

American Journal of Economics and Business Management

Vol. 9 Issue 11 | **pp.** 524-531 | **ISSN:** 2576-5973
Available online @ https://www.globalresearchnetwork.us/index.php/ajebm

Article

Dynamics of Tourism Structural Indicators and Analysis Of Structural Shifts in Uzbekistan

***Mamatkulova Odinakhon*[1]**

1. *Phd Student, Fergana State University*
omamatqulova24@gmail.com

Abstract: The article analyses the dynamics of the indicators of tourism structural elements in Uzbekistan in 2021–2025 and the structural shifts within them, using official data of the National Statistics Committee of the Republic of Uzbekistan. The aim of the study is to quantify changes in the geographic and purpose-of-visit composition of inbound tourist flows, in the indicators of the tourism industry and accommodation infrastructure, and in the share of tourism in the economy. Structural shares, contributions to growth, a structural shift index, a diversification measure based on the Herfindahl–Hirschman index and unit efficiency ratios were applied. The results show that inbound trips increased 6.2 times, that the share of trips for visiting relatives fell from 85.7% to 67.3% while the shares of leisure and business trips rose, and that the pace of structural shifts accelerated year by year. At the same time, the rapid growth in the number of accommodation establishments was accompanied by a decline in the number of guests per establishment. Based on the findings, proposals are made for managing tourism structural elements through quality-oriented indicators.

Keywords: *Uzbekistan; tourism infrastructure; digital connectivity; accommodation capacity; infrastructure complementarity*.

Citation: Odinakhon, M. Dynamics of Tourism Structural Indicators and Analysis Of Structural Shifts in Uzbekistan. American Journal of Economics and Business Management 2026, 9(11), 524-531.

Received: 10th Oct 2026
Revised: 11th Oct 2026
Accepted: 24th Oct 2026
Published: 14th Nov 2026

Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/)

1. Introduction

Tourism In recent years, tourism development has become one of the priorities of economic policy in Uzbekistan. The Development Strategy of New Uzbekistan for 2022–2026 set the target of increasing the number of foreign tourists to 9 million by 2026 [1], and the "Uzbekistan – 2030" Strategy raised this target to 15 million foreign tourists and 25 million domestic tourists [2]. These efforts are also recognised internationally: in the World Economic Forum's Travel & Tourism Development Index, Uzbekistan moved up from 94th place to 78th place between 2019 and 2024 [3].

However, growth in tourist numbers does not in itself mean that the sector has developed qualitatively. Tourism is a multi-sectoral activity, and its outcomes depend on which countries tourist flows come from and for what purposes, as well as on how well tour operators and accommodation establishments develop in line with these flows. Therefore, tourism management requires monitoring not only aggregate volume indicators but also their composition and structural changes. This issue has not yet been sufficiently analysed quantitatively in the scientific literature on Uzbekistan.

The aim of this article is to analyse the dynamics of the indicators of tourism structural elements in Uzbekistan in 2021–2025, to quantify the structural shifts within them and, on this basis, to develop proposals for improving their management. The article

consists of an introduction, a literature review, research methodology, analysis and results, and conclusions and recommendations.

The theoretical foundations for analysing tourism as a structural system were laid by N. Leiper, who defined tourism as a system consisting of tourists, generating and destination regions, and the tourism industry [4]. S. Smith substantiated the need to define tourism from the supply side, that is, as the set of industries serving tourists [5]. Together, these two approaches make it possible to study tourism structural elements from both the demand side [the composition of tourist flows] and the supply side tour operators and accommodation establishments. The United Nations International Recommendations for Tourism Statistics establish a classification of the purposes of trips and a list of tourism characteristic industries, which form the basis for measuring the structure of tourism in an internationally comparable way [6].

The role of tourism in economic growth was substantiated by J. Balaguer and M. Cantavella-Jordá through the tourism-led growth hypothesis, using the example of Spain [7]. Using data for 2002–2017, F. Adedoyin and co-authors found that the effect of tourism on economic growth changes substantially once governance [institutional quality] factors are taken into account [8]. This implies that what matters is not only the volume of tourism, but also its composition and the governance conditions under which it grows.

Among Uzbek scholars, I.S. Tuxliyev and R. Hayitboyev developed a classification of the components of the tourism industry [9]. M. Amonboev and S.Sh. Xalilov analysed tourist flow and purpose-of-visit statistics for 2016–2020 and examined opportunities for the effective development of the sector [10]. Z.B. Navruz-Zoda studied opportunities for developing pilgrimage tourism in Uzbekistan [11], while A.U. Akkulov showed that institutional fragmentation and overlapping mandates persist in tourism governance [12].

The review of existing studies shows that statistical analyses of tourism in Uzbekistan are mainly descriptive and focus on the absolute growth of indicators. Structural shifts in tourist flows, their geographic and purpose-of-visit diversification, and the unit efficiency of tourism structural elements have not been assessed quantitatively within a single framework. This article aims to partly fill this gap.

2. Materials and Methods

Data The study uses data from the “Tourist Flow” bulletin of the National Statistics Committee of the Republic of Uzbekistan [13], its press release “Development of Tourism and Recreation in Uzbekistan” [14] and the tourism satellite account indicators available in the Statistical Information and Analytical System [SIAT] [15]. The analysis covers 2021–2025, while the tourism satellite account indicators cover 2019–2024, the period for which they have been published.

In addition to statistical grouping, structural shares and dynamic analysis, the following indicators were calculated. First, the contribution of each purpose of visit to total growth:

$$C_i = [X_{i,2025} - X_{i,2021}] / [X_{2025} - X_{2021}] \times 100,$$

where X_i is the number of trips for purpose i and X is the total number of trips. Second, the annual structural shift index:

$$S_t = \tfrac{1}{2} \times \Sigma \, | d_{i,t} - d_{i,t-1} | \times 100,$$

where $d_{i,t}$ is the share of purpose i in year t; this index shows by how many percentage points the structure was redistributed within one year. Third, the degree of diversification was calculated on the basis of the Herfindahl–Hirschman index [16]:

$$D = 1 - \Sigma \, d_i^2,$$

where a value of D close to 0 means that the flow is concentrated in one segment, and the closer D is to 1, the more diversified the flow. The reciprocal of the index 1/HHI shows into how many equal-sized segments the flow is effectively divided. Diversification was calculated in two dimensions: by purpose of visit six purposes and geographically the

15 leading countries. Since official statistics report the remaining countries as a single "other countries" group 2.4–3.8% of the total flow in 2021–2025, and treating them as one country would artificially increase concentration, this group was excluded from the calculation; the geographic HHI values should therefore be interpreted as a lower bound, although this does not affect their dynamics over time. Fourth, the unit efficiency of tourism structural elements was measured by the number of persons served per tour operator and by the number of guests accommodated per accommodation establishment and per bed.

3. Results and Discussion

Classification According to official data, the number of trips made by foreign citizens to Uzbekistan for tourism purposes increased from 1,881.3 thousand in 2021 to 11,679.6 thousand in 2025, that is, 6.2 times; the average annual growth rate was 57.9%. The sharpest jump was observed in 2022 [+178.1%], when borders fully reopened after the pandemic, and in 2025 the flow increased by 3,722.4 thousand trips compared with the previous year [17]. The geographic composition of the flow is presented in Table 1.

Table 1

Dynamics of inbound tourist trips to Uzbekistan by leading countrie

Country	2021, thousand	2025, thousand	Growth, times	Share in 2025, %
Total	1,881.3	11,679.6	6.2	100.0
Kyrgyzstan	652.2	3,315.1	5.1	28.4
Tajikistan	288.2	2,695.7	9.4	23.1
Kazakhstan	565.3	2,667.4	4.7	22.8
Russia	190.5	984.4	5.2	8.4
Afghanistan	34.0	476.7	14.0	4.1
Turkmenistan	1.2	370.0	308.3	3.2
China	3.6	278.9	77.5	2.4
Türkiye	44.2	174.9	4.0	1.5
India	10.7	80.9	7.6	0.7
Republic of Korea	5.8	46.3	8.0	0.4

[1]Source: calculated by the authors based on data of the National Statistics Committee of the Republic of Uzbekistan.

The table shows that neighbouring countries still account for the bulk of inbound flows: in 2025, Kyrgyzstan, Tajikistan and Kazakhstan together accounted for 74.3% of the total. However, this share has declined from 80.0% in 2021. The highest growth rates were recorded for Turkmenistan [308 times], China [77 times] and Afghanistan 14 times. The reasons differ: 70.3% and 68.7% of trips by citizens of China and Turkmenistan, respectively, were for leisure purposes, whereas 87.2% of trips by citizens of Afghanistan were for commercial purposes, mainly related to cross-border trade [18].

The purposes of visit reveal the qualitative composition of tourist flows more clearly Table 2 and Figure 1.

Table 2

Composition of inbound tourist trips by purpose of visit and contribution to growth

Purpose of visit	2021, thousand	2025, thousand	Share 2021, %	Share 2025, %	Growth, times	Contribution to growth, %

Visiting relatives	1,613.1	7,863.3	85.7	67.3	4.9	63.8
Leisure	155.1	1,922.1	8.2	16.5	12.4	18.0
Business	60.7	1,321.5	3.2	11.3	21.8	12.9
Commerce	13.6	446.8	0.7	3.8	32.9	4.4
Medical treatment	32.4	86.2	1.7	0.7	2.7	0.5
Study	6.4	39.7	0.3	0.3	6.2	0.3
Total	1,881.3	11,679.6	100.0	100.0	6.2	100.0

[2]*Source: calculated by the authors based on data of the National Statistics Committee of the Republic of Uzbekistan.*

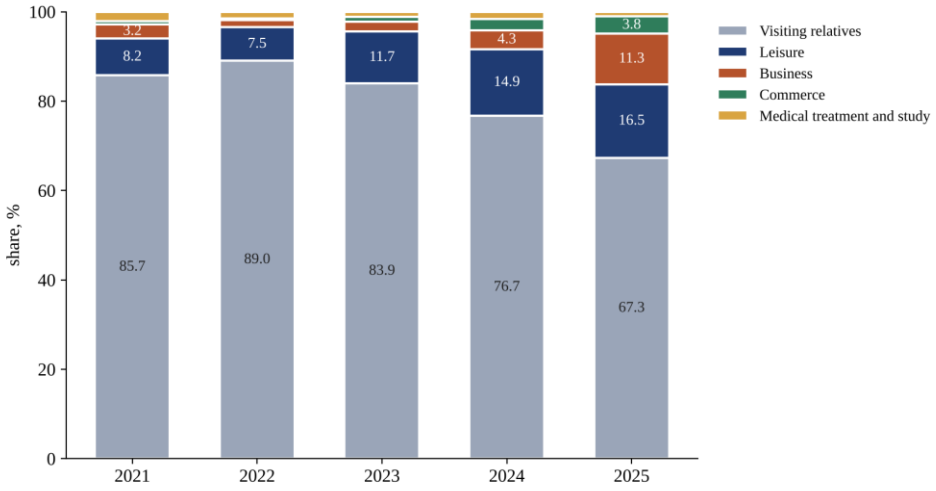


Figure 1. Composition of inbound tourist trips by purpose of visit, %

[3]*Source: compiled by the authors based on data of the National Statistics Committee of the Republic of Uzbekistan.*

The results reveal an important structural change. Although trips for visiting relatives still account for the largest volume, their share declined from 89.0% in 2022 to 67.3% in 2025. At the same time, the share of leisure trips doubled to 16.5%, and the share of business trips rose from 3.2% to 11.3%. The contribution-to-growth indicator confirms this: of the increase of 9,798.3 thousand trips in 2021–2025, 63.8% was due to trips for visiting relatives, while leisure, business and commercial trips together provided 35.3%. Given that these three segments accounted for only 12.1% of the total flow in 2021, their contribution to growth was almost three times larger than their initial share.

The structural shift index shows that this process is accelerating: the purpose-of-visit structure was redistributed by 3.3 percentage points in 2022, 5.5 in 2023, 7.2 in 2024 and 10.0 in 2025. The cumulative shift over 2021–2025 amounted to 19.4 percentage points. The dynamics of the diversification indicators over the years are presented in Table 3.

Table 3

Herfindahl–Hirschman index and diversification indicators of inbound tourist flows

Indicator	2021	2022	2023	2024	2025
HHI by purpose of visit	0.743	0.798	0.719	0.613	0.495
D = 1 – HHI by purpose of visit	0.257	0.202	0.281	0.387	0.505

Effective number of segments [1/HHI]	1.35	1.25	1.39	1.63	2.02
Geographic HHI [15 leading countries]	0.245	0.244	0.229	0.217	0.197
Geographic D = 1 – HHI	0.755	0.756	0.771	0.783	0.803

[4]*Source: calculated by the authors based on data of the National Statistics Committee of the Republic of Uzbekistan.*

The table shows that in 2021–2022 the tourist flow was almost entirely concentrated in a single segment — visiting relatives — and that this concentration even intensified in the year of post-pandemic recovery [HHI rose from 0.743 to 0.798]. From 2023 onwards, however, concentration declined every year, and in 2025 the HHI fell below 0.5 for the first time [0.495], while the diversification indicator rose from 0.257 to 0.505, that is, almost doubled. The increase in the effective number of segments from 1.35 to 2.02 means that the flow has in effect shifted from a "single-segment" to a "two-segment" structure: alongside visiting relatives, leisure and business trips are becoming structure-defining factors. Nevertheless, the HHI by purpose of visit remains high, indicating that one segment still dominates the composition of the flow. Geographic concentration also decreased steadily [HHI from 0.245 to 0.197], reflecting a gradual increase in the share of long-haul markets.

At the same time, two points should be taken into account. First, 93.0% of commercial trips were made by citizens of Afghanistan, so the growth of this segment is explained by cross-border trade rather than tourism. Second, trips for medical treatment show unstable dynamics: they fell from 104.9 thousand in 2024 to 86.2 thousand in 2025, and their share decreased from 1.7% to 0.7%. This indicates the need for further research on and support for the medical tourism segment.

Similar growth was observed in outbound tourism: trips abroad by citizens of Uzbekistan increased from 2,194.8 thousand in 2021 to 7,559.7 thousand in 2025, that is, 3.4 times. As a result, in 2025 inbound trips exceeded outbound trips by 4,119.9 thousand [19].

Table 4 shows how well the supply-side structural elements match the changes in tourist flows.

Table 4

Main and unit indicators of tour operators and accommodation establishments[5]

Indicator	2021	2022	2023	2024	2025
Number of tour operators and travel agencies	288	348	593	743	869
Persons served by them, thousand	577.8	673.7	1,157.1	1,972.9	1,981.7
Persons served per tour operator	2,006	1,936	1,951	2,655	2,280
Number of accommodation establishments	1,653	1,877	2,396	3,600	3,644
Guests accommodated, thousand	2,002.9	3,045.7	3,975.0	4,261.8	4,356.1
Guests per establishment	1,212	1,623	1,659	1,184	1,195
Guests per bed	13.2	25.0	28.6	29.3	26.1

[5]*Source: calculated by the authors based on the press release of the National Statistics Committee of the Republic of Uzbekistan [14].*

In 2021–2025, the number of tour operators and travel agencies increased 3.0 times, the number of persons they served 3.4 times, and the number of tour vouchers sold from 147.7 thousand to 706.9 thousand, that is, 4.8 times [20]. Although the number of persons served per tour operator peaked in 2024 [2,655], it fell to 2,280 in 2025 because the number

of firms grew by 17.0% while the number of persons served remained almost unchanged. This may indicate emerging signs of saturation in the tour operator market.

The imbalance is even more evident in accommodation. In 2024, the number of establishments increased in a single year from 2,396 to 3,600, that is, by 50.3%, while the number of guests accommodated rose by only 7.2%. As a result, the number of guests per establishment fell from 1,659 to 1,184, that is, by 28.6%, and remained at that level in 2025 [1,195]. In 2025, the number of beds grew by 14.7% while the number of guests increased by 2.2%, so the number of guests per bed also fell from 29.3 to 26.1. The sharp increase in the number of establishments may partly reflect the registration of guest houses and other small establishments, but the overall trend indicates that accommodation capacity is growing faster than demand.

The role of tourism in the national economy was assessed using tourism satellite account indicators. Gross value added generated in tourism industries increased from 49,684.8 billion soums in 2019 to 141,688.1 billion soums in 2024. Direct tourism gross domestic product fell sharply during the pandemic [3,469.8 billion soums in 2020] and amounted to 38,139.6 billion soums in 2024. Figure 2 shows the share of direct tourism GDP in the gross value added of tourism industries.

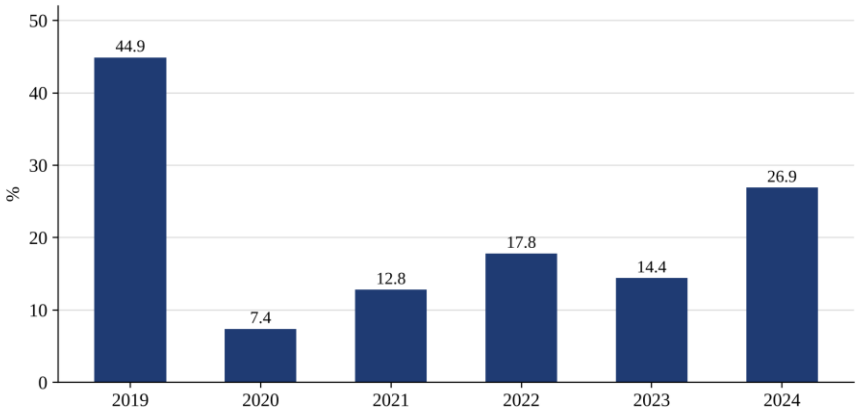


Figure 2. Share of direct tourism GDP in gross value added of tourism industries, %

The figure shows that the part of value added in tourism industries attributable directly to tourist consumption fell from 44.9% in 2019 to 7.4% during the pandemic and recovered to 26.9% in 2024. The fact that this share has not yet returned to its 2019 level, even though tourist numbers have exceeded pre-pandemic levels, can be explained by the fact that a large part of the growth in tourist flows comes from segments that make little use of tourism industry services, in particular visiting relatives. This conclusion is consistent with the results of the structural analysis in Table 2.

4. Conclusion

The analysis of the dynamics of tourism structural indicators and structural shifts in Uzbekistan demonstrates that the tourism sector is undergoing significant transformations in terms of its scale, composition, and contribution to the national economy. The development of tourism has become an important factor in diversifying economic activity, expanding service exports, creating employment opportunities, and strengthening the country's position in the international tourism market. The study highlights that changes in tourism indicators should be assessed not only through their absolute growth rates but

also through shifts in their structural composition. In particular, changes in the number of domestic and international tourists, the development of accommodation facilities, the expansion of tourism services, and the diversification of tourism products provide a more comprehensive understanding of sectoral development. Structural analysis makes it possible to identify the areas experiencing the most significant changes and assess the extent to which tourism development is becoming more diversified. An important conclusion is that sustainable tourism development depends on the balanced development of its individual components. Increasing tourist flows alone cannot guarantee long-term sectoral competitiveness. It is also necessary to improve tourism infrastructure, enhance service quality, strengthen regional tourism destinations, develop human capital, and expand the range of tourism products. Particular attention should be paid to pilgrimage, cultural, historical, ecological, gastronomic, and rural tourism, which offer opportunities to attract different categories of visitors and reduce the concentration of tourism activity in a limited number of destinations.

REFERENCES

[1] President of the Republic of Uzbekistan, "On the Development Strategy of New Uzbekistan for 2022–2026," Decree No. PF-60, Jan. 28, 2022. [In Uzbek].

[2] President of the Republic of Uzbekistan, "On the 'Uzbekistan–2030' Strategy," Decree No. PF-158, Sep. 11, 2023. [Online]. Available: https://lex.uz/docs/-6600413. [In Uzbek].

[3] World Economic Forum, Travel & Tourism Development Index 2024. Geneva, Switzerland: WEF, 2024. [Online]. Available: https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf.

[4] N. Leiper, "The framework of tourism: Towards a definition of tourism, tourist, and the tourist industry," Annals of Tourism Research, vol. 6, no. 4, pp. 390–407, 1979.

[5] S. L. J. Smith, "Defining tourism: A supply-side view," Annals of Tourism Research, vol. 15, no. 2, pp. 179–190, 1988.

[6] United Nations, International Recommendations for Tourism Statistics 2008, Studies in Methods, Series M, No. 83/Rev.1. New York, NY, USA: United Nations, 2010.

[7] J. Balaguer and M. Cantavella-Jordá, "Tourism as a long-run economic growth factor: The Spanish case," Applied Economics, vol. 34, no. 7, pp. 877–884, 2002.

[8] F. F. Adedoyin, N. Erum, and F. V. Bekun, "How does institutional quality moderate the impact of tourism on economic growth? Startling evidence from high earners and tourism-dependent economies," Tourism Economics, vol. 28, no. 5, pp. 1311–1332, 2022, doi: 10.1177/1354816621993627.

[9] I. S. Tuxliyev and R. Hayitboyev, Turizm asoslari [Fundamentals of Tourism]. Samarkand, Uzbekistan: Samarkand Institute of Economics and Service, 2014. [In Uzbek].

[10] M. Amonboev and S. Sh. Xalilov, "Turizm sohasini samarali rivojlantirishda asosiy imkoniyatlarning ilmiy tahlili va nazariy talqini" [Scientific analysis and theoretical interpretation of the main opportunities for the effective development of tourism], Iqtisodiyot va innovatsion texnologiyalar, no. 5, pp. 348–354, 2021. [In Uzbek].

[11] Z. B. Navruz-Zoda, "Opportunities for the development of pilgrimage tourism in Uzbekistan," European Journal of Economics and Management Sciences, no. 2, pp. 30–34, 2024, doi: 10.29013/EJEMS-24-2-30-34.

[12] A. U. Akkulov, "Institutional coordination and tourism governance in Uzbekistan: A theoretical and empirical analysis," Innovation Science and Technology, no. 2, pp. 119–123, 2026.

[13] National Statistics Committee of the Republic of Uzbekistan, "Turistik oqim: 2025-yil yanvar–dekabr" [Tourist Flow: January–December 2025]. [Online]. Available: https://stat.uz/files/611/choraklik-natijalar-2025-yanvar-dekabruz/4233/20--.pdf. [In Uzbek].

[14] National Statistics Committee of the Republic of Uzbekistan, "O'zbekistonda turizm va dam olishning rivojlanishi, 2025-yil" [Development of Tourism and Recreation in Uzbekistan, 2025], press release. [Online]. Available: https://stat.uz/img/press-relizlar/2025-turizm-va-dam-olishni-rivozhlanishi-lotin_p81837.pdf. [In Uzbek].

[15] National Statistics Committee of the Republic of Uzbekistan, "Statistical Information and Analytical System (SIAT): Tourism Satellite Account Indicators." [Online]. Available: https://siat.stat.uz/reports-filed/3347/table-data.

[16] A. O. Hirschman, "The paternity of an index," The American Economic Review, vol. 54, no. 5, p. 761, 1964.

[17] R. W. Butler, "The concept of a tourist area cycle of evolution: Implications for management of resources," The Canadian Geographer, vol. 24, no. 1, pp. 5–12, 1980.

[18] L. Dwyer and C. Kim, "Destination competitiveness: Determinants and indicators," Current Issues in Tourism, vol. 6, no. 5, pp. 369–414, 2003.

[19] J. R. B. Ritchie and G. I. Crouch, "The competitiveness of international tourism destinations: A framework for understanding and analysis," in Proceedings of the 43rd Congress of the Association Internationale d'Experts Scientifiques du Tourisme, San Carlos de Bariloche, Argentina, 1993.

[20] G. I. Crouch and J. R. B. Ritchie, "Tourism, competitiveness, and societal prosperity," Journal of Business Research, vol. 44, no. 3, pp. 137–152, 1999.