IMPROVING WAYS OF ATTRACTING FOREIGN INVESTMENTS IN THE REPUBLIC OF UZBEKISTAN

Sobirjonova Kamola Abrorkhon kizi
Tashkent State of University Economics
Assistant of the department of "Economics security"
k.sobirjonova@tsue.uz

Abstract:

This article covers the issues of improving innovative methods of financing small business and private entrepreneurship. Also, the opportunities for improving innovative methods of financing small business and private entrepreneurship were analyzed. Following this, we discuss the factors explaining the emergence of the new players and group them into supply-and demand-side factors. The editorial gives researchers and practitioners orientation about recent developments in entrepreneurial finance and provides avenues for relevant and fruitful further research. Scientific proposals and practical recommendations on improving the system of attracting foreign investments to the national economy have been formed.

Key words: small business and private entrepreneurship, foreign investments, financial globalization, framework

1 Introduction

Globalization of world economic relations leads to diversification of forms and directions of international competition, methods of struggle for possession and control of technological, labor, intellectual, natural and investment resources. The formation of an optimal structure of the economy with a predominance of the share of services, and high-tech products in it is becoming increasingly important. In the context of globalization, countries that actively participate in the international scientific, technical and information exchange, have a developed infrastructure, highly qualified workforce win, which is ensured by the presence of sufficient capital and its free movement in countries[1]. Financial globalization requires a review of the existing system of theoretical and practical knowledge about the functioning of the world economy from the point of view of the international movement of capital in the form of investments. It is generally recognized that only high growth rates of the state economy and per capita incomes can ensure the preservation of socio-political stability in the country. At the same time, the growth of gross domestic product and per capita incomes can be achieved by attracting foreign direct investment in the structural adjustment of the country's economy[2].

To increase the industrial and production potential of the republic, wide introduction of high technologies in economic sectors, creation of new production capacities in the regions by

expanding the attraction of foreign direct investments, development of exports, provision of employment and reduction of poverty, as well as systematic planning of investments and investment projects in order to effectively manage[3]:

- 1. To adopt the investment program of the Republic of Uzbekistan for 2022-2026 (hereinafter the Program), formed by the Ministry of Investments and Foreign Trade, which provides for
- the absorption of foreign investments in the amount of 70 billion US dollars in the next five years.

The following[4]:

a) for 2022-2026:

the cumulative target indicators of the absorption of centralized and decentralized investments are consistent;

the target indicators of investment and credit absorption in sectors and regions are consistent; b) for 2022[5]:

- -the collective address program for investment and credit utilization is appropriate;
- -address list of large production facilities and capacities to be put into operation;
- -the list of large production facilities and capacities requiring construction, reconstruction and perfect repair of external infrastructure facilities;

Address list of investment projects implemented in the name of the Republic of Uzbekistan or under the guarantee of the Republic of Uzbekistan with foreign loans;

- -address list of investment projects to be implemented involving direct foreign investments and loans;
- -the list of new investment projects that are planned to attract state foreign debt is in accordance;
- -the list of investment projects requiring development, agreement and approval of pre-project and project documents;
- -the list of promising investment projects whose implementation possibilities are studied should be approved accordingly.

2 Literature review

The structure of the investment climate in improving the mechanisms for attracting foreign investment, the importance of increasing the efficiency of foreign investment, the importance of government support have been studied in detail by local and foreign economists. In particular, scientists of our country A.V.Vakhobov, Sh.Kh.Khajibakiyev, N.G.Muminov, K.Djurayeva, N.G.Karimov, R.Khodjayev, N.Koziyeva, L.R.Shayusupova's views were analyzed and recommendations for the consistency of reforms and investment policy were developed[6,7,8,9,10].

In addition, as a result of research conducted by foreign scientists such as M.M.Novikov, A.S.Neshitoy, O.S.Sukharev, K.V.Shvandar, A.V.Sisoyev, V.S.Shapran, L.V.Shkvarya,

O.V.Xmiz, Y.E.Khalevinskaya, to improve the investment climate, to implement an effective investment policy , serves as an important theoretical and methodological guide in improving infrastructure in the regions and attracting foreign investment in industries. A number of research studies within the framework of attracting foreign investments to the national economy and forming ways of their effective use are of particular importance in the scientific research of foreign economists C.Liesbeth, M.Miet, S.Jo. According to researchers, the process of economic liberalization in transition countries is an important factor in improving the system of attracting foreign direct investments. The attraction of technologies and knowledge to national enterprises through direct capital accumulation and technological know-how ensures sustainable rates of economic growth. In the studies of P. Mihaela, A. Vaqar, H. Helian, the institutional mechanism of attracting foreign investments to the national economy is studied. According to the results of the research, it is noted that changes in the institutional quality of the country's economy have a positive effect on the system of attracting foreign direct investments [11,12,13,14,15].

V.D. Andrianov's scientific studies have studied the theoretical foundations of the investment potential of the national economy, the concepts within the framework of the investment potential have been theoretically summarized, and the expediency of using the system of financial privileges to increase it has been emphasized. M. V. Charaeva's scientific studies have studied the conceptual basis of financial management processes of real investments of organizations. Features of strategic financial management of real investments in the conditions of innovation-oriented economy are described[16,17].

3 Materials and Methods

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[18].

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[19]. 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[20].

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[21].

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[22].

"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 [23]:

- 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).

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[24]. 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 socioeconomic 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[25].

The following conclusions were made within the framework of this research[26]:

- 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 [27].
- 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[28]:
- 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.

Results and Discussion

In January-September 2022, 62.6 trillion soums of investments in fixed assets, or 32.9% of their total volume, were disbursed at the expense of the own funds of enterprises and organizations. At the expense of the population, 19.1 trillion soums, or 10.1%, were disbursed. 23.7 trillion soums were disbursed through foreign direct investment, which, compared with the corresponding period of 2021, is less by 0.8 percentage points, or 12.5% of their total volume[29]. At the same time, due to bank loans and other borrowed funds, 18.5 trillion soums were disbursed (9.8% of the total investment in fixed assets and this indicator, compared with the corresponding period of 2021, increased by 1.9 percentage points), foreign loans under the guarantee of the Republic of Uzbekistan[30], amounting to 8.3 trillion soums (4.4% decreased by 4.9 percentage points), non–guaranteed and other foreign investments and loans – 40.0 trillion soums (21.0% decreased by 2.0 percentage points), the Reconstruction and Development Fund - 0.9 trillion soums (0.5% decreased by 0.7 percentage points), the Republican Budget – 14.9 trillion soums (7.8% decreased by 0.8 percentage points), the Fund for the Development of Water Supply and Sewerage Systems – 1.9 trillion soums (1.0% increased by 0.1 percentage points) of their total volume[31].

Structural composition of investments directed to the economy of Uzbekistan in 2020

Centralized investments	Total investments in	Decentralized
39310.2 billion soums	fixed capital amount to	investments 162,68 <mark>9.9</mark>
	202,000.1 billion soums	billion soums
Foreign loans under the	Foreign investments and	Foreign direct
guarantee of the	loans allocated to fixed	investment and loans
Republic of Uzbekistan	capital amount to	64,179.9 billion soums
amount to 22,467.1	86,647.0 billion soums	
billion soums		

In January-September 2022, 190.0 trillion soums of investments in fixed assets were disbursed and, compared to the corresponding period in 2021, amounted to 105.0%. 57.0% or 108.3 trillion soums of investments in fixed assets were financed from borrowed funds, 43.0%, or 81.7 trillion soums, from the own funds of enterprises, organizations and the population. Also, their volume, disbursed from centralized sources of financing, amounted to 26.1 trillion soums, the remaining 163.9 trillion soums were disbursed from noncentralized sources of financing (Figure 1.) According to research, creation a favorable investment climate in Uzbekistan needs[32]:

- create economic prerequisites, such as the provision of benefits for taxation of profits, property and infrastructure to increase the flow of investment in the economy;
- ensure the same legal regime for all investors;
- ensure transparency of business entities;
- every year to allocate lists of priority industries that require investment at the state and regional levels;
- establish priority areas for the flow of foreign investment in enterprises of those industries in which the importer has absolute advantages.

Due to the fact that Uzbekistan is a treasury of natural resources, the bulk of investments is focused on investors' access to raw materials, while investments attracted by technological advantages or at least low production costs in Uzbekistan occupy a small part. Investments are also being developed aimed at ensuring investors' access to domestic markets, however, in this case, it is often a matter of creating industries that allow foreign companies to overcome customs barriers[33].



Figure 1. Investments in fixed assets

In the technological structure of investments in fixed capital in the Republic of Uzbekistan, 86.1 trillion soums were allocated for the purchase of machinery, equipment and inventory, which amounted to 45.3% of their total volume, investments for construction and installation works reached 89.0 trillion soums (share in the total volume of 46.9%), for other costs - 14.8 trillion soums (7.8%). The highest share of construction and installation works in the total volume of investments in fixed assets was observed in Surkhandarya region - 61.8%, or 5.3 trillion soums. The lowest level of this indicator was noted in Syrdarya region - 26.1%, or 2.2 trillion soums. In the same region, the highest share of costs for the purchase of machinery, equipment and inventory was recorded - 66.1%, or 5.6 trillion soums (Figure 2.) [34].

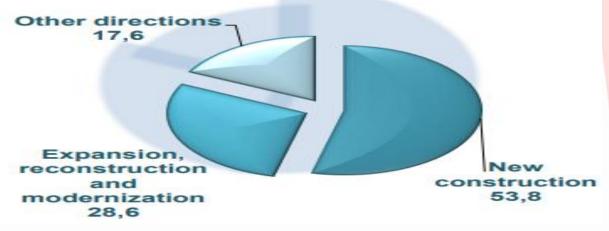


Figure 2. Reproductive structure of investments in fixed assets, % of the total



Figure 3. Foreign investments and loans in fixed assests

The large-scale attraction of foreign investment in the national economy is directly related to the existing investment climate and economic reforms in the country[35]:

- 1. Stability of the investment climate in the country;
- 2. Implementation of economic measures to regulate the exchange rate;
- 3. Establishment of legal and material norms for improving the tax mechanism of the country;
- 4. Development of decisions and laws in the tax legislation, regulating the activities of foreign investment and aimed at creating the necessary conditions;
- 5. Existence of favorable market conditions;
- 6. The growing number of enterprises successfully operating with the participation of foreign investment in leading sectors and industries of the economy.

Conclusion

One of the maingoals of socio-economic reforms in our country is to increase the welfare of the population, improve their quality of life and achieve sustainable development of social sectors. Attracting foreign investment is creating new jobs, equipping enterprises with modern equipment and technologies, increasing production efficiency and having a positive impact on exports. Among the problems related to the improvement of mechanisms for attracting foreign investment are:

- -Insufficient development of investment infrastructure in attracting foreign investment in the regions with potential investment potential;
- -Insufficient effectiveness of measures to create new jobs in the regions, increase incomes and additional funding to the local budget;
- -Lack of consulting, marketing and legal services in the regions;
- -creation of artificial barriers to the use of benefits and incentives to attract foreign investors.

To address the above shortcomings, we would like to include the following in our list of suggestions:

- -It is advisable to encourage the activities of investment funds, insurance and leasing companies and their effective participation in the implementation of investment projects;
- -Although the country has a wide range of opportunities for foreign investment, due to the lack of effective organization of activities such as creating new jobs in the regions, increasing incomes and additional funding to the local budget, consulting, marketing and it will be necessary to establish and develop legal service centers;
- -Encouraging the rural population to do business through the development of the service sector in rural areas, to address the problems of infrastructure in the regions for foreign investors:
- -Strict control over the absence of artificial barriers in the use of benefits and incentives to attract foreign investors, which, in turn, will increase the effectiveness of economic reforms by addressing the issue of increasing production by attracting foreign investment in the regions creates the possibility of implementation. In general, in order to increase foreign investment in the economy, it is necessary to bring the investment climate to the level of international standards.

At the same time, it is important identify the factors that hinder the flow of investment, and to find ways to eliminate them. As a result, foreign investment has become an important source of external financing for our country, which has a huge economic impact in terms of attracting high innovative technologies and the implementation of effective governance

References

- 1. Loewendahl, Henry Innovations in Foreign Direct Investment Attraction https://publications.iadb.org/en/innovations-foreign-direct-investment-attraction
- 2. Abdalkareem Jasim, S., Mireya Romero Parra, R., Salam Karim, Y., Mahdi, A. B., Jade Catalan Opulencia, M., Fakhriddinovich Uktamov, K., & Thaeer Hammid, A. (2022). Optimization of doubly-fed induction generator (DFIG) based wind turbine to achieve maximum power generation with imperialist competitive algorithm (ICA). Science Progress, 105(3), 00368504221113193.
- 3. Abdalkareem Jasim, S., Mireya Romero Parra, R., Salam Karim, Y., Mahdi, A. B., Jade Catalan Opulencia, M., Fakhriddinovich Uktamov, K., & Thaeer Hammid, A. (2022). Optimization of doubly-fed induction generator (DFIG) based wind turbine to achieve maximum power generation with imperialist competitive algorithm (ICA). Science Progress, 105(3), 00368504221113193.
- 4. Abdukhakim, Y., Khusniddin, U., Sanjar, M., & Kongratbay, S. (2022, December). Econometric Evaluation of the Efficiency of the Management of the Enterprise Through the Supply of Raw Materials in Oil Enterprises in the Conditions of the Digital Economy. In International Conference on Next Generation Wired/Wireless Networking (pp. 310-

- 321). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-30258-9 26
- 5. Abdullaeva, B., Opulencia, M. J. C., Borisov, V., Uktamov, K. F., Abdelbasset, W. K., Al-Nussair, A. K. J., ... & Jabbar, A. H. (2022). Optimal variable estimation of a Li-ion battery model by fractional calculus and bio-inspired algorithms. Journal of Energy Storage, 54, 105323. https://www.scopus.com/record/display.uri?eid=2-s2.0-85134664889&origin=resultslist&sort=plf-f
- 6. Aktam Usmanovich Burkhanov and Madina Mansur qizi Eshmamatova. 2022. The Ways for Improvement of Investment Strategy in the Period of Digital Economy. In The 5th International Conference on Future Networks & Distributed Systems (ICFNDS 2021). Association for Computing Machinery, New York, NY, USA, 655–662. https://doi.org/10.1145/3508072.3508202
- 7. Aktam Usmanovich Burkhanov, Bobir Tursunov, Khusniddin Uktamov, and Bunyod Usmonov. 2023. ECONOMETRIC ANALYSIS OF FACTORS AFFECTING ECONOMIC STABILITY OF CHEMICAL INDUSTRY ENTERPRISES IN DIGITAL ERA: IN CASE OF UZBEKISTAN. In Proceedings of the 6th International Conference on Future Networks & Distributed Systems (ICFNDS '22). Association for Computing Machinery, New York, NY, USA, 484–490. https://doi.org/10.1145/3584202.3584274
- 8. Baratova, D., Khasanov, K., Musakhonzoda, I., Abdumuratov, S., & Uktamov, K. (2021). The impact of the coronavirus pandemic on the insurance market of Uzbekistan and ways to develop funded life insurance. In E3S Web of Conferences (Vol. 296, p. 06028). EDP Sciences. https://www.e3s-conferences.org/articles/e3sconf/abs/2021/72/e3sconf_esmgt2021_06028/e3sconf_esmgt2021_06028.html
- 9. Bobir Ortikmirzaevich Tursunov, Khusniddin Fakhriddinovich Uktamov, and Adolat Tukhtamuratova. 2023. WAYS TO **ENSURE FOOD** SECURITY DEVELOPMENT OF A DIGITAL ECONOMY. In Proceedings of the 6th International Conference on Future Networks & Distributed Systems (ICFNDS '22). Association for New York. Computing Machinery, NY, USA, 548-555. https://doi.org/10.1145/3584202.3584284
- 10. Burkhanov, A. U. (2020). Assessment of financial security of investment funds. Journal of Advanced Research in Dynamical and Control Systems, 12(5), 293-300.
- 11. Burkhanov, A., & Bakhodirovna, B. D. (2021). Evaluation of economic potential of textile industry enterprises. Vlakna a Textil, 28(2), 9-21.
- 12. Gu, X., Badeeb, R. A., Ali, S., Khan, Z., Zhang, C., & Uktamov, K. F. (2023). Nonlinear impact of natural resources and risk factors on the US economic growth. Resources Policy, 82,

https://www.sciencedirect.com/science/article/abs/pii/S0301420723002817

13. Guoyu Wang, Xiao Gu, Xi Shen, Khusniddin Fakhriddinovich Uktamov, Mohammed Moosa Ageli, A dual risk perspective of China's resources market: Geopolitical risk and political risk, Resources Policy, Volume 82, 2023, 103528, ISSN 0301-4207, https://doi.org/10.1016/j.resourpol.2023.103528.

https://www.sciencedirect.com/science/article/pii/S0301420723002398

14. Haojie Liao, Yi Wei, Dr Sher Ali, Khusniddin Fakhriddinovich Uktamov, Naveed Ali., Natural resources extraction and industrial expansion: Natural resources a curse or blessing for the industrial sector of China? Resources Policy Volume 85, Part B, August 2023, 103986. https://doi.org/10.1016/j.resourpol.2023.103986.

https://www.sciencedirect.com/science/article/pii/S0301420723006979?via%3Dihub

15. Haojie Liao, Yi Wei, Dr Sher Ali, Khusniddin Fakhriddinovich Uktamov, Naveed Ali., Natural resources extraction and industrial expansion: Natural resources a curse or blessing for the industrial sector of China? Resources Policy Volume 85, Part B, August 2023, 103986. https://doi.org/10.1016/j.resourpol.2023.103986.

https://www.sciencedirect.com/science/article/pii/S0301420723006979?via%3Dihub

16. Jasim, S. A., Ansari, M. J., Majdi, H. S., Opulencia, M. J. C., & Uktamov, K. F. (2022). Nanomagnetic Salamo-based-Pd (0) Complex: an efficient heterogeneous catalyst for Suzuki–Miyaura and Heck cross-coupling reactions in aqueous medium. Journal of Molecular Structure, 1261, 132930.

https://www.sciencedirect.com/science/article/abs/pii/S0022286022005993

- 17. Khayrullo Nasrullayevich Khasanov, Dinora Alisherovna Baratova, Khusniddin Fakhriddinovich Uktamov, and Dildora Bokhodirovna Abdusattarova. 2022. Improving the Practice of Attracting Financial Resources from the International Capital Market to the Corporate Sector of the Economy. In The 5th International Conference on Future Networks & Distributed Systems (ICFNDS 2021). Association for Computing Machinery, New York, NY, USA, 718–727. https://doi.org/10.1145/3508072.3508213
- 18. Khayrullo Nasrullayevich Khasanov, Dinora Alisherovna Baratova, Khusniddin Faxriddinovich Uktamov, and Sardor Alisher o'g'li Djuraev. 2022. Developing Attraction of Financial Resources from the International Capital Market to the Corporate Sector of the Economy with the Help of it Technologies. In The 5th International Conference on Future Networks & Distributed Systems (ICFNDS 2021). Association for Computing Machinery, New York, NY, USA, 755–768. https://doi.org/10.1145/3508072.3508220
- 19. Khusniddin Fakhriddinovich Uktamov. 2023. IMPROVING THE METHOD OF ASSESSING THE LEVEL OF ECONOMIC SECURITY OF INDUSTRIAL ENTERPRISES UNDER THE TRANSFORMATION OF THE DIGITAL ECONOMY. In Proceedings of the 6th International Conference on Future Networks & Distributed Systems (ICFNDS '22). Association for Computing Machinery, New York, NY, USA, 355–363. https://doi.org/10.1145/3584202.3584253

- 20. Kzar, H. H., Salahdin, O. D., Arenas, L. A. B., Parra, R. M. R., Aravindhan, S., Mohammed, F., ... & Abid, M. K. (2023). Solamen Vaillanti Mollusk Powder as an Efficient Biosorbent for Removing Cobalt Ions from Aqueous Solution: Kinetic and Equilibrium Studies. Physical Chemistry Research, 11(1), 159-169. https://www.scopus.com/record/display.uri?eid=2-s2.0-
- 85138586750&origin=resultslist&sort=plf-f
- 21. Li, R., Manafian, J., Lafta, H. A., Kareem, H. A., Uktamov, K. F., & Abotaleb, M. (2022). The nonlinear vibration and dispersive wave systems with cross-kink and solitary wave solutions. International Journal of Geometric Methods in Modern Physics, 19(10), 2250151-5551. https://www.scopus.com/record/display.uri?eid=2-s2.0-85134594383&origin=resultslist&sort=plf-f
- 22. Mao, Z., Li, Y., Guan, Z., Uktamov, K. F., & Ageli, M. M. (2023). COP27 perspective of resources management: From conflict to COVID-19 of emerging countries. Resources Policy, 103708. https://www.sciencedirect.com/science/article/pii/S0301420723004191
- 23. Mumtaz Ali1, Mehdi Seraj, Ecevit Alper, Turgut Tursoy, Khusniddin Fakhriddinovich Uktamov, Russia-Ukraine war impacts on climate initiatives and sustainable development objectives in top European gas importers. Environmental Science and Pollution Research. https://doi.org/10.1007/s11356-023-29308-9
- 24. Ngakan Ketut Acwin Dwijendra, Abduladheem Turki Jalil, Azher M Abed, Bashar S Bashar, Ahmed Kateb Jumaah Al-Nussairi, Ali Thaeer Hammid, Ali Shamel, Khusniddin Fakhriddinovich Uktamov, Improving the transition capability of the low-voltage wind turbine in the sub-synchronous state using a fuzzy controller, Clean Energy, Volume 6, Issue 4, August 2022, Pages 682 692, https://doi.org/10.1093/ce/zkac033
- 25. Nosirov, J., Uktamov, K., Xabibullayev, D., & Mirolimov, M. Ensuring the financial stability of insurance companies in the innovative development of the economy. In E3S Web of Conferences (Vol. 402, p. 08007). (2023, May). https://doi.org/10.1051/e3sconf/202340208007
- 26. Patra, I., Ansari, M. J., Emad Izzat, S., Uktamov, K. F., Abid, M. K., Mahdi, A. B., ... & Sharma, H. (2022). Synthesis of efficient cobalt—metal organic framework as reusable nanocatalyst in the synthesis of new 1, 4-dihydropyridine derivatives with antioxidant activity. Frontiers in Chemistry, 943. https://doi.org/10.3389/fchem.2022.932902
- 27. Ramez Abubakr Badeeb, Bo Wang, Jun Zhao, Zeeshan Khan, Khusniddin Fakhriddinovich Uktamov, Changyong Zhang, Natural resources extraction and financial inclusion: Linear and non-linear effect of natural resources on financial sector. Resources Policy, Volume 85, Part A, 2023, 103826, https://doi.org/10.1016/j.resourpol.2023.103826.
- 28. Salah Aldeen, O. D. A., Mahmoud, M. Z., Majdi, H. S., Mutlak, D. A., Fakhriddinovich Uktamov, K., & Kianfar, E. (2022). Investigation of Effective Parameters Ce and Zr in the

- Synthesis of H-ZSM-5 and SAPO-34 on the Production of Light Olefins from Naphtha. Advances in Materials Science and Engineering, 2022, 1-22. https://www.hindawi.com/journals/amse/2022/6165180/
- 29. Sari, A., Abdelbasset, W. K., Sharma, H., Opulencia, M. J. C., Feyzbaxsh, M., Abed, A. M., ... & Uktamov, K. F. (2022). A novel combined power generation and argon liquefaction system; investigation and optimization of energy, exergy, and entransy phenomena. Journal of Energy Storage, 50, 104613. https://www.sciencedirect.com/science/article/abs/pii/S2352152X22006296
- 30. Smaisim, G. F., Mohammed, D. B., Abdulhadi, A. M., Uktamov, K. F., Alsultany, F. H., Izzat, S. E., ... & Kianfar, E. (2022). Nanofluids: properties and applications. Journal of Sol-Gel Science and Technology, 104(1), 1-35.. https://link.springer.com/article/10.1007/s10971-022-05859-0
- 31. Sun, X., Abbass, R., Ghoroqi, M., Patra, I., Dwijendra, N. K. A., Uktamov, K. F., & Jasem, H. (2022). RETRACTED ARTICLE: Optimization of dyes and toxic metals removal from environmental water samples by clinoptilolite zeolite using response surface methodology approach. Scientific reports, 12(1), 13218. https://www.nature.com/articles/s41598-022-17636-8
- 32. Tukhtabaev, J. S., Uktamov, K. F., Kukhar, V. S., Loretts, O. G., & Neverova, O. P. (2022, June). The role of industrial enterprises in ensuring food security. In IOP Conference Series: Earth and Environmental Science (Vol. 1043, No. 1, p. 012023). IOP Publishing. https://iopscience.iop.org/article/10.1088/1755-1315/1043/1/012023/meta
- 33. Tukhtabaev, J. S., Uktamov, K. F., Tillaeva, B. R., Akramova, R. R., & Goziyeva, A. A. (2022, June). Ways of development of agriculture and processing industry enterprises manufacturing cooperation. In IOP Conference Series: Earth and Environmental Science (Vol. 1043, No. 1, p. 012024). IOP Publishing. https://iopscience.iop.org/article/10.1088/1755-1315/1043/1/012024/meta
- 34. Umidjon Abdusamat ugli Dadabaev, Khusniddin Faxriddinovich Uktamov, Abduvali Abdurakhimovich Isadjanov, Zokir Rustamovich Sodikov, and Nilufar Sherkulovna Batirova. 2022. Ways to Improve Integration of Uzbekistan in Global Financial Services with the Participation of Takaful Companies in the Conditions of Development of the Digital Economy. In The 5th International Conference on Future Networks & Distributed Systems (ICFNDS 2021). Association for Computing Machinery, New York, NY, USA, 440–446. https://doi.org/10.1145/3508072.3508159
- 35. Zhen Wang, Difei Hu, Fariha Sami, Khusniddin Fakhriddinovich Uktamov, Revisiting China's natural resources-growth-emissions nexus: Education expenditures and renewable energy innovation. Resources Policy, Volume 85, Part A, 2023, 103923, https://doi.org/10.1016/j.resourpol.2023.103923.