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ANALYSIS OF FOREIGN INVESTMENT ATTRACTION PRACTICES IN THE NATIONAL ECONOMY



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Abstract. This article analyzes the practice of attracting foreign investments into the national economy and examines the economic significance of foreign capital in ensuring sustainable economic growth. The study investigates the investment policy reforms implemented in Uzbekistan, the dynamics of foreign direct investment inflows, and the factors influencing investment attractiveness. In addition, the scientific views of foreign and local economists regarding the investment climate, institutional development, and investment efficiency are analyzed. Based on international experience and national practice, scientific conclusions and practical recommendations aimed at improving the investment environment and increasing foreign investment inflows into the national economy have been developed.

Keywords: foreign investment, foreign direct investment, investment climate, national economy, investment attractiveness, economic growth, institutional reforms, investment policy, economic modernization, infrastructure development.

Annotatsiya. Mazkur maqolada milliy iqtisodiyotga xorijiy investitsiyalarni jalb qilish amaliyoti tahlil qilinib, barqaror iqtisodiy o'sishni ta'minlashda xorijiy kapitalning iqtisodiy ahamiyati o'rganilgan. Tadqiqotda O'zbekistonda amalga oshirilayotgan investitsiya siyosati islohotlari, to'g'ridan-to'g'ri xorijiy investitsiyalar oqimi dinamikasi hamda investitsion jozibadorlikka ta'sir etuvchi omillar tadqiq etilgan. Shuningdek, xorijiy va mahalliy iqtisodchi olimlarning investitsion muhit, institutsional rivojlanish va investitsiya samaradorligi bo'yicha ilmiy qarashlari tahlil qilingan. Xalqaro tajriba va milliy amaliyot asosida investitsion muhitni yaxshilash hamda milliy iqtisodiyotga xorijiy investitsiyalar oqimini oshirishga qaratilgan ilmiy xulosalar va amaliy tavsiyalar ishlab chiqilgan.

Kalit so'zlar: xorijiy investitsiya, to'g'ridan-to'g'ri xorijiy investitsiya, investitsion muhit, milliy iqtisodiyot, investitsion jozibadorlik, iqtisodiy o'sish, institutsional islohotlar, investitsiya siyosati, iqtisodiy modernizatsiya, infratuzilmani rivojlantirish.

Аннотация. В данной статье анализируется практика привлечения иностранных инвестиций в национальную экономику, а также рассматривается экономическое значение иностранного капитала в обеспечении устойчивого экономического роста. В исследовании изучены реформы инвестиционной политики, реализуемые в Узбекистане, динамика притока прямых иностранных инвестиций и факторы, влияющие на инвестиционную привлекательность. Кроме того, проанализированы научные взгляды зарубежных и отечественных экономистов на инвестиционный климат, институциональное развитие и эффективность инвестиций. На основе международного опыта и национальной практики разработаны научные выводы и практические рекомендации, направленные на улучшение инвестиционной среды и увеличение притока иностранных инвестиций в национальную экономику.

Ключевые слова: иностранные инвестиции, прямые иностранные инвестиции, инвестиционный климат, национальная экономика, инвестиционная привлекательность, экономический рост, институциональные реформы, инвестиционная политика, экономическая модернизация, развитие инфраструктуры.

INTRODUCTION.

In the context of accelerating globalization processes in the world economy, foreign investment is one of the important factors ensuring the sustainable development of the national economy. In particular, foreign direct investment plays an important role in expanding production capacities, introducing modern technologies, increasing export potential, and creating new jobs [1]. Therefore, today many countries around the world are striving to increase the competitiveness of their national economies by actively attracting foreign capital to the economy.

In recent years, Uzbekistan has also been implementing large-scale reforms aimed at improving the investment climate, creating favorable economic and legal conditions for investors, and expanding the flow of foreign investment. In particular, a number of measures have been implemented to liberalize currency policy, develop the activities of free economic zones, simplify the tax and customs system, and create legal guarantees for investors [2]. As a result, the volume of foreign investment attracted to the country's economy is increasing year by year.

According to statistics, in 2023, the volume of investments in fixed assets in Uzbekistan amounted to 352.1 trillion UZS, with a significant increase in the share of foreign investments and loans [3]. This indicates an increase in investment attractiveness in the country and an increase in investment activity in sectors of the economy. At the same time, the issues of increasing the efficiency of attracting foreign investments, rational use of the investment potential of regions, and reducing investment risks are gaining urgent scientific and practical importance.

In this regard, it is important to analyze the practice of attracting foreign investments to the national economy, identify priority areas of investment policy, and develop scientifically based proposals and recommendations to increase investment attractiveness.

LITERATURE REVIEW

Research on the practice of attracting foreign investments into the national economy has been widely conducted by foreign and local economists. In particular, the issues of investment climate, institutional reforms, investment attractiveness, and the role of foreign capital in economic growth have been deeply analyzed in economic literature.

American economist and Nobel Prize laureate Joseph E. Stiglitz studied the role of foreign investments in economic modernization and institutional development in developing countries [4]. The scholar emphasized that attracting foreign capital contributes to technological renewal, productivity growth, and increased competitiveness of the national economy. In our opinion, Stiglitz's scientific views are important in understanding the institutional foundations of investment policy.

British economist John H. Dunning developed the "Eclectic Paradigm" theory of international production and foreign direct investment [5]. According to the scholar, market size, resource potential, and institutional advantages are the main determinants of attracting foreign investments. His scientific approach became one of the methodological foundations for analyzing global investment flows.

American economist Jeffrey Sachs analyzed the relationship between investment climate and sustainable economic development [6]. The scholar argued that macroeconomic stability, infrastructure development, and openness of the economy are key factors in increasing foreign investment inflows. His research remains highly relevant for transition economies.

Singaporean statesman and economist Lee Kuan Yew investigated the importance of investment policy in transforming Singapore into a global financial and investment center [7]. The scholar highlighted that low corruption, effective governance, and favorable business conditions are essential for attracting foreign investors. In our opinion, Singapore's experience is particularly important for developing economies.

Chinese economist Justin Yifu Lin researched industrial policy and investment-led economic growth [8]. According to the scholar, state-supported industrial modernization and export-oriented production significantly stimulate foreign investment inflows. His theories scientifically explain China's successful investment policy.

Kazakh researcher O.Z. Tarielkyzy studied regional investment policy and its impact on the economic structure [9]. The author emphasized that regional investment policy plays an important role in improving investment attractiveness, developing infrastructure, and stimulating economic activity in different regions. This approach is relevant for analyzing investment disparities and regional investment development in Central Asian countries.

Uzbek economist Q.X. Abdurahmonov analyzed investment policy and regional economic development issues in Uzbekistan [10]. The scholar emphasized that improving the investment climate and supporting entrepreneurial activity are important conditions for increasing investment attractiveness in the national economy.

Uzbek economist N.G. Karimov researched financial mechanisms for attracting foreign investments and increasing investment efficiency [11]. According to the scholar, effective use of financial resources and

investment risk management are crucial for ensuring sustainable economic growth.

Official data from the Ministry of Investment, Industry and Trade of the Republic of Uzbekistan indicate that investment policy in the country is aimed at improving the investment climate, supporting regional investment projects, and attracting foreign capital to priority sectors of the economy [12]. These measures contribute to industrial modernization, infrastructure development, export potential growth, and the expansion of investment activity in Uzbekistan.

The above-mentioned scientific studies demonstrate that attracting foreign investments plays a vital role in ensuring economic growth, technological modernization, and increasing the competitiveness of the national economy. Foreign and local economists highly evaluate the importance of institutional reforms, investment climate stability, and infrastructure development in increasing investment attractiveness. Nevertheless, global economic instability, investment risks, regional disparities, and increasing competition for foreign capital indicate that the practice of attracting foreign investments remains a relevant scientific and practical issue.

RESEARCH METHODOLOGY

In preparing this article, regulatory and legal documents, official academic sources, and formal internet data were systematically analyzed, along with a comparative and critical evaluation of the scientific and theoretical perspectives of economic scholars on the subject matter. Throughout the investigation of the research topic, general economic approaches, as well as methods such as systemic analysis, generalization, abstract-logical reasoning, and statistical analysis, were extensively utilized.

ANALYSIS AND RESULTS

Foreign investments play an important role in ensuring sustainable economic growth, increasing production capacity, and accelerating technological modernization in the national economy. In recent years, Uzbekistan has implemented large-scale institutional reforms aimed at improving the investment climate and attracting foreign capital. As a result, the volume of foreign direct investment (FDI) inflows into the economy has significantly increased.

According to official statistics, the total volume of investments in fixed capital in Uzbekistan reached 352.1 trillion UZS in 2023, which indicates growing investment activity in the country. A significant share of these investments consisted of foreign investments and international loans directed to industry, energy, infrastructure, and service sectors. In particular, reforms related to currency liberalization, simplification of tax administration, and expansion of free economic zones positively influenced investment attractiveness.

The dynamics of foreign direct investment inflows into Uzbekistan in recent years are presented in the following table.

Table 1
Dynamics of foreign direct investment inflows into Uzbekistan (2020–2025) [13]

Years	FDI inflows (billion USD)	Growth rate (%)	Share in total investments (%)
2020	6.6	157.1	28.3
2021	8.1	122.7	31.4
2022	8	98.7	29.8
2023	11.9	148.7	33.6
2024	13.4	112.6	35.1
2025	15	111.9	36.8

The data presented in Table 1 indicate that the inflow of foreign direct investment into Uzbekistan increased considerably during the analyzed period. In 2020, FDI inflows amounted to USD 6.6 billion, while by 2023 this figure had reached USD 11.9 billion. Such growth demonstrates the positive impact of economic liberalization policies and institutional reforms implemented in the country.

Despite the slowdown of the global economy and geopolitical instability observed in 2022, Uzbekistan managed to maintain relatively stable investment activity. In 2022, FDI inflows slightly decreased to USD 8.0 billion compared to 2021. However, this decline was temporary, as investment inflows sharply increased again in 2023 due to the implementation of large-scale industrial and infrastructure projects, expansion of international

partnerships, and improvement of the investment environment.

The share of foreign investments in total investments also showed an upward tendency. In 2020, foreign investments accounted for 28.3% of total investments, whereas by 2025 this indicator is expected to reach 36.8%. This trend confirms the growing role of foreign capital in financing economic modernization and structural transformation processes in Uzbekistan.

Foreign investments in Uzbekistan are primarily concentrated in strategically important sectors of the economy, including industry, energy, construction, transport, telecommunications, and services. Sectoral distribution of investments plays a crucial role in ensuring the structural transformation of the national economy, technological modernization, and export diversification. In recent years, the government has focused on attracting foreign capital particularly into manufacturing industries and infrastructure projects aimed at increasing industrial competitiveness and regional economic development.

The implementation of large industrial projects, modernization of energy infrastructure, and expansion of digital economy initiatives significantly increased investment activity across various sectors. At the same time, foreign investments directed toward manufacturing industries contributed to the growth of export-oriented production and job creation. This indicates that sectoral diversification of investments is becoming one of the important priorities of Uzbekistan's investment policy.

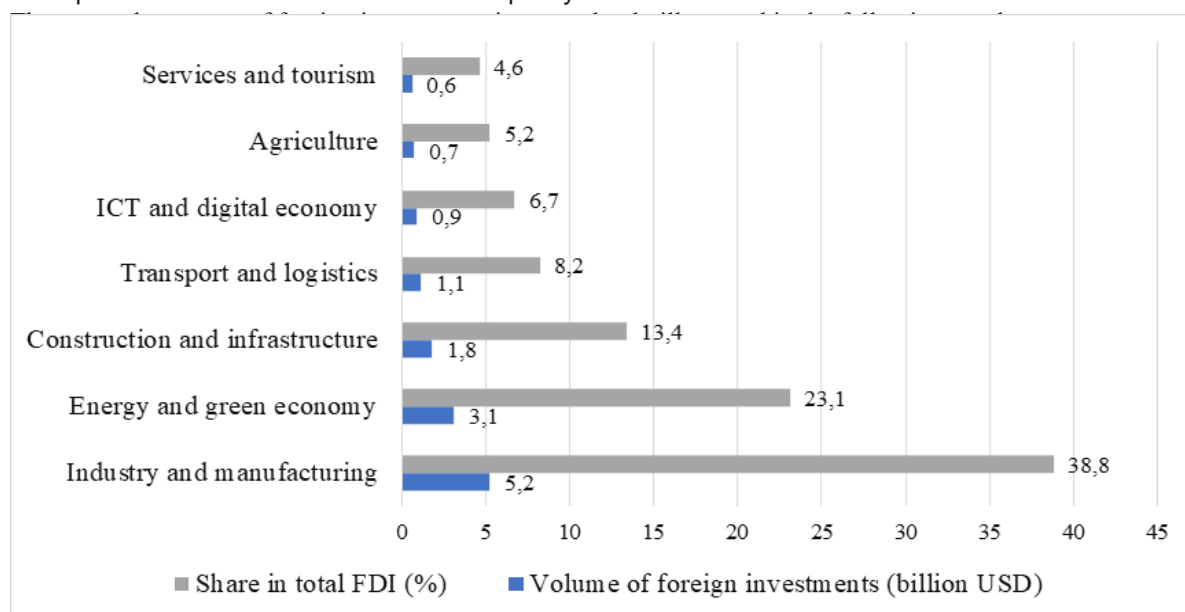


Figure 1. Sectoral distribution of foreign investments in Uzbekistan (2024) [13]

The data presented in Figure 1 show that the largest share of foreign investments in Uzbekistan is directed toward the industry and manufacturing sectors, accounting for 38.8% of total FDI inflows. This trend indicates that industrial modernization and the development of export-oriented production remain the main priorities of economic policy. Investments in manufacturing industries contribute to technological renewal, productivity growth, and the expansion of industrial exports.

The energy sector occupies the second-largest share, with 23.1% of total foreign investments. In recent years, Uzbekistan has actively attracted foreign investors into renewable energy projects, including solar and wind power stations. Cooperation with international companies in green energy projects has become one of the important directions of sustainable economic development and energy security policy.

Significant investment activity can also be observed in the construction, transport infrastructure, and logistics sectors. Investments directed toward roads, railways, airports, and logistics centers improve regional connectivity and strengthen Uzbekistan's role as a transit hub in Central Asia. At the same time, foreign investments in ICT and digital economy sectors contribute to digital transformation and the development of innovative business models.

Overall, the conducted sectoral analysis demonstrates that foreign investments are playing an increasingly important role in the modernization and diversification of the national economy. Further expansion of investments into high-value-added and innovation-driven sectors will contribute to strengthening sustainable economic growth and improving Uzbekistan's competitiveness in the global market.

The regional distribution of foreign investments is one of the key indicators reflecting the level of investment attractiveness and economic activity within the national economy. In Uzbekistan, the uneven distribution of foreign

investments among regions is influenced by factors such as industrial potential, infrastructure development, natural resources, logistics opportunities, and the effectiveness of regional investment policies. In recent years, the government has paid special attention to increasing regional investment attractiveness through the development of free economic zones, industrial clusters, and infrastructure modernization programs.

The largest volumes of foreign investments are concentrated in economically developed regions with strong industrial and infrastructure potential. In particular, Tashkent city, Tashkent region, Navoi, and Kashkadarya regions occupy leading positions in attracting foreign capital due to the presence of industrial enterprises, transport networks, mineral resources, and free economic zones. At the same time, several regions still have untapped opportunities to strengthen investment activity by improving infrastructure and expanding industrial capacity.

The regional distribution of foreign investments in Uzbekistan in 2024 is presented in the following table.

Table 2

Regional distribution of foreign investments in Uzbekistan (2024) [13]

Region	Volume of foreign investments (billion USD)	Share in total FDI (%)	Main investment directions
Tashkent city	4.1	30.6	Industry, banking, ICT, services
Tashkent region	2.3	17.2	Manufacturing and logistics
Navoi region	1.8	13.4	Mining, metallurgy, energy
Kashkadarya region	1.5	11.2	Oil-gas and chemical industry
Samarkand region	1	7.5	Tourism and infrastructure
Fergana region	0.9	6.7	Industry and agriculture
Other regions	1.8	13.4	Mixed sectors

The data presented in Table 2 indicate that Tashkent city remains the leading region in attracting foreign investments, accounting for 30.6% of total FDI inflows. This is primarily explained by the concentration of financial institutions, industrial enterprises, business infrastructure, and international companies in the capital city. Moreover, the rapid development of the ICT, banking, and service sectors significantly contributes to the investment attractiveness of Tashkent city.

Tashkent region also demonstrates high investment activity due to its advantageous geographic location, developed transport infrastructure, and industrial potential. Foreign investments in this region are mainly directed toward manufacturing industries, logistics centers, and construction projects. Navoi region occupies an important position because of its rich mineral resources and large industrial enterprises operating in the mining and metallurgy sectors.

Kashkadarya region attracts substantial foreign investments, primarily into the oil, gas, and chemical industries. Large energy and hydrocarbon projects implemented in cooperation with international investors have strengthened the economic significance of the region. In Samarkand region, tourism infrastructure and transport modernization projects play a major role in attracting foreign capital.

At the same time, the analysis shows that several regions still receive relatively small volumes of foreign investments. This situation is mainly connected with infrastructure limitations, lower levels of industrialization, and insufficient investment promotion mechanisms. Therefore, reducing regional disparities in investment activity remains one of the important objectives of state investment policy.

The conducted analysis demonstrates that regional investment attractiveness in Uzbekistan is strongly influenced by industrial specialization, infrastructure development, and institutional support mechanisms. Expansion of free economic zones, improvement of logistics systems, and digitalization of investor services can significantly increase investment activity in less-developed regions. Strengthening regional investment policies will contribute not only to balanced economic development but also to the creation of new jobs, growth of regional exports, and improvement of living standards across the country.

The effectiveness of attracting foreign investments into the national economy largely depends on the overall investment climate, institutional reforms, macroeconomic stability, and the level of state support provided to investors. In recent years, Uzbekistan has implemented a number of structural reforms aimed at improving investment attractiveness and creating favorable business conditions for foreign investors. These reforms

include liberalization of currency policy, simplification of taxation procedures, strengthening of legal guarantees for investors, and expansion of digital public services.

One of the key factors influencing foreign investment inflows is macroeconomic stability. Stable economic growth, controlled inflation, and predictable fiscal policy increase investor confidence and reduce investment risks. Uzbekistan has maintained relatively stable GDP growth rates in recent years, which has positively affected investment activity. In addition, reforms directed toward liberalization of the banking and financial system have improved access to financial resources and strengthened the investment environment.

Another important factor is the system of tax and customs incentives provided to foreign investors. Uzbekistan has established various tax preferences within free economic zones and industrial parks, including exemptions from land tax, property tax, and customs duties for strategic investment projects. Such incentives significantly reduce operational costs for foreign companies and stimulate investment inflows into priority sectors of the economy.

The main factors affecting investment attractiveness in Uzbekistan are presented in the following table.

Table 3

Key factors influencing foreign investment attraction in Uzbekistan [13]

Factors	Current condition	Impact on investment attractiveness
Macroeconomic stability	Stable GDP growth and moderate inflation	Increases investor confidence
Tax incentives	Tax and customs preferences in FEZs	Reduces business costs
Legal guarantees	Strengthened protection of investor rights	Improves investment security
Infrastructure development	Expanding transport and energy systems	Facilitates industrial projects
Digital public services	Increasing electronic government services	Simplifies business procedures
Banking and financial reforms	Liberalization of financial markets	Improves access to capital
Administrative barriers	Partially reduced, but still existing	Limits investment efficiency
Regional disparities	Uneven regional investment activity	Reduces balanced development

The data presented in Table 3 demonstrate that macroeconomic stability and tax incentives remain among the most influential factors affecting foreign investment attraction. Stable economic growth and controlled inflation create favorable conditions for long-term investment planning, while tax preferences significantly improve profitability for foreign investors operating in Uzbekistan.

Legal guarantees and protection of investor rights also play a crucial role in increasing investment attractiveness. In recent years, Uzbekistan has adopted several legislative reforms aimed at strengthening investor protection mechanisms and improving the transparency of investment processes. These measures have contributed to the improvement of the country's position in international investment and business rankings.

Infrastructure development is another essential determinant of investment activity. Expansion of transport corridors, modernization of energy systems, and improvement of logistics infrastructure positively influence industrial and export-oriented investment projects. In particular, ongoing railway, road, and renewable energy projects create additional opportunities for attracting foreign capital into regional economies.

At the same time, the analysis reveals the existence of several challenges that negatively affect investment efficiency. Although administrative procedures have become simpler compared to previous years, certain bureaucratic barriers and regulatory complexities still remain. Furthermore, regional disparities in infrastructure development and industrial capacity limit investment inflows into less-developed regions of the country.

Digitalization of public services has become an increasingly important factor in modern investment policy. The introduction of electronic licensing systems, online tax administration, and digital investor platforms has significantly reduced transaction costs and improved the transparency of investment-related procedures. Such reforms contribute to strengthening the overall investment climate and increasing the competitiveness of the national economy.

Overall, the conducted analysis shows that Uzbekistan has achieved significant progress in improving the investment environment and attracting foreign capital. However, maintaining sustainable growth in foreign

investment requires further institutional reforms, reduction of administrative barriers, modernization of regional infrastructure, and enhancement of investment security mechanisms. Strengthening these factors will contribute to long-term economic growth, technological modernization, and deeper integration of Uzbekistan into the global investment system.

The analysis of foreign investment attraction practices demonstrates that Uzbekistan has achieved noticeable progress in improving its investment climate and strengthening cooperation with international investors. Economic liberalization, expansion of free economic zones, improvement of infrastructure, and simplification of administrative procedures have positively influenced the dynamics of foreign capital inflows. Nevertheless, comparison with international experience indicates that additional institutional reforms and modernization measures are still required to further increase the competitiveness of the national economy in the global investment market.

Many developed and developing countries, including Singapore, China, Kazakhstan, and the United Arab Emirates, have successfully implemented effective investment policies based on digitalization, strong legal guarantees, tax incentives, and innovation-oriented development strategies. Comparative analysis shows that these countries pay special attention to reducing administrative barriers, improving investor services, and supporting export-oriented industries. Uzbekistan has also introduced similar reforms in recent years; however, the efficiency of these mechanisms still differs from international best practices.

The comparative analysis of investment attractiveness indicators between Uzbekistan and selected foreign countries is presented in the following table.

Table 4
Comparative analysis of investment attractiveness indicators [14]

Indicators	Uzbekistan	Singapore	Kazakhstan	China
Ease of doing business conditions	Improving	Very high	High	High
Digital investor services	Developing	Advanced	Moderate	Advanced
Free economic zones effectiveness	Moderate	High	High	Very high
Infrastructure quality	Developing	Advanced	Moderate	High
Tax incentives for investors	Available	Highly competitive	Competitive	Competitive
Investment protection mechanisms	Improving	Strong	Moderate	Strong
Innovation and technology investments	Growing	Very high	Moderate	High
Regional investment balance	Uneven	Balanced	Moderate	Moderate

The data presented in Table 4 indicate that Uzbekistan has made substantial progress in improving investment attractiveness, particularly in the areas of tax incentives, legal reforms, and expansion of free economic zones. However, compared to countries such as Singapore and China, Uzbekistan still faces challenges related to the digitalization of investor services, infrastructure quality, and balanced regional investment development.

Singapore demonstrates one of the most effective investment environments due to its advanced digital government system, strong legal institutions, and highly competitive tax regime. Investor services are almost fully digitalized, which significantly reduces administrative costs and increases business efficiency. China, on the other hand, has achieved high investment attractiveness through large-scale industrialization, export-oriented production, and highly effective free economic zones.

Kazakhstan's experience is particularly relevant for Uzbekistan because both countries share similar regional and economic characteristics. Kazakhstan has improved its investment climate through the development of logistics infrastructure, international financial centers, and targeted regional investment policies. Uzbekistan can benefit from this experience by strengthening regional infrastructure and increasing investment activity outside major economic centers.

The comparative analysis also demonstrates that innovation- and technology-oriented investments are becoming increasingly important determinants of competitiveness in the global economy. Countries attracting large volumes of high-tech and digital investments achieve faster economic modernization and productivity growth. Therefore, Uzbekistan should intensify support for innovation ecosystems, startup financing, and digital economy projects.

At the same time, regional disparities remain one of the major weaknesses of the current investment environment in Uzbekistan. Most foreign investments are concentrated in economically developed regions such as Tashkent city and industrial centers, while less-developed regions continue to attract relatively small volumes of capital. Addressing this imbalance requires stronger regional investment policies, infrastructure modernization, and expansion of investment incentives in remote regions.

Overall, the discussion of results confirms that Uzbekistan possesses significant investment potential and favorable conditions for attracting foreign capital. The country's strategic geographic location, natural resources, demographic advantages, and ongoing reforms create strong foundations for further investment growth. However, achieving long-term investment sustainability requires deeper institutional modernization, enhancement of digital governance, reduction of administrative barriers, and development of innovation-driven sectors of the economy.

CONCLUSION AND SUGGESTIONS

The conducted research demonstrates that foreign investments play a significant role in ensuring sustainable economic growth, accelerating industrial modernization, and increasing the competitiveness of the national economy. The analysis showed that, in recent years, Uzbekistan has achieved considerable progress in improving the investment climate through institutional reforms, liberalization of the economy, development of free economic zones, and strengthening of legal guarantees for investors. As a result, the volume of foreign direct investment inflows into the country has steadily increased.

The study revealed that foreign investments in Uzbekistan are mainly concentrated in industry, energy, infrastructure, transport, and digital economy sectors. Such sectoral concentration contributes to technological modernization, export diversification, and expansion of production capacities. At the same time, regional analysis indicated that investment activity remains uneven across the country, with the majority of investments concentrated in economically developed regions such as Tashkent city, Tashkent region, Navoi, and Kashkadarya.

The comparative analysis with foreign countries demonstrated that successful investment policies are largely based on the digitalization of investor services, reduction of administrative barriers, effective infrastructure development, and innovation-oriented economic strategies. In particular, the experiences of Singapore, China, and Kazakhstan confirm that strong institutional frameworks and investor-oriented reforms significantly increase investment attractiveness and economic competitiveness.

The research also identified several existing challenges affecting the efficiency of foreign investment attraction in Uzbekistan. These include regional infrastructure disparities, remaining bureaucratic barriers, insufficient diversification of investments into high-tech sectors, and limited development of innovation ecosystems. Therefore, further modernization of the investment environment remains an important priority for sustainable economic development.

Based on the results of the research, the following suggestions are proposed:

First, it is necessary to further improve digital investor services and expand electronic government systems in order to reduce administrative procedures and transaction costs for foreign investors.

Second, special attention should be paid to strengthening regional investment attractiveness through the modernization of transport, logistics, and energy infrastructure in less-developed regions.

Third, Uzbekistan should intensify support for innovation-driven sectors, including information technologies, green economy projects, innovation and entrepreneurship ecosystems, and high-tech manufacturing industries.

Fourth, it is important to continue improving legal protection mechanisms for investors and ensure the transparency and stability of investment-related regulations.

Fifth, the effectiveness of free economic zones and industrial parks should be enhanced by introducing additional tax incentives, infrastructure support, and export-oriented industrial strategies.

Finally, strengthening cooperation with international financial institutions and expanding public-private partnership mechanisms can contribute to increasing foreign investment inflows and ensuring long-term economic modernization.

Overall, the conducted analysis confirms that Uzbekistan possesses substantial investment potential and favorable opportunities for attracting foreign capital. Consistent implementation of institutional reforms and modernization policies will further strengthen the country's position in the global investment market and contribute to sustainable economic development in the future.

References

1. UNCTAD. *World Investment Report 2024: Investment Facilitation and Digital Government*. Geneva: United Nations, 2024. <https://unctad.org/publication/world-investment-report-2024>
2. Resolution of the President of the Republic of Uzbekistan No. RP-4300 dated April 29, 2019 "On measures for the further improvement of mechanisms for attracting direct foreign investment into the national economy". <https://lex.uz/en/docs/7571137>
3. National Statistics Committee of the Republic of Uzbekistan. "Investments in fixed capital in 2023". <https://stat.uz/en/press-center/news-of-committee/51787-o-zbekiston-respublikasida-jami-iqtisodiy-faoliyat-turlari-bo-yicha-352-1-trln-so-m-investitsiyalar-o-zlashtirildi-3>
4. Stiglitz J.E. *Globalization and Its Discontents*. New York: W.W. Norton & Company, 2002.
5. Dunning J.H. *Multinational Enterprises and the Global Economy*. Wokingham: Addison-Wesley Publishing Company, 1993.
6. Sachs J.D. *The End of Poverty: Economic Possibilities for Our Time*. New York: Penguin Press, 2005.
7. Lee Kuan Yew. *From Third World to First: The Singapore Story, 1965–2000*. Singapore: Singapore Press Holdings, 2000.
8. Lin J.Y. *New Structural Economics: A Framework for Rethinking Development and Policy*. Washington, DC: World Bank, 2012. <https://openknowledge.worldbank.org/entities/publication/d43bcbb3-4470-55c8-9d28-f36de538ad2a>
9. Tarielkyzy O.Z. *Region Investment Policy and Its Impact on the Economic Structure*. CyberLeninka, 2020. <https://cyberleninka.ru/article/n/region-investment-policy-and-its-impact-on-the-economic-structure>
10. Abdurahmonov Q.X. *Mintaqaviy iqtisodiyot va boshqaruv*. Toshkent: "Fan va texnologiya" nashriyoti, 2019. – 356 b.
11. Karimov N.G'. *Iqtisodiy integratsiyalashuv sharoitida investitsiya faoliyatini moliyalashtirishning bozor mexanizmlarini joriy etish masalalari*. Toshkent: "Fan va texnologiya", 2007. – 240 b.
12. O'zbekiston Respublikasi Investitsiyalar, sanoat va savdo vazirligi. *Investitsiya muhiti va hududiy investitsiya loyihalari bo'yicha rasmiy ma'lumotlar*. <https://gov.uz/uz/miit>
13. Prepared by the author based on data from the National Statistics Committee of the Republic of Uzbekistan, the Ministry of Investment, Industry and Trade of the Republic of Uzbekistan, and UNCTAD investment reports.
14. Prepared by the author based on UNCTAD, World Bank, OECD and Transparency International reports.

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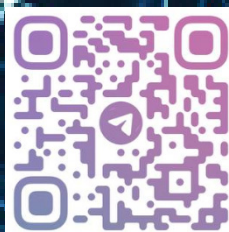
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