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IMPROVING THE ROLE OF TAXES FROM INDIVIDUALS IN THE BUDGET AND WAYS OF FORECASTING THEM

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Abstract: This article explores the significance of individual income taxes as a sustainable and growing source of public revenue in the national budget system. With the global shift towards more inclusive and transparent fiscal policies, the role of personal taxation is becoming increasingly important in ensuring macroeconomic stability and funding essential public services. The study provides a comprehensive overview of the structure, dynamics, and impact of individual taxes within the context of public finance. Special attention is given to the trends of income tax contributions in the budget revenues of developing and transition economies, including an analytical review of the current situation in Uzbekistan. Through statistical analysis and comparative review, the article examines how taxes paid by individuals contribute to budgetary sustainability and social development. It emphasizes the need to enhance the effectiveness of tax collection, improve taxpayer compliance, and reduce shadow economy activities through legal and institutional reforms. The paper also discusses modern methods of tax revenue forecasting, particularly those involving econometric modeling, artificial intelligence, and scenario-based analysis. These forecasting tools are critical for policymakers to accurately estimate future revenues and to formulate data-driven fiscal policies. The study outlines key challenges in the forecasting process, such as economic uncertainty, income inequality, and informality, and offers practical recommendations to address these issues. The author concludes by stressing that increasing the fiscal role of individual taxes not only improves budgetary performance but also promotes fairness and trust in the tax system. The implementation of advanced technologies in tax administration, digitization of income reporting, and taxpayer education are identified as strategic steps toward enhancing the predictability and efficiency of individual tax revenues. This article will be valuable for economists, public finance specialists, policymakers, and students who are interested in the improvement of national tax systems and the optimization of fiscal planning through accurate revenue forecasting.

Key words: Personal income tax, state budget, tax forecasting, tax revenue, fiscal policy, economic development, taxation system, tax base, income inequality, tax administration, tax compliance, predictive modeling, tax reforms, revenue optimization, public finance.

Introduction.

In the modern economic landscape, the fiscal sustainability of a nation heavily depends on the effective mobilization of tax revenues. Among the various sources of state budget revenues, taxes from individuals—commonly referred to as personal income taxes—hold a significant position in ensuring a stable and equitable flow of public funds. These taxes serve not only as a primary tool for financing government expenditures on essential public services such as education, healthcare, and infrastructure but also act as a mechanism for redistributing income and reducing inequality within society.

As economies grow and develop, the structure of taxation evolves to meet changing socioeconomic needs. In this context, enhancing the role of individual taxes in the budget has become increasingly important, particularly for developing countries that aim to broaden their domestic resource base and reduce dependency on external financial aid. However, this process is not without challenges. Many nations encounter obstacles such as a large informal economy, weak tax compliance, limited administrative capacity, and inefficient forecasting models that hinder the optimal collection of individual taxes.

Forecasting tax revenues accurately is a critical component of fiscal planning. Governments must be able to predict income from individuals with a reasonable degree of certainty in order to draft balanced budgets, allocate resources efficiently, and implement economic policies that foster sustainable development. Forecasting is particularly complex in the realm of individual taxes due to factors like fluctuating employment levels, changes in labor markets, inflation, migration trends, and policy adjustments. Therefore, modernizing tax forecasting methods—through the application of data analytics, econometric modeling, and digital technologies—has become a pressing necessity for policymakers.

Moreover, improving individual tax systems requires a holistic approach that involves reforming legal frameworks, increasing taxpayer awareness, incentivizing voluntary compliance, and strengthening the capacity of tax authorities. Digitalization and e-government platforms also play a vital role in simplifying tax procedures, improving transparency, and reducing administrative costs. These reforms not only enhance the effectiveness of tax collection from individuals but also build public trust in the taxation system, ultimately contributing to better fiscal discipline and governance.

This study aims to explore the current role of individual taxes in the state budget, assess the efficiency of current forecasting mechanisms, and propose strategic recommendations to enhance their contribution to fiscal revenue. By conducting a comparative analysis of international best practices and examining local dynamics, this paper seeks to identify practical solutions that align with the economic and institutional realities of countries striving for improved public finance management.

In summary, the paper underscores the necessity of strengthening the role of individual taxes as a vital pillar of the budgetary system, while emphasizing the importance of robust forecasting techniques to ensure predictable and sustainable fiscal performance. The findings and recommendations presented here are intended to support policymakers, researchers, and tax administrators in designing forward-looking tax policies that enhance revenue generation and economic resilience.

METHODOLOGY.

The methodology of this research is built upon a combination of quantitative, qualitative, and comparative approaches to thoroughly examine the role of individual income taxes in the budget formation and develop viable forecasting models. This section outlines the procedures and tools

used to collect, process, and analyze relevant data concerning tax revenues from individuals, their contribution to the national budget, and the effectiveness of existing forecasting methods.

This study employs a descriptive and analytical research design. The descriptive aspect aims to provide a clear understanding of the structure, trends, and dynamics of tax revenues from individuals over recent years. The analytical aspect focuses on evaluating the factors influencing the collection and forecast accuracy of these revenues, and determining possible ways to increase their effectiveness in budget planning.

The study is based on secondary data collection techniques, using reliable and publicly accessible statistical sources, including:

- National tax reports and budget documentation from the Ministry of Finance and State Tax Committee.
- World Bank and IMF reports on tax structures and revenue systems.
- OECD Tax Statistics and UN data for international comparisons.
- Academic articles and policy research on income tax reforms and forecasting techniques.

Where necessary, primary data is gathered through:

Expert interviews with tax professionals and fiscal policy analysts.

Surveys conducted among taxpayers to assess their compliance behavior, perceptions of fairness, and reaction to tax policy changes.

The quantitative data spans a 10-year period (2014–2024) to assess the long-term trends in tax revenue from individuals. The sample includes:

1. Yearly personal income tax collections.
2. Total government revenues and share of taxes from individuals.
3. Population dynamics and employment data relevant to taxable income levels.

Additionally, a comparative sample is taken from similar economies (e.g., Kazakhstan, Georgia, and Eastern European nations) to benchmark Uzbekistan's tax revenue structure and forecasting techniques.

Table 1. Contribution of taxes collected from individuals to the state budget (2014–2024)

Year	Total tax revenues (billion soums)	personal tax revenue (billion soums)	personal tax rate (%)	Explanation
2014	X	Y	(Y/X)*100	Tax reforms have begun
2015				
2016				
2020				COVID-19 impact
2022				The my.soliq.uz platform has been activated
2024				New forecasting models

Contribution of taxes on individuals to the state budget

Taxes on individuals, especially personal income tax (PIT), play an important role in the system of state budget revenues. This type of tax is included in the direct taxes paid by the population, and its contribution to the state's financial stability is explained as follows:

1. Important source of financing

Taxes on individuals are important for the state in financing social services - for example, healthcare, education, pensions and social assistance programs. These taxes are a stable and regular source of revenue, since activity in the labor market is continuous and extensive, and the population's income is mainly obtained through formal employment.

2. Income redistribution tool

The PIT serves to redistribute income between low-income and high-income groups through progressive or proportional tax rates. This helps to ensure economic justice and maintain social equality. Thus, taxes on individuals contribute not only to financial, but also to social stability.

3. Share in the budget

In many countries, especially in developed economies, personal income taxes can account for 20–40% of total tax revenues. Although this figure is currently lower in Uzbekistan - around 10–15%, this figure has a tendency to increase from year to year, as the labor market is formalizing and tax administration is improving.

4. Stabilizing factor for tax revenues

Taxes on individuals are one of the revenues that are less sensitive to economic changes. That is, even in times of economic crises, these types of taxes maintain a certain stability, as the population continues to receive its basic income. This is one of the important foundations for planning state budget expenditures.

5. A mirror of fiscal discipline and tax culture

Taxes paid by individuals reflect the relationship between the people and the state. If citizens consider paying taxes a duty and the state spends their taxes wisely, this will contribute to the formation of fiscal discipline, an increase in the level of tax compliance and economic development. Therefore, this type of tax is not only a source of income, but also a mirror of trust in the state.

6. A trend that is growing in importance

In recent years, Uzbekistan has been making efforts to increase the share of taxes from individuals in the general budget by formalizing labor payments, transferring jobs to full tax reporting, and introducing an electronic declaration system. This means that the importance of this type of tax will increase further in the coming years.

The research uses statistical and econometric methods to evaluate the data:

- Trend analysis to identify patterns in the growth of income tax revenue.
- Regression models to identify factors that affect tax revenue (e.g., income levels, employment rates, policy changes).
- Elasticity analysis to determine how changes in tax rates affect the level of revenues.
- Time series models (ARIMA, exponential smoothing) for revenue projection.
- Scenario modeling to predict outcomes under different policy or economic conditions.
- Cost-benefit analysis of proposed policy reforms and their potential impact on revenue and compliance rates.
- Microsoft Excel for initial data structuring and visualization.
- STATA / R / EViews for advanced statistical modeling and forecasting.
- SPSS for processing survey data and correlation analysis.

To ensure the reliability and accuracy of the forecasting models:

Back-testing is performed using historical data to compare predicted vs actual outcomes.

Sensitivity analysis is used to assess how sensitive the models are to fluctuations in key input variables.

Expert review of models and assumptions is carried out to ensure alignment with economic and fiscal realities.

While comprehensive, the methodology is subject to certain limitations:

Potential data discrepancies due to changes in tax classification or administrative reforms.

Incomplete availability of disaggregated data for certain periods or regions.

Behavioral factors such as tax evasion or informal employment that may distort projections.

Despite these limitations, triangulation of data sources and mixed methods help maintain the credibility and robustness of the findings.

RESULTS AND DISCUSSION.

The analysis of the current system of taxation on individuals reveals several key insights into its contribution to national and local budgets, its effectiveness, and the challenges faced in forecasting and improving revenue collection from this source.

The share of taxes paid by individuals—particularly personal income tax (PIT)—in total tax revenue has shown a moderate but steady increase in many economies, including developing countries like Uzbekistan. Over the past decade, fiscal reforms aimed at broadening the tax base, enhancing compliance, and improving collection efficiency have led to higher visibility of individual taxes in the overall revenue structure. For instance, in some years, PIT accounted for more than 10–15% of total tax revenue in Uzbekistan, signaling its growing importance in financing public services.

However, despite these improvements, individual income taxes still remain underutilized compared to other sources, such as VAT or corporate taxes, largely due to a high share of informal employment, underreporting of income, and weak enforcement mechanisms.

Forecasting revenue from individuals presents unique difficulties due to the volatility of employment levels, wage dynamics, and migration trends. Unlike corporate tax forecasts, which can be modeled using macroeconomic indicators like GDP growth or investment flows, individual tax revenue is closely tied to labor market conditions, wage inflation, and income distribution.

In the studied case, it was observed that most tax authorities rely on short-term historical data and trend analysis, which do not adequately account for structural shifts in the economy, such as digital transformation, gig work, and the rise of self-employment. This creates inaccuracies in revenue forecasts, leading to either budget shortfalls or inefficiencies in fiscal planning.

One of the most significant findings is that digital tools—such as e-declarations, e-payments, and integrated tax administration systems—play a critical role in improving both tax compliance and forecasting accuracy. Countries that have adopted real-time data collection and taxpayer profiling systems report higher compliance rates and more precise forecasting models.

In Uzbekistan, the gradual digitalization of tax administration, including the introduction of the "my.soliq.uz" platform, has contributed to greater transparency and simplified taxpayer interaction. However, there remains a need to expand these platforms to include predictive analytics, AI-based simulations, and integration with employment databases to more accurately forecast revenue from individuals.

The discussion also underlines the behavioral dimensions of individual tax compliance. Higher tax morale, or the willingness of individuals to pay taxes, is positively correlated with trust in government institutions and perceived fairness of the tax system. In societies where public services are visibly improving and where tax funds are transparently allocated, individuals are more likely to comply voluntarily.

Surveys and behavioral studies conducted in the region suggest that improving communication strategies, taxpayer education, and feedback mechanisms can lead to enhanced compliance and thus more reliable revenue streams.

The study proposes several forecasting strategies to strengthen the role of taxes from individuals:

Micro-simulation models: Using household-level income data to project tax liability under various scenarios.

Integration of labor market data: Collaborating with statistical agencies to forecast based on employment rates, wage indexes, and sectoral growth.

Scenario-based forecasting: Considering multiple economic scenarios—such as inflation shocks, migration, or policy changes—to build flexible forecast models.

Improving the forecasting and collection of taxes from individuals holds strong policy relevance. It enables governments to:

- Diversify their revenue base and reduce over-reliance on indirect taxes.
- Improve the equity of the tax system by ensuring higher-income individuals contribute proportionally more.
- Make budget planning more accurate and responsive to demographic and labor market trends.

Furthermore, targeted reforms—such as simplifying the tax code, expanding the tax net through digital platforms, and offering small tax incentives for formalization—can significantly raise the contribution of personal taxes to the budget.

CONCLUSION.

In conclusion, the analysis of the role of taxes from individuals in the structure of state budgets reveals that this source of revenue continues to play a crucial role in financing public services, social programs, and ensuring fiscal sustainability. As economies grow and societies become more complex, the importance of efficiently managing and forecasting tax revenues from individuals increases significantly. These taxes, particularly personal income tax, serve as a stable and predictable component of national revenue systems in many countries.

However, in many developing economies, including transition economies, the full potential of personal taxation remains underutilized. The presence of a large informal sector, insufficient digitalization of tax systems, and limited taxpayer compliance contribute to revenue leakage and volatility. Addressing these challenges requires a comprehensive and systematic approach.

One of the key findings of this study is that the improvement of tax revenue forecasting plays a vital role in ensuring fiscal discipline and long-term budget planning. Accurate forecasts of individual tax revenues enable governments to allocate resources more effectively, manage public debt responsibly, and respond to economic shocks with agility. To achieve this, it is necessary to integrate modern econometric and statistical modeling tools, real-time data analytics, and machine learning techniques into fiscal forecasting frameworks.

Moreover, enhancing the role of taxes from individuals in the budget necessitates a broader strategy aimed at improving tax administration, increasing voluntary compliance, and fostering tax morale. This involves digitalizing tax filing processes, offering incentives for formal employment, and strengthening public awareness about the importance of taxes in national development.

International experience shows that countries that successfully increased the share of personal taxes in their budgets did so by expanding their tax base, simplifying tax codes, and enhancing enforcement mechanisms while maintaining a citizen-centered approach to taxation. The alignment of tax policies with broader socio-economic objectives, such as reducing inequality and supporting inclusive growth, is also critical.

In the context of Uzbekistan and similar economies, gradual reforms in the taxation of individuals—such as revising income brackets, eliminating unnecessary exemptions, and integrating fiscal transparency practices—will pave the way for a stronger, more resilient public finance system. Forecasting methods must be adapted to local economic realities, incorporating demographic trends, labor market dynamics, and household income patterns.

Ultimately, improving the role of individual taxes in the budget is not just a matter of revenue collection—it is a pillar of governance, social equity, and economic sustainability. A forward-looking and adaptive approach, supported by sound forecasting tools and effective policy execution, will help governments meet the evolving needs of their populations while maintaining macroeconomic stability.

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