

REVIEW OF THE COUNTRY OF UZBEKISTAN'S MARKET SOPHISTICATION INDEX FROM THE YEARS 2013 AND 2024

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Abstract: This article analyzes the statistical data of the market sophistication index of the Republic of Uzbekistan in the GII for 2013-2024. The study identified the main causes of the market sophistication index's considerable fluctuations over the previous few years. The market complexity index peaked at 27 in 2023, then fell by -42 points over the next 4 years, ranking 69th in 2024, and the reasons for this were explored. The article analyzes the Market sophistication Index of the Republic of Uzbekistan, which covers the macroeconomic stability and Market foundations of the Global Innovation Index, as well as Credit, Investment, Trade, diversification, and market scale from the sub-indices. Several factors have been identified that are obstructing the nation's market sophistication growth.

Key words: innovation, global innovation rating, innovation index, market, credit, investment, trade, diversification, innovative development, economic growth.

ОБЗОР ИНДЕКСА РАЗВИТИЯ РЫНКА СТРАНЫ УЗБЕКИСТАНА ЗА 2013 И 2024 ГОДЫ

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Аннотация: В данной статье анализируются статистические данные индекса развитости рынка Республики Узбекистан в ГИИ за 2013-2024 годы. Исследование выявило основные причины значительных колебаний индекса

развитости рынка за последние несколько лет. Индекс сложности рынка достиг пика в 27 в 2023 году, затем упал на -42 пункта в течение следующих 4 лет, заняв 69-е место в 2024 году, и причины этого были исследованы. В статье анализируется Индекс развитости рынка Республики Узбекистан, который охватывает макроэкономическую стабильность и рыночные основы Глобального инновационного индекса, а также кредит, инвестиции, торговлю, диверсификацию и масштаб рынка. Было выявлено несколько факторов, которые препятствуют росту развитости рынка страны.

Ключевые слова: инновации, глобальный рейтинг инноваций, индекс инноваций, рынок, кредит, инвестиции, торговля, диверсификация, инновационное развитие, экономический рост.

O‘ZBEKISTONNING BOZOR RIVOJLANISHI INDEKSINI 2013-2024-YILLARDAGI MA‘LUMOTLARI SHARHI

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Annotatsiya: Ushbu maqolada O‘zbekiston Respublikasining GII dagi bozor rivojlanishi indeksining 2013-2024-yillardagi statistik ma‘lumotlari tahlil qilindi. Tadqiqotchi bozor rivojlanishi indeksining so‘nggi bir necha yillar ichida sezilarli darajada o‘zgarishining asosiy sabablarini o‘rgandi. Bozor rivojlanishi indeksi 2023-yilda 27 darajaga yetdi, keyingi 4 yil ichida -42 punktga tushib, 2024-yilda 69-o‘rinni egalladi. Maqolada global innovatsiyalar indeksining makroiqtisodiy barqarorligi va bozor asoslarini, shuningdek, kredit, investitsiyalar, savdo, diversifikatsiya va sub-indekslar bo‘yicha bozor ko‘lamini qamrab oluvchi O‘zbekiston Mamlakatning bozor rivojlanishi o‘sishiga tosqinlik qiluvchi bir qancha omillar aniqlandi.

Kalit so‘zlar: innovatsiyalar, global innovatsiyalar reytingi, innovatsiyalar indeksi, bozor, kredit, sarmoya, savdo, diversifikatsiya, innovatsion rivojlanish, iqtisodiy o‘shish.

Introduction

Analyzing market challenges for creative growth is generally an important issue. Market sophistication especially intends to prevent the approaching economic crisis, ensure the effective functioning of scientific, technological, and innovative activities in the field, and establish the conditions necessary for the introduction of important creative ideas, changes in the market, access to credit, protection for freshly created employment opportunities, and an increase in company competitiveness. Two academic disciplines that have a relationship strongly linked to science management and economics are directly related to the study of innovation. The first tries to explain innovation's internal aspects, while the second concentrates on the ways that innovation has impacted within organizations. [1] This study explores how Uzbekistan's market development influences the country's capacity to succeed economically. A competent market, in particular, seeks to achieve the successful functioning of scientific and technological innovation activity in the sector while preventing economic crises and simultaneously ensuring innovative upgrades in production that create new jobs and enhance product competitiveness.

Consequently, in our research, we strictly take into consideration the Republic of Uzbekistan's Market Development Index on the global innovation index.

Literature review

The idea of the five degrees of market sophistication was initially presented by management scholar Eugene Schwartz in his book "Breakthrough Advertising."

Schwartz often noted that businesses were losing out on important chances to market their goods to consumers. This resulted from the reality that consumers have varying degrees of market sophistication, which marketers must account for when crafting their messaging and advertising. [2] To put it briefly, knowing market sophistication implies that your company is aware of the precise number of comparable goods and/or services that the market you are in is already aware of. [3] Pedro's research aims to analyze the impact of business complexity on marketing knowledge. [4] The main objective of the Vesal study was to examine the interactions between "labor market efficiency" and "business complexity" from a set of global competitiveness indices. [5] Abdullaev analyzed the dynamics of the Business Sophistication Index data for the Republic of Uzbekistan between 2012 and 2020. [6] However, in the subsequent years of 2023 and 2024, there were strong changes in the Uzbekistan Business Sophistication Index, which necessitated its analysis.

Methodology

At the same time, different countries and international organizations employ various techniques to evaluate market sophistication on their own. Such as:

Knowledge assessment methodology (Knowledge Assessment Methodology, or KAM) The knowledge assessment methodology, often known as KAM, is "an interactive benchmarking tool created by the World Bank's Knowledge for Development Program to help countries identify the challenges and opportunities they face in making the transition to the knowledge-based economy" [7];

NIC stands for National Innovative Capacity. The national innovation system (NIS) theory serves as the primary theoretical foundation for the NIC conceptual framework. In 1987, Freeman introduced the idea of NIS, which he defined as the network of public and private sector organizations whose contacts and activities create, import, alter, and disseminate new technologies (OECD, 1997) [8];

Comparative comparison of innovation performance in EU nations, other European nations, and regional neighbors is provided by the European Innovation Scoreboard (EIS). It evaluates the relative advantages and disadvantages of national innovation systems and assists nations in determining what needs to be addressed [9];

The Global Innovation Index (GII), published by WIPO, ranks around 130 economies based on innovation capabilities and results. As a key reference and “tool for action,” it assesses factors like institutions, human capital, infrastructure, investment, knowledge creation, and creative outputs to support economic development. [10]

The Innovation Index rating is based on 7 key indicators:

- institutions;
- human capital and research;
- infrastructure;
- market sophistication;
- business sophistication;
- knowledge and technology outputs;
- creative outputs.

In our study, we consider Global innovation Index the Market sophistication Index of the Republic of Uzbekistan for 2012-2024.

Results and discussion

For companies to thrive and for innovation to take place, market sophistication is the availability of finance and an atmosphere that encourages investment, as well as access to the global market, competition, and market size. Three sub-pillars make up the market sophistication pillar, which is organized according to the overall volume of transactions and market circumstances. (Table 1).

Findings from the Research Out of the 132 economies included in the GII 2024, Uzbekistan comes in at number 82. World economies are ranked based on their capacity for innovation by the Global Innovation Index (GII). The goal of the GII is to capture the many aspects of innovation through its approximately 80 indicators, which are categorized into innovation inputs and outputs. Uzbekistan's market sophistication rankings during the last two years are displayed in the following table (table 1). Uzbekistan's ranking in the GII 2023 and 2024 falls between numbers 69 and 78, according to the statistical confidence range. [17,18]

Table 1

Market sophistication index of the Republic of Uzbekistan

Sub-indices	Score/ Value 2023 y.	Rank 2023 y.	Score/ Value 2024 y.	Rank 2024 y.
Market sophistication	33.9	69	28.9	78
Credit	7.0	121	26.4	66
Finance for startups and scaleups	n/a	n/a	65.8	19
Domestic credit to private sector, % GDP	35.7	90	36.7	84
Loans from microfinance institutions, % GDP	0.2	49	0.2	51
	n/a	n/a	2.4	106
Market capitalization, % GDP	n/a	n/a	8.1	78
Venture capital (VC) investors, deals/bn PPP\$ GDP	n/a	n/a	0.0	87
VC recipients, deals/bn PPP\$ GDP	n/a	n/a	0.0	90
VC received, value, % GDP	n/a	n/a	0.0	85
Trade, diversification, and market scale	60.8	51	57.9	61
Applied tariff rate, weighted avg., %	2.6	68	2.7	77

Domestic industry diversification	92.4	42	87.8	44
Domestic market scale, bn PPP\$	334.3	56	371.6	56

Source: Global innovation index 2023,2024.

Market sophistication

The global financial crisis of 2007-2009 determined how important credit was to business performance and became the focus of most government policies. These indicators help to determine the status of credit and the situation of creditors and investors in the economy. The Credit Index consists of the following sub-indices: Finance for startups and scaleups; Domestic credit to private sector, % GDP; Loans from microfinance institutions, % GDP.

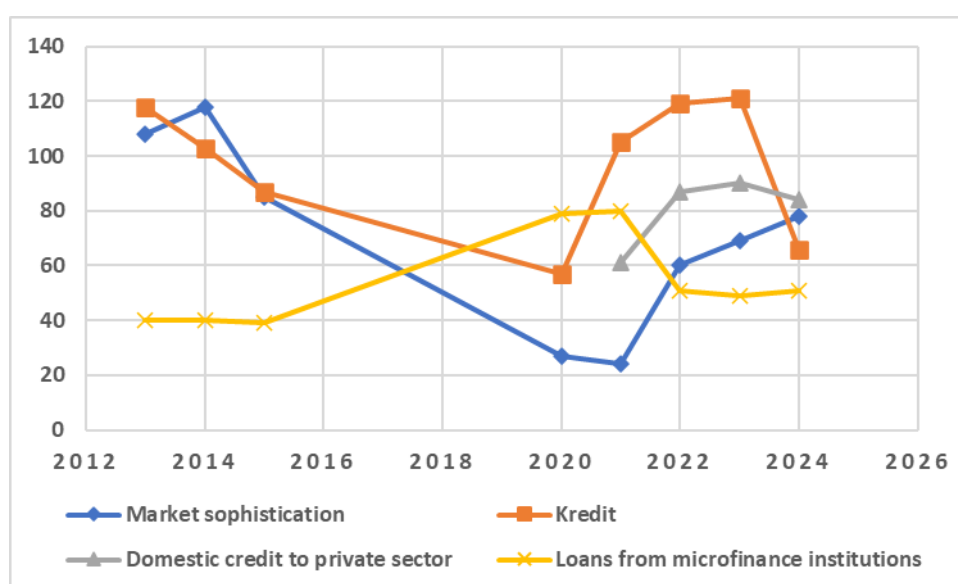


Figure 1. Dynamics of credit indicators in Uzbekistan

If we pay attention to the dynamics of **Credit** indicators in Uzbekistan according to the GII (see Figure 1), we can observe the unstable development of the indicators. Here, Credit has grown by +55 points over the last 2 years and in 2024 ranked 66th in the GII ranking.

Data on **Domestic Credit to private sector** from the **Credit** Index's compilers began to be provided in 2021. It had a rating of 61 in 2021 and 90 in 2023, changing by -29 points. In 2024, it fell to 84th place.

Loans from microfinance institutions ranked 79th in the GII in 2020, then increased by +30 points in 4 years to rank respectively 49th in 2023 and 51st in 2024.

Market sophistication decreased by -42 points in 4 years to rank 69th in 2024. The market complexity index peaked at 27 in 2023, then fell by -42 points over the next 4 years, ranking 69th in 2024, and the reasons for this were explored. The Investment Index consists of the following sub-indices: Ease of protecting minority investors; Market capitalization, % GDP; Venture capital investors, deals/bn PPP\$ GDP.

If we look at the dynamics of investment indicators in Uzbekistan on GII (Table 1), we can see that the data on this indicator for Uzbekistan in 2023 is not provided. Here, in the last 2024 year (Table 1) Investment has shown 106 ranked, and its sub indicators are **Market capitalization** 78, **Venture capital (VC) investors** 87, **VC recipients** 90 ranked.

The **Trade, diversification, and market scale** Index consists of the following sub-indices: **Applied tariff rate**, weighted avg.,%; **Domestic industry diversification**; **Domestic market scale**, bn PPP\$

If we look at the dynamics of the Trade, Diversification and Market Size indicators in Uzbekistan according to the GII (see Figure 2), we can observe the unstable development of the indicators. Here, over the past 4 years, Trade, Diversification and Market Size has decreased by +54 points, and the GII ranking has dropped from 108th place in 2020 to 51st place in 2023. In 2024, it has returned to 61st place.

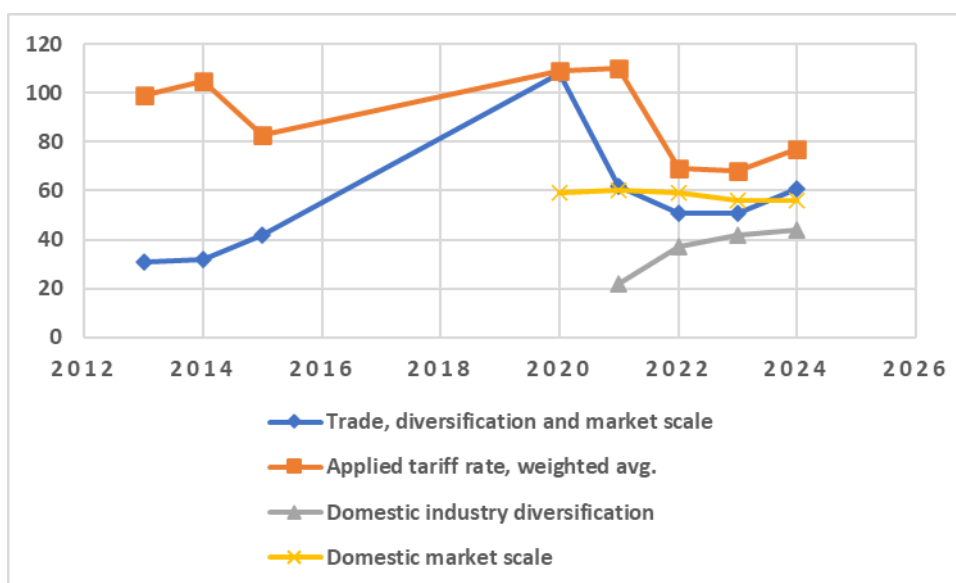


Figure 2. Dynamics of Trade, diversification, and market scale Indicators in Uzbekistan.

Source: Global innovation index - 2013, 2014, 2015, 2020, 2021, 2022, 2023, 2024. [11,12,13,14,15,16,17,18]

The applied tariff rate has increased by +41 points, and the GII ranking has dropped from 109th place in 2020 to 68th place in 2023. In 2024, it has dropped to 77th place.

The domestic market size index ranked 59th in the GII ranking in 2020 and changed positively by +3 points to 56 points in 2023. It remained unchanged at 56 points in 2024.

Data on domestic industrial diversification were presented in 2021 at 22nd place, but in the next 3 years it changed by 20 points to 42nd place. In 2024, it fell to 44th place.

Conclusion

Therefore, the study of the current state of **Market sophistication** index shows that the problem of developing new infrastructure is very complex and requires specialized processing. At the moment, Uzbekistan has a highly developed market. However, this activity is of less interest to organizations and enterprises engaged in innovation, as well as credit and financial institutions offering finance.

From the analysis of Uzbekistan's GII data, the following can be noted: the GII indicator of Uzbekistan has been calculated since 2012. Over this period, the study of the **Market sophistication** index of the Uzbekistan shows a positive trend; the basis of each economy is its market **sophistication** network, which reduces transaction costs and expands market access

The trends in Uzbekistan's **credit** indicators indicate a mix of successes and shortcomings in financial accessibility and lending practices.

1. We propose the following to improve the ease of getting credit: Expanding lending by the state; Modernizing credit policy and risk assessment; Introducing digital financial services and fintech solutions.

2. The recent decline in credit ratings may be due to: Tight credit policies due to inflationary risks; macroeconomic fluctuations affecting lending capacity; regulatory obstacles to investor confidence.

3. The **domestic credit to private sector** indicator indicates the level of financial resources available to businesses and individuals. A relatively low score may be due to: limited access to credit for startups and small and medium-sized enterprises; conservative banking approach to lending to the private sector; the need for better credit policies to stimulate private sector growth.

4. **Loans from microfinance institutions.** The microfinance sector plays a key role in providing financial opportunities to small businesses and the poor. A downgrade in the rating could be due to: economic difficulties affecting repayment rates; possible changes in financial inclusion policies.

5. We propose the following solutions and recommendations to address the above challenges: strengthening access to credit for businesses and individuals through innovative lending models; increasing the adoption of digital banking and fintech to simplify lending processes; ensuring financial stability by balancing credit expansion with risk management; and stimulating microfinance growth by offering government-backed guarantees or incentives.

References

1. Kemp, R. G. M., Folkeringa, M., De Jong, J. P. J., & Wubben, E. F. M. (2003). Innovation and firm performance Research report n. H200207, Scientific analysis of entrepreneurship and SMEs.
2. Eugene M. Schwartz and Martin Edelston Breakthrough Advertising. Jan 1, 2004
3. Explained:The Five Levels Of Market Sophistication. November16,2020/<https://bestpractice.biz/explained-the-five-levels-of-market-sophistication/>.
4. Pedro F. X., Rodrigues R. G. The Impact of Business Sophistication on Marketing Knowledge //Disruptive Innovation and Emerging Technologies for Business Excellence in the Service Sector. – IGI Global, 2022. – C. 130-163.
5. Vesal S. M. et al. The Relationship between" Labor Market Efficiency" and" Business Sophistication" in Global Competitiveness //International Journal of Business and Management. – 2013. – T. 8. – №. 13. – C. 83.
6. Bakhodir A., Nurullo K., Zilolaxon A. Analysis of Market Sophistication Index of the Republic of Uzbekistan //International journal of business diplomacy and economy. – 2022. – T. 1. – №. 3. – C. 58-63.
7. Chen D. H. C., Dahlman C. J. The knowledge economy, the KAM methodology and World Bank operations //World Bank Institute Working Paper. – 2005. – №. 37256.
8. R.P. Mu et al./National Innovation Capacity Index: A Cross-Country Comparative Analysis. Innovation and Development Policy 2 (2019) 132-158.
9. The European innovation scoreboard.<https://ec.europa.eu/info/>
10. The Global Innovation Index (GII) <https://www.globalinnovationindex.org>
11. The Global Innovation Index 2013. <https://www.globalinnovationindex.org>
12. The Global Innovation Index 2014. <https://www.globalinnovationindex.org>
13. The Global Innovation Index 2015. <https://www.globalinnovationindex.org>
14. The Global Innovation Index 2020. <https://www.globalinnovationindex.org>
15. The Global Innovation Index 2021. <https://www.globalinnovationindex.org>

16. The Global Innovation Index 2022. <https://www.globalinnovationindex.org>
17. The Global Innovation Index 2023. <https://www.globalinnovationindex.org>
18. The Global Innovation Index 2024. <https://www.globalinnovationindex.org>