low- and middle-income countries. Modern construction systems are increasingly turning to private engineers or firms that are certified or approved to perform the facility's control function. In general, the role of the private sector can range from a very limited scope to a much wider scope that controls the design and construction process of the private sector. According to the World Bank's Doing Business 2018 report, 93 out of 190 countries use some form of outsourced private services to manage construction. Of the upper and middle income countries, 66.1% and 56.9% use third-party services to regulate construction, while only 37.7% of low- and middle-income countries use third-party services. In contrast, only 25 percent of low-income countries use private third-party services to regulate construction.

According to the participants, the involvement of the private sector in the area of construction regulation and its connection with it will contribute to improving the quality of construction and adherence to the construction rules.

First, the transfer of some of the regulatory functions from the state to the private sector must be done in the public interest. (20, National agency for project management)

Second, cooperation between the public and the private sector in the field of regulation of construction, as a key safeguard, will be successful if the government imposes significant requirements on the qualifications and experience of private entities and develops effective mechanisms of control and conflict of interest.

"Taxation" is also one of the indicators that improved in 2019 compared to 2016-2018. In 2019, Uzbekistan is ranked 64th. In particular, the annual number of faithful reports was 10, and the preparation and submission of tax returns took 181 hours per year. The main reason for these positive shifts is the reduction of taxes by the government. Starting January 1, 2019, business entities will pay the following taxes:

- Single tax payment. Depending on the type of activity, direction and type of business entity, it is approved at the beginning of the reporting year in accordance with the Presidential Decree.
- customs payments;
- Taxes and special payments for subsoil users;

- tax on water resources use - use of water resources for entrepreneurial activity;
- excise tax - when producing excisable goods;
- single social payment;
- the state duty;
- fee for receipt and (or) temporary import of vehicles. (21, UzA.uz).

Table 2. Investor Rights Protection Indicators 2019

#	Index	Uzbekistan	Europe and Central Asia
1	Information Disclosure Index. (0-10)	8.0	7.3
2	Director Responsibility Index	3.0	4.9
3	Executive Legal Responsibility Index	7.0	6.8
4	Shareholder Rights Index	6.0	7.1
5	Management Structure Development Index	5.0	5.6
6	Corporate Transparency Index	7.0	7.5

**Doing business <https://russian.doingbusiness.org/ru/rankings>*

According to the table, in 2019 Uzbekistan holds 62 positions on investor rights. Although this figure has improved over the 2016-2018 year, it is 3 points on the 10-point scale of CEO responsibility and 5 points on Uzbekistan’s 10-point scale of managerial growth, suggesting that the investment attractiveness of the country is lower than in Europe and Central Asia.

The low level of responsibility for the management of enterprises and projects in Uzbekistan and the imperfect structure of governance affect the financial behavior of foreign investors.

The methodological aspects of the accounting of innovative and labor potential in the socio-economic potential of the regions and the complex development of the regions are justified;

The study proposes a method for determining the value of regional investment attractiveness (IJ) and calculating the factors affecting it, taking into account the existing risks. These methods and formulas are the product of previous research and studies conducted by foreign and local scientists in different periods, and to some extent, are an improved version of the calculations used.

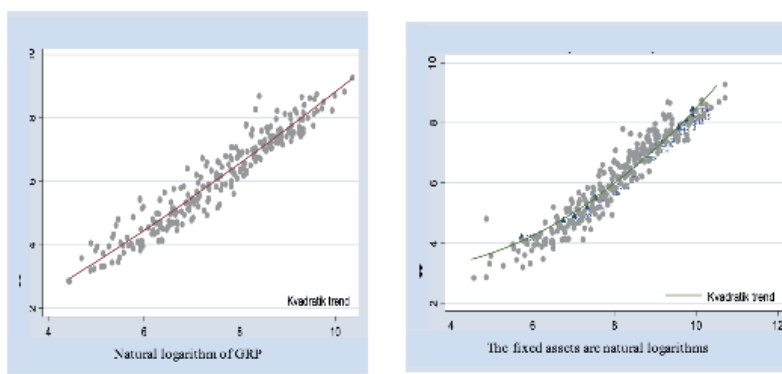


Figure 1. The relationship between investment and gross regional product

The relationship between investment and fixed assets. The type of data collected belongs to the panel data, and the panel units are the regions of the Republic of Uzbekistan (14 administrative regions). The data for each region are presented for the period 2000-2016.

While the econometric analysis of a number of variables, including investment in fixed assets (hereinafter «investments»), growth rates of investments, foreign investment and loans, and their share in investment, as independent variables, they are included in fixed assets for research purposes. The investments made are selected as a fixed variable. In an intuitive way, the more attractive the investment climate of a particular region, the greater the interest of investors in the area.

Of course, the size of investment depends not only on the interest of individual investors, but also on government decisions. The size of the investment in government decisions related to government decisions was small and the impact was not considered in the study.

The correlation between the factors was found to be across the regions of Uzbekistan between 2000 and 2016 (Figure 1).

The following steps were performed in the thesis for the calculation of the panel models described above.

First, choosing a free variable. In the regression model, the independent variables were chosen based on the theory. At the same time, it is necessary to take into account the correlation of some variables. In cases where the correlation coefficient between the two regressors is high (although there is no multicollinearity problem), the high correlation coefficient increases the standard error in calculating the econometric model. One of the variables with the highest correlation was chosen when selecting variables for the model. Although the normal correlation coefficient does not take into account intervals or panel correlations separately, it represents the link between the two variables under consideration.

Second, arbitrary and volatile variables vary between panel units and time. Intermittent variation of variables is referred to as intermittent variation, and the variance between regions is called variation between panel units, calculated as follows:

Intermediate dispersion:

$$s_{within}^2 = \frac{1}{NT-1} \sum_i \sum_t (x_{it} - \bar{x}_i)^2 = \frac{1}{NT-1} \sum_i \sum_t (x_{it} - \bar{x}_i + \bar{x})^2 \quad (1)$$

Dispersion between panel units:

$$s_{between}^2 = \frac{1}{N-1} \sum_i (\bar{x}_i - \bar{x})^2 \quad (2)$$

Total dispersion:

$$s_{overall}^2 = \frac{1}{NT-1} \sum_i \sum_t (x_{it} - \bar{x})^2 \quad (3)$$

It is desirable to distinguish between time intervals and panel units for calculation using panel models. In particular, the calculation of the model of fixed effects produces ineffective estimates when the time variance is smaller than the variation between panel units.

Third, the base model as a base model is estimated using the least squares method. Although it is not appropriate to calculate panel sampling using the ECK method, it is appropriate to start calculating panel models using the ECK method.

In addition, a compound error in calculating the $y_{it} = x'_{it}\beta + \alpha + \varepsilon_{it}$ model using the PCC method is a prerequisite for testing the hypotheses with the rule of $\varepsilon_{it} \sim (0, \sigma_{\varepsilon}^2)$. This hypothesis is not satisfied with panel data and therefore is not effective, although the calculated parameters are reasonable.

Table 3

$y_{it} = x'_{it}\beta + \alpha + \varepsilon_{it}$ panel model calculation results

	(1)	(2)	(3)	(4)
An arbitrary variable: linc	Model of assembly	Cluster-resistant aggregate model	Immutable effects	Random effects
linc_pc	0.395*** (0.0731)	0.395 (0.244)	0.623*** (0.107)	0.650*** (0.0918)
lhigher	0.425*** (0.141)	0.425 (0.246)	0.0238 (0.187)	0.181 (0.148)
lroads	0.358*** (0.119)	0.358 (0.352)	0.686 (0.991)	0.625* (0.350)
lassets	0.829*** (0.118)	0.829** (0.298)	0.232* (0.139)	0.299** (0.133)
grpq	0.00633* (0.00380)	0.00633 (0.00516)	0.00614** (0.00298)	0.00584** (0.00291)
lind	-0.128** (0.0627)	-0.128 (0.0791)	0.178* (0.102)	0.118 (0.0874)
leco_active	0.190**	0.190	0.734	0.225

	(0.0759)	(0.223)	(0.754)	(0.252)
Constant	-7.974***	-7.974***	-11.75	-8.713***
	(0.921)	(2.223)	(7.537)	(2.544)
	195	195	195	195
R-	0.928	0.928	0.958	
			13	13

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Fourth, although there are several empirical computational methods based on panel data, the most common are nonlinear effects (OLS) and random effects (GLS – Generalized least squares, MLE – Maximum likelihood estimation). At the same time, it is advisable to use a fixed effects model if the unobservable interim variables (investor culture and customs) and the variable effects between the panel units are strong, affecting the amount of investment.

Fifth, the Hausman test (22, Hausman) is used to select one of the fixed and random effects models. According to this test, is known to be , and it is assumed that is effective.

is an effective estimate of the true parameter. If the null hypothesis is true, there is no systematic difference between these two estimates, and the random effects model is used to calculate regression parameters. If the null hypothesis is not true, there is a systematic difference between the two estimates, and the hypothesis, that is, the parameters calculated using the random effects, are rejected, and the parameters calculated using the indefinite effects model are valid (Table 3).

Consolidated Models (Models 1 and 2) The first computational model calculated by the ECK method is based on the per capita income, higher education, infrastructure, cost of fixed assets in the country, and economically active population 1% of the investment (for the economically active population). 5%) at the statistical level. Their quantitative growth and other factors have led to an increase in investment in Uzbekistan.

Table 4. Results of the Hausman test

	----	Coefficients	----	
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
linc_pc	0.6228293	0.6501478	-0.0273185	0.055422
lhigher	0.0237553	0.1811028	-0.1573475	0.1148152
lroads	0.6863717	0.6251157	0.061256	0.9270906
lassets	0.2324024	0.2987003	-0.0662978	0.0419287
grpg	0.0061386	0.0058405	0.0002981	0.0006631
lind	0.1776677	0.1184616	0.0592062	0.0526569
leco_active	0.7343876	0.225257	0.5091307	0.710903
	b = consistent under Ho and Ha; obtained from xtreg			
B =	inconsistent under Ha, efficient under Ho; obtained from xtreg			
Test: Ho:	difference in coefficients not systematic			
	chi2(7) = (b-B)'((V_b-V_B)^(-1))(b-B)			
	4.65			
	Prob>chi2 = 0.7028			

In addition, according to the investment theory calculated by the ECK method, unexpected parameters are the expected parameter in panel models. That is, the parameters calculated as a result of considering the heterogeneity of the regions, remain valid. Secondly, the calculated parameters in the invariant and random effects models show a close elasticity. In other words, it can be seen that the parameters calculated using the ECK method are almost the same distance from the quantitative point of view. When per capita incomes increase by 1%, the investment in these regions, with the exception of other factors, increases by 0.623% (unchanged effects) and 0.650% (random effects). (Table 4).

Which of these two panel models best explains the investment in regions is explained by several criteria (Depending on the individual statistical significance of the computed parameters, the general significance test (test, test) The official Hausmann test was used.

Conclusions and Suggestions

The following conclusions were made within the framework of this research:

- Investment attractiveness of the country, along with legal and political factors, depends on the level of development of management in the country and the responsibility of managers for the project and the company, which is reflected in the World Bank's rating;
- There is no methodological basis for ensuring the participation of Uzbekistan in such key indexes of the investment climate of the country as widely used in the world practice, such as Genuine saving (GS), The Global Competitiveness Index (GCI). Uzbekistan's participation in these indices allows investors to identify the country's ability to achieve sustainable economic growth, to assess technology, government institutions and macroeconomic status.
- In international practice, the assessment of the potential of regions is determined by integral indicators - the arithmetic mean and the sum of the derivatives. When evaluating the potential of regions in Uzbekistan using these methods, it is advisable to use integrated indicators, which include the following steps: 1) justification of selected indicators; 2) assessment of the sustainability of the region for each indicator; 3) calculating economic, social and environmental sustainability through multivariate comparative analysis; 4) formation of integral index; 5) Determining the results with the highest (regions with the financial and intellectual resources: development potential, diversified and favorable environmental environment) and the lowest sustainability.
- Excessive capital stock reduces the efficiency of the capital factor and has a negative impact on the output of the final product. One of the prerequisites is an increase in the quality of labor resources in parallel with the increase in capital reserves. Therefore, when designing comprehensive development measures, it is advisable to take all the factors into account and make rational economic decisions based on accurate regression models.
- Based on the panel data for 2000-2016 across regions of Uzbekistan, independent factors (investment and loans, gross regional product, per capita investment, agriculture, industry, and services) and the independent factors (key factors) are analyzed. a direct correlation between the volume of capital investments). According to the random effects model, when per capita income increases by 1 percent, the region's investment in 0.650 percent and road construction (infrastructure) increases by 0.625 percent while other factors remain unchanged. The results of the Hausmann test show that, because , the hypothesized effect on the parameters of the random effects model was not rejected by any standard statistical significance, and therefore the amount of investment in the regions was interpreted using the random effects model. The decision was made as to its expediency.

BIBLIOGRAPHIC REFERENCES

- Bekmurodov, A.Sh. and others. (2013). Financial sector of Uzbekistan during the global economic crisis: problems, results and prospects. Scientific monograph. - T. Finance.
- Biyakov, O.A. (2005) Regional economic space: measuring the use of potential: Abstract. dis.Dr. econ. sciences. Kemerovo.
- Bocharov, V. & Popova, R. (1993). The financial and credit mechanism for regulating the investment activity of the enterprise. St. Petersburg
- Bykovsky, V.V. (2002). Investment potential: the mechanism of formation and use. Publishing house Engineering
- Chub, B.A. (2001). The activities of the main subjects of the national economy at the mesoscale. M. LETTER
- Doroshenko, Yu.A. (1998). Assessment and mechanism for managing the economic potential of the territory: Diss. econ. sciences. Belgorod
- Doing business (2019). <http://www.doingbusiness.org>
- Gazibekov, D.G. (2002). Problems of investment financing: Thesis for the degree of Doctor of Economics.
- Glushkova, T.G. (1998). The investment potential of the region: some approaches to analysis. Regional strategy for sustainable socio-economic growth: Abstract. doc scientific-practical conf. Part 1. Ekaterinburg
- Gubanova, E.S. (2002). Investment activity in the region. Vologda: VNKTS TsEMI RAS.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica* 46
- Imamov, Sh.B. (1993). Regulation of the territorial development of the economy of Uzbekistan: Abstract of dissertation for the degree of Doctor of Economics.
- Klimova, N.I. (1999). Investment potential of the region. Ekaterinburg: Publishing House of the Ural Branch of the Russian Academy of Sciences
- Korchagin, Yu.A. & Malichenko, I.P. (2008). Investments: Theory and Practice: A Training Aid. UNITY-DANA
- Kostornichenko, S.A. (2003). Management of investment adaptability of construction enterprises: The dissertation for the degree of candidate of economic sciences. Volgograd
- Margolin, A.M. & Bystryakov, A.Ya. (1998). Methods of state regulation of the process of overcoming the investment crisis in the real sector of the economy. Chelyabinsk: South Ural books. from
- National agency for project management (2018) Optimization of licensing procedures in the construction industry. https://napm.uz/oz/press_center/news/lbma-construction-so-conditioning-providing-processing/
- Nazarov, Sh. Kh. (2014). Metodological aspects of increasing the competitiveness of regions. Dissertation. IFMR
- Saidova, G.K. (2009). The main measures of the anti-crisis program of Uzbekistan and the expected effect of its implementation. Materials of the international conference «The global financial and economic crisis, ways and measures to overcome it in the conditions of Uzbekistan».
- Sodiqov, A.M. (2005). Fundamentals of regional development: theory, methodology, practice. Monograph. IQTISOD-MOLIYA
- The Decree of the President of the Republic of Uzbekistan “On the Strategy of Action for the Further Development of the Republic of Uzbekistan”. Issue PF-4947, February 7, 2017. - Collection of legislation of the Republic of Uzbekistan. 2017, Issue 6, Article 70.
- UzA.uz (2019)// Changes in the tax administration of individual entrepreneurs. <http://uza.uz/en/business/yack-business-management-oid-solution-management-b-27-12-2018>