The ways to improve the forecasting of local budget revenues in the Republic of Uzbekistan

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Abstract: It should be noted, that one of the essential links in the new development strategy of the country in ensuring efficiency of the tax and budget system is the issue of socio-economic development of regions through the sustainability of local budgets and strengthening their revenue base. This issue can be favourably settled only when the revenues of local budgets are in balance. In this regard, this article is devoted to consideration of the issues related to the forecasting of revenues of local budgets and strengthening their revenues. Moreover, the article provides relevant scientific conclusions and practical recommendations.

Keywords: tax, budget policy, budget, tax administration, local budget, tax potential, normative analysis, positive analysis, tax burden, representative tax rate, tax report on average rate, tax revenues, tax deductions, tax rate.

Introduction

Regardless of the structure of the state budget and the development level, each state is required to formulate the necessary amount of budget revenues to perform public functions. This fact necessitates selecting an optimal approach to the formation of state budget revenues in many countries under conditions of the pandemic, when the need for additional social protection is crucially important due to decline in economic activity, cessation of entrepreneurial activity and other factors.

One of the most significant links in the new development strategy of the country is to ensure efficiency of the tax and budget system, the issue of socio-economic development of regions through the sustainability of local budgets and strengthening their revenue base. This issue can be favourably resolved only when the revenues of local budgets are in balance. This, in turn, is directly related to the sources of revenue of the local budget, that is, the accurate solution to the problem of forecasting tax revenues. So, at the current stage of development, one of the most urgent issues is to enhance the role of local budgets in the country, to strengthen their revenues through accurate forecasting of their sources of income to address issues related to the introduction of the budget.

Literature review

Within the budgets of all levels, the issues of optimal forecasting of taxes, which are their main sources of income, including local budgets, have been investigated at various levels by economists, strating from classical schools of economists up to contemporary scholars.

In particular, A.V. Bryzgalin in his research examined the relationship between tax revenues and the tax burden and assessed its impact on the forecast of tax revenues, while V.G. Panskov and V. Knyazev revealed importance of forecasting tax revenues in budget forecasting (V.G. Panskov and V. Knyazev, 2003).

S.Khudoykulov in his research determined the forecast indicators of total state budget revenues for 2018-2023 by econometric methods (S.Khudoykulov, 2019). A.Agzamov in his PhD research determined the forecast of personal income tax for 2019-2023, U.Pardaev in his PhD research studied the issues of forecasting state budget

revenues, Doctor of Economics J.Urmonov determined the forecast indicators of tax revenues of the single tax payment for 2018-2020.

3. Research methodology

Forecasting the revenues of local budgets requires the use of general and specific research methods of research. Scientific and theoretical analysis of approaches to forecasting local budget revenues based on theoretical observation and a logical approach has been performed. Thus, scientific literary sources have been analyzed, the scientific-theoretical views of researchers and experts on the problem have been studied on a polymical basis with the method of generalization and grouping. Based on official and practical materials, scientific conclusions have been made based on synthesis and analysis methods, and the deductive or inductive approach has enabled to study the factors influencing the process of forecasting local budget revenues in an upward trend and vice versa. Scientific and practical proposals have been developed in reliance upon comprehensive analysis using logical and comparative, abstract-logical thinking and statistical methods.

4. Analysis and results

Taking into account the forecast parameters of socio-economic development in the State Tax Service authorities, calculation of revenues from taxes and fees to the local budget is performed in compliance with the legislation of the Republic of Uzbekistan. Forecasting of tax receipts to the local budget is made using several calculation methods:

- **direct calculation** – the method based on the use of forecast values of volume and value indicators, revenue volume, rate levels and other indicators;

- **average** - the calculation based on the average calculation of annual revenues received in the previous period;

- **indexation** – the calculation using the consumer price index, inflation, deflator and other indicators describing the forecast type of income;

- **extrapolation** - the a calculation based on available data on changes in revenue in previous periods.

These proposed methods should be used in compliance with the law in the development and definition of revenue forecasts of local budgets.

The following are the main principles of forecasting the state budget and local budget revenues:

Forecasts of local budget revenues can be, as a rule, monthly (operational), quarterly, annual and medium-term.

Revenue is forecasted by type of tax and by large groups of non-tax payments.

It is advisable to use the following data to forecast local budget revenues:

indicators of socio-economic growth of the republic (region);

data of ministries and departments required to calculate the state budget revenue base;

tax, fiscal policy measures for the upcoming period;

receipts in the previous period;

information from the Internet (prices, other expectations, etc.).

In order to ensure the sustainability of the local budget, it is advisable to use data from other ministries and agencies for forecasting.

1. The following is used to calculate the forecast amount of tax for the use of water resources:

- dedication of funds collected in the local budget for previous periods, as well as the tax base for the use of water resources and the dynamics of real revenues;

- information on the volume of water resources used from surface and underground sources on the basis of tax statistics, as well as on inquiries from the Ministry of Water Resources of the Republic of Uzbekistan;

- calculation of the forecast amount of tax revenues for the use of water resources should be performed by the method of direct calculation based on the direct use of calculation rates and other indicators with the account of the indexation of tax rates on water intake (including in excess of established limits).

The forecast volume of tax receipts for the use of water resources (W_{Tax}) is based on the following calculation algorithm:

$W_{Tax.} = \sum (V_{surface.} * (S_{surface.} * I_{ind.})) + (V_{undegr.} * (S_{undegr.} * I_{ind.})) (+/-) F$, here:

$W_{Tax.}$ – *forecast of tax receipts for the use of water resources;*

$V_{surface.}$ – *volume of water obtained from surface water sources;*

$V_{undegr.}$ – *volume of water obtained from underground sources;*

$S_{surface.}$ – *rate on water from surface sources, 1 m^3 in UZS;*

$S_{undegr.}$ – *rate on water from underground sources, 1 m^3 in UZS;*

$I_{ind.}$ – *indexation of the tax rate, as well as the tax rate for over-consumption, %;*

F – *the amount of adjustment of receipts with the account of amendments made in legislation, actual receipts, etc.*

2. The following formula is used to calculate the property tax forecast of legal entities:

- forecast indicators of socio-economic development of the Republic of Uzbekistan for the next fiscal year and the scheduled period (average annual residual value of depreciable property, depreciation);

- tax base of entities on property tax, including average annual residual value, average annual value of construction in progress, dynamics of average annual value of commissioned residential real estate for previous periods;

- the dynamics of tax amounts calculated for payment to the budget based on the average annual value of property tax for previous periods, dynamics of tax amounts calculated for payment to the budget based on cadastral value;

- the dynamics of taxes and real revenues calculated on the funds collected in the local budget for previous periods.

It is recommended that the forecast of property tax receipts of legal entities should be implemented by the method of direct calculation of volume and value indicators using the forecast values, volume of receipts, the level of rates and other indicators.

The forecast amount of property tax for legal entities ($MS_{leg.}$) is calculated according to the following formula:

$MS_{leg.} = (SB_1 \times S_1 + SB_2 \times S_c) \times K (+/-) F$, here:

SB_1 – *the amount of the property tax base determined by the average annual value;*

The amount of the property tax base (SB_1), determined by the average annual value, is calculated according to the following formula:

$$SB_1 = (A_1 + (A_1 - A))/2 \times M_1,$$ here:

A_1 – *the value of the depreciable property at the beginning of the year;*

A – *depreciation amount;*

M_1 – *the taxable share of the property determined by the average annual value formulated during the reporting period.*

The volume of the property tax base (SB_2), determined by the cadastral value, is calculated according to the following formula:

$$SB_2 = (A_1 + (A_1 - A))/2 \times M_2,$$ here:

SB_2 – *property tax base determined by cadastral value;*

A_1 – *the value of the depreciable property at the beginning of the year;*

A – *depreciation amount;*

M₂ – *the share of the value of taxable property determined by the cadastral value formulated during the reporting period (calculated as the product of dividing the tax base in the form of the average annual value of property of legal entities by the total average annual value of property).*

S₁ – *average calculation rate of property tax of legal entities determined by the average annual value (calculated as the ratio of the amount of property tax determined by the average annual value to the tax base in the form of the average annual value).*

Sc – *average calculation rate of property tax of legal entities determined by cadastral value (calculated as the ratio of the amount of property tax determined by cadastral value to the tax base in the form of cadastral value).*

K – *calculated level of collection with the account of the dynamics of the collection rate for this type of tax formulated in previous periods. It takes into account the work on debt collection (defined as the product of dividing the amount of tax received by the amount of tax assessed).*

F – *the amount of adjustment of receipts with the account of amendments made in legislation.*

3. The following is used to calculate the land tax levied on legal entities:

- the tax base of land tax levied on legal entities for the previous periods, the calculated amounts and the dynamics of actual receipts.

Calculation of the forecast amount of land tax receipts from legal entities in the regions of the Republic of Uzbekistan is implemented by direct calculation using the indicators of the tax base and the tax rate and other indicators (level of payments, collection level, etc.)

The forecast of land tax receipts (**ES_leg.**) is calculated according to the following formula:

$$ES_{leg.} = S_B \times K_{ekstr.} \times S \times K_{p.t.} \times K_{col.} (+/-) F, \text{ here:}$$

S_B – *tax base in the form of cadastral value of land plots of entities with the account of the tax incentives;*

K ekstr. – *extrapolation coefficient calculated as the arithmetic mean of the rates of increase (decrease) of the tax base in the form of cadastral value compared to the previous period;*

S – *the average calculated rate of land tax levied on legal entities for the reporting period.*

The average rate of land tax levied on legal entities is calculated as the ratio of the amount of tax paid to the budget to the tax base in compliance with the aggregate data of tax reporting forms:

K p.t. – *the rate of calculation of payments transferred to taxes.*

The rate of calculation of payments transferred to taxes is determined as the product of dividing the amount of land tax levied on legal entities (funds collected to the local budget) generated for previous periods by the amount of land tax levied on legal entities (aggregate data of land tax reporting forms for legal entities).

K_col. – *the calculated rate of collection with the account of the dynamics of the collection rate for this type of tax formulated in previous periods. It takes into account the activities on the payment of tax arrears.*

F – *amounts of receipts, modified with the account of amendments in the legislation of the Republic of Uzbekistan, actual receipts, as well as one-time transactions (receipts, refunds, etc.).*

The amount of revenues lost is determined within the established algorithm for calculating the forecast amount of tax receipts.

Assessment of the tax potential of the land tax for the scheduled period is made according to the following formula:

$ES_{leg.} = ES *(100\% + I_P),$ here:

$ES_{leg.}$ – *assessment of the tax potential of the land tax for the scheduled period;*

ES –*tax potential of the land tax for the current year determined in the legislation;*

I_f – *forecast rate of inflation, %.*

4. The following shall be used to calculate the tax on turnover payable in connection with the application of the special tax regime:

- forecast indicators for socio-economic development for the next fiscal year and scheduled period;

- the tax base of turnover tax for previous periods, the calculated amounts and the dynamics of actual receipts;

- tax rates, incentives and preferences provided for in the Tax Code.

Calculation of the forecast amount of tax receipts obtained from turnover is made using the method for direct calculation based on the forecast amount of receipts for each type of tax based on the selected object of taxation using direct forecast indicators, tax rates and other indicators (tax incentives, tax collection rate, etc.).

It is advisable to calculate the turnover tax receipts forecast (T_P) according to the following formula:

$T_P = SB_{AOS} *S - L(+/-)F,$ here:

T_P – *assessment of turnover tax receipts for the current year determined in the statutory acts;*

SB_{AOS} – *tax base;*

S – *the rate established by the Tax Code of the Republic of Uzbekistan;*

L – *amount of incentives and preferences;*

F – *amounts adjusted with the account of amendments made in legislation, changes in actual receipts, changes in the tax regime, as well as one-time transactions (transactions, refunds, etc.).*

When used as an object of taxation, the forecasted volume of the tax base on the tax on turnover ($SB_{f.}$) is calculated with the use of the following formula in reliance upon the share of the tax base of the previous period in the GDP:

$SB_{f.} = SB_{pp}/V_{O'.D.}* V_{f.},$ here:

$SB_{f.}$– *the tax base of the forecast period;*

$SB_{pp.}$– *the tax base of the previous period;*

$V_{f.}$– *forecasted Gross Domestic Product;*

$V_{pp.}$ – *Gross Domestic Product of the previous period;*

At the macro level, we recommend the use of the extrapolation method in forecasting state budget revenues.

In particular, the procedure for calculating the turnover tax forecast is as follows:

$$Rt = \sum_{i=1}^{n} \sum_{j=1}^{m} Ap * Np$$

Rt	forecast of the tax on turnover
i, n	sectors of the economy
j,m	group of payers in terms of the amount of annual payment
Ap	the amount of tax that taxpayers expect in the upcoming year
Np	number of taxpayers

The procedure for calculating the forecast for the property tax paid by legal entities is made with the use of the following formula:

$$Rpt = Rov - P + \sum_{i=1}^{n} FAcost \; x \; avr \; x \; tp - Ex + Adr$$

Rpt	forecast of the property tax paid by legal entities
Rov	tax arrears, which have not been levied at the beginning of the year
P	the amount of the tax excessively paid at the beginning of the year
i, n	sectotrs of the economy
FAcost	residual value of the real estate
avr	average growth rates formulated in the relevant sector of the economy
tp	the rate of the property tax paid by legal entities
Ex	amount of incentives
Adr	additional tax amount according to the terms of the concept

The procedure for calculating the forecast for the land tax paid by legal entities is made with the use of the following formula:

$$Rlt = Rov - P + \sum_{i=1}^{n} Dsum \ x \ ind - Ex + Adr$$

Rlt	forecast of the land tax paid by legal entities
Rov	tax arrears, which have not been levied at the beginning of the year
P	the amount of the tax excessively paid at the beginning of the year
i, n	sectotrs of the economy
Dsum	the amount of land tax paid by legal entities calculated in the current year
ind	indexation of rates of the land tax paid by legal entities
Ex	amount of incentives
Adr	additional tax amount according to the terms of the concept

Conclusion and recommendations

The scientific conclusions of the research implemented in the field of forecasting taxes, which are considered primary sources of revenues of local budgets, illustrate that forecasting of tax revenues referred to local budgets is a very complex process, and many factors of a rapidly changing nature affect the forecast indicators for each type of tax. In this regard, in our opinion, the following recommendations can be made:

first, it is necessary to properly formulate the information base that local budgets will need to forecast taxes, which constitute the primary sources of revenues;

second, it is required to correctly identify the factors that influence the forecast indicators and have a rapidly changing nature, as well as accurately assess the impact of each of them on the forecast indicators;

third, it is recommended to use special software, which is currently widely applied in the global practice, to forecast taxes nas the main source of local budget revenues and therefore it is required to elaborate relevant methodological foundations.

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