

## **WAYS TO ATTRACT INVESTMENT WITH ASSESSMENT OF INVESTMENT POTENTIAL OF THE REGIONS**

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### **Abstract**

*The article proposes a methodology for assessing the investment potential of a region, which makes it possible to determine the specific features of the sectoral structure of the region's industry and its infrastructural security, to identify areas of activity that determine the specialization of the region, and to identify the most attractive sectors of the regional economy for investors. The article is devoted to a number of methodological aspects related to the evaluation of investment attractiveness of the regions. The content of the concept of "investment the attractiveness of the region "as a broad economic category, covering the entire a set of external factors affecting the risk and return on investment projects implemented in the region. The article presents a list of stages evaluation of investment attractiveness and analyzed methodical difficulties encountered at each of these stages. Special attention is paid to the process of weighing the factors of investment attractiveness, which is one of the key stages of the assessment, on the correctness of which depends the quality integral indicator of investment attractiveness of the region.*

*Keywords: investment, potential of regions, investment attractiveness, Uzbekistan*

## INTRODUCTION

Nowadays providing sustainable and effective economic processes in modern conditions reflects the model of modern socio-economic relationships. In particular, among the financial factors of economic growth, we can record the investment activity as a key indicator. In modern conditions, it is important to create an attractive investment attraction, taking into account the investment potential.

A specific feature of the theoretical foundations of investment attractiveness is to study it in micro (region, enterprise) and macro (country) levels.

In our opinion, to provide investment attractiveness and wise usage of investment potential the followings should be paid attention:

- Encourage the placement of producing forces which gives opportunity of effective management model of investment processes in the regions and forming investment strategies of development;
- to reach synergetic and multiplication effectiveness by consolidation of institutionalization level through addressability of investment objects, cross- sector collaboration, economic purpose which is aimed to increase investment attractiveness in order to stabilization of economic opportunities of the region;
- acceleration of investment activity aimed to innovation update social- economic structure of the region, increase diversification level which provides first appearance of regional research institutions; second, innovative embedded of investments;
- implementation of investments based on the principles of inter-sectoral interest;
- develop database based on multiple component which is aimed to provide activation process of investment activity in the regions.

Assessment of the investment attractiveness of the region is a necessary tool for studying, forecasting and regulating investment flows. In modern studies, investment activity is considered as an observable and quantitatively measured parameter of investment inflows to a region, and investment attractiveness is considered as a combination of signs, factors and conditions affecting the intensity of investment inflows. Consequently, investment activity can be considered as an indicator that is directly dependent on the level of investment attractiveness. But if the methods of measuring investment activity are fairly obvious (this could be, for example, investments in fixed capital in the region or the volume of foreign direct investment in the region), then an assessment of the region's investment attractiveness is a rather laborious multi-step process.

Purpose of the study is to develop a theory and methodology for quantitative assessment of the investment potential of the region, as well as the study of the principles and mechanisms for the redistribution of investment potential at the territorial level.

## LITERATURE REVIEW

It should be noted that the place and the role of the BERI index plays a special role in assessing the investment attractiveness of the countries (regions). The essence of this method is considered to be a criterion for helping to identify the risk of an investment environment. Calculation of this index involves the following 15 criteria:

- Political stability (12)
- Devaluation (6)
- Economic growth rates (10);
- Currency conversion (10);
- Contractual capacity (6);
- Expertise and access to services (2);
- Organization of transport and communication (4);
- Foreign investments and benefits (6);
- National capacity (6);
- Balance of payments (6);
- Bureaucratic measures - level of public administration (4);
- Wages and remuneration (8);
- Short-term lending options (8);
- Long-term lending (8);
- Local government and partnership (4).

Each criterion can be evaluated till 12 balls. The maximal ball of the each criterion is defined due to its specific level. The most important of these criteria is considered political stability. The criteria as economic growth rates, currency conversion, wages and remuneration, short-term lending options and long-term lending are also included to the line which is significantly important.

Investment attractiveness is meant to be one of the supporting features of providing economic stabilization. There are different compromises to evaluate the economic criterion. We can study them dividing into three groups:

- Econometric and mathematical methods;
- Factor Analysis;
- Expert analysis.

Although the main aim of these methods is to assess the investment attractiveness, there are different winnings and scorings in them.

Table 1 The theoretical methodical bases of assessing investment attractiveness

	<b>Economic-mathematic methods</b>	<b>Factor Analysis</b>	<b>Expert analysis</b>
<b>The essence of the method</b>	meant to usage of such methods as correlation and dispersion analysis, optimization, mathematical modeling	Analyzing the indicators that are closest to the essence by grouping them	giving statements on the base of proofs of studied objects by specialists and leaders
<b>Advantages</b>	<ul style="list-style-type: none"> <li>- The systematic algorithm;</li> <li>- The uniformity of results obtained</li> <li>- Reduction of "human factor"</li> </ul>	<ul style="list-style-type: none"> <li>- Classification of statistical information reflecting the situation in the region;</li> <li>- The account of multi-factor affiliation</li> <li>- Complexity</li> <li>- The possibility of grouping territories based on investment activity;</li> <li>-Clarity of results.</li> </ul>	<ul style="list-style-type: none"> <li>not only statistically but also one-time quality information</li> <li>- reliable information of the expert</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>- Unreliability of modeled figures;</li> <li>- The estimation of the contribution of each indicator to the last result is not feasible.</li> </ul>	<ul style="list-style-type: none"> <li>- Subjectivity of the criteria of the established share standards and indicators;</li> <li>-Insufficient substantiation of all selected factors.</li> <li>-The real distance between the participants is uncertain;</li> <li>-The lack of transparency of indicators.</li> </ul>	<ul style="list-style-type: none"> <li>- The subjective value of expertise;</li> <li>- high work capacity;</li> <li>- high value.</li> </ul>

Source: Authors' compilation

A researcher from Uzbekistan R.H. Bozorov divided the assessment of investment activity into two methodical comprises, for instance, financial and economic assessment. "Financial assessment is used to analyze a liquidity of investment project's implementation process. In other words, the task of financial assessment is to define enough financial resource of a company to accomplish all its financial commitment in order to implement the project in the defined period (Bozorov R.H. 2018).

Economic assessment is used to save potential opportunity of investment project; value of resources invested in the project and creates enough level of their increasing rate (Bozorov R.H. 2018).

Professors O.P. Ovchinnikova and E.E. Churlova explained the assessment of investment attractiveness due to its economic structural forming and risk component in their researches. The following formula is paid attention (Ovchinnikova O.P., Churilova E.E. 2014):

$$IA = ES \times (1 - RS)$$

Where: IA-investment attractiveness, ES- economic structure (deficit of budget, average tax rate, volume of investments), RS- risk component.

The result from this assessment is weighted in the following way:

IA> 0.4 - High investment attractiveness;

0,2<IA<0,4 - higher investment attractiveness;

0,1<IA <0,2 - average investment attractiveness;

0,05<IA <0,1 - lower investment attractiveness;

IA <0.05 - low investment attractiveness.

In the research conducted by Russian scholar S.V. Bochariov factors of investment attractiveness and their places were shown in the following way (Bocharov S.V. 2006):

- economic efficiency - 0.207;
- commercialization rate - 0.203;
- the degree of excellence of the project - 0.161;
- qualification of performers - 0,149;
- innovation level of the project - 0.148;
- the patentability rate is 0.132.

While assessing investment attractiveness both- investment policy and several factors should be paid attention. To solve the problem with attracting investment to the region regional investment policy should be created. Briefly, regional investment policy is an activity of regional executive bodies; it should be oriented towards searching the source of investments and their effective usage.

## RESEARCH METHODOLOGY

To implement the research panel information on the database of State Statistical Committee of the Republic of Uzbekistan is used by the methods of correlated regression of interconnectedness among gross regional products and investment tendencies.

## ANALYSIS AND RESULTS

We use investment potential category to assess the investment attractiveness. The analysis on share in the creation of gross regional product by economic mathematic methods is also used.

Table 2 Regression analysis of investments in fixed capital in the regions and gross regional product's development tendencies

Regions' names	Coefficients		P-cost		F-cost
	exempt	Free variable	exempt	Free variable	
The Republic of Karakalpakistan	6600,3	-0,3902	0,13	0,66	0,22
Andijan region	-3086,9	6,97	0,77	0,31	1,49
Bukhara region	6279,1	0,59	0,01	3,18	10,2
Jizzakh region	2560,0	1,57	0,12	0,25	2,0
Kashkadaryo region	5056,1	1,27	0,01	0,00	59,8
Navoiy region	2292,0	3,25	0,36	0,04	10,9
Namangan region	1718,2	2,83	0,01	0,00	319,0
Samarkand region	5393,9	1,50	0,75	0,80	0,07
Surhandaryo region	-3015,3	6,37	0,02	0,00	297,1
Sirdaryo region	-1973,5	5,10	0,01	0,00	249,6
Tashkent region	-13658,9	8,13	0,29	0,06	8,21
Fergana region	16321,4	-2,52	0,01	0,26	1,87
Khorezm region	-2586,2	5,82	0,44	0,06	8,36
Tashkent city	4403,2	2,87	0,26	0,00	54,6

We implemented regression analysis for analyzing investments in fixed capital's share in creation of gross regional product. Information in 2013-2017 section was chosen for it. Due to conducted researches it may be stated that in several regions share in creation investments' added value has indirect feature.

For instance, in the regions as Bukhara, Kashkadaryo, Navoiy, Namangan, Surhandaryo, Sirdaryo regions and Tashkent city relationships between these indicators is scattered. That is, taking into account the results of regression analysis in these regions, the Fisher distribution criterion is 9.12, since the number of observations is 5. In the mentioned regions, this F value is greater than 9, 12.

It should be mentioned that if in Bukhara region 1 unit investment creates conditions of positive change of gross regional product to 0.59 unit, in Surkandaryo and Sirdaryo regions it accordingly increases to 6.37 and 5.10 units. Even though it is becoming clear that uncounted factors has negative influence. The most important thing is that in Navoiy, Namangan regions and Tashkent city it is observed accordingly increasing of these indicators to 3.25, 2.83 and 2.87 unit due to the uncounted factors influence though they are positive. It can be observed that in these regions not only F-value, but P-value has increased accordingly (look at table 2).

It is known from the world experience that the share of fixed capital investments in gross regional product (GDP) is about 23%. In many developed countries of the world this indicator is 20.75 percent and in the European Union - 19.3 percent. For example, this indicator is 20 percent in Germany, 18.8 percent in Germany, 17.3 percent in the Netherlands, and 21.9 percent in Japan. In Uzbekistan, it is 30.3% (Economy Watch).

From this point of view paying attention to the regions it is visible that this tendency has no stable feature. For instance, In the Republic of Karakalpakistan gross regional product relative to fixed capital investment consisted of 79 percent in 2013, in 2017 it became equal to 27 percent. It should be noted that it consisted of 15-17 percent in Andijan region, while in Fergana it consisted of 25 percent. In the above mentioned regression analysis in the regions with positive tendencies this indicator consisted of 39-58 percent, in Namangan 21-28 percent, in Surhandaryo 26-27 percent, in Tashkent city 28-30 percent. We suppose that in these regions investments accordance to gross regional product has stable feature and it cause suitable condition for increasing the gross regional product. Furthermore in Bukhara region this number consisted of average 30 percent during 2013-2016, in 2017 it was 90 percent. It is happening due to the significant changes caused by evolution of implemented economic reforms in our country.

Furthermore, we pay attention some criterions of this process by BERI index, economic increase sharply changed in the Republic of Karakalpakistan, Andijan and Samarkand regions during 2015-2017. For instance, in 2017 In the Republic of Karakalpakistan it decreased to 13 point than it was in 2016. It is also one of the main factors of stable economic increase tendencies in strengthening investment potential.

Table 3 Regression analysis of per capita fixed capital investments  
and GRP development trends

Regions' names	Coefficients		P-cost		F-cost
	exempt	Free variable	exempt	Free variable	
The Republic of Karakalpakistan	6412,0	-0,82	0,04	0,52	0,52
Andijan region	546,8	73,5	0,91	0,14	3,84
Bukhara region	7974,8	0,51	0,00	0,15	3,5
Jizzakh region	2108,2	26,8	0,05	0,04	11,3
Kashkadaryo region	5710,0	5,3	0,07	0,03	13,6
Navoiy region	8982,1	0,8	0,03	0,93	0,00
Namangangan region	4540,4	5,8	0,00	0,00	103,9

Samarkand region	-1118,5	208,6	0,42	0,18	2,98
Surhandaryo region	1323,2	29,1	0,37	0,00	43,0
Sirdaryo region	4818,2	-14,3	0,29	0,74	0,12
Tashkent region	3938,0	23,6	0,43	0,05	9,9
Fergana region	23786,5	-55,3	0,19	0,46	0,69
Khorezm region	3913,3	19,4	0,07	0,22	2,27
Tashkent city	10839,2	13,1	0,08	0,02	17,1

Table 3...

Continuing our research we will look through the connection between per capita fixed capital investments and per capita fixed capital investments gross regional product in the regions. We will research using methodology of regression analysis.

In this case, the level of population savings is also important. For example, J. Kane says that people have a tendency to change their consumption with increasing income (Keynes Dj. M. 2011).

Of course, in the creation of gross regional product, the consumption of the population will be taken into account. Therefore, the volume of per capita investments is of particular importance in the formation of regional economic growth.

Based on the results of research, it is possible to note that in the regions of Bukhara, Kashkadarya, Namangan, Surhandarya, Syrdarya and Tashkent regions, per capita capital investments play an important role in creating additional value.

Fergana region can also be included in these territories. Considering the F-value in this region, the Fischer distribution is much larger than the criterion, and the R value is less than 5 percent likelihood. Another noteworthy aspect of this area is that an increase in the per capita unit investment will result in an additional value increase of 64.5 units. It should be noted that in the Bukhara region, where all indicators of regression analysis are positive, this indicator is 1.12 units (see Table 3).

In our view, the high volume of per capita investments is not an important factor in creating additional value. Here, a considerable aspect is to prevent a sudden change in investment in a person over the years. It is important to monitor this situation and to take into account the prognosis in the development of prognosis.

When evaluating the investment potential of the regions, the impact of attracted foreign investment on the value added process is crucial. The reason is that the attracted foreign funds should be reflected in the economic growth of the region, due to the capacities of the region.



Table 4 Regression analysis of foreign investment (loans) and  
GRP development trends in fixed capital in the regions

Regions' names	Coefficients		P-cost		F-cost
	exempt	Free variable	exempt	Free variable	
The Republic of Karakalpakstan	6412,0	-0,82	0,04	0,52	0,52
Andijan region	546,8	73,5	0,91	0,14	3,84
Bukhara region	7974,8	0,51	0,00	0,15	3,5
Jizzakh region	2108,2	26,8	0,05	0,04	11,3
Kashkadaryo region	5710,0	5,3	0,07	0,03	13,6
Navoiy region	8982,1	0,8	0,03	0,93	0,00
Namangan region	4540,4	5,8	0,00	0,00	103,9
Samarkand region	-1118,5	208,6	0,42	0,18	2,98
Surhandaryo region	1323,2	29,1	0,37	0,00	43,0
Sirdaryo region	4818,2	-14,3	0,29	0,74	0,12
Tashkent region	3938,0	23,6	0,43	0,05	9,9
Fergana region	23786,5	-55,3	0,19	0,46	0,69
Khorezm region	3913,3	19,4	0,07	0,22	2,27
Tashkent city	10839,2	13,1	0,08	0,02	17,1

It is possible to note that in the regions of Jizzakh, Kashkadarya, Namangan and Tashkent city the economic growth is dependent on foreign capitals. In these regions, in Namangan and Kashkadarya regions one unit of foreign capital gives 5 units of synergetic effect in the creation of gross domestic product (see Table 4).

## CONCLUSIONS

In our opinion, in order to ensure a positive correlation between the capital investment and the gross domestic product in the regions, it is worthwhile to note the following:

- ensuring stable share of attracting investments in the region to gross regional product;
- to prevent the sharp rise in investment trends compared with the previous year;
- Due to the fact that the proportion of investments in GDP is by international standards (25-40%) to ensure that investments are robust in the creation of a giant product.

In our opinion, the development of the gross domestic product in Kashkadarya, Namangan regions and Tashkent city is in line with the growth of domestic and foreign investments. It should be noted that the investments attracted in these regions are characteristic of value creation rather than consumer.

It is clear from the study that development tendencies of local investment in Jizzakh have a direct impact on the creation of value added, while the share of foreign funds in the total output of goods is directly reflected.

It should be noted that, such our regions as Bukhara, Jizzakh, Kashkadarya, Navoi, Namangan, Surkhandarya, Syrdarya and Tashkent can be included to the list of places where the investment potential is positive. Therefore, it is possible to say that in the mentioned regions investment activity has been provide on the base of existed potential.

We think it is expedient to draw attention to the following points when attracting foreign investment to the regions:

- placement of investments taking into account natural and climatic conditions;
- implementation of investment projects, taking into account the degree of specialization;
- investment in priority sectors, taking into account competitive advantage;
- take into account the positive impact of economic growth, not on the volume of investments.

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