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RAQAMLI IQTISODIYOT SHAROITIDA IQTISODIYOT, TURIZM VA BIZNES JARAYONLARINI ANALITIK HAMDA MATEMATIK MODELLASHTIRISH.

THE ROLE OF REGIONAL INVESTMENT FLOWS IN UZBEKISTAN AND ITS ATTRACTIVE FACTORS

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Abstract. This article analyzes the processes of forming investment flows in the regions of Uzbekistan based on statistical data. Factors determining the investment attractiveness of regions will be identified, and scientifically grounded proposals for their improvement will be developed.

Keywords: Investment, Regional Development, Investment Attractiveness, Fixed Capital, Infrastructure, Economy of Uzbekistan.

1. Introduction:

Regional investments plays a crucial role in economic development, employment generation, and foreign exchange earnings. The pandemic caused a global decline of nearly 70–80% in international tourist arrivals in 2020. Regions in Uzbekistan are critical in attracting investment by showcasing local natural resources, infrastructure, and labor capacity, directly impacting GDP growth and job creation. In recent years, attracting investment into the economy of Uzbekistan and its effective distribution across regions has become one of the priority areas of state policy. The goal is to achieve sustainable economic growth by reducinginterregional economic disparities and increasing investment activity.

The goal is to achieve sustainable economic growth by reducing interregional economic disparities and increasing investment activity. Considering the factors influencing the formation of a favorable investment climate, it should be noted that integration of the state into the world community in terms of attractive investment is crucial. This article contributes to the existing literature by providing empirical evidence from Uzbekistan's regional statistics and offering actionable policy recommendations.

2. Literature Review:

A substantial body of literature has examined the determinants of investment attractiveness at both national and subnational levels. Theoretical foundations are rooted in location theory (Weber, 1929), new economic geography (Krugman, 1991), and institutional economics (North, 1990). According to Porter (1990), regional competitiveness depends on factor conditions, demand conditions, related and supporting industries, firm strategy, and government policies. In transition economies, these factors are often mediated by legacies of central planning, uneven infrastructure development, and ongoing institutional reforms.

Empirical studies on post-Soviet states (Ahrend, 2005; Lankhuizen et al., 2015) indicate that foreign direct investment (FDI) tends to concentrate in capital cities and resource-rich regions. Factors such as market size (GRP), agglomeration economies, transport infrastructure, and quality of governance are consistently significant. For Central Asian countries specifically, research by Jenish (2014) and Ruziev & Doktyrbek (2019) highlights the importance of free economic zones (FEZs), political stability, and access to regional markets. In Uzbekistan, recent studies by the Ministry of Economy and Finance (2023–2025) and international organizations (World Bank, 2024; IMF, 2023) confirm that regional disparities persist, but detailed quantitative analysis at the district level remains limited.

This study addresses these gaps by using district-level data and analyzing annual growth rates over the study period.

3. METHODOLOGY

3.1 Research Design:

This study employs a quantitative, descriptive, and comparative research design. It uses secondary statistical data to analyze investment flows into fixed capital across regions of Uzbekistan, with a particular focus on Jizzakh region and its districts as a representative case. The time frame is 2020–2025, capturing the post-pandemic recovery and recent economic reforms.

3.2 Data Sources:

Data were obtained from the State Committee of the Republic of Uzbekistan on Statistics (2021–2025), the Ministry of Economy and Finance (2023–2025), and the Ministry of .

3.3 Variables:

Dependent variable: Investment flows into fixed capital of absolute volume and growth rates.

Independent variables (attractive factors): Economic (GRP), institutional (presence of FEZs), infrastructural (transport and energy), social (labor potential), and innovative (IT parks, digitalization).

3.4 Analytical Techniques:

Descriptive Statistics: Mean, Standard Deviation (SD), Coefficient of Variation (CV) to measure dispersion.

Trend Analysis: year-on-year growth rates and overall change over five years.

Comparative Regional Analysis: ranking of regions by investment volume and growth consistency.

3.5 Limitation:

- The study is limited by the availability of consistent Regional-level data for all regions of Uzbekistan.
- The study based on secondary data
- Due to lack of time, the period of study restricted to 2020 to 2025.

4. The Role of Regions in Investment Flows

4.1 Regional Specialization: Regions, such as Navoi (mining) or Industrial Zones in Tashkent, customize their attractiveness based on local resources like raw materials, energy and labor density.

4.2 Decentralization of Economic Policy: The government delegates responsibility to local leaders (khokims) to attract investors, making local governments central to boosting foreign and domestic investment.

4.3 Infrastructure & Clusters: Regional development is increasingly focused on building Industrial Clusters and operating Free Economic Zones (FEZs) to attract foreign capital.

5. Data Analysis:

5.1 Amount of Investment in Uzbekistan:

A perusal of table 1, it is observed that the amount of investment in development in Uzbekistan during the 2020 to 2025 were gradually increased year on year from 210.20, 239.50, 289.90, 352.10, 445.20 and 591.10 Trillion UZS respectively from all sources of financing. This indicator represents a significant increase compared to previous years. It further observed that the annual growth rallied above 100 per cent each year after pandemic period in the range of 113.94 per cent to 132.77 per cent respectively.

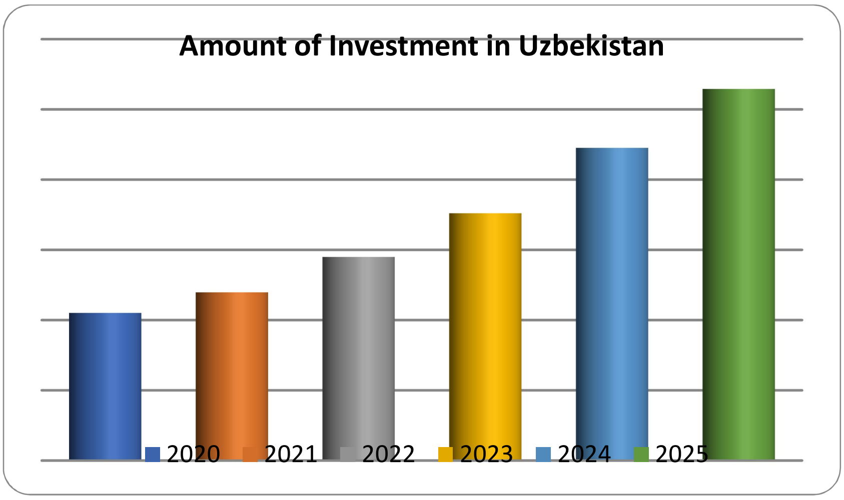
Table 1: Amount of Investment in Uzbekistan

Year	**Amount of Investments (Trillion UZS)**	**Growth Rate (%)**
2020	210.20	**--**
2021	239.50	113.94
2022	289.90	121.04
2023	352.10	121.46
2024	445.20	126.44
2025	591.10	132.77
Total	**2066.00**	
Mean	**344.33**	
SD	**123.55**	
CV	**35.88**	
CAGR	**22.90**	

Source: Department of Statistics, Ministry of economics , Uzbekistan

It can be seen from the table, the volume of investments increased nearly 2.5 times over five years. The compound annual growth rate (CAGR) is approximately 22.9%, indicating a significant increase in investment activity. The coefficient of variation (35.88%) shows moderate volatility across years, with accelerated growth after 2022.

Chart 1



5.2 Region-wise Annual Growth Rates of Investments in Fixed Assets

Table 2 presents annual growth rates of investments in fixed assets across 14 districts (tuman) and the city of Jizzakh for the period 2020–2024. The data reveal significant intra-regional heterogeneity and temporal volatility, which carry important implications for regional investment policy.

High Volatility and Project-Based Nature of Investments:

Most of districts exhibit extreme year-to-year fluctuations. Arnasoy tumani dropped from 109.7% (2020) to 23.7% (2021) and then surged to 279% (2024).

- Zafarobod tumani fluctuated between 25.9% (2021) and 331.6% (2024).
- G‘allaorol tumani reached 332.4% (2023) but fell to 66.6% (2024).

Such volatility suggests that investments are largely project-based (e.g., one-time infrastructure or industrial projects) rather than reflecting stable, recurring flows. This pattern makes long-term regional planning difficult and indicates a lack of sustained investor confidence in some areas.

Leaders in Recent Growth (2024):

The following districts posted exceptionally high growth rates namely Zafarobod tumani – 331.6%, Sharof Rashidov tumani – 331.0%, Arnasoy tumani – 279.0%, Zomin tumani – 267.0% and Do‘stlik tumani – 261.7% respectively in 2024.

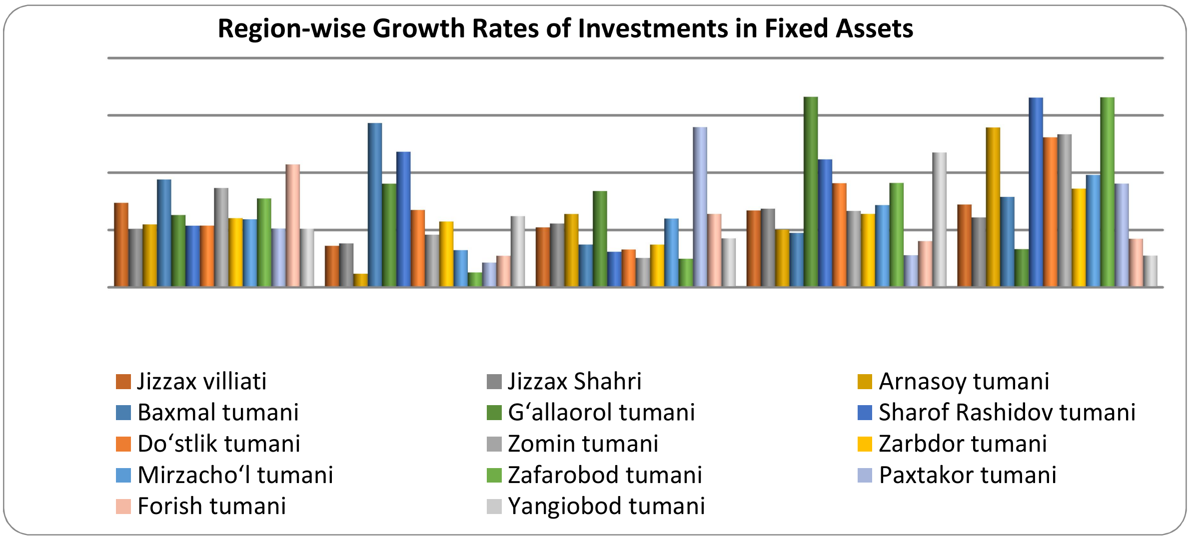
Table 2: Region-wise Annual Growth Rates of Investments in Fixed Assets

Sl. No.	Region	2020 %	2021 %	2022 %	2023 %	2024 %
1	Jizzax villiati	147.4	72.4	104.6	134.1	144.4
2	Jizzax Shahri	101.5	76.6	111.3	137.2	121.9
3	Arnasoy tumani	109.7	23.7	127.9	100.6	279
4	Baxmal tumani	188.1	286.6	74.6	94.9	157.7
5	G‘allaorol tumani	126.1	180.9	167.9	332.4	66.6
6	Sharof Rashidov tumani	107.5	236.6	62.1	223.2	331
7	Do‘stlik tumani	107.7	135	65.9	181.7	261.7
8	Zomin tumani	173.3	91.9	51.3	133.3	267
9	Zarbdor tumani	120.6	114.8	74.5	128.1	172.2
10	Mirzacho‘l tumani	118.7	64.8	120	143.5	196.1

11	Zafarobod tumani	155.1	25.9	49.9	182.1	331.6
12	Paxtakor tumani	102.6	43.1	279.5	56	181
13	Forish tumani	214.4	55	128.1	80.7	84.7
14	Yangiobod tumani	102.2	124.2	85.4	235.3	55.3

Source: Department of Statistics, Ministry of Economics , Uzbekistan

Chart -2



The district-level data from Jizzakh region reveal that investment growth is highly uneven and unstable. To transform sporadic project-based investments into sustained regional development, Uzbekistan’s policymakers must adopt location-specific, multi-year incentives and invest in basic infrastructure and institutional capacity in consistently underperforming districts.

6 Factors of regional investment attractiveness (Uzbekistan's experience):

The Key attractive factors include the establishment of Free Economic Zones (FEZs), Tax Incentives and Specialized Industrial Development aimed at diversifying the local economy.

6.1. Economic factors:

In Uzbekistan, the level of the gross regional product (GRP) of the regions plays an important role in attracting investment. Regions with high economic activity have broader market opportunities for investors.

6.2. Institutional Factors:

In recent years, free economic zones have been established to improve the investment climate. In particular, the Navoi Free Economic Zone is one of the important territories that have created favorable conditions for foreign investors.

6.3. Infrastructure factors:

The development of transport and logistics infrastructure will increase the flow of investment. The improvement of railways, highways, and the energy system will enhance the attractiveness of the regions.

6.4. Social factors:

Regions with a high level of labor potential and qualifications of the population are considered priority for investors. In this regard, the Samarkand and Bukhara regions are actively attracting investment in and services.

6.5. Innovation factors:

The implementation of the digital economy and innovative technologies is significantly improving the investment climate. IT parks and innovation centers play an important role in this process.

7 Proposed Problem Solutions:

7.1 **Differentiation of Regional Investment Policy:** Tailor incentives to each district’s specialization (agriculture, industry,).

7.2 **Increasing Public Investment in Infrastructure:** Prioritize lagging regions for transport and energy projects.

7.3 **Expanding Regional Preferences for Investors***:* Offer tax holidays, subsidized land and simplified administrative procedures specifically in low-performing districts.

8 Conclusion:

The experience of Uzbekistan shows that increasing the investment attractiveness of regions is a key condition for expanding investment flows. Analyses conducted on the basis of statistical data show that the distribution of investments between regions is uneven – both at the viloyat level and more strikingly, at the district level. Therefore, economic growth can be accelerated by balancing regional development and improving the investment climate through targeted, data-driven policies.

References:

1. *Administration of the President of the Republic of Uzbekistan. Collection of decrees and resolutions on the Development Strategy of the Republic of Uzbekistan. – Toshkent, 2021.*

2. *Ministry of Economy and Finance of the Republic of Uzbekistan. Annual reports on economic development indicators of Uzbekistan. – Tashkent, 2023-2025.*

3. *State Committee of the Republic of Uzbekistan on Statistics. Statistical collection on investments in fixed assets. – Tashkent, 2021–2025.*

4. *The World Bank. World Development Indicators. – Washington, DC, 2024.*

5. *International Monetary Fund. Regional Economic Outlook: Central Asia. – 2023.*

6. *United Nations Conference on Trade and Development. World Investment Report. – Geneva, 2024.*

7. *Organization for Economic Cooperation and Development. Investment Policy Reviews. – Toshkent, 2021.*

8. *Michael Porter. The Competitive Advantage of Nations. – New York: Free Press, 1990.*

9. *Paul Krugman. Geography and Trade. – MIT Press, 1991.*

10. *Jeffrey Sachs. The End of Poverty. – Penguin Press, 2005.*

RAQAMLI VALYUTALAR AYLANISHI SHAROITIDA TIJORAT BANKLARI VALYUTA LIKVIDLIGINI SUN’IY INTELLEKT YORDAMIDA BOSHQARISH MEXANIZMLARINI TAKOMILLASHTIRISH

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Annotatsiya: Global moliyaviy tizimning raqamli transformatsiyasi sharoitida tijorat banklarining valyuta likvidligini boshqarish mexanizmlarini tubdan qayta ko‘rib chiqish zaruriyati yuzaga keldi. Ushbu maqolada Markaziy banklarning raqamli valyutalari va kripto-aktivlar oqimi sharoitida likvidlikni boshqarishning sun’iy intellekt modellari tadqiq etilgan.