E- Global Congress
Hosted online from Dubai, U. A. E., E - Conference.
Date: 30th October, 2026
Website: https://eglobalcongress.com/index.php/egc
ISSN (E): 2836-3612

THE ECONOMIC-GEOGRAPHICAL IMPACT OF CITIES AND URBAN AGGLOMERATIONS ON REGIONAL DEVELOPMENT

Maxammadjonova Moxlaroy Zokirjon qizi
Tashkent state university of economics
mohlaroyummataliyeva@gmail.com

Annotation

This thesis examines the economic-geographical impact of cities and urban agglomerations on regional development. The study focuses on the role of cities in concentrating economic activity, integrating labour resources and markets, and strengthening infrastructural connectivity. Particular attention is given to recent academic approaches concerning polycentric urban structures and their effects on regional economic performance and territorial disparities. Official statistical data from Uzbekistan are used to assess the relationship between urbanization and regional development. The findings indicate that the economic influence of cities extends beyond administrative boundaries through labour, transport and service interactions with surrounding territories. At the same time, agglomeration benefits may be constrained by congestion, infrastructure shortages and other costs associated with urbanization. Based on the results, policy implications are formulated for strengthening functional integration among cities and surrounding territories and for incorporating agglomeration development into regional policy.

Keywords: City, agglomeration, urbanization, regional development, polycentricity, concentration, mobility, infrastructure, integration.

Introduction:

Cities have become important spatial centres of regional economic development. Their economic significance is determined not only by the concentration of production and services but also by the spatial concentration of labour markets, capital, knowledge, innovation and consumer demand. Therefore, modern regional economics increasingly considers cities not as isolated administrative units but as components of interconnected economic spaces involving surrounding territories [1].

E-Global Congress
Open Access | Peer Reviewed | Conference

ISSN (E): 2836-3612

The impact of cities on regional development operates through several mechanisms. First, spatial proximity between firms and workers improves labour-market matching. Second, cities act as centres of transport, trade, education, healthcare and other services, thereby influencing neighbouring territories. Third, the expansion of economic activity around major cities contributes to the formation of urban agglomerations. The economic efficiency of cities is also influenced by their spatial structure. Zhang, Sun and Li demonstrate that polycentric urban structures can, under certain conditions, contribute positively to economic performance and labour productivity [2]. However, the effect of polycentricity is not uniform. Kwon and Seo distinguish morphological and functional polycentricity and show that their economic effects may differ significantly [3].

The issue is particularly relevant for Uzbekistan because of the continuing urbanization process. According to the SIAT database of the National Statistics Committee, the permanent urban population increased from 14.43 million in 2010 to 17.14 million in 2020 and 19.47 million in 2026 [10]. As of 1 January 2026, the urban population accounted for 50.9% of Uzbekistan's total permanent population [10]. Therefore, the purpose of this study is to identify the major economic-geographical mechanisms through which cities and urban agglomerations affect regional development and to assess the relationship between urbanization and territorial economic development in Uzbekistan.

Literature review:

The role of cities in regional development is an important field of contemporary economic geography. Clark, Harrison and Miguelez consider cities not merely as administrative units but as nodes connecting production, innovation, distribution, consumption, capital and labour flows [1]. This perspective supports the argument that the economic influence of cities extends beyond their administrative boundaries.

Zhang, Sun and Li [2] compare monocentric and polycentric urban structures and demonstrate that polycentricity may improve labour productivity under certain conditions. In particular, infrastructure and digital connectivity may strengthen the economic effects of polycentric urban structures.

E-Global Congress
Open Access | Peer Reviewed | Conference

ISSN (E): 2836-3612

Kwon and Seo [3] distinguish between morphological and functional polycentricity. Their results indicate that an increase in the number of spatial centres does not necessarily imply stronger functional integration. Consequently, regional policy should focus not only on the spatial distribution of cities but also on actual economic and transport linkages between them.

Li et al. conducted a meta-analysis of 139 empirical estimates and found that the relationship between polycentricity and economic development is not unequivocal [4]. Their findings indicate that the results depend considerably on how polycentricity is measured and whether agglomeration economies are adequately controlled for.

Ji and Yuan, using Chinese urban agglomerations as a case, demonstrate that polycentric spatial structures may contribute to reducing regional disparities and supporting the economic development of smaller cities [5]. This highlights the importance of interactions among several urban centres. Ao et al. examine polycentric development and economic resilience and show that the positive effects of polycentricity may diminish or even become adverse under stronger economic shocks [6].This suggests that agglomeration policies should be linked to the resilience and adaptive capacity of regional economies.

Burger, Ianchovichina and Akbar demonstrate that in developing countries the benefits of agglomeration are closely connected with urban mobility [7]. Congestion and transport constraints may reduce the productivity advantages associated with urban density.

A recent study by Zheng, Sun and Zhang finds that polycentric megaregions can improve the economic performance of both large and smaller cities, with infrastructure connectivity, factor mobility and functional spillovers acting as important mechanisms [9]. Overall, the literature suggests three major channels through which cities influence regional development: **economic concentration and agglomeration economies; transport and labour mobility; and functional integration and spillovers among cities and surrounding territories**. However, agglomeration does not automatically generate higher efficiency; its outcomes depend on infrastructure, connectivity, governance and functional integration.

E-Global Congress
Open Access | Peer Reviewed | Conference

ISSN (E): 2836-3612

Methodology: The study applies economic-geographical, comparative and statistical methods. The impact of cities on regional development is examined through three groups of indicators:

demographic concentration — the size and dynamics of the urban population;

economic concentration — the concentration of economic activity and production in cities;

functional integration — transport, labour and service flows between cities and surrounding territories.

Methodologically, an urban agglomeration is interpreted as a functional spatial system consisting of a **core city, adjacent territories and a wider zone of economic influence**. Administrative boundaries alone are insufficient because actual economic interactions frequently extend beyond administrative borders [1; 5].

The empirical analysis uses urban population data from the SIAT database of the National Statistics Committee of Uzbekistan for 2010–2026 [10]. Urbanization is assessed through changes in the size of the urban population and its share in the country's total population.

Results:

One of the main indicators characterizing Uzbekistan's urbanization process is the long-term increase in the urban population.

Table 1

Year	Urban population, million	Growth compared with 2010
2010	14.43	100.0%
2020	17.14	118.8%
2026	19.47	135.0%

Source: National Statistics Committee of the Republic of Uzbekistan, SIAT [10].

The table demonstrates that between 2010 and 2026 the number of permanent urban residents in Uzbekistan increased by approximately 5.05 million. This confirms the continuing long-term urbanization process. At the beginning of 2026, the urban population represented 50.9% of the country's total permanent population, indicating a substantial transformation in the demographic relationship between urban and rural areas [10]. However,

E-Global Congress
Open Access | Peer Reviewed | Conference

ISSN (E): 2836-3612

urbanization itself does not automatically guarantee regional economic development. Its economic effect depends on infrastructure, transport accessibility, labour-market size and functional relations with surrounding territories. Contemporary studies emphasize that the effectiveness of polycentric urban systems is strongly associated with actual integration among urban centres [4; 5].

The regional impact of urban agglomerations can therefore be represented through the following mechanism:

Urban core → economic concentration → labour and capital mobility → infrastructural integration → spillovers to surrounding territories → regional development. Transport infrastructure has a particularly important role in this mechanism. Recent evidence shows that congestion and mobility constraints in developing countries can reduce the productivity benefits of agglomeration economies [7]. Therefore, in Uzbekistan, urban development policies should not focus exclusively on urban cores but should also address transport and logistics systems connecting major cities with economically integrated surrounding territories.

Polycentric development can also contribute to reducing territorial disparities. Functional integration among several urban centres can provide smaller and medium-sized cities with access to markets, infrastructure, knowledge and services concentrated in larger cities [5; 9]. Nevertheless, the positive effect of polycentricity is not automatic, as demonstrated by the meta-analysis of previous empirical studies [4].

Consequently, for Uzbekistan, strengthening the economic-geographical impact of cities should not primarily mean increasing the number of urban centres. Rather, the main objective should be to strengthen functional and economic integration between existing urban centres and the territories within their zones of influence.

Conclusion:

The results demonstrate that cities and urban agglomerations represent important economic-geographical factors of regional development. By concentrating population, production, services, labour resources and infrastructure, cities become major centres of regional economic activity.Official statistics for Uzbekistan show that the urban population

E-Global Congress
Open Access | Peer Reviewed | Conference

increased from 14.43 million in 2010 to 19.47 million in 2026. At the beginning of 2026, urban residents accounted for 50.9% of the country's total permanent population [10]. This indicates that urbanization is becoming an increasingly important factor in regional development policy.

The analysis identifies three principal conditions determining the positive economic-geographical impact of cities: economic concentration, transport mobility and functional integration. To maximize the benefits of agglomeration, major cities should be developed as integrated economic spaces together with their surrounding territories.

For Uzbekistan, regional policy should prioritize the development of intercity transport links, integration of labour markets, efficient spatial distribution of production and services, and improvement of institutional mechanisms for managing urban agglomerations. Thus, the regional impact of cities should not be assessed solely through urban population size or economic output. It should also be evaluated through their functional, transport, labour and economic spillovers to surrounding territories.

REFERENCES:

1. Clark J., Harrison J., Miguelez E. Connecting cities, revitalizing regions: the centrality of cities to regional development // Regional Studies. 2018. Vol. 52, No. 8. P. 1025–1028. DOI: 10.1080/00343404.2018.1453691.
2. Zhang T., Sun B., Li W. The economic performance of urban structure: From the perspective of Polycentricity and Monocentricity // Cities. 2017. Vol. 68. P. 18–24. DOI: 10.1016/j.cities.2017.05.002.
3. Kwon K., Seo M. Does the Polycentric Urban Region Contribute to Economic Performance? The Case of Korea // Sustainability. 2018. Vol. 10, No. 11. Article 4157. DOI: 10.3390/su10114157.
4. Li W., Sun B., Zhang T., Zhang Z. Polycentric spatial structure and its economic performance: evidence from meta-analysis // Regional Studies. 2022. Vol. 56, No. 11. P. 1888–1902. DOI: 10.1080/00343404.2021.2012142.
5. Ji P., Yuan L. Whether polycentric spatial structure is conducive to regional coordinated development: A study on urban agglomerations in China // Growth and Change. 2023. Vol. 54, No. 4. P. 940–961. DOI: 10.1111/grow.12685.

E-Global Congress
Open Access | Peer Reviewed | Conference

6. Ao X., Li Q., Schwanen T., Wójcik D. Does polycentric regional development promote economic resilience? Empirical evidence from urban agglomerations in China // Journal of Economic Geography. 2025. Vol. 25, No. 5. P. 749–770. DOI: 10.1093/jeg/lbaf015.
7. Burger M. J., Ianchovichina E. I., Akbar P. A. Agglomeration economies and urban mobility in developing countries // Regional Studies. 2026. Vol. 60, No. 1. P. 1–16. DOI: 10.1080/00343404.2026.2657867.
8. Averkyna M. The Sustainability of the Urban Agglomeration in Ensuring the Regional Development // Business Inform. 2019. No. 3(494). P. 108–113. DOI: 10.32983/2222-4459-2019-3-108-113.
9. Zheng X., Sun B., Zhang T. Do polycentric megaregions contribute to the economic development of cities in China // Cities. 2026. Article 106878. DOI: 10.1016/j.cities.2026.106878.
10. National Statistics Committee of the Republic of Uzbekistan. SIAT: Permanent population – Urban. 2010–2026 data. Updated 22 April 2026.

E-Global Congress
Open Access | Peer Reviewed | Conference