

# Analysis of the Influence of Factors on Changes in Regional Budget Revenues in Uzbekistan

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**Abstract:** The article examines the analysis of receipts to regional budgets in Uzbekistan. Generalization, grouping, logical and comparative methods of analysis, comparative analysis, statistics, prospective forecasting and grouping methods of scientific methods of studying economic reality processes are widely used in the research. A brief review of the literature on structural changes of local budgets' incomes, growth weights, and the influence of factors on them is presented.

The factors affecting the changes in the revenues of the regional budgets have been identified and their statistical indicators have been studied. Based on the studies, a theoretical view was put forward. Descriptive statistics of revenues of regional budgets and gross regional product of the region and a number of other macroeconomic indicators were formed, and their correlation coefficients were determined.

The impact of indicators such as the number of production enterprises, the amount of investments in the economy on the tax revenues of the budget was studied by econometric modeling and conclusions were drawn.

**Key words:** economy, budget policy, regional budget, financial stability, tax, tax policy, budget revenues, taxable income, tax-free income, capital.

## Introduction

One of the main directions of budget policy in Uzbekistan is to give financial independence to local budgets and ensure their financial stability. Currently, increasing the responsibility of local budgets in the implementation of socio-economic goals, creating a stable income base, and studying the factors affecting the effectiveness of local budgets from a yearly point of view are urgent issues today.

The goal of improving the welfare of the population, ensuring economic stability, and creating ample opportunities for the rapid development of small business and private entrepreneurship is embodied in the reforms carried out in the budget and tax sphere in our country. In particular, measures to further reduce the tax burden in the economy, simplify the taxation mechanism, and improve tax administration are aimed at this goal.

Effective local implementation of state policy in the socio-economic sphere depends on the financial capabilities of local self-government bodies. In modern conditions, the practice of forming the revenue base of local budgets, while ensuring their complete financial independence, does not have an encouraging description of local government authorities in increasing budget revenues through the rational use of the economic potential of the region.

## Literature review

In Great Britain, federal taxes are the main source of revenue for local budgets, with 70-90% of federal taxes transferred to county and city budgets. In Germany, the share of local taxes in the income part of local budgets is not high, subsidies and grants from the federal and state budgets make up 40%. It should be noted that in Germany, "rich" countries allocate part of their financial income to countries with a relatively low level of development, and as a result, local budgets are formed at the expense of

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vertically distributed budget subsidies and subventions. In Germany, budget subsidies are spent for strictly defined purposes and allocated mainly to the social sector.

As we all know, increasing the profitability of local budgets depends on macroeconomic and financial factors as the most pressing issue in the state financial management system. Many economists have conducted research on increasing the income of local budgets and implementing forecast indicators between the budget system links. In particular, prof. A. Toshmatov cited a number of measures aimed at increasing tax revenues to the local budget. The system of distribution of taxes between budgets of different levels was discussed in order to increase tax revenues of local budgets.

According to O.Kenjaboyev reasonable reduction of the tax burden in regulating the effective management system of local budgets. He emphasized that it is necessary to increase the share of direct taxes in the structure of state budget revenues or to determine the ratio of taxation.

A.Burkhanov, Kh.Kurbanov based the scientific conclusions aimed at increasing the revenue sources of local budgets. First of all, the share of relatively economically developed regions in the revenues charged to the budget in the region is high. Secondly, in the periods under analysis, the development of the regional economy in some districts of the region, that is, the rapid development of small business and private entrepreneurship, the establishment of new enterprises due to the further development of investment activity, the financial rehabilitation of economically weak enterprises, the reduction of tax arrears, the informal sector He cited ways to increase the income of local budgets by transferring operating entities to the official sector.

During the research, generalization, grouping, logical and comparative methods of analysis, comparative analysis, statistics, perspective forecasting and grouping methods of scientific methods of studying economic reality processes were widely used.

Regional budgets are an important part of the state budget. Local budgets finance important functions of the state, and because they are a lower level of the state budget, they have a strong connection with society. We know that the methods of "fiscal federalism" and "fiscal unitarism" are used to allocate funds between budgets. If in the method of "fiscal unitarism" all or most of the budget revenues are collected in the central budget, the funds are distributed in the form of transfers to local budgets, in the method of "fiscal federalism" a part of the taxes and tax-free revenues goes to the central budget, and a part to local budgets. is attached as, thereby ensuring the financial independence of local budgets. Many researchers, scientists and experts recognize that the "fiscal unitarism" method is effective in the allocation of state budget funds.

### **Analysis and results**

The real basis of the reforms implemented in the budget sector in Uzbekistan is currently aimed at increasing the independence of regional budgets, in this regard, financial freedoms are being given to local state authorities, in particular, receipts exceeding the forecast of budget revenues are left in local budgets, some taxes are attached to local budgets, freedoms on investment activities are among them. As a result of such changes, the aspirations of local government bodies to increase budget revenues, find sources of additional tax revenues, and improve the environment for production activities increase.

In Uzbekistan, most of the income of local budgets is formed from the taxes and mandatory payments assigned to the local budget, as well as from the tax revenues allocated according to regulations from state taxes.

Our research is to carry out an econometric analysis evaluating the impact of economic changes on the tax revenues of local budgets on the example of Fergana region.

Based on the data of Table 1, the assessment of the effect of the number of people employed in the economy in the region (BS), the number of active enterprises operating in the region (KS) and the volume of investments in fixed capital in the region on the tax revenues of the regional budget of Fergana region we carry out modeling.



**Table 1. Some macroeconomic indicators of Fergana region**

Years	Tax revenues of the local budget (SD), billion soums	Number of jobs in the economy (BS), thousand people	Number of enterprises (KS), pcs	Capital investment (I)
2009	267	1170.6	12 101	178
2010	406	1206.4	13,086	273
2011	445	1280.1	14,872	485
2012	678	1311.7	15 504	663
2013	811	1340.4	16,879	931
2014	921	1367.6	18 259	1 261
2015	1 067	1398.8	19,016	1 506
2016	1 217	1431.1	19 230	2 130
2017	1 389	1462.8	21 173	2 295
2018	1 530	1485.3	21 795	2 542
2019	1 601	1508.3	23 083	2 644
2020	1 878	1525.7	23 310	2 955
20 21	1 595	1451.0	25 571	5 539
20 22	3 533	1492.6	29 128	8 685
202 3	2 013	1438.3	35 379	11 320

*Note: Information from the Statistics Agency and the Ministry of Economy and Finance*

So, in our research, we define the result symbol as the tax revenues of the local budget - SD, the factor symbols as the number of items in the economy - BS, the number of enterprises - KS, investment in fixed capital - I.

**Table 2. Descriptive statistics of observations used for 2009-2023**

Indicator	Average	Median	Minimum	Maximum
SD	1290.0	1217.0	267.43	3532.5
BS	1391.4	1431.1	1170.6	1525.7
KS	20559	19230	12101	35379, 0
I	2893.8	2130.0	178.20	11320, 0
Indicator	Standard deviation	Variation	Asymmetry	Excess
SD	823.43	0.63830	1.2139	1.6832
BS	109.59	0.078761	-0.70181	-0.61804
KS	6223.7	0.30272	0.81135	0.29087
I	3230.9	1.1165	1.6061	1.4960

It can be seen from the descriptive statistics of the data that the number of observations in this study is 15. The lowest amount of SD is 267.3 billion soums , the highest amount is 3532 billion soums , the minimum amount of investment is 178.2 billion soums , the maximum amount is 11320.2 billion soums reached The minimum number of BS was 1170.6 thousand people, the maximum number was 1525.7 thousand people, the minimum number of KS was 12101 people, and the maximum number was 35379 people.

At the initial stage of our analysis, based on the data of Table 1, we analyze the correlation coefficient of local budget tax revenues (SD) with the number of items (BS), the number of enterprises (KS) and investments in fixed capital (I).

Table 3 shows that the correlation of tax revenues (SD) with the number of items (BS) is 0.7796, the correlation with the number of enterprises (KS) is 0.8423, the correlation with fixed capital investments (I) is 0.8084, and all three Tax revenues are strongly correlated with the factor.



**Table 3. The matrix of correlation coefficients of the indicators used for the years 2009-2023**

SD	BS	KS	I	Indicators
1.0000	0.7796	0.8423	0.8084	<b>SD</b>
	1.0000	0.7488	0.5389	<b>BS</b>
		1.0000	0.9526	<b>KS</b>
			1.0000	<b>I</b>

The change in the volume of taxable income (SD) depends on the changes in the number of jobs (BS), the number of enterprises (KS) and investments in fixed capital (I) in the economy. we create an econometric model of interdependence. According to the inductive analysis of this model, the indicator representing the statistical significance of the above model (R-value (F)) is less than 0.05, therefore this model is statistically significant, independent variables (BS, KS and I) the coefficients indicating the effect on the dependent variable are also less than 0.05 and statistically significant (Table 4).

**Table 4. The regression equation of the effect of investments in fixed capital (I), the number of jobs in the economy and (BS) the number of enterprises (KS) on the tax revenues of the local budget**

Factors	Coefficient y ent	Standard error	t-statistics	Thank you	
<b>const</b>	-8003.96	1186.90	-6,744	<0.0001	***
<b>BS</b>	10.8629	1.64846	6,590	<0.0001	***
<b>KS</b>	-0.383107	0.0803528	-4,768	0.0006	***
<b>I</b>	0.710454	0.121784	5,834	0.0001	***
Dependent variable mean		1290,027	Standard deviation		823.4286
Sum of Squares of Residuals		556546.5	Standard error		224.9336
R-squared		0.941370	Adjusted R-squared		0.925380
F -statistics (3, 11)		58.87219	R- faith (F)		4.62e-07
Logarithmic closeness to truth		-100.1950	Akaik e Criterion		208.3900
Schwartz criterion		211,2222	X a nna-Quinn criterion		208.3598
Rho parameter		-0.292607	Darbin- U otson c tistics		2.551665

Note: This model was obtained as a result of calculations in Gretl program complex.

Adjusted R-squared of the developed equation is equal to 0.9254, and the number of jobs (BS), number of enterprises (KS) and investments in fixed capital (I) in the economy changes can explain 95.54 percent of the change in the volume of tax revenues. When calculated on the basis of the statistical table of the Darbin-Watson statistic at the 5 percent level of significance, the condition of non-autocorrelation was calculated as  $1.14 < DW < 3.73$ . The fact that the Darbin-Watson statistic is in the desired range means that there is no autocorrelation problem. When the residuals were checked for normal distribution, it was found that they were normally distributed.

The change in the volume of taxable income (SD) depends on the changes in the number of jobs (BS), the number of enterprises (KS) and investments in fixed capital (I) in the economy. econometric model of correlation:

$$SD = 10.8629*BS - 0.3831*KS + 0.7105*I - 8003.96 + e$$

Here: SD - tax revenues of the local budget, billion soums;

BS - number of jobs in the economy, thousand people;

KS - number of enterprises, units

I – investments in fixed capital, in billion soums;

e - unaccounted factors

According to the model, an increase (decrease) of BS (the number of jobs in the economy) by 1 thousand people, an increase (decrease) of SD (taxable income of the local budget) by 10.8629 billion soums, KS (the number of enterprises) an increase (decrease) of 1 to a decrease (increase) of SD (local



budget tax revenue) by 0.3831 billion soums, an increase of I (volume of investments in fixed capital) by 1 billion soums (decrease) means that SD (local budget tax revenue) will increase (decrease) by 0.7105 billion soums.

General summary of the model:

- An increase in jobs and employment in the economy leads to an increase in local budget revenues;
- An increase in the number of enterprises leads to a slight decrease in tax revenues of the local budget;
- The increase in the volume of investments attracted to the region will significantly contribute to the increase of local budget revenues.

## Conclusion

In order to increase the real incomes, living standards and quality of the population, ensuring stable financing of integrated development of regions, sharply reducing dependence on the central budget, and strengthening the independent work of local state authorities in the management of local budget funds through the radical reform of inter-budgetary relations are the main aspects of the country's budget policy. is one of the tasks.

In order for any country to achieve rapid economic growth, it is necessary to solve economic problems, which will directly stimulate the development of the country's economy and the well-being of the population. An in-depth study of tax types, systems, tax policy and other important tax-related topics in the experience of developed foreign countries and reliably studied with researched literature, an advanced foreign country in the management of tax policy , their introduction and implementation. conducting politics like other countries is becoming the need of the hour.

Summing up from the above, we can say that taxes are the most important factor in achieving these goals, and the government of each country will achieve economic development and prosperity only if this system is perfected. Taxes are the main source of state spending, and it is the main and important lever for regulating the economy and achieving economic maturity in the conditions of market relations.

## References

1. Allocating Tax Revenue to Sub-Central Government Levels: Lessons from Germany and Poland. Institute of Economic Research Working Papers No. 17/2015. [http://www.badaniagospodarcze.pl/images/Working\\_Papers](http://www.badaniagospodarcze.pl/images/Working_Papers) ;
2. Sh.A.Toshmatov Iqtisodiyotni rivojlantirish va liberallashtirishda davlat byudjeti daromadlari manbalarini kengaytirish yo'nalishlari // O'zbekistonda moliya sektorini rivojlantirishning ustuvor yo'nalishlari. Respublika ilmiy-amaliy anjumani materiallari to'plami. 2017 yil 10 noyabr. –T.: TDIU, 2017. -b.27-28;
3. Kenjabayev O.T., Fozilov A.F., Alimov O.R. Respublika byudjeti va mahalliy byudjetlarning daromadlar va xarajatlarini samarali boshqarish masalalari // “Xalqaro moliya va hisob” ilmiy elektron jurnali. №1, fevral, 2017 y.;
4. Burxanov A.U., Qurbonov X.A. Hududlarda mahalliy byudjetlar daromadlar manbaini kengaytirish yo'llari // “Iqtisodiyot va innovasion texnologiyalar” ilmiy elektron jurnali. № 1, yanvar-fevral, 2018 yil.;
5. Achilov U., Sulaymanov A. ISSUES OF ENSURING CONTINUITY OF STATE BUDGET REVENUES IN UZBEKISTAN //Центральноазиатский журнал образования и инноваций. – 2024. – Т. 3. – №. 5. – С. 118-122.;
6. Vakhidovich GS, Ulug'bekovich AU Ways to Increase the Possibilities of Attracting Foreign Investments to the National Economy //Excellencia: International Multi-disciplinary Journal of Education (2994-9521). - 2024. - T. 2. – no. 6. - S. 1189-1196.

