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TAX REVENUES AND ECONOMIC GROWTH DYNAMICS IN UZBEKISTAN

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Gaybullayev Rakhim Murodovich
Head of the Department of Finance, Taxation and Banking, TSUU SF, PhD, Professor
rahimgaibullaev63@gmail.com
Phone: +99899-0125078
Ruziyev Shahzod Behzod oglu
TDIU SF , researcher

Annotation

Tax revenues play a crucial role in shaping a country's economic direction. As the primary source of state income, taxes fund the government services, infrastructure, and social programs necessary for creating a conducive environment for economic growth. However, the relationship between tax policy and economic growth is complex and multifaceted. Different implementations of tax structures, rates, and policies can have varying impacts on investment, consumption, and overall economic activity. This article explores the intricate link between tax revenues and economic growth, analyzing how different approaches to taxation can either promote or hinder development. By examining theoretical perspectives and empirical evidence, this study seeks to shed light on what optimal tax strategies can be developed to foster sustainable economic growth while ensuring fiscal stability.

Key words

t ax, income, expense, strategy, economic growth, GDP, budget, taxation, tax system.

Introduction. In recent years, Uzbekistan has implemented significant reforms in its tax administration. President of the Republic of Uzbekistan Decree No. PF-60 of 28.01.2022 "On the Development Strategy of New Uzbekistan for 2022-2026" was adopted [1]. This strategy, among other goals, provides for a reduction in the tax burden to 25% of GDP. To achieve these goals, measures will be taken to alleviate the tax burden for citizens and business entities. In particular, it is planned to reduce the property tax rate for enterprises from 2% to 1.5%. These changes are aimed at fully automating processes, eliminating tax obstacles to reduce the size of the "shadow economy", and increasing human resources. It is worth noting that tax incentives are one of the important factors affecting the tax burden. In global tax

practice, two different approaches to tax incentives are observed. The first approach is aimed at optimizing the tax burden and involves the introduction of general and high tax rates, differentiation of tax rates by sector, introduction of various tax exemptions and deductions. The second approach is aimed at expanding the tax base by eliminating tax exemptions and deductions and reducing the tax burden by reducing the general tax rate. Although the application of general and high tax rates, differentiation by sector, and the introduction of numerous tax exemptions help optimize the tax burden, it leads to an increase in the costs of state intervention in the economy. In addition, this approach forces the state to bear the bulk of social spending in the economy. High taxation levels facilitate this process. Therefore, the study of the complex relationship between tax revenues and economic growth, the analysis of how different approaches to taxation can stimulate or hinder development, is of great relevance today.

Analysis of the literature on the topic. It is worth noting that in the economic literature, economists express different opinions about the complex relationship between tax revenues and economic growth . The relationship between taxes and economic growth is a topic that has been widely studied by scholars.

Engen and Skinner [2] analyzed data from 107 countries between 1970 and 1985 and found that even increases in taxes and government spending under balanced budget conditions reduced economic growth. Similarly, Folster and Henrekson [3] conducted an econometric study on rich countries between 1970 and 1995 and found that taxes and government spending were negatively associated with economic growth. Chu et al. [4] analyzed data from 37 high-income and 22 middle- and low-income countries between 1993 and 2012 using ordinary least squares (OLS) and the generalized method of moments (GMM) and found that increases in government spending and tax revenues had a significant negative impact on growth.

Koester and Kormendi [5] analyzed data from 63 countries and found a clear negative effect of tax rates on growth. Kaneva et al. [6] recently supported this result, arguing that higher overall tax burdens hurt GDP per capita growth in the Baltic and Central European countries over the period 2000–2021. Pradhan [7] also found a negative effect of taxes on economic growth in middle-income countries over the period 1960–2017. In Turkey, Ozpence and Mercan [8] found a negative effect of tax burdens on economic growth over the period 1970–2018 using vector autocorrelation (VAR) and Granger causality testing.

Furthermore, Çollaku et al. [9] used VAR and vector error correction model (VECM) to study the relationship between tax revenues and economic growth in Kosovo over the period 2010–2021 and identified long-term negative effects.

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Thus, in history, with the increase in the types of taxes, the intensification of tax pressure, the state has often been faced with financial collapse. The introduction of many unjustified, heavy taxes led to the weakening of the economic activity of the population, which dried up their savings. This, in turn, reduced the economic power of the state. The rulers themselves recognized that heavy taxes imposed on the people would have negative consequences for the government . In particular, from the words of the Russian Empress Catherine II, "Taxes are necessary for the state like sails for a ship. They should not serve to overwhelm the ship with their own cargo or to keep it always on the open sea and eventually lead it into a whirlpool, but to bring it into port as soon as possible," one can understand that taxes are a delicate weapon in the hands of the state that requires caution [10].

However, some studies contradict the above findings. For example, Tanchev and Mose [11], using OLS and fixed effects, found that tax revenues and government spending increase economic growth in the 28 EU countries over the period 1995–2020. This conclusion is also supported by Spulbar et al. [12], who, using structural equation modeling (SEM), found that tax rates positively affect GDP dynamics in the 28 EU countries over the period 2005–2017.

Also, taxes are one of the main financial resources necessary for the implementation of all state-level measures of the state and are the main tool for the country's economic development and the implementation of the established reforms [13]. Or, as the great sahib Amir Temur emphasized in his decrees, "Taxes are the economic support of the state" [14]. So, taxes play an important role in regulating the economy.

Research methodology. The research methodology of this article, namely "Tax Revenues and Economic Growth Dynamics", involves the use of various economic and methodological techniques to study the relationship between taxes and economic indicators. Below is an overview of the main components of research in this area:

1. *Data collection* : The study uses data on tax revenues and economic indicators, such as GDP, inflation, savings ratio, and foreign direct investment (FDI), from countries with different income levels. This article uses data covering the period from 1989 to 2023. Data sources are generally international financial databases and government reports.

2. *Unit root test* : To ensure the stationarity of the variables, augmented Dickey-Fuller (ADF) tests are conducted. Stationary time series data is important to avoid spurious regression results. Some studies have found that special tax variables such as export taxes and income taxes are stationary in the first difference.

3. *Economic-Methodological Models* : Research often uses regression models to study the impact of tax components on economic growth. For example, models such as Ordinary Least Squares (OLS) are used to study the relationship between tax revenue components and GDP growth. Variance Inflation Factors (VIF) are calculated to check for multicollinearity in regression models to ensure the reliability of the indicators .

4. *Heteroskedasticity tests* : Tests such as the Breusch-Pagan-Godfrey test, the Glejser test , and the Harvey-Godfrey test are used to determine the presence of heteroskedasticity in regression models. Heteroskedasticity can lead to inefficient estimates, so these tests help determine whether the model needs to be modified.

5. *Panel data analysis* : Some studies use panel data analysis to capture changes over time and across countries. This approach helps to understand how tax policy affects economic growth in different economic settings, such as low-income and high-income countries.

6. *Dependent and independent variables* : Typically, the dependent variable is the change in GDP or the rate of GDP growth. The independent variables typically include various components such as tax revenues on income, goods and services, international trade, etc., expressed relative to total tax revenues or GDP.

This methodology aims to comprehensively analyze how tax policies and structures affect economic growth dynamics in different economic environments.

Analysis and results. Delayed payment of taxes by legal entities and individuals, concealment of taxable income, implementation of unaccounted transactions and conclusion of fraudulent contracts are the main methods of tax evasion. These actions reduce the revenues of the state budget, since a large part of state finances is based on tax revenues. Also, tax evasion has a significant negative impact on economic growth.

To address these problems, governments typically raise tax rates, introduce new taxes, or rely more heavily on borrowing from the banking sector to finance government spending, which can lead to higher inflation and budget deficits.

Economists such as G. Stein, M. Bernst , and A. Laffer have argued that taxes should not put excessive pressure on economic activity or discourage productive initiatives. They argue that high taxes significantly reduce the after-tax income of producers and workers, thereby limiting their ability to access social programs.

measures taken to improve tax policy and administration in Uzbekistan , as well as the full implementation of new institutions at the local and enterprise levels , tax revenues in the first half of 2024 amounted to 85.8 trillion soums, an increase of 12.5% compared to the same period in 2023 (76.3 trillion soums). This certainly

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indicates that the measures applied and implemented in relation to existing tax types and systems have had a positive impact.

In accordance with Article 17 of the Tax Code in force in the territory of the Republic of Uzbekistan, the following taxes are established:

1. Value Added Tax;
2. Excise tax;
3. F monthly tax;
4. Personal income tax;
5. Subsoil use tax;

5 [1] Special rent tax for the extraction of minerals ;

5Tax for the use of water resources;

6Property tax ;

7Land tax;

8Social tax.

Table 1. Types of taxes in the Republic of Uzbekistan and revenues from them (as of the end of the 1st half of 2024).

Tax type	Revenue (billion soums)	Increase /decrease (%) compared to the corresponding period in 2023
Property tax	3,525	37.6%
Land tax	4,022	31.2%
Tax for the use of water resources	426	21.1 %
Excise tax	8,037	19.8 %
Turnover tax	1,350	18.9 %
Subsoil use tax	8 366	18.2 %
Income tax	16,933	17.9 %
VAT	17,807	12.3 %
Profit tax	19 171	6.0 %

As can be seen from the table above, the largest positive growth rates are property tax, land tax and profit tax. Real estate taxes in percentage (%) i.e. in terms of coefficient, profit tax showed the largest indicator in terms of revenue. Of this, the share of property tax amounted to 3.5 trillion soums, which increased by 963 billion soums (37.6%) compared to the same period in 2023 , including 18.3% for legal entities and 93.5% for individuals. Revenues from land tax also amounted to 4 trillion soums, which increased by 956 billion soums (31.2%) compared to the same

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period last year, including 29.4% for legal entities and 33.8% for individuals. Since these indicators are among the largest, they indicate the need to study, analyze, and further improve these taxes across regions.

It is worth noting that in practice, there are cases of taxpayers evading taxes that they should pay by circumventing various types of taxes. However, if compared, profit tax was the tax that was least exposed to the hidden economy. This is because this type of tax is in the general tax regime, which means that taxpayers and individual entrepreneurs who receive income from turnover can also pay it, that is, if their income from sales exceeds 1 billion soums, even if they are in a special tax regime, they are obliged to pay profit tax in the general tax regime. It is clear from this that profit tax, according to the current tax code, is comprehensive and has a large composition. From deductible and non-deductible expenses to deductible and non-deductible income, including the composition of expenses and income and additional elements, the tax code provides in detail. Therefore, the cases of transfer pricing are also decreasing sharply. Another aspect of profit tax is that this tax is paid only if a profit is actually made, that is, if the difference between income and expenses is positive.

Profit tax for the Republic as of the end of the 1st half of 2024

amounted to 19,171 billion soums, an increase of 6.0% compared to the corresponding period in 2023, the share of interregional tax inspections for large taxpayers increased by 2%, and the share of tax departments increased by 32.3%.

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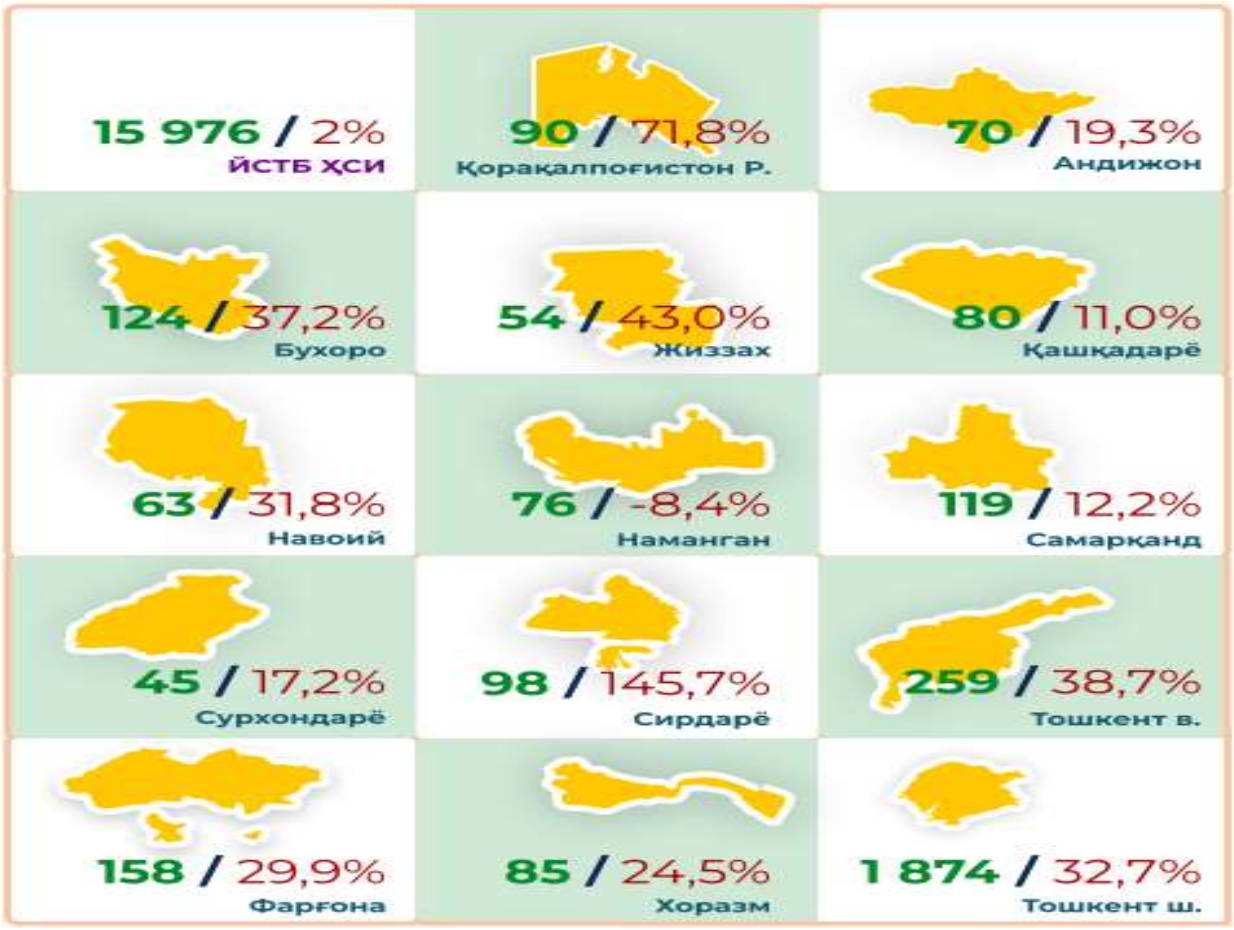

Figure 1. Profit tax revenues by region (as of the end of the 1st half of 2024, in billion soums)

Econometric analysis of the impact of taxation on economic growth is a very important area of research to determine the relationship between finance and economic growth. In this analysis, we try to explain how changes in tax rates, tax composition, and tax policies affect economic growth indicators such as GDP, investment, employment, and output.

is a summary of how an econometric study is conducted to analyze the impact of taxation on economic growth :

1. *Determining the theoretical basis:*

- Economic growth models **:** The theoretical basis is built on the Solow growth model or endogenous growth models, which emphasize how taxation affects savings, investment , and production.

- Types of taxes: The analysis needs to distinguish between different types of taxes (e.g., income tax, corporate tax, consumption tax, wealth tax) and their impact on economic growth.

- Income taxes can affect incentives for labor supply and human capital accumulation.

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- Corporate tax affects investment, capital formation , and entrepreneurial activity.

- Consumption taxes change the demand and saving patterns .

2. Model specification .

taxation and economic growth can be expressed by the following regression equation:

$$\text{Growth}_t = \beta_0 + \beta_{1*} (\text{Taxation})_t + \beta_2 (\text{Investment})_t + \beta_3 (\text{Labor})_t + \beta_4 (\text{Government spending})_t + \varepsilon_t$$

Here:

• Increase = Time t in economic growth , usually real GDP percent change with is measured .

• Taxation $_t$ = Taxation variables (e.g., tax share to GDP, income tax, rates).

• Investment $_t$ = Gross capital formation or investment share.

• Labor $_t$ = Growth in labor supply or employment rate.

• Government spending $_t$ = Government spending.

• e $_t$ = Error coefficient .

The β_1 coefficient measures the effect of taxation on economic growth.

3. Collect data .

Data are usually obtained from national statistical offices, international organizations such as the World Bank, OECD, IMF, and databases such as the Penn World Table. The main indicators needed for the analysis are:

• Real GDP growth rate.

• Tax share relative to GDP.

• Corporate and personal income tax rates.

• Consumption tax rates (VAT).

• Government spending and other control variables (e.g., inflation, population growth).

across multiple countries and over time are used to measure changes in both cross-sectional and time series.

4. Evaluation methods :

• Ordinary least squares (OLS): OLS regression can be used for basic analysis. However, endogeneity problems may arise (e.g., higher growth may lead to higher tax revenues).

• Fixed and random effects models: Panel data is used in analysis to control for unobservable country-specific characteristics.

• Instrumental Variables (IV) Regression: IV methods are used to address endogeneity problems. Y a 'ni may be an instrument of aggressive historical tax rates or other external factors that affect tax policy, but not directly on GDP growth.

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• Dynamic panel data models (GMM): The Generalized Method of Moments (GMM) is used to address simultaneity and endogeneity issues in dynamic relationships, where current growth is affected by past growth.

5. Hypothesis testing.

The main hypothesis may be that taxation has no significant effect on economic growth, while the alternative hypothesis is that taxation has a significant positive or negative effect on economic growth.

$\mathbf{H}_0: \beta_1 = 0$ (Taxation has no effect on economic growth)

$\mathbf{H}_1: \beta_1 \neq$ (Taxation affects economic growth)

Using significance levels (e.g. p-values), we can reject or accept the main hypothesis.

6. Interpretation of results .

• If β 1 is significantly negative, this means that taxation reduces economic growth. This may be due to a reduction in incentives to invest, save, or participate in the labor force .

• If β 1 is significantly positive, this may indicate that taxation increases economic growth by financing productive government spending such as infrastructure, education, and healthcare.

• If β 1 is not significant , this may mean that taxation does not directly affect economic growth, as the negative effects of taxation may be offset by the benefits of government services.

7. Check for stability .

• Alternative Specifications: Testing different forms of taxes (e.g., corporate taxes and personal taxes) and their interactions (e.g., taxes and government spending).

• Inequality models: Examine whether the relationship between taxation and economic growth is inequitable. For example, moderate tax rates may not have a significant effect, but very high tax rates may be harmful.

• Outlier analysis: Identifying which countries or time periods are disproportionately influencing the results.

8. Impact on tax policy.

Tax policy recommendations have been made based on econometric findings. For example, if corporate taxes have a significant negative impact on economic growth, governments may consider reducing these taxes or reforming tax structures to encourage investment. Conversely, if higher taxes finance more productive government spending, a more balanced approach to taxation may be recommended.

Possible outcomes.

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Let's imagine that after running a regression, we found the following results:

2. Results from the regression.[19]

Variable	Coefficient	Standard error	P-value
Tax share relative to GDP	0.05	0.02	0.015
Investment share	.12	0.03	0.001
Government spending	0.04	0.02	0.10
Labor growth	0.07	0.01	0.000

on the tax-to-GDP ratio (-0.05) indicates that if the tax-to-GDP ratio increases by 1 percentage point, GDP growth will decrease by 0.05 percentage points, all other factors being held constant. This result is significant at the 5% level (p-value = 0.015). On the other hand, investment is positively associated with high economic growth (0.12), suggesting that policies that encourage investment can help economic growth.

and structure of taxation to support economic growth.

Conclusion. Thus, based on the analysis and research conducted, we can make the following conclusions and suggestions:

1. There is a positive relationship between tax revenues and economic growth, suggesting that well-designed tax policies can increase growth potential.

2. The current tax system needs reforms to increase efficiency, which should support economic activities and generate sufficient revenue.

3.Special tax policies for various sectors can stimulate investment and growth, especially for new innovative productions.

4. It is necessary to improve the efficiency of tax collection and administration, and to increase evasion and compliance.

5. Introduce targeted tax incentives to encourage investment in high-growth sectors, such as technology and renewable energy.

6. Regularly assess the tax burden for businesses and individuals to ensure that it is consistent with economic growth.

[19] Prepared by the author.

7. Increase public awareness of tax policies, which should encourage compliance and active participation in the tax system.

LIST OF USED LITERATURE.

1. Decree of the President of the Republic of Uzbekistan dated 28.01.2022 Decree No. PF-60 "On the Development Strategy of New Uzbekistan for 2022-2026 " .

2. Engen EM, Skinner J. Fiscal Policy and Economic Growth, 1992, NBER Working Paper no. w4223. Available at: https://www.nber.org/system/files/working_papers/w4223/w4223.pdf (accessed: 08.06.2023).

3. Folster S., Henrekson M. Growth effects of government expenditure and taxation in rich countries. European Economic Review. 2001;45(8):1501–1520. https://doi.org/10.1016/S0014-2921(00)00083-0

4. Chu T., Hölscher J., McCarthy D. The impact of productive and non-productive government expenditure on economic growth: an empirical analysis in high-income versus low- to middle-income economies. Empirical Economics. 2020;58:2403–2430. https://doi.org/10.1007/s00181-018-1616-3

5. Koester R., Kormendi R. Taxation, aggregate activity and economic growth: Crosscountry evidence on some supply-side hypotheses. Economic Inquiry. 1989;27(3):367–386. https://doi.org/10.1111/j.1465-7295.1989.tb02011.x

6. Kaneva T., Chugunov I., Pasichnyi M., Nikitishin A., Husarevych N. Tax Policy for Economic Recovery and Sustainable Development after COVID-19. Problemy Ekorozwoju. 2022;17(2):102–109. https://doi.org/10.35784/pe.2022.2.11

7. Pradhan RP The Effect of Infrastructure and Taxation on Economic Growth: Insights from Middle-Income Countries. In: Arnab Kumar Laha (ed.) Applied Advanced Analytics: 6th IIMA International Conference on Advanced Data Analysis, Business Analytics and Intelligence. Singapore: Springer; 2021, pp. 187–197. https://doi.org/10.1007/978-981-33-6656-5_16

8. Ozpence O., Mercan N. The relationship between tax burden and economic growth: Turkey case. Journal of Business, Economics and Finance (JBEF). 2020;9(2):143–154. http://doi.org/10.17261/Pressacademia.2020.1220

9. Çollaku L., Balaj D., Hajdini A. Correlation between Tax Revenues and Gross Domestic Product: Evidence from the Developing Economy. Corporate and Business Strategy Review. 2023 ;4 (1):31–38. https://doi.org/10.22495/cbsrv4i1art3

10. Niyazmetov I. Tax burden optimization: theory, methodology and practice. Monograph. - Tashkent: Finance, 2016. - 192 p.

11. Tanchev S., Mose N. Fiscal Policy and Economic Growth: Evidence from European Union Countries. Economic Izsledvania. 2023;32(3):19–36. Available:

12. Spulbar C., Ehsanifar M., Birau R., Babaie A., Doagă DI Advanced empirical research based on structural equation modeling (SEM) regarding the impact of tax revenue on GDP dynamics at EU-28 level. Scientific Annals of Economics and Business. 2021 ;68 (3):285–307. https://doi.org/10.47743/saeb-2021-0017

13. Alimardonov M.I., Khudoikulov S.K., Yusupov O.A., Agzamov A.T., Taxation of Legal Entities. Textbook. Tashkent-2013.

14. Timur's rules. T.: Cholpon, 1991. 98 p.