

Regional features of investment activeness in the Republic of Uzbekistan

*Baxtiyar Ruzmetov*¹, *Mirzobek Avezov*^{1,*}, *Javokhir Babadjanov*¹, *Yulduz Eshniyazova*¹ and *Nodira Panjiyeva*²

¹Urgench State University, Kh.Alimdjan Street, 14, 220100, Urgench, Uzbekistan

²Termez State University, Barkamol avlod, 43, 190111, Termez, Uzbekistan

Abstract. This article analyzes the regional features of investment activity in the Republic of Uzbekistan using data from the Agency for Statistics under the President of the Republic of Uzbekistan for the period 2013-2021 of Uzbekistan. In the article, methods of strategic planning, monographic observation, content analysis, systematic and comparative analysis, cross-analysis and statistical analysis were used to assess the investment attractiveness of zones in conditions of increasing investment activity. It has been established that increasing investment attractiveness to support investments in economic modernization by the state has a positive effect. A generalization of the system of indicators reflecting the investment potential of the region has been made, the specifics of trends in the development of the region's economy and the level of investment, their classification by sources and industries have been identified, a proposal has been identified on ways to increase investment potential and its effectiveness in the sustainable development of the region's economy, an econometric assessment of the impact of investment potential on the economy region and development of development prospects.

1 Introduction

In the conditions of sustainable rapid development of the economy of Uzbekistan, the issue of attracting investments in the implementation of deep structural transformations, technical re-equipment of the production process and increasing the competitiveness of the national economy is of increasing importance.

During the last period of instability in the world market, the decline in the inflow of international investment slowed down the process of implementing investment projects. "The flow of direct investment in 2020 reduced by 35 percent and amounted to 1 trillion US dollars. Total direct investment in Europe fell by 80 percent to \$73 billion. This figure fell to 57 percent in the UK, to 47 percent in France, to 34 percent in Germany, to 40 percent in the US and amounted to 156 billion US dollars.

The development strategy of New Uzbekistan requires an effective investment policy to increase the country's international competitiveness. At the same time, first of all, scientific research is being carried out to introduce innovative technologies, modernize production and

* Corresponding author: avezov.mirzobek@urdu.uz

ensure the competitiveness of industrial production sectors, attract investment in the technological reproduction of fixed capital, and develop entrepreneurship.

1.1 Literature review

Investments and investment problems are widely covered in the scientific works of D. Keynes, P. Masse, C. McConnell, S. Brew, E. Dolan and other scientists. According to P. Massa, "... investments are a process of exchanging the satisfaction of today's needs for the benefit of its expectation in the future" [1].

According to D.G. Gozibekov and T.M. Qoraliyev, investment means all types of property and intellectual products that generate income (profit) or have a social impact and are involved (consumed) in business and economic activities that are not prohibited by the state [2]. N. Khaidarov defined investments as follows: "Investors (state, economic entities and individuals) direct their financial, material and intellectual wealth to obtain economic results (income, profit, profit) is a sum of values" [3]. According to D. Tojiboeva, investments mean financial resources intended for the future result: expanding or renewing production, improving the quality of products and services, training qualified specialists and conducting scientific research [4]. When studying investment problems, economists deeply analyzed terms such as foreign direct investment, investment attractiveness.

Foreign direct investment is an important element supporting the development of the national economy, including its individual regions. According to the definition of Sergi, S., foreign direct investment is not only financial resources, but also production equipment, technologies, management personnel, as well as important for the activity of the host country's economy. is the introduction of new management and marketing methods [5]. In general, these investments contribute to economic development by providing foreign capital and spread the benefits to the country's economy.

The problem of investment attractiveness also has a sufficient theoretical foundation. Investments together with regional development issues discussed by Doussard and others [6], Mas-Verdu and others [7], Takhumova and others [8], Samigin and others [9], Galanina and others [10], Ohotia and others [11], Baltgailis [12], Tvaronavičienė [13], Selivanova-Fyodorova and others [14], Jeong, J.Y et al. [15] Polyakova A.G. and others [16]. The term Investment attractiveness refers to the ability to encourage investors to choose a certain location for their investment [17]. Also, scientific and practical aspects of the investment attractiveness of the economy of Uzbekistan were studied by economists-scientists of our republic Akhmedov D.K. [18], Makhmudov N.M. [19], Nadirkhanov U.S. [20] and others.

2 Data and Methodology

2.1 Data

In Uzbekistan, special attention is paid to macroeconomic issues of improving investment mechanisms; in this regard, special attention is paid to "further improving the investment environment in the country and increasing its attractiveness, taking measures to attract \$120 billion, including \$70 billion of foreign investment." investments in the next five years" [21]. Consistent and effective implementation of these tasks significantly increases the importance of ensuring economic growth based on the formation of an investment strategy and improving the mechanism for its implementation.

Activation of a country's investment activity is a set of objective and subjective characteristics that affect the results of investment activity and determine its position for the investment subject.

During the analyzed period, there were changes in the composition of investments by industry for all sources of financing. In 2013-2021, as a result of a targeted policy of modernization of the national economy, technical and technological restructuring, the share of the electricity, gas and steam supply sector increased from 7.6 percent to 7.9 percent in 2021 compared to 2017. 2013. It increased from 3 percent to 7.9 percent. (Table 1).

Table 1. Investments in fixed capital by economic activities (as a percentage of the end)

No.	Indicators	2013	2015	2017	2019	2021	Changes, (+ / -)	
1	General	100	100	100	100	100	2021/2017	2021/2013
		Including						
2	Agriculture, forestry and fisheries	10.2	10.1	8.5	6.2	7.4	-1.1	-2.8
3	Mining and careers	15.2	21.7	19.7	10.2	9.0	-10.7	-6.2
4	Manufacturing industry	13.4	11.9	16.9	26.0	21.9	5.0	8.5
5	Supply of electricity, gas, steam	4.3	5.0	7.6	10.8	7.9	0.3	3.6
6	Water supply, sewerage, waste collection and disposal	1.1	1.0	1.3	2.0	2.3	1.0	1.2
7	Information and communication	2.6	2.2	2.7	1.4	3.8	1.1	1.2
8	Construction	19.5	20.3	15.3	10.4	10.1	-5.2	-9.4
9	Transport and storage	14.3	8.3	8.8	7.2	6.7	-2.1	-7.6
10	Other activities	19.4	19.5	19.2	25.8	31	11.8	11.6

Source: statistic data from Statistics Agency Under the President of the Republic of Uzbekistan www.stat.uz [22].

In manufacturing, the rate increased from 16.9 percent to 21.9 percent in 2021 compared to 2017 and from 13.4 percent to 21.9 percent in 2021 compared to 2013.

In 2021, 239.5 trillion. bonds from the total volume of sources of financing for the development of the economic and social spheres of the country, or, in contrast to 2018, investments in fixed assets exceeded about 192.1%.

The consistent path of the Republic of Uzbekistan towards the expropriation and privatization of property, the formation of a securities market, the development of small businesses and private entrepreneurship creates real conditions for intensifying the process of attracting direct and portfolio investments into the country's economy.

In the Decree of the President of the Republic of Uzbekistan "On measures to implement the investment program of the Republic of Uzbekistan for 2023-2025" dated December 28, 2022 No. 459, accelerating the development of sectors of the country's economy, expansion and modernization of production capacities, industry, services and agriculture. It is planned to widely introduce modern technologies, increase the production of export products with huge added value, accelerate investment processes and actively attract foreign direct investment to the regions, as well as create high-paying jobs and provide local employment.

In particular, the first step of the acquisition of the Yoshlik copper mine will be completed, and the 3rd copper processing plant with a processing capacity of 60 million tons of ore will be put into operation. Thanks to this, the capacity of the Almalyk plant for processing ore will reach 100 million tons from the current 40 million. The construction of a complex for processing gold ore with a capacity of 4 million tons will be completed at the Pistanlinsky mine in Navoi. Our large-scale programs in the field of metallurgy will make it possible to increase the production of copper by 3 times in five years, and gold - up to 150 tons per year. Large-scale projects in the chemical, automotive and agricultural industries will also be launched. At that time, it is important to fully and effectively use the possibilities of privatization and public-private partnership in attracting active investments.

In the regions, high growth rates of investments in the capital stock are 195.2% in Jizzakh region (the amount of investments in fixed assets is 7919.3 billion soums), Syrdarya region - 194.3% (6129.2 billion soums), Khorezm region - 167.1% (5566.8 billion soums), in the Surkhandarya region - 148.8% (12232.4 billion soums), in the Navoi region - 145.7% (17775.3 billion soums), in the city of Tashkent - 142.5% (41497.9 billion soums), in Andijan region - 142.3% (8183.7 billion soums), and in the Fergana region - 140.1% (9164.2 billion soums).

If we give a general assessment of investment attractiveness by region, then the uneven placement of investments is manifested (Table 2).

Table 2. The amount of investment in fixed assets per capita

No.	Regions	2013	2015	2017	2019	2021	Changes (+/-)	
							2021/2017	2021/2013
1	The Republic of Uzbekistan	1,000	1,000	1,000	1,000	1,000		
2	Republic of Karkalpakstan	0.888	0.236	0.692	0.796	0.611	-0.081	-0.277
3	Andijan	0.614	0.473	0.448	0.412	0.505	0.057	-0.109
4	Bukhara	1.704	1.581	2.807	0.931	1.524	-1.283	-0.18
5	Jizzakh	0.806	0.721	0.611	0.991	0.943	0.332	0.137
6	Kashkadarya	1.333	1.375	1.608	1.291	0.751	-0.857	-0.582
7	Navoi	2.322	1.372	1.877	3.061	2.138	0.261	-0.184
8	Namangan	0.457	0.603	0.601	0.741	0.652	0.051	0.195
9	Samarkand	0.575	0.637	0.535	0.458	0.571	0.036	-0.004
10	Surkhandarya	0.532	0.539	0.640	0.781	0.646	0.006	0.114
11	Syrdarya	1.083	0.965	0.902	1.201	1.349	0.447	0.266
12	Tashkent	0.911	1.114	0.936	1.194	1.405	0.469	0.494
13	Ferghana	0.554	0.511	0.369	0.401	0.476	0.107	-0.078
14	Khorezm	0.581	0.617	0.545	0.465	0.633	0.088	0.052
15	Tashkent city	2,844	2,009	2,492	2,864	3,005	0.513	0.161

Source: statistic data from Statistics Agency Under the President of the Republic of Uzbekistan. URL: www.stat.uz [22].

In 2021, high rates of investment in fixed assets per capita were above average in Navoi (2138), Syrdarya (1349), Bukhara (1524), Tashkent (1405) and Tashkent (3005) regions.

As a result of the research, the following factors were identified to increase the investment attractiveness of the region:

- 1) creation of a basic legal framework for the protection of private property by direct action without interpretation by ministries, departments, regional authorities, etc.;
- 2) maximum harmonization of regulatory documents with international norms and rules;
- 3) reforming the legal system, resolving economic, property and other disputes through arbitration and the judicial system (“Lobby of the Prime Minister”, Institute of Business Ombudsman, etc.);
- 4) when developing and implementing a set of measures to solve socio-economic problems and government target programs, taking into account territorial factors for increasing competitiveness (geographical location, natural and climatic conditions, demographic characteristics, mineral and economic potential, environmental load, etc.) maximum improvement of the system formation of state investment programs;
- 5) holding scientific and practical forums and conferences together with the national government, local governments, large industrial organizations and representatives of the business community.

2.2 Model and methodology

The study effectively used methods of scientific abstraction and generalization, systematic analysis, economic and statistical analysis, econometric, factorial and comparative analysis, quantitative analysis and efficiency analysis, synthesis, induction and deduction, expert, integral, regression and correlation methods of analysis.

The practical significance of the research results is explained by the fact that proposals and scientific conclusions obtained using economic-statistical, econometric and factorial, comparative analysis, quantitative analysis and efficiency analysis, regression and correlation methods were used to develop promising state and regional programs for average and in the long term to increase investment potential, they were used to improve educational and methodological complexes in such disciplines as “Regional Economics”, “Investments and Investment Activities” in higher educational institutions.

According to the forecast values calculated on the basis of the constructed econometric model, for 2022-2027 the volume of investments in the economy of the Khorezm region will increase by 2.3 times, and the volume of GDP will increase by 2.4 times. The investment rate, reflecting the activity of investment potential in the economy, is on average 28.4%, return on capital, adopted as an efficiency criterion, is on average 3.52, but in the forecast period it is growing, and capital intensity is on average 3.79 units. and tends to decrease.

3 Results

As a result of the study, it was substantiated that the overall level of investment potential of the Khorezm region is high (72.7 percent) in terms of production potential, average (63.6 percent) in terms of labor potential and lower (45.5 percent) in terms of entrepreneurial potential. Potential is the optimal level of increasing investment volumes.

The relationship of positive aspects to investment rates has been determined when assessing the impact of local and foreign investments in fixed capital of the region on economic growth, when the level of development of the region is assessed by labor and capital, and at the same time 6.2 percent of average growth (7.5 percent) corresponds to labor and 1.3 percent to capital, and the difference between the two growth factors in the economy as a whole is 4.8 times, in industry and services - 1.6 times, in agriculture - 41 times, in construction - 7.2 times.

It is justified that the accelerator coefficient of investment potential activity is 1.5-1.8 units, the investment rate is 27-29 percent, and gross accumulation is in the range of 32-33 percent in order to ensure stable development of the economy of the Khorezm region based on the balance of supply and demand.

4 Discussions

Based on these factors, an analysis of the investment attractiveness of the Khorezm region of the Republic of Uzbekistan was carried out.

Considering that the Khorezm region does not have rich mineral reserves, it is advisable to solve the issues of saturating the domestic market with building materials through the implementation of interregional projects based on the widespread use of the natural resource potential of the Republic Karakalpakstan. Thus, using deposits of lime (m. Karatau) and cement raw materials (m. Dzhimurtau) in the region, it is possible to establish the production of lime, reinforced concrete products, asphalt concrete (Bagat, Gurlen, Koshkopyr, Yangiaryk, Yangibazar), Khankaisky, Khazaraspsky districts), which will not only expand the range of local products, but also increase export supplies (Kazakhstan). In addition, close cooperation with the Ustyurt gas chemical complex will allow us to master the production of

polypropylene products, synthetic carpets, synthetic detergents, bitumen based on the processing of secondary raw materials (Gurlensky, Yangibazarsky, Khankaysky districts).

At the same time, the industrial development of the Khorezm region will be carried out in close cooperation with the territories of the Navoi region. In order to develop outsourcing (Urgench, Urgench districts), it will be useful to implement projects for the production and repair of machinery and equipment that are in great demand in the Navoi region. The implementation of this project will make it possible to effectively use the potential of the neighboring region (the most developed innovative technologies, management methods and points of sale in the production and sale of local goods).

Interterritorial projects involving the joint implementation of measures to stimulate industrial development through the use of local raw materials resources of the regions will be aimed at ensuring the growth of less developed, insufficiently resourced and infrastructurally provided territories.

The districts of the Khorezm region have a unique raw material base that differs from other territories of Uzbekistan. However, their deep processing is practically absent. In addition, the activities of local entrepreneurs are characterized by low production volumes, which affects their sales and competitiveness. To resolve these issues, it is necessary to combine the efforts of the territories to use the existing advantages.

At that time, an important area was the organization of processing of fruits and vegetables. The food industry is an industry that ensures food security in the regions and forms the agri-food market. The specialization of the agro-industrial complex in the cultivation of fruits and vegetables and livestock breeding serves as the raw material base for the regions' production activities.

With the increase in deep processing of agricultural raw materials, the promising implementation of a number of projects for the processing of fruits, vegetables (Urgench, Shavat districts), meat and milk (Urgench, Koshkopirsky, Bagatsky districts) will expand the range of food industry products. Thus, the rich raw material base in the future will give impetus to the creation of interterritorial agricultural complexes (based on deep processing of fruits and vegetables in the Urgench and Shavat regions).

In order for enterprises to receive economic benefits, it is extremely important to expand the range of food products produced, aimed at both the domestic and international markets, along the value chain of food industry products.

To obtain a greater economic effect, it is necessary to take into account various socio-economic and technological factors in a complex, among which the following can be distinguished: data protection of business process participants [23], the impact of end-to-end digital technologies, including artificial intelligence and robotics technologies [24, 25], the significant impact of migration processes [26], effectiveness of state [27] and grant support [28], identification of competitive advantages [29], strengthening of investment attractiveness [30], introduction of intelligent technologies [31], the effectiveness of the use of money [32], solving issues of import substitution of goods and works [33], strengthening the effectiveness of various business institutions [34], the development of tourist areas [35] and solving environmental problems [36], the creation of effective economic mechanisms for innovative development [37] and the formation of competitive products [38].

Another promising direction is the organization of deep processing of licorice root (licorice).

In addition, licorice stems can be used to make coarse yarn, rope products, flooring materials for furniture, the fiber can be used to make brushes, and the waste can be used as a feed additive in livestock diets. Thus, consumers of products of deep processing of licorice root will be almost all industries, including pharmaceutical, perfumery and cosmetics, confectionery, alcohol, textile, ferrous metallurgy, as well as agriculture.

For implementation interregional and interterritorial projects developed the following suggestions:

1. Formation of a raw material base for crop and livestock products;
2. Deep processing of agricultural products, involvement in the production process.
3. Creation of favorable industrial and social infrastructure, i.e. ensuring uninterrupted power supply, storage and modern transportation of raw materials and goods.
4. Establishment of mutually beneficial cooperation ties between entrepreneurs of the Khorezm region with other regions of the republic, as well as within the region itself.
5. Increasing literacy and awareness of local residents and entrepreneurs by organizing business fairs, exchanging experiences with successful manufacturers, qualified personnel from other regions of the country and abroad (China, India, Israel).
6. Effective use of empty unused capacities for the creation of small industrial enterprises, consideration of the possibility of their provision at a “zero” rate.

5 Conclusion

As a result of the research, priority directions for the development of investment processes in the Republic of Uzbekistan were identified:

- creating a new level of efficiency in the fuel, energy and mining sectors of the economy, modernization and technical re-equipment of economic sectors, creating conditions for the development of industries with a high level of added value;
- increasing the investment attractiveness of large industrial enterprises, clusters, free economic zones and small industrial territories in the context of the rapid economic development of Uzbekistan;
- increasing investment attractiveness by improving the mechanisms for regulating state institutions, including macroeconomic and institutional aspects, when implementing the investment strategy;
- in order to become a member of the World Trade Organization, to create an effective business environment to attract foreign investors in the field of financial services, insurance, information support, development of a competitive environment in domestic markets, construction and other areas.
- harmonization of the legislative and regulatory framework of agriculture with the requirements of the WTO in order to increase the specialization and competitiveness of agricultural products";
- creating demand for new services in the social sphere, developing the social sphere as a means of developing entrepreneurship;
- development and formation of new types of services and the emergence of new methods of financing operations (securitization of investment portfolios, venture investment instruments).

Thus, we can conclude that accelerating investment activity in the Republic of Uzbekistan is of great importance for the development of the country and its regional economic growth.

References

1. P. Masse. *Criteria and methods of optimal determination of capital investments*. (Per. s fr.). Moscow: Statistics. 160 p. (1971).
2. W. Sharp, D.J. Bailey. *Investments*. (Tr. from English). Moscow: INFRA-M. (2000).
3. D.G. Gozibekov, T.M. Karaliev. *Organization of investment activity and state regulation*. (Tashkent, 1993).

4. N.Kh. Khaidarov. Opportunities for direct investment. Scientific electronic journal "Economics and innovative technologies", **1**, 225-231 (2011).
5. S. Sergi. Economic Dynamics in Transitional Economies: The Four-P Governments, the EU Enlargement, and the Bruxelles Consensus. (Routledge, New York, 2003). doi: 10.4324/9781003063797
6. M. Doussard, G. Schrock, T.W. Lester. Did US regions with manufacturing design generate more production jobs in the 2000s? New evidence on innovation and regional development. *Urban Studies*, **54(13)**, 3119-3137 (2017).
7. F. Mas-Verdu, D.R. Soriano, S.R. Dobon, Regional development and innovation: The role of services. *Service Industries Journal*, **30(5)**, 633-641 (2010).
8. O.V. Takhumova, E.V. Kasatkina, E.A. Masliхова, A.V. Yumashev, M.V. Yumasheva. The main directions of increasing the investment attractiveness of the Russian regions in the conditions of institutional transformations. *Espacios*, **39(37)**, (2018).
9. D. Samygin, B. Nikolaj, S. Natal'Ja. Models of investment appeal of agribusiness in Russian regions. *Ponte*, **73(2)**, 344-351 (2017).
10. T.V. Galanina, V.G. Mikhailov, N.N. Golofastova, T.G. Koroleva. Investment Appeal of the Recreational Potential of the Region. *IOP Conference Series: Earth and Environmental Science*, **50(1)**, 012037 (2017). doi: 10.1088/1755-1315/50/1/012037
11. A. Ohotina, O. Lavrinenko, S. Ignatjeva, J. Lonska. Socio-economic security as a determinant of regional differences in the investment climate in the region. *Journal of Security and Sustainability Issues*, **7(3)**, 427-438 (2018).
12. J. Baltgailis. The issues of increasing the effectiveness of teaching comparative economics. *Insights into Regional Development*, **1(3)**, 190-199 (2019). doi: 10.9770/ird.2019.1.3(1)
13. M. Tvaronavičienė. Insights into global trends of capital flows' peculiarities: emerging leadership of China. *Administratie si Management Public*, **(32)**, (2019). doi: 10.24818/amp/2019.32-01
14. N. Selivanova-Fyodorova, V. Komarova, J. Lonska, I. Mietule. Differentiation of internal regions in the EU countries. *Insights into Regional Development*, **1(4)**, 370-384 (2019). doi:10.9770/ird.2019.1.4
15. J.Y. Jeong, M. Karimov, Y. Sobirov, O. Saidmamatov, P. Marty. Evaluating Culturalization Strategies for Sustainable Tourism Development in Uzbekistan. *Sustainability*, **15**, 7727 (2023). doi: 10.3390/su15097727
16. A.G. Polyakova, A.V. Pavlyuk, G.V. Meshkova. Investment appeal of a region and its impact on investment inflows. *Entrepreneurship and Sustainability Issues*, **7(2)**, 1089-1097 (2019). doi: 10.9770/jesi.2019.7.2(21)
17. H. Godlewska-Majkowska, A. Komor, D. Turek, P. Zarębski, M. Czernecki, M.Typa. "Regional Investment Attractiveness 2016" Report prepared for the Polish Information and Foreign Investment Agency at the Institute of Enterprise, Warsaw School of Economics, Warsaw. (2016).
18. D.K. Akhmedov. Business administration and process reform. The dialogue between the state and business has determined the ways of improving the investment climate. *Economic Review*, **5(221)**, 80-84 (2018).
19. N.M. Mahmudov. Econometric models of intersectoral division of investments in the economy of Uzbekistan. *Monograph*. 158 pages, (2014).
20. U.S. Nadyr Khanov Private foreign investments in Uzbekistan: experience, problems, prospects. (Tashkent: "Science and technology", 2011).

21. *World Investment Report 2021: Investing in a sustainable recovery*. UNCTAD/WIR/2021. (2021). URL: https://unctad.org/system/files/official/document/wir2021_en.pdf
22. *Statistics Agency Under the President of the Republic of Uzbekistan*. URL: <https://www.stat.uz/uz/>
23. A. Zharova. The protect mobile user data in Russia. *International Journal of Electrical and Computer Engineering*, **10(3)**, 3184-3192 (2020). doi: 10.11591/ijece.v10i3.pp3184-3192
24. I.R. Begishev. Limits of criminal law regulation of robotics. *Vestnik Sankt-Peterburgskogo Universiteta. Pravo*, **12(3)**, 522-543 (2021).
25. A.A. Shutova, D.D. Bersei, E.V. Nechaeva. Bioprinting medical devices: Criminal evaluation issues. *AIP Conf. Proc.*, **2701**, 020032 (2023). doi: 10.1063/5.0121700
26. I. Abdullayev, I. Begishev, Y. Limareva, H. Hajiyev, A. Yumashev, N. Prodanova. Impact of international migration on the internal security of the state. *Migration Letters*, **24(2)**, 38-50(2023).
27. V. Kukhar, E. Kot, O. Loretts, A. Ruchkin, N. Yurchenko. Analysis of the effectiveness of state support to farms in region of russia. The case of sverdlovsk region. *Journal of Environmental Management and Tourism*, **11(3)**, 676-681 (2020).
28. T. Kruzhkova, V. Kuhar, E. Kot, A. Ruchkin, , O. Rushitskaya. Grant support for the development of peasant farms: The experience of sverdlovsk industrial region, problems and prospects. *Journal of Environmental Management and Tourism*, **11(5)**, 1259-1268 (2020).
29. H.E. Panfilova, A.I. Tikhonov, A.V. Savin. Competitive Advantages of Innovative Development of High-Tech Manufactures Based on the Creation of Special Economic Zones. *Lecture Notes in Networks and Systems*, **115**, 39-47 (2020).
30. N.S. Plaskova, N.A. Prodanova, V.T. Chaya, S.N. Pozdeeva, I. L. Dimitrov. *Assessment of the investment attractiveness of innovative companies using the scenario method*. Paper presented at the Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020, 7766-7773 (2019).
31. E. Kirillova, I. Otcheskiy, S. Ivanova, R. Karlibaeva, V. Sekerin. Developing Methods for Assessing the Introduction of Smart Technologies into the Socio-Economic Sphere Within the Framework of Open Innovation. *International Journal of Sustainable Development and Planning*, **18(3)**, 693-702 (2023).
32. V. Kolmakov, & A. Polyakova. Regional free cash flow dataset: An approach to regional performance evaluation. *Data in Brief*, **25**, (2019). doi: 10.1016/j.dib.2019.104175
33. E.V. Plotnikova, S.A. Gorovoy, V.A. Tupchienko, A.G. Ertel, T.A. Ovsyannikova. Import substitution as a regional economy development basis. *International Journal of Applied Business and Economic Research*, **15(23)**, 147-159 (2017).
34. V.F. Islamutdinov. Efficiency assessment and development forecast of the institutions stimulating the innovative behavior of economic entities in a resource-extraction region. *Journal of Applied Economic Sciences*, **12(3)**, 808-819 (2017).
35. O. Saidmamatov, U. Matyakubov, E. Khodjaniyazov, J. Day, E. Ibadullaev, S. Chuponov, D. Bekjanov, M. Matniyozov, B. Matyusupov. Analiza TOWS możliwości zrównoważonego rozwoju ekoturystyki i pomocy państwa w czasie pandemii – region JEZIORA aralskiego w uzbekistanie. *Turyzm/Tourism*, **31(1)**, 47-57 (2021). doi: 10.18778/0867-5856.31.1.06

36. A.L. Mirzagitova. Historical retrospective of environmental problems of oil-extracting regions (On the example of the Almetyevsk district of Tatarstan Republic in Russia in the second half of the XX century). *Review of European Studies*, **7(1)**, 52-56 (2015).
37. I.S. Abdullaev, P.A. Gurbanov, R.A. Aleshko, Y.Yu. Finogenov. Improvement of the organizational and economic mechanism of innovative development of the food and processing industry. *Siberian Journal of Life Sciences and Agriculture*, **15(3)**, 357-386 (2023). doi: 10.12731/2658-6649-2023-15-3-357-386
38. R.B. Gabdulkhakov, A.L. Poltarykhin, O.M. Tsukanova, Y.M. Avdeev. Regional competitiveness assessment: prospects for the agro-industrial complex of the region. *Siberian Journal of Life Sciences and Agriculture*, **13(6)**, 339-361(2021). doi: 10.12731/2658-6649-2021-13-6-339-361