THE ROLE OF THE "INTEGRAL TAX CAPACITY INDEX" IN INCREASING THE FINANCIAL STABILITY OF LOCAL BUDGETS

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Abstract. *This research aims to effectively enhance the financial stability of local budgets and perfect equitable tax burden distribution mechanisms. The adopted methodology utilizes advanced econometric analysis and mathematical modeling to develop the Integral Tax Capacity Index, carefully incorporating objective regional economic indicators. The main result economically substantiates applying multiplying coefficients to land and property tax rates across various districts using this index, successfully generating additional local budget revenues. The practical significance is that this approach adapts tax administration to regional demographic, infrastructural, and commercial potentials, thereby fulfilling its foundational role in ensuring the complete financial independence of local budgets.*

Keywords: *local budgets, financial stability, Integral Tax Capacity Index, tax burden distribution, tax administration, econometric modeling, multiplying coefficients.*

In the modern context of regional economic development, strengthening the revenue base of local budgets and ensuring their long-term financial stability remains a primary objective of macroeconomic policy. As fiscal decentralization progresses, local governments require robust financial mechanisms to fund social infrastructure, public services, and regional investment programs. A critical component of these mechanisms is the effective utilization of property and land taxes. Currently, local councils apply multiplying coefficients (ranging from 0.7 to 3.0) to baseline tax rates to adjust the tax burden according to the specific characteristics of different districts and neighborhoods (mahallas). However, a significant problem arises when these coefficients are assigned formally, without relying on deep empirical indicators such as population density, infrastructure quality, market value, or commercial activity. The lack of precise economic criteria creates the risk of an uneven and unfair distribution of the tax burden. This research aims to address this issue by proposing a scientifically grounded methodological approach to optimize regional fiscal mechanisms, thereby mitigating economic imbalances and ensuring sustainable local budget revenues.

To transition from a formal to an economically justified system of assigning tax coefficients, this study introduces the mathematical and econometric model of the "Integral Tax Capacity Index" (ISTI). The Surkhandarya region, specifically Termiz city and the Denau district, was selected as the primary empirical object of the research.

The ISTI model evaluates the actual fiscal potential of a given territory through a multi-factor equation:

$$\mathbf{ISTI = w1(KAD) + w2(BUS) + w3(DEM) + w4(INF) + w5(TRN) - w6(IMT).}$$

The components of the model reflect the most vital economic dimensions of a territory:

KAD (Cadastral Value Index): Represents the market and cadastral value of the land, weighted at 0.30 due to its direct correlation with property wealth.

BUS (Business Density Index): Measures commercial activity, including the concentration of retail, service, and manufacturing enterprises, weighted at 0.25.

DEM (Demographic Index): Reflects population density and the proportion of the working-age population, weighted at 0.15.

INF (Infrastructure Index): Evaluates the quality of roads, electricity, gas, water supply, and financial services, weighted at 0.15.

TRN (Transport/Transit Index): Measures daily traffic flow and logistical potential, weighted at 0.15.

IMT (Share of Preferential Objects): Acts as a deductive factor, accounting for the volume of tax-exempt or privileged entities that reduce the potential tax base.

The practical application of the ISTI model demonstrated substantial opportunities for enhancing budget revenues through objective tax rate differentiation. The empirical analysis yielded the following specific results for the studied territories: Termez City Analysis:

Termez city possesses significant economic potential, comprising approximately 3,600 hectares of land, of which 1,450 hectares belong to legal entities and 2,150 hectares to physical persons. The city exhibits high business activity, hosting around 3,530 business entities (including 1,150 retail, 1,900 service, and 480 manufacturing enterprises) with an annual trade turnover of 5.2-5.8 trillion UZS. The infrastructure index scores high (82-86 points), and the demographic base includes a population of approximately 201,000 with a daily transit flow of up to 35,000 people. Calculating these factors through the ISTI formula yields a high capacity score of 0.85. When applied to the coefficient formula, the economically justified coefficient reaches 1.75, compared to the currently applied 1.60. With a base rate of 37.7 million UZS per hectare, increasing the coefficient to 1.75 generates an additional 8.2 billion UZS

annually exclusively from the land tax of legal entities. Denau (Denov) District Analysis:

In the Denau district, the current multiplier coefficient for legal entities is 1.45 (resulting in a rate of 54,665,000 UZS per hectare), while for physical persons it is 1.36 (480.22 UZS per sq.m). By formally linking the coefficients to the district's actual infrastructure and market value, elevating the legal entity coefficient to 1.60 provides an additional 5.655 million UZS per hectare. Across 900 hectares, this generates approximately 5.09 billion UZS in additional budget funds. Simultaneously, raising the coefficient for physical persons to 1.45 yields an extra 31.8 UZS per square meter. Across 1.5 million square meters of applicable land, this translates to an additional 47.7 million UZS. Overall, the optimization of coefficients in the Denau district creates a supplementary local budget source of 5.1 to 5.2 billion UZS. These findings confirm that transitioning from arbitrary coefficient assignment to a strictly parameterized index system maximizes revenue collection without disproportionately burdening taxpayers.

The introduction of the “Integral Tax Capacity Index” provides a robust, transparent, and economically justifiable methodology for the differentiation of local tax rates. By explicitly correlating tax coefficients with objective regional criteria – such as infrastructure quality, demographic trends, and business concentration – this mechanism ensures an equitable distribution of the fiscal burden. Ultimately, this scientific approach significantly strengthens the financial independence and stability of local budgets, provides local councils with a reliable tool for fiscal planning, and effectively mitigates economic disparities among different districts and neighborhoods.

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