

The method of estimating the regional budgetary process

Vladimer Glonti^{1,*}, Miras Zhiyenbayev², and Rezo Manvelidze¹

¹Shota Rustaveli State University, 6010, Ninoshvili str., 35, Batumi, Georgia

²Karaganda State Technical University, 100027, Mira avenue, 56, Karaganda, Kazakhstan

Abstract. None of the territorial authorities would be able to perform the functions of management of economic and social processes in their territories, to make adequate decisions appropriate in concrete situations, without knowing the status of their territorial budget. An analysis of the budgetary process includes several directions of research characteristic of its different phases. At the stage of budgeting it includes an expert study of the budget in terms of justification of its basic parameters. At the stage of implementation, it includes an operational analysis of the current state budget and a systematic study of trends in the income and expenditure budget. The final stage includes an analysis of the effectiveness and efficiency of use of budgetary resources. On this basis, the paper presents a system of indexes which makes it possible to assess the quality of the regional budget process and to identify the causes of breaches of development. It includes: 1. indexes specific to the structure of regional budget revenues and the dynamics of the relations between them; 2. absolute and relative indexes of the regional budget balance, 3. indexes of the income and expenditure proportionality in the budget; 4. a rhythmic analysis of expenditure from budgetary funds within the current budget; and 5. indexes of regional budget liquidity.

1 Introduction

The analysis of the budget process includes some directions of research characteristic of its different phases. Since the state of the budget is a result of the financial policy conducted by the authority, we must consider as the base of a long-term strategy of management of budget resources whose aim is to secure its stability in a longer perspective. The mistakes and disproportions made in the past can create conditions which will influence the regional authority adversely and will cause the deviation of indexes from a stable and balanced state. A financial analysis is a method of the accumulation, transformation and use of information for the following purposes:

- to estimate the current and future financial state of the regional budget;

* Corresponding author: vladimer.ghlonti@bsu.edu.ge

- to ascertain all possible resources of the budget income, to work out and analyze methods of their mobilization; to analyze the effectiveness and possibility of correction of the fiscal policy conducted by the authority;
- to analyze reasons of the imbalance of the budget indexes and to identify the resources of financing of the deficit; and
- to identify and analyze factors of change in the financial stability of the regional budget.

It must be designated that in Georgian scientific-theoretical researches the questions concerning the analysis of the regional budget are poorly studied [1]. First of all, it is conditioned because of the fact that the current economic reform in Georgia has defined the study of the problems related to the stable functioning of the enterprises and financial-credit institutions in the difficult market environment. So, the serious imbalance in the field of theoretical validity of financial analysis of the activities of enterprises and of regional budget has been formed. Besides, the financial analysis of the activities of the enterprises are based on the analytical apparatus, which are well done as by Georgian so foreign scientists as well, while in the sphere of the analysis of the regional budget there is hardly such an instruments.

In general, the meaning of the indexes of financial stability is to estimate the composition of the sources of financing and its correlation dynamics. The analysis is based upon the thesis that income sources differ by the prime cost level, the degree of accessibility, the degree of trustworthiness, the degree of risk, and the degree of obligation. Those differences appear when using different financial sources.

2 The index system of estimating the regional budget

The first point of the presented method is the thesis that the level of stability of the regional budget is defined by the volume of sources necessary to ensure minimal budget stability. There are four kinds of budget stability:

1. An absolutely stable condition of the budget, which can be characterized by the following correlation:

$$P_m < D_c + D_p . \quad (1)$$

where P_m is the minimum expenses of the budget, D_c is the private incomes of the budget, and D_p is the regulator incomes of the budget.

2. A normal condition

$$P_m = D_c + D_p . \quad (2)$$

3. An unstable condition

$$P_m = D_c + D_p + I_d . \quad (3)$$

where I_d - additional sources to decrease the budget tension (e.g. means of territorial extra-budgetary funds, credit, etc.).

4. A crisis condition

$$P_m > D_c + D_p + I_d . \quad (4)$$

We have to note that the offered method of estimation of the stability of the regional budget is not universal, as it does not account for essential differences in the potential incomes of territorial administration units. The same applies to minimum spending. Correlations can change under the influence of the economic condition of the country, legislation, fiscal policy, and other factors. Such independent budget parts as the current and investment budgets stipulate different sources of financing. The method presented is offers an express analysis of the budget indexes which gives one a chance to estimate its current stability.

We are confident that a deeper and more detailed analysis of the main budget indexes is necessary to estimate the financial condition of the sub-federal authorities and the degree of stability of their budget. The analysis of the regional budgetary process has to contain the following main blocks of indexes.

I. An analysis of factors of regional budget stability offers the following indexes of estimating the budgetary process:

- *The coefficient of the correlation of the private and regulator incomes of the budget:*

$$K_c = \frac{\text{private incomes}}{\text{regulator incomes}} . \quad (5)$$

This coefficient shows which part of the budget expenses is in balance with the profits of the private income base.

- An additional index estimating the income base of the regional budget is the *correlation of taxable and non-taxable sources:*

$$K_{N1} = \frac{\text{taxable incomes}}{\text{non - taxable incomes}} . \quad (6)$$

This index will be more informative if we do not include incomes which do not imply the result of the tax efforts of the corresponding organ of the authority.

That is why it is necessary to include incomes of the private sector in taxable incomes as well as the regulator incomes attached to the given budget level. From non-taxable incomes we must exclude official transfers which correspond with the international standards of statistics of government finances:

$$K_{N2} = \frac{\text{private taxable incomes}}{\text{non - taxable incomes - official transfers}} . \quad (7)$$

K_c , K_{N1} and K_{N2} indexes complement one another and characterize both sides of the taxable part of the regional budget. Discussion of these indexes in dynamics will give a chance to estimate the activities of the authority in the sphere of mobilization of the regional financial potential.

To estimate the degree of financial independence of the regional budget, we can use an independence coefficient:

$$K_A = \frac{\text{private incomes}}{\text{sum total of budget incomes}} . \quad (8)$$

If the value of this index is high, the financial independence of the regional budget is high too. As a quantitative criterion [2], for those coefficients we can use the following scale (Table 1).

Table 1. Criteria of the regional budget condition.

Indexes	Stable condition	Normal condition	Unstable condition	Critical condition
Ds:D	60 – 70%	40 – 50%	20 - 30%	5 - 10%
Dm:D	30 – 40%	50 - 60%	70 - 80%	90 -95%
V:P	10 – 15%	20 - 25%	30 - 35%	40 - 50%

In this table Ds denotes the attached (private) incomes:

Dm - regulator incomes

D – total revenues

P - total expenditure of budget

V - total debts of the budget.

II. The effectiveness of the budget policy of the authorities is characterized by the budget deficit and the size of the state debt, that is why it is necessary to estimate the condition of the regional budget with indexes of absolute and relative balancing. *The balancing coefficient* of the budget shows how budget expenses balance with incomes:

$$K_n = \frac{D}{P} \cdot 100\% \quad (9)$$

III. For the characterization of the structure of incomes and expenses of the regional budget we can choose the following group of indexes:

- *The coefficient of the expense structure:*

$$K_{STR} = \frac{\text{budget of current expenses}}{\text{investment budget}} \quad (10)$$

- *The coefficient of private sources guaranty:*

$$K_0 = \frac{\text{private incomes}}{\text{current expenses}} \quad (11)$$

If K_0 approaches 1, this means that the region can totally cover its obligatory expenses with the incomes deriving from private sources. In addition, we can use the index:

$$K_{STR} = \frac{\text{long - term and short - term credits}}{\text{budget of development}} \quad (12)$$

If the value of this coefficient is more than one, it indicates a tendency of the budget to lose stability.

The general characteristic of the financial-economical estimation of the budgetary process is:

$$K_U = \frac{D_s + D_m + K}{P} \quad (13)$$

In this formula K denotes long-term credit.

IV. A current operative analysis of the budget process. The rhythmical course of the process of budget execution plays an important role in preserving the current stability of the budget. That is why the operative management of the budgetary process contains a daily analysis of the financial balance of the budgetary accounts, establishment of the reasons of the cash break and implementation of adequate measures for their liquidation. It is expedient to use daily norm of expenditure of funds according to the budget responsibilities for operative monitoring of the financial condition of the regional budget.

$$H = \frac{\text{calculating volume of incomes of regional budget for financing minimal expenses}}{365 \text{ days}} \quad (14)$$

H denotes the norm of money sources on the budgetary account per day.

For the definition of a daily norm of money sources for the normal functioning of the budget, it is necessary to take into account the following:

- to perform a current calculation, there must be a basic reserve of money sources,
- to cover unforeseen expenses, there must be different money sources,
- to guarantee normal liquidity of the regional budget, there must be a separate reserve of money sources.

V. The objective connection of the budget with the whole system of financial-economic processes of regional development must be reflected in the budget process. We propose using a guaranty index of the regional budget, defined as budgetary expenses per capita, as a criterion in estimating the development of the regional financial base [3]. The analysis of the dynamics of this index has great significance.

a) A general budget guarantee, including all the incomes of the budget.

b) A private budget guarantee as a possibility of covering expenses with private incomes and forming financial sources.

The correlation of those two criteria characterizes the financial condition of the region:

$$K_{FM} = \frac{\text{private budget guarantee}}{\text{general budget guarantee}} . \quad (15)$$

A change in the above coefficients expresses an improvement or worsening of the financial condition of the region. If the index approaches one, the functioning of the financial base of the region is stable. This index reflects the stability of the regional budget and generally of economic development. Also, it defines the connection of the region financial-budgetary system with its economic system, profitability of industries, the regional enterprise development and the effectiveness of production.

In the conditions of non-stable development of the global and regional economic processes, with a crisis looming in the background, it is possible to estimate the direction of the financial-economic development of the region with the help of the index of financial development.

$$I_{FM} = \frac{K_{FM1}}{K_{FM0}} . \quad (16)$$

where 1 - the prognosis or calculating period, 0 - the basic period.

The rate of change in this index reflects the dynamics of the financial development of the region. If the speed of positive dynamics is high, the region economic development is more active.

The presented system of financial indexes of the estimation of the regional budget stability can be used as a basis to work out a method of estimation of the financial condition of a budget at any level.

3 Conclusion

1. Ensuring of stability is realized with the forming of the corresponding construction of the regional budget, i.e. with the availability of the progressive elements in its structure, which will enhance its ability of resistance to external destruction factors. Also, it guarantees control of the main parameters of the micro- and macro-surroundings. The investment budget is an element which secures the adaptation of the structure of budgetary expenses to changes in the needs of regional development.

2. The improvement of the construction of the income and expense parts of the regional budget raises its structural stability. A change of the budget structure implies a change in spending policy. The current budget expenses must change the problematic character of social process in a qualitative way. They are expenses on the development of human capital: education, additional training, job creation, supporting small and medium-sized businesses, etc.

3. In the region an improvement in the management of the investment process can be achieved through:

a) the restoration of strategic budgetary planning, which is one of the main conditions of effective financial policy;

b) a guarantee of budget transparency ensured by a system of an objective estimation of the demand for expenses;

c) a higher degree of influence of budgetary administration on all the stage of the budgetary process (prognosis, operative government of budgetary sources, liquidity);

d) the broadening of the forms of participation of regional organs in the regulation of socio-economic processes, which must be realized with the help of the existing mechanisms of influence of the legislative, regulatory, financial and administrative authorities.

4. To eradicate the imperfections formed in the process of reformation of budgetary relations, it is necessary to modernize the model of budgetary federalism in order to overcome destruction tendencies and regional disproportions [4]. It is therefore expedient to reinforce the position of the state budget in the budgetary system.

The authors share the opinion of those specialists who support the formation of a Georgian national model of fiscal federalism on the basis of regulator (joint) taxes. However, it is necessary to work out a flexible system of using those taxes by the region. In this process it is necessary to establish objective criteria and identify features of the regional specificity of the budgetary sphere.

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