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Analysis of Wholesale and Retail Trade Turnover in the Guba-Khachmaz Economic Region

Abstract

This article analyzes the dynamics, structure, and territorial differentiation of retail and wholesale turnover in the Guba-Khachmaz Economic Region of the Republic of Azerbaijan for the period 2015–2023. Using official statistical data from the State Statistics Committee, a comparative territorial analysis of trade indicators was carried out, per capita dynamics were calculated, and a typology of districts by their level of trade activity was constructed. The results show a pronounced asymmetry: the main centers of trade are represented by Khachmaz and Guba, while peripheral districts (Shabran, Siyazan) experience difficulties in developing their trade and demonstrate persistent unfavorable trends. The discussion focuses on the reasons for this differentiation — insufficient transport and logistical support, structural and morphological disparities, and the weak purchasing power of the population — which collectively undermine sustainable regional development. This result may serve as a basis for developing differentiated management approaches, strengthening the sustainability of trade, and reducing imbalances in the socio-economic development of the districts.

Keywords: *Guba-Khachmaz district, retail turnover, wholesale trade, differentiation, sustainability, socio-economic development*

Introduction

Trade, as one of the most important sectors of the market economy, fulfills in regional systems not only the function of distributing goods but also serves as an indicator of the population's economic activity, the level of urbanization, and the efficiency of production and logistics infrastructure. The analysis of the dynamics and structure of trade turnover acquires particular significance in economically and geographically differentiated regions, where the combination of natural, demographic, and infrastructural factors determines the diversity of consumer behavior and entrepreneurial activity.

In the Republic of Azerbaijan, the Guba-Khachmaz Economic Region represents a territorial entity where internal disparities in socio-economic development and trade specialization are especially pronounced. The region includes five administrative districts – Khachmaz, Guba, Gusar, Siyazan, and Shabran – each differing in population size, settlement density, sectoral structure of the economy, and level of investment activity. Given these differences, trade turnover – both retail and wholesale – acts as an objective criterion for assessing the level of economic development and the effectiveness of spatial economic organization at the regional level.

In recent years, there has been growing interest in regional trade analysis in the context of spatial planning and the assessment of state policy effectiveness. However, despite the existence of certain statistical publications, a systematized economic-geographical analysis of trade turnover at the level of an intra-state economic region remains insufficiently represented. At the same time, in regions such as Guba-Khachmaz, trade performs not only a distributive function but also plays the role of a crucial factor of socio-economic integration, particularly in the context of increasing transport connectivity and the transformation of consumer models.

The purpose of this study is to identify the trends, patterns, and spatial disparities in the dynamics of trade turnover in the Guba-Khachmaz Economic Region of Azerbaijan for the period 2015–2023,

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based on the analysis of official statistical data. The research primarily relies on the data of the State Statistical Committee of the Republic of Azerbaijan (Guseynov, 2009; Imrani, 2023; Khudaverdiyeva & Ragimov, 2021), which encompass indicators of retail and wholesale trade in the administrative districts, as well as their dynamics per capita.

The research objectives include:

– analyzing changes in the volume and structure of retail and wholesale trade turnover in the region as a whole;

– identifying growth and stagnation rates across the administrative districts;

– comparing absolute and per capita indicators of trade;

– constructing a typology of districts according to the level of trade activity;

– identifying factors that promote or hinder trade development in specific districts.

The methodological basis of the study is a comparative-territorial analysis, including the systematization of statistical data, index-based evaluation of dynamics, and per capita calculations, which make it possible to reveal not only nominal but also real trends in trade development. Elements of graphical analysis and cartographic interpretation, oriented towards the visualization of the spatial structure of trade, are also applied (Bayramov, 2019).

The scientific and practical significance of the research lies in substantiating the necessity of a differentiated approach to trade regulation within a single economic region, taking into account differences in infrastructural, demographic, and economic characteristics. The findings can be of use to executive authorities, as well as in the development of regional socio-economic development programs. The analysis of trade turnover as a tool for assessing the socio-economic condition of a region requires the application of a set of methods that combine quantitative and qualitative approaches. In the context of territorial differentiation and differences in demographic and infrastructural characteristics of the districts within the Guba-Khachmaz Economic Region, the use of comparative-geographical and statistical methods makes it possible to obtain an objective picture of trade development at the regional level. The source base of the study consists of official data from the State Statistical Committee of the Republic of Azerbaijan, including the annual statistical compendiums *Districts of Azerbaijan* for 2016 and 2022 (Guseynov, 2009; Imrani, 2023), as well as the general statistical report *Indicators of Azerbaijan* (Khudaverdiyeva & Ragimov, 2021). Aggregated data on the dynamics of retail and wholesale trade turnover by administrative units, information on population size, and investment activity were also utilized.

To achieve the research objectives, the following methods and approaches were applied:

– **Comparative-territorial analysis**, which made it possible to evaluate differences among the districts in terms of trade volume, growth rates, and the structure of trade forms (retail/wholesale);

– **Index method**, employed in the analysis of the dynamics of the physical volume of retail trade turnover in order to eliminate the influence of inflation and seasonal fluctuations;

– **Per capita trade turnover calculation**, which allowed the assessment of not only the overall volume of trade but also the intensity of consumption per resident;

– **Typological approach**, used to group districts according to their level of trade activity (high, medium, low) and the dynamics of indicators.

The study covers the period from 2015 to 2023. The choice of this time interval is determined by two factors: firstly, the availability of comparable and systematized statistical data; and secondly, the relevance of assessing trade processes in the post-crisis (pandemic and post-pandemic) period. In some cases, to substantiate retrospective dynamics, data from 1991, 2005, and 2010 were also employed (Guseynov, 2009).

The limitations of the research are associated with the aggregated nature of official statistics. In particular, the reporting does not include a breakdown of trade by type of settlement (urban/rural) nor by product groups. Information on the share of informal trade and small-scale entrepreneurship is also absent, which may underestimate the role of trade in some rural areas. Furthermore, official reports do not always reflect the spatial distribution of investments specifically directed towards trade infrastructure.

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Despite these limitations, the applied methodological framework makes it possible to identify the main regularities and territorial differences in the development of trade, as well as to formulate conclusions regarding the typology of districts by level and structure of trade activity within the Guba-Khachmaz Economic Region.

General Characteristics of the Region

The Guba-Khachmaz Economic Region is located in the north-eastern part of the Republic of Azerbaijan and encompasses five administrative districts: Khachmaz, Guba, Gusar, Siyazan, and Shabran. The total area of the region is about 6,700 km², and the population as of 2023 exceeds 530,000 people (Khudaverdiyeva & Ragimov, 2021), making it one of the larger subregional areas within the structure of the national economy. The region has a favorable geographical position, bordering the Caspian Sea to the east and the Russian Federation to the north. Major road and railway corridors traverse its territory, linking the capital region with the north of the country and beyond.

The relief of the region is highly contrasting — from foothills and mountain ranges in the west to the Caspian lowlands — which generates differences in agricultural specialization, settlement patterns, and territorial accessibility. The landscape diversity contributes to the development of both agriculture (including horticulture, livestock breeding, and crop production) and tourism potential, particularly in the Gusar and, to some extent, Guba districts (Gerayzade & Mirzayeva, 1998).

From an economic perspective, the Guba-Khachmaz region is characterized by a multi-structural economy, where traditional forms of agricultural production coexist with emerging formats of the service economy. The role of trade in the regional economy is constantly increasing, which is associated with both the general economic environment and the developing character of the national economy as a whole, as well as regional factors such as population growth, rising mobility, the expansion of logistics opportunities, and the development of the consumer sector. In certain districts, trade performs not only the function of redistributing consumer goods but also serves as the main source of employment and self-employment for the population.

In terms of urbanization and infrastructural saturation, the districts of the Guba-Khachmaz region demonstrate significant heterogeneity. The Khachmaz district concentrates a considerable number of trade facilities, a developed transport network, and high population density. The Guba district shows relatively stable growth due to its agricultural specialization and domestic tourism. The Gusar district, despite its natural and tourist potential, suffers from outmigration of the population and limited trade infrastructure. The Siyazan and Shabran districts, being the least populated and economically active territories of the region, display weak investment dynamics and a low density of the trade network (Guseynov, 2009; Imrani, 2023; Khudaverdiyeva & Ragimov, 2021).

According to the State Statistical Committee, the average age of the region's population is gradually increasing, while a steady outflow of the working-age youth towards the capital is observed (Khudaverdiyeva & Ragimov, 2021). This has a direct impact on local consumer markets, reducing the intensity of retail trade in rural and mountainous districts. Urbanized districts of the region accumulate the bulk of trade turnover, while peripheral territories constitute zones with low purchasing power and weak development of logistics nodes.

Based on this description, the Guba-Khachmaz Economic Region represents a territory with pronounced internal economic-geographical segmentation, where trade develops unevenly depending on the level of urbanization, investment activity, transport accessibility, and demographic sustainability. These differences form an important basis for analyzing trade turnover at the level of administrative districts and allow for territorial typologization within a single economic region.

Analysis of Retail Trade Turnover (2015–2023)

Retail trade is the most sensitive indicator of a region's socio-economic activity. Its volumes directly depend on the size and purchasing power of the population, the level of infrastructural provision, the nature of employment, and the degree of urbanization. In the Guba-Khachmaz Economic Region, retail trade turnover demonstrates positive dynamics during the period under consideration, although it is accompanied by significant territorial disparities (Mamedov & Allakhverdiyev, 2003).

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According to the data of the State Statistical Committee of Azerbaijan, the total volume of retail trade turnover in the economic region increased from 1,043.8 million manats in 2015 to 1,836.5 million manats in 2023, which is equivalent to a nominal growth of 75.9% [Table 1]. The most intensive growth was recorded in 2022–2023, during the post-pandemic recovery period. However, real dynamics (measured by the physical volume index of sales) were more moderate, fluctuating within the range of 97–101%, which indicates a slowdown in consumer activity and market saturation [Table 1].

The district structure of retail trade turnover in 2023 is as follows:

Table 1. Trade turnover and market share of administrative districts of the Guba-Khachmaz economic region.

District	Turnover (million manats)	Share in regional volume (%)
Khachmaz	707.9	38.6
Guba	624.2	34.0
Gusar	277.7	15.1
Siyazan	108.8	5.9
Shabran	117.8	6.4
Total	**1836.5**	**100**

Source: Compiled by the author based on data from the State Statistical Committee of the Republic of Azerbaijan.

As can be seen, almost three-quarters of the regional retail trade turnover is concentrated in two districts — Khachmaz and Guba — reflecting their leading role in the region's consumer system. Growth in these districts can be explained by a higher concentration of population, the level of urbanization, transport connectivity, and investment activity. The largest number of trade facilities is located here, including modern shops, shopping centers, and service enterprises.

In the Gusar district, despite its resort and tourism potential, the volume of retail trade is almost 2.5 times lower than in Khachmaz. This indicates a weak internal consumer base and limited trade infrastructure. At the same time, the recorded increase — from 145.6 million manats in 2015 to 277.7 million manats in 2023 — demonstrates the district's potential, provided that logistics and services are modernized (Guseynov, 2009; Khudaverdiyeva & Ragimov, 2021).

The Siyazan and Shabran districts remain the least active, their combined share in the regional retail turnover amounting to only 12.3%. This is associated with low population numbers, limited urbanization, and weak entrepreneurial initiative. Moreover, trade growth rates in these districts also lag behind the regional average, which reflects their structural backwardness in trade development.

The per capita retail turnover indicator helps to refine spatial differences in consumer activity. In 2023, this indicator amounted to 3,360.7 manats per person across the region, which is significantly higher than the 2015 level (1,689.4 manats) (Khudaverdiyeva & Ragimov, 2021). However, intra-regional disparities remain: the highest values are observed in Khachmaz and Guba, while the lowest are recorded in Siyazan and Shabran, where purchasing power remains limited.

The trend in the transformation of trade infrastructure is also noteworthy. The number of shops in the region increased from 2,871 in 2015 to 6,568 in 2023, while the number of kiosks decreased from 280 to 112 over the same period (Khudaverdiyeva & Ragimov, 2021). This reflects a shift from small-scale retail to more formalized formats, especially in districts with developed urban structures. In other words, the retail trade turnover of the Guba-Khachmaz region develops unevenly: central districts (Khachmaz, Guba) show high growth rates and concentration of trade infrastructure, whereas peripheral districts (Shabran, Siyazan) remain in a zone of lagging development. These differences form the basis for typologizing districts by level of trade activity, which will be presented in subsequent sections (Mikailova, 2010).

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Analysis of Wholesale Trade Turnover (2015–2023)

Wholesale trade performs a crucial function in the regional economy, acting as an intermediate link between producers and the retail sector. Unlike retail trade, wholesale activity is more sensitive to the investment climate, transport infrastructure, logistics chains, and the level of entrepreneurial cooperation (Alayev, 1983). Therefore, its dynamics in the Guba-Khachmaz Economic Region can be regarded as a reflection of deeper structural processes.

In 2015, the total volume of wholesale trade turnover in the region amounted to 325.9 million manats. By 2023, this figure had decreased to 306.4 million manats, which is equivalent to a nominal decline of 6.0% [Table 2]. This decline is particularly significant against the background of growth in retail trade, indicating imbalances in the development of trade formats.

A breakdown by district is presented below:

Table 2. Wholesale trade turnover and its dynamics across the administrative districts of the Guba-Khachmaz economic region.

District	Wholesale turnover, million manats (2015)	Wholesale turnover, million manats (2023)	Growth/decline rate (%)	Share in regional volume (2023), %
Khachmaz	141.2	196.7	+39.3	64.2
Guba	86.1	93.4	+8.5	30.4
Gusar	59.4	10.8	−81.8	3.5
Siyazan	21.3	3.1	−85.4	1.0
Shabran	17.9	2.4	−86.6	0.8
Total	**325.9**	**306.4**	**−6.0**	**100**

Source: Compiled by the author based on data from the State Statistical Committee of the Republic of Azerbaijan.

As the table demonstrates, wholesale trade growth in the region is ensured exclusively by two districts — Khachmaz and Guba — which together account for more than 94% of the regional volume. The other three districts (Gusar, Siyazan, Shabran) show a sharp decline in wholesale operations, amounting to the near-total degradation of their logistics function. In particular, Gusar experienced a decline of more than 81%, while Shabran recorded a decrease of 86.6%. This points to the loss of wholesale infrastructure and the withdrawal of these districts from regional production and supply chains [Table 2] (Saushkin, 1980).

The decline in both absolute and relative terms in peripheral districts can be explained by several reasons:

– insufficient investment activity and the absence of wholesale warehouses;
– reorientation towards local (intra-network) supply channels;
– limited road networks and logistics platforms;
– a small number of registered wholesale trade entities.

Another important indicator — wholesale trade turnover per capita — illustrates spatial disparities (State Statistical Committee of the Republic of Azerbaijan, 2016):

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Table 3. Population and per capita wholesale turnover across the administrative districts of the Guba-Khachmaz economic region.

District	Population (2023), thousand people	Per capita wholesale turnover, manats
Khachmaz	207.4	948.6
Guba	171.2	545.5
Gusar	99.6	108.4
Siyazan	42.1	73.6
Shabran	48.2	49.7

Source: Compiled by the author based on data from the State Statistical Committee of the Republic of Azerbaijan (2022b).

These data confirm a profound stratification along the centre–periphery axis. Only two districts exceed the regional median per capita turnover, whereas the remaining three display extremely low values that do not allow for the formation of a sustainable wholesale network [Table 3]. Hence, the structure of wholesale trade in the region is highly uneven and vulnerable. The dominance of Khachmaz and Guba is intensifying, while Siyazan, Shabran, and Gusar are losing their wholesale intermediation functions. This makes them economically dependent on external supplies and reduces the efficiency of local production processes.

Comparative-Territorial Analysis

A comprehensive comparison of retail and wholesale trade indicators across the administrative districts of the Guba-Khachmaz Economic Region makes it possible to identify internal patterns of spatial polarization and to systematize districts by type of trade specialization. The criteria for typologization include:

– total trade volume,
– growth rates,
– per capita indicators, and
– the district's share in the regional structure (State Statistical Committee of the Republic of Azerbaijan, 2022a).

Table 4. Summary table of trade activity of districts.

District	Retail turnover (million manats)	Wholesale turnover (million manats)	Retail per capita (manats)	Wholesale per capita (manats)	Share in retail (%)	Share in wholesale (%)
Khachmaz	707.9	196.7	3414.3	948.6	38.6	64.2
Guba	624.2	93.4	3646.2	545.5	34.0	30.4
Gusar	277.7	10.8	2788.7	108.4	15.1	3.5
Siyazan	108.8	3.1	2584.3	73.6	5.9	1.0
Shabran	117.8	2.4	2444.2	49.7	6.4	0.8

Source: Compiled by the author based on data from the State Statistical Committee of the Republic of Azerbaijan (2023).

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The Khachmaz district is the most developed in trade-economic terms. It leads in the volume of both retail and wholesale trade, as well as in its share of the region's total trade turnover. A high per capita indicator and diversity of trade formats allow it to be classified as the regional centre of mixed-type trade [Table 4]. The Guba district demonstrates stable performance in both sectors, lagging behind Khachmaz in absolute terms but surpassing it in per capita retail turnover. This indicates a balanced consumption structure, a developed trade network, and local redistribution of goods. The district can be classified as an intra-regional trade core. The Gusar district possesses moderate retail potential associated with seasonal tourism activity, yet it demonstrates a critically low level of wholesale trade. This allows it to be characterised as a district with a functionally one-sided trade system (retail-oriented) and weak logistics connectivity [Table 4]. The Siyazan and Shabran districts are in a zone of structural lag. Their share in regional trade turnover is minimal, as are their per capita indicators. The near-complete disappearance of wholesale infrastructure makes them vulnerable to external logistics risks. These districts should be classified as areas of low trade activity and infrastructural degradation (State Statistical Committee of the Republic of Azerbaijan, 2023).

Table 5. Typology of districts by trade activity.

Type of trade development	Districts	Characteristics
I. Centre of mixed trade activity	Khachmaz	High retail and wholesale volumes, developed logistics
II. Stable consumption core	Guba	Balanced per capita and absolute indicators
III. Tourist-retail type	Gusar	Moderate retail, weak wholesale, seasonality
IV. Periphery of low activity	Siyazan, Shabran	Low trade density, degradation of wholesale function

Based on the obtained data, the comparative analysis revealed a pronounced spatial asymmetry. The economic weight of trade processes is concentrated in two central districts, whereas peripheral areas have lost key wholesale and distribution functions. This forms an unstable regional model with risks of hyper-centralisation of the trade function and trade-logistics dependence on Khachmaz and Guba.

Discussion of Results

The results of the comparative-territorial analysis of retail and wholesale trade turnover in the Guba-Khachmaz Economic Region for 2015–2023 revealed a pronounced asymmetry in the dynamics, structure, and level of trade activity across administrative districts. These disparities are the outcome of the combined influence of socio-economic, demographic, institutional, and infrastructural factors and define the overall model of spatial development in the region (State Statistical Committee of the Republic of Azerbaijan, 2022b). The centres of trade concentration are the Khachmaz and Guba districts, which confirm the effect of scale: the presence of a developed transport and logistics network, warehousing infrastructure, an entrepreneurial sector, and population growth ensures a stable inflow of trade turnover. These districts form the core of the distribution system, acting as the main points of attraction and reproduction of the regional economy. At the same time, peripheral territories — Shabran and Siyazan districts — are characterised by structural and morphological degradation. Here, low levels of transport and logistics provision, limited sales channels, and insufficient purchasing power of the population are observed. This leads to a decline in both wholesale and retail trade, exacerbates disparities, and creates a "crowding-out" effect whereby weaker districts are excluded from the system of sustainable reproduction (Tundzha, 2000). The Gusar district occupies a special place, as the dynamics of retail turnover are largely determined by the tourism factor. Tourism specialisation provides advantages in the services sector and stimulates retail trade; however, due to its dependence on tourist flows, the model remains unstable and poorly

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adapted to fluctuations in demand. Moreover, the wholesale sector here is underdeveloped. Collectively, the identified trends form a concentrator model of regional trade: the core is concentrated in Khachmaz and Guba, while peripheral districts are gradually losing resilience. This widens the socio-economic gap, reduces employment levels, limits the emergence of new growth points, and hinders the equalisation of living standards (Von Thünen, 1966).

Conclusion

The structural-spatial analysis of retail and wholesale turnover makes it possible not only to identify the key advantages and shortcomings but also to determine reserves for strengthening the sustainability of the regional trade system. To reduce disparities, it is necessary to implement a differentiated management policy aimed at developing transport and logistics infrastructure, stimulating entrepreneurship, increasing the population's purchasing power, and creating new points of sustainable growth in peripheral districts.

It follows that only a comprehensive approach can ensure more balanced and sustainable socio-economic development of the Guba-Khachmaz Economic Region.

References

1. Alayev, L. B. (1983). *Economic and geographical terminology: An attempt at a systematic dictionary*. Nauka.
2. Bayramov, T. Sh. (2019). Socio-economic situation and population migration in the Guba-Khachmaz economic region of the Republic of Azerbaijan. *University Proceedings. North Caucasus Region. Natural Sciences*, (2), 26–33.
3. Gerayzade, T. P., & Mirzayeva, T. A. (1998). Ways to solve regional problems. In *Proceedings of the 7th Congress of the Azerbaijan Geographical Society*. 98–100.
4. Guseynov, T. (2009). *Investments in Azerbaijan: Income, investments, industrialization, employment*. Elm.
5. Imrani, Z. T. (2023). Constructive foundations of sustainable economic-geographical development of the investment environment and productive sectors of Azerbaijan. *Proceedings of Tula State University. Earth Sciences*, (2), 484–498.
6. Khudaverdiyeva, L. A., & Ragimov, E. G. (2021). Urbanization and ethno-demographic transformation in the regions of Azerbaijan. *Bulletin of Geography*, (4), 112–120.
7. Mamedov, Z. T., & Allakhverdiyev, Kh. B. (2003). *Regulation of investment processes*. Caucasus House.
8. Mikailova, S. M. (2010). The role of investment policy in ensuring national interests. *Russian Entrepreneurship*, 12(174), 164–168.
9. Saushkin, Yu. G. (1980). *Economic geography and population geography*. Mysl.
10. State Statistical Committee of the Republic of Azerbaijan. (2016). *Districts of Azerbaijan: Statistical compendium*.
11. State Statistical Committee of the Republic of Azerbaijan. (2022a). *Districts of Azerbaijan: Statistical compendium*.
12. State Statistical Committee of the Republic of Azerbaijan. (2022b). *Statistical indicators of Azerbaijan: Statistical compendium*.
13. State Statistical Committee of the Republic of Azerbaijan. (2023). *Demographic yearbook of Azerbaijan, 2019–2023*.
14. Tundzha, Z. (2000). Another way to compensate for the resource deficit — foreign capital. *Toprak (Journal for Employers)*, (47), 12–13.
15. Von Thünen, J. H. (1966). *The isolated state*. Pergamon Press.

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