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05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
05.01.03 – Informatikaning nazariy asoslari
05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
05.01.07 – Matematik modellashtirish
05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
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05.02.08 – Yer usti majmualari va uchish apparatlari
05.03.02 – Metrologiya va metrologiya ta'minoti
05.04.01 – Telekommunikasiya va kompyuter tizimlari, telekommunikasiya tarmoqlari va qurilmalari. Axborotlarni taqsimlash
05.05.03 – Yorug'lik texnikasi. Maxsus yoritish texnologiyasi
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05.08.03 – Temir yo'l transportini ishlatish
05.08.06 – "G'ildirakli va gusenisali mashinalar va ularni ishlatish" (texnika fanlari)
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10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
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08.00.03 – Sanoat iqtisodiyoti
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THE ROLE OF INTERGOVERNMENTAL TRANSFERS IN MITIGATING REGIONAL INEQUALITY IN UZBEKISTAN: EMPIRICAL ASSESSMENT AND DIRECTIONS FOR IMPROVEMENT

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Abstract. The paper analyses the current state of the intergovernmental transfer system in Uzbekistan, changes in the revenue base of local budgets and the regional distribution of equalization transfers on the basis of official statistical data. Regional inequality is measured using the Theil index, the Gini coefficient and the coefficient of variation, while the progressivity of transfer allocation is assessed with a regression model. Based on the results, proposals are developed for transitioning the transfer system to formula-based equalization.

Keywords: intergovernmental transfers, equalization transfers, local budget, regional inequality, Theil index, fiscal equalization, convergence.

INTRODUCTION

Ensuring balanced regional development and equal access of the population to basic public services is one of the priorities of public finance policy, and intergovernmental transfers are the main financial instrument for achieving it. The literature emphasizes that the success of a transfer system should be judged not by the sophistication of its mechanism, but by whether it achieves the objectives set out in a country's fiscal decentralization policy [11]. From this perspective, an empirical assessment of the outcomes of the intergovernmental reforms implemented in Uzbekistan in recent years is of considerable scientific and practical relevance.

Main part. Since 2021, the Budget Code of the Republic of Uzbekistan has provided for equalization (regulating) intergovernmental transfers, defined as non-repayable funds that cover the portion of local budget expenditures exceeding projected revenues [1]. These transfers are approved annually in a fixed amount by the Law on the State Budget and may not be reduced during budget execution [2].

Presidential Decree No. PF-223 of 20 December 2024 marked an important step in expanding the revenue base of local budgets: from 2025, the turnover tax and the property and land taxes on legal entities are fully assigned to district (city) budgets, together with at least 50 percent of personal income tax revenues [3]. According to the Budget Message, the share of personal income tax allocated to local budgets was raised from 20–25 percent in 2024 to 50 percent [4]. Starting in 2026, local budgets will also retain 20 percent of VAT revenues in the regions and 5 percent in Tashkent city [5].

In 2025, local budget revenues were projected at UZS 65.8 trillion and expenditures at UZS 84.3 trillion, while equalization transfers from the republican budget were set at UZS 18.5 trillion [6]. Thus, 78.1 percent of local budget expenditures were financed from own revenues and 21.9 percent from transfers. Although transfers increased to UZS 19.65 trillion in 2026, their ratio to GDP declined from 1.07 to 0.99 percent [4; 7].

The expansion of the revenue base is reducing the number of transfer-dependent budgets. According to the Ministry of Economy and Finance, in 2025 the number of districts and cities receiving transfers was planned to fall from 188 to 110, with 78 districts expected to cover their expenditures from their own revenues [4]. At the same time, local budgets are being assigned new expenditure responsibilities: from 2026, the costs of academic lyceums and of the construction and major repair of preschool and school facilities are being

shifted from the republican budget to local budgets [5]. The expansion of the revenue base should therefore be assessed against the expenditure obligations being transferred. In addition, transfers are allocated through a two-tier system: among the 14 regions by law at the national level, and among districts (cities) by decisions of regional councils of people's deputies at the subnational level [1]. The absence of a unified methodology governing allocation at the second tier makes it difficult to assess intra-regional disparities.

To analyse the regional distribution of transfers, data from Annex 7 of the 2026 State Budget Law [7] were combined with National Statistics Committee data on regional GRP and population [8] (Table 1).

Table 1
Equalization transfers relative to economic capacity by region (selected regions)

Region	Transfer (2026), UZS billion	Transfer per capita, UZS thousand	GRP per capita (2025), UZS thousand
Republic of Karakalpakstan	2,498.5	1,223.9	26,489.5
Jizzakh	1,252.4	806.8	34,116.8
Surkhandarya	2,165.5	727.1	22,223.4
Samarkand	1,703.3	392.6	28,001.8
Kashkadarya	1,269.7	345.2	26,856.9
Tashkent city	295.2	93.8	116,747.3
Navoi	103.6	93.9	152,238.2
Republic total / average	19,650.0	518.6	48,816.4

Source: author's calculations based on [7; 8].

The calculations reveal a high concentration of transfers: the five largest recipient regions receive 58.4 percent of the total, whereas Tashkent city, Tashkent region and Navoi region, which together generate 38.7 percent of GDP, receive only 3.5 percent. At the same time, there are inconsistencies: Kashkadarya region, one of the regions with the lowest GRP per capita, receives 2.3 times less in transfers per capita than the relatively more prosperous Jizzakh region.

Regional inequality was measured using population-weighted indicators [10]. Between 2024 and 2025, the weighted coefficient of variation rose from 0.713 to 0.746, the Theil index from 0.187 to 0.202, and the Gini coefficient from 0.295 to 0.306; no σ-convergence was observed. In the Barro and Sala-i-Martin model [9], the β coefficient is positive (+0.0098) and insignificant at the 5 percent level, confirming the absence of absolute convergence. A decomposition of the Theil index shows that 86.1 percent of total inequality is explained by the gap between Tashkent city and Navoi region on the one hand and the remaining 12 regions on the other.

To assess the progressivity of transfer allocation, a log-linear model was estimated:

$$\ln(TR_i/P_i) = \alpha + \gamma \cdot \ln(GRP_i/P_i) + u_i$$

The estimation yields $\gamma = -1.27$ ($t = -5.46$; $R^2 = 0.71$; $n = 14$), meaning that a region with 1 percent higher GRP per capita receives, on average, 1.27 percent less in transfers per capita. However, when Navoi region and Tashkent city are excluded, the explanatory power of the model falls to 42 percent and the rank correlation becomes statistically insignificant ($p = 0.059$). This indicates that, although transfers clearly separate "rich" from "poor" regions, allocation among economically similar regions is substantially influenced by non-formula factors such as the historical expenditure base. Residual analysis shows the largest positive deviations from predicted transfers in the Republic of Karakalpakstan (+0.59), Syrdarya (+0.54) and Jizzakh (+0.49), and the largest negative deviations in Tashkent region (−1.00), Kashkadarya (−0.66) and Samarkand (−0.48). The higher transfers to the Republic of Karakalpakstan may be justified by the environmental and social problems of the Aral Sea region and the high cost of service delivery; however, these factors are currently taken into account implicitly through the historical expenditure base rather than as explicit formula parameters. According to the simulation results, transfers reduce GRP disparities by only 3.3 percent (as measured by the Theil index). This confirms that their primary function is to narrow differences in the capacity to finance public services rather than differences in economic output.

Macro-fiscal constraints must also be taken into account in reforming the transfer system. Under the "Uzbekistan – 2030" Strategy, the consolidated budget deficit must not exceed 3 percent of GDP from 2025 [4]. This rule limits the scope for debt-financed increases in total transfers; consequently, the task of reducing regional disparities depends on the efficiency with which existing resources are redistributed. At the same time, a structural shift in the financing of social services is under way: with the nationwide roll-out of state health insurance mechanisms from 2026, budget transfers to the State Health Insurance Fund are being increased by UZS 11.1 trillion [4]. As a result, health services are moving from financing based on "expenditure estimates"

through equalization transfers to financing based on “volume of services delivered” through a dedicated fund. This trend provides practical support for linking transfers to performance indicators.

International experience points in the same direction. In Germany, horizontal equalization among the Länder was replaced in 2020 by fiscal capacity equalization within the distribution of VAT revenues [12], while in Canada equalization is based on potential fiscal capacity calculated through a “representative tax system” [13]. In both models, equalization is partial rather than full, which preserves regions’ incentives to increase their own revenues.

CONCLUSION

Based on the research findings, the following proposals are put forward:

– to move gradually from determining equalization transfers on the basis of the “gap between expenditures and revenues” to a formula based on standardized fiscal capacity and normative expenditure needs;

– to implement partial equalization (covering 80–90 percent of the gap relative to the average level) in order to preserve regions’ incentives to broaden their tax base;

– to link the total volume of transfers to a fixed share of GDP or VAT revenues and to set transfers on a medium-term (three-year) basis;

– to reflect the environmental and demographic characteristics of regions such as the Republic of Karakalpakstan through explicit coefficients in the formula;

– to create and publish a panel database at the regional and district levels in order to evaluate the effectiveness of transfers against social service indicators.

Implementing these proposals would enhance the transparency and fairness of the transfer system and contribute to balanced economic development across regions.

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