

Use of Budgetary Coefficients for Assessing the Sustainability of the Local Budget of Kazakhstan

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RESEARCH ARTICLE

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Abstract

At the present time, development of budget analysis as a direction of fiscal science is relevant and promising in terms of scientific and practical aspects. For the local budget of Kazakhstan, it is important to derive the state of the budget system of regions and determine the level of sustainability from the analysis of objective information. The purpose of this study is to analyze and assess sustainability indicators of the local budget of the Republic of Kazakhstan (RK) for the period between 2002 and 2013. Concept of fiscal sustainability is explained, features of its assessment and its influencing factors are identified and basic approaches to the analysis of financial stability in the regions of Kazakhstan are reviewed in the article. Based on study methods, stability of the local budget of the Republic of Kazakhstan is analyzed. Analysis of fiscal indicators is supplemented by proposed set of analytic coefficients.

Keywords

Budgetary coefficients, Local budget, Republic of Kazakhstan, Methods to improve stability, Sustainability factors

1 Introduction

Currently, special attention is paid to various performance indicators of the local budget of Kazakhstan. Fiscal sustainability is of great importance in the practice of budget work: under current conditions, it is necessary to properly assess financial and economic (including budget) provision of specific regions and on this basis to build a sound fiscal policy. Analysis of stability is needed for investors to realistically assess the risk of capital investments in regions.

The purpose of this study is to analyze and assess sustainability indicators of the local budget of the Republic of Kazakhstan for the period between 2002 and 2013.

In this regard, the following objectives were set:

- To collect data on structure of revenues and expenditures of the local budget of Kazakhstan for the period under study;
- explain concept of fiscal sustainability;
- calculate necessary budgetary coefficients;
- make an analysis of calculated coefficients;
- perform rating of the local budget of Kazakhstan.

The concept of sustainability is referred to a state budget, which ensures proper functioning of the local budget, implementation of all assigned powers on the basis of full and timely funding budgeted expenditures, including repayment and servicing of domestic and external debt. Fiscal sustainability gives an indication of the strength of financial basis of activities of entity authorities (Tabakov et al., 2004).

Examination of different points of view on the definition of “fiscal sustainability”, “stability of financial (budget system)” reveals ambiguity in theoretical approaches to this category and characteristics of its constituent elements. Despite the fact that the budget has a number of properties of an integrated system, the application of the category of “stability” in the budget limits the subject study area of the factors ensuring sustainability of the budgetary system of the state, not allowing to examine the integrity of the sum of its system qualities that are integrated into “stability” category of systems theory. In financial theory and practical financial performance, notion of stability is often identified with the concepts of balancing, stability and balance (Sabitova, 2005).

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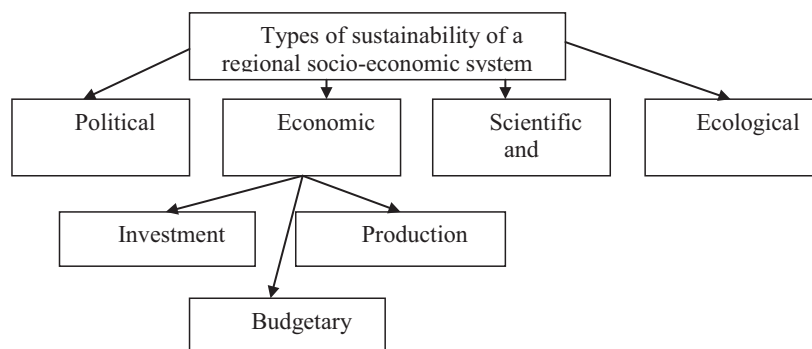


Fig. 1 Types of sustainability of a regional socio-economic system

Fiscal sustainability can also be understood as a state of the budget, which will ensure a proper functioning of the budget through full and timely financing costs. Fiscal sustainability allows us to speak of the strength of the financial basis of the activities of the local budget. In modern conditions, identification of sustainability of the local budget of the Republic of Kazakhstan is of high importance.

It is possible to select multiple types of stability of a socio-economic system such as a region (Novozhilova and Morozov, 2012). (Fig. 1)

2 Methodology

2.1 Method of identification of fiscal sustainability

According to Polyak G.B (2008), the level of sustainability of a local budget may be determined by the amount of funds necessary to ensure minimum deterministic budgetary expenditures. He proposed methods for determining the degree of stability of territorial budgets.

1. Absolutely stable state of budget can be provided if a value of minimum expenditures is less than own and regulatory revenues of the budget.
2. Normal state of budget is characterized by equal values of minimum expenditures and own and regulatory budget revenues.
3. The unstable state of budget is when financial resources are attracted (unrestricted balances of budget, extra-budgetary funds, etc.) in addition to own and regulatory budget revenues to cover minimum expenditures.
4. The state of crisis of budget is possible if the absolute value of minimum expenditures is more than the value of own and regulatory budget revenues.

Polyak, G.B. (2008) defines four states of fiscal sustainability:

- absolutely stable;
- normal;
- unstable;
- crisis.

2.2 Methodology of balanced budget

In this methodology, various indicators of coefficients for the analysis of the local budget are reviewed. On this basis, eight most valuable factors which show balanced local budget were selected.

1. Coefficient of budget autonomy (independence);
2. Coefficient of budget dependence;
3. Coefficient of stability;
4. Coefficient characterizing level of deficit;
5. Coefficient characterizing level of tax revenues;
6. Coefficient of budget coverage;
7. Coefficient of budget efficiency (level of budget income per capita);
8. Coefficient of budget provision for the population.

Through implementation of the methods of budget financing, public authorities regulate movement of downstream (Ignatov and Rudoy, 2001, p.387). Such methods involve subsidies, financial aid, loans and guarantee for borrowing. Management of financial flows through the levels of the budget system should provide the greatest possible stability of the budgetary system of both individual regions and the state as a whole (Babich and Pavlova, 2002, p.476). Depending on how current economic and social conditions were formed, as well as depending on a model of budgetary regulation used, type of fiscal sustainability of a region can be identified (Fig. 2).

Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

3 Results

3.1 Approach to financial stability by academician Polyak, G.B.

The concept of financial sustainability of budgets was first proposed by Academician Polyak, G.B. (2008). According to the scientist, the level of sustainability of a territorial budget is determined by the amount of funds necessary to ensure the minimum budget expenditures. Minimum budget expenditures refer to resources, budgeted for constitutionally guaranteed financing activities for livelihood of local population.

The method of budget classification to a certain type of stability is shown in Fig. 3 and Table 1.

Polyak offered quantitative criteria assessing the sustainability of the budget of four degrees by means of the following indicators:

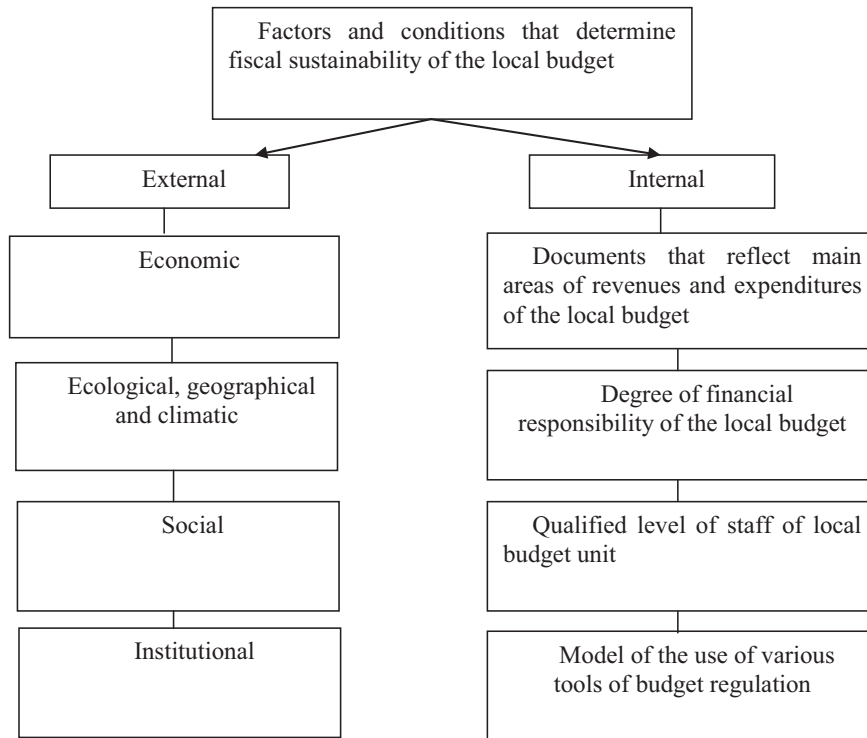


Fig. 2 External and internal factors and conditions governing fiscal sustainability of a region

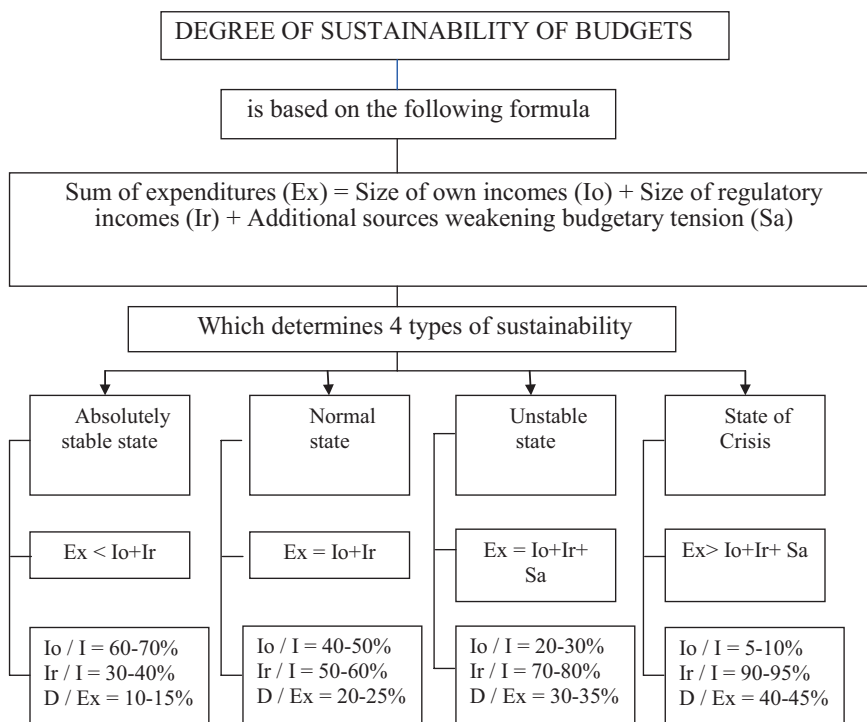


Fig. 3 Scheme of determining the degree of sustainability of budget

- size of own incomes (Io) - include permanently fixed tax and non-tax revenues;
- size of regulatory incomes (Ir) - tax revenues which are distributed on a temporary basis and by differentiated standards;
- additional sources, weakening budgetary tension (Sa) – resources of extra-budgetary funds, borrowed funds;
- amount of the debt of the budget (D) - value of the budget deficit.

Analysis of the type of financial stability of the local budget of Kazakhstan for twelve years has shown that in 2002 and between 2005 and 2008, minimum expenditures could not even cover the amount of own and extra incomes, which confirms the result - the state budget of the region at that time was critical, which is evidenced by covering of the budget deficit at the expense of financial aid from the state budget. While in other years on the contrary, the state budget was stable, that is the minimum expenditures are fully covered by the amount of own

Table 1 Type of financial stability of the local budget of Kazakhstan

Indicators	2002	2003	2004	2005	2006	2007
Expenditures of local budget	378 549	468 793	608 796	783 484	1 000 150	1 468 076
Own incomes (<i>Io</i>)	298 781	349 430	378 809	446 114	547 379	740 311
Additional sources (<i>Sa</i>)	76 781	122 926	209 061	278 115	413 501	699 692
<i>Io+Sa</i>	375 562	472 356	587 870	724 229	960 880	1 440 003
Conditions for reference	<i>Ex > Io+Sa</i>	<i>Ex < Io+Sa</i>	<i>Ex > Io+Sa</i>	<i>Ex > Io+Sa</i>	<i>Ex > Io+Sa</i>	<i>Ex > Io+Sa</i>
Type of financial stability	Crisis	Stable	Stable	Crisis	Crisis	Crisis

Source:(Stat. byul MF RK 2002-2007)

Continuation of Table 1

Indicators	2008	2009	2010	2011	2012	2013
Expenditures of local budget	1 798 774	2 021 250	2 330 641	2 576 751	2 970 873	3 233 413
Own incomes (<i>Io</i>)	761 334	800 065	883 967	1 011 082	1 155 333	1 309 650
Additional sources (<i>Sa</i>)	1 020 440	1 287 764	1 486 553	1 632 854	1 820 369	1 927 592
<i>Io+Sa</i>	1 781 774	2 087 829	2 370 520	2 643 937	2 975 702	3 237 241
Conditions for reference	<i>Ex > Io+Sa</i>	<i>Ex < Io+Sa</i>	<i>Ex < Io+Sa</i>	<i>Ex < Io+Sa</i>	<i>Ex < Io+Sa</i>	<i>Ex < Io+Sa</i>
Type of financial stability	Crisis	Stable	Stable	Stable	Stable	Stable

Source:(Stat. byul MF RK 2008-2013)

Table 2 Relative indicators of financial stability of the local budget of RK

Type of financial stability	Io/I	Ir/I	D/Ex
Absolutely stable	60 – 70%	30 – 40%	10 – 15%
Normal	40 – 50%	50 – 60%	20 – 25%
Unstable	20 – 30%	70 – 80%	30 – 35%
State of Crisis	5 – 10%	90 – 95%	40 – 45%
Calculation			
2002	78,81%	20,25%	-2,08%
2003	73,01%	25,68%	1,54%
2004	63,05%	34,80%	-1,78%
2005	59,51%	37,10%	-5,03%
2006	53,31%	40,27%	1,98%
2007	48,56%	45,90%	-0,62%
2008	41,60%	55,76%	-0,71%
2009	37,75%	60,77%	0,97%
2010	36,72%	61,75%	0,28%
2011	37,76%	60,98%	-0,41%
2012	38,37%	60,46%	-0,88%
2013	39,87%	58,69%	-0,78%

and extra incomes. However, this data does not represent an accurate analysis, because substantial covering of budget can also be implemented by using additional sources, i.e. share of additional funds can be heavy.

Therefore, in our opinion, it would be more relevant to make the analysis of financial stability in relative terms (Kachanova, 2012). (Table 2).

This analysis shows the opposite, that between 2002 and 2005, all indicators of local budget of RK remained absolutely

stable, since 2006 the state budget changes in a negative way, ranging from normal to unstable state and only in terms of budgetary arrears for twelve years, is referred to the absolutely stable type of financial stability.

3.2 Financial indicators to evaluate stability, independence and orientation of the local budget

A somewhat different approach to analyze the financial stability of the budgets is suggested by doctor of economic

sciences, Ivanov, V.V. (Ivanov and Korobova, 2002), who considers that it is more appropriate to perform the analysis in the context of the indicators characterizing incomes and expenses of budgets. For the analysis of budget revenues coefficients of ratio of renewable incomes and total incomes, own and total incomes, regulatory taxes and renewable incomes, receipts from the sale of assets and all incomes, cash flows and total incomes are offered by Ivanov (2002). To characterize budget expenditures, the following criteria are used: ratios of current, capital expenditures and total expenses, expenditures on budgetary organizations and total expenditures, the amount of loans to businesses and total expenditures, cash expenditures and total expenditures. Budget analysis is proposed to be based on the results derived from both budget formulation and execution.

In the analysis of financial sustainability of the local budget of the Republic of Kazakhstan, it is proposed to use the coefficients characterizing budgetary potential as indicators. The budgetary potential is the potential for accumulation of financial resources in a budget system. Methodology for determining the budgetary potential is formed by taking into account maximum informativeness of indicators. Moreover, the high level of financial stability of budgetary potential is provided at a sufficiently high amount of its own revenues and efficiency (Sulzhenko, 2014).

For comparison, let us try using the following set of financial indicators to evaluate stability, independence and orientation of the local budget:

Coefficient of budget autonomy (independence) is calculated by the formula 1:

$$K_{aut} = \frac{IR}{I} \times 100\% \quad (1)$$

Coefficient of budget dependence:

$$K_{dep} = \frac{NT}{I} \times 100\% \quad (2)$$

Coefficient of stability:

$$K_{stab} = \frac{TR}{IR} \times 100\% \quad (3)$$

Coefficient characterizing level of deficit:

$$K_{Def} = \frac{Def}{IR} \times 100\% \quad (4)$$

Coefficient characterizing level of tax revenues:

$$K_{TR} = \frac{TR}{IR} \times 100\% \quad (5)$$

Coefficient of budget coverage:

$$K_{cover} = \frac{I}{Ex} \times 100\% \quad (6)$$

Coefficient of budget efficiency (level of budget income per capita):

$$K_{eff} = \frac{I}{P} \quad (7)$$

Coefficient of budget provision for population:

$$K_{prm} = \frac{Ex}{P} \quad (8)$$

where I - total budget incomes;

Ex - total budget expenditures;

IR - received tax and non-tax revenues, revenues of trust budgetary funds, i.e. total income minus non-repayable and non-recoverable transfers;

NT - non-repayable and non-recoverable transfers from budgets of higher levels;

TR - tax revenues;

Def - deficit size;

P - territory population.

Let us collect data to assess the level of sustainability and self-reliance of the local budget of the Republic of Kazakhstan for the period between 2002 and 2013. (Table 3)

On the basis of the data in Table 3 we calculate the coefficients for the period between 2002 and 2013. (Table 4)

Coefficient of autonomy shows the share of own revenues in the total revenues of the local budget. As it can be seen, the trend is worsening every year, i.e. in 2002 the coefficient of autonomy was 79.75%, and in 2013 it fell to 41.31%. It has decreased by almost 2 times over the period. Therefore, finding more effective ways to increase own incomes is an important task for today.

Coefficient of budget dependence and coefficient of stability shows how the budget is dependent on additional sources, i.e. is the recipient. According to the calculations, the dependence has increased by almost 3 times over the period.

Coefficient characterizing the deficit level determines that it is a positive result if the deficit is below threshold values, but it must be kept in mind that the minimum presence of the deficit may be the cause of financial assistance from a higher budget.

Coefficient characterizing the level of tax revenues has revealed that almost 95% of the total income is constituted by tax revenues.

Coefficient of budget coverage for all twelve years is greater than one. This suggests that minimum expenditures were covered by budget revenues, which led to the minimum budget deficit.

Coefficient of budget provision for the population demonstrates to what extent minimum expenditures are covered by budget revenues. In 2002, for every tenge of minimum expenditure 25,463 tenge of own revenues, while in 2013 - 188,370 tenge of own revenues are accounted. This situation indicates a positive trend, but it should be noted that index of consumer prices must be taken into account to remove inflation.

Coefficients of budget efficiency and budget provision for the population are interrelated to some extent, since they both depend on the population. The first shows that the income in 2013 for each person living in Kazakhstan accounted for 191,340 tenge, while each person in the same year was provided with goods and services from the regional budget to the amount of 188,370 tenge, that is, each person in average "gave" to the budget 2970 tenge more than he/she received.

Table 3 Data for assessment of the level of sustainability and self-reliance of the local budget of the Republic of Kazakhstan

Indicators	2002	2003	2004	2005	2006	2007
Budget expenditures, mln.tg. (<i>Ex</i>)	378 549	468 793	608 796	783 484	1 000 150	1 468 076
Budget incomes, mln. tg. (<i>I</i>)	379 112	478 602	600 788	749 661	1 026 747	1 524 458
Tax and non-tax revenues, mln.tg. (<i>IR</i>)	302 331	355 676	391 727	471 546	613 246	824 766
Non-repayable transfers, mln.tg (<i>NT</i>)	76 781	122 926	209 061	278 115	413 501	699 692
Non-tax revenues, mln.tg. (<i>NTR</i>)	4 223	5 575	9 130	9 712	6 099	11 089
Tax revenues, mln.tg. (<i>TR</i>)	298 781	349 430	378 809	446 114	547 379	740 311
Level of deficit, mln.tg (<i>Def</i>)	-7 877	7 212	-10 809	-39 425	19 818	-9 061
Population, pp. (<i>P</i>)	14 866 837	14 951 200	15 074 767	15 219 291	15 396 878	15 571 506

Sources : (Stat. byul MF RK 2002-2007) & (Stat. Gov RK 2002-2007)

Continuation of Table 3

Indicators	2008	2009	2010	2011	2012	2013
Budget expenditures, mln.tg. (<i>Ex</i>)	1 798 774	2 021 250	2 330 641	2 576 751	2 970 873	3 233 413
Budget incomes, mln. tg. (<i>I</i>)	1 830 138	2 119 178	2 407 437	2 677 740	3 010 924	3 284 401
Tax and non-tax revenues, mln.tg. (<i>IR</i>)	809 698	831 414	920 884	1 044 886	1 190 554	1 356 809
Non-repayable transfers, mln.tg (<i>NT</i>)	1 020 440	1 287 764	1 486 553	1 632 854	1 820 369	1 927 592
Non-tax revenues, mln.tg. (<i>NTR</i>)	13 232	22 391	33 441	29 957	35 572	41 230
Tax revenues, mln.tg. (<i>TR</i>)	748 102	777 674	850 526	981 126	1 119 761	1 268 419
Level of deficit, mln.tg (<i>Def</i>)	-12 822	19 583	6 607	-10 612	-26 193	-25 130
Population, pp. (<i>P</i>)	15 982 370	16 203 036	16 440 124	16 673 077	16 909 776	17165239

Sources : (Stat. byul MF RK 2007-2013) & (Stat. Gov RK 2007-2013)

Table 4 Calculation of coefficients of fiscal sustainability of the local budget

Indicator	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1) Coefficient of budget autonomy (independence)	79,75	74,32	65,2	62,9	59,73	48,56	44,24	39,23	38,25	39,02	39,54	41,31
2) Coefficient of budget dependence	20,25	25,68	34,8	37,1	40,27	45,9	55,76	60,77	61,75	60,98	60,46	58,69
3) Coefficient of stability	25,4	34,56	53,37	58,98	67,43	84,84	126,03	154,89	161,43	156,27	152,9	142,07
4) Coefficient characterizing level of deficit	-2,61	2,03	-2,76	-8,36	3,23	-1,1	-1,58	2,36	0,72	-1,02	-2,2	-1,85
5) Coefficient characterizing level of tax revenues	97,43	96,68	94,37	92,55	88,26	88,42	92,39	93,54	92,36	93,9	94,05	93,49
6) Coefficient of budget coverage	100,15	102,09	98,68	95,68	102,66	103,84	101,74	104,84	103,3	103,92	101,35	101,58
7) Coefficient of budget efficiency	25 501	32 011	39854	49257	66 685	97 900	114510	130789	146437	160603	178058	191340
8) Coefficient of budget provision for population	25 463	31 355	40 385	51 480	64 958	94 280	112547	124745	141765	154546	175690	188370

Table 5 The rating of the local budget of the Republic of Kazakhstan for the period between 2002 and 2013, points

Indicator	Standard	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
1) Coefficient of budget autonomy (independence)	≥ 80	1												
	≥ 70	0												
	≤ 70	-1												
	≤ 40	-2	1	0	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1
2) Coefficient of budget dependence	≤ 20	1												
	≤ 30	0												
	≥ 40	-1												
	≥ 60	-2	1	0	0	0	-1	-1	-1	-2	-2	-2	-2	-1
3) Coefficient of stability	≤ 30	1												
	$>0,3$	0												
	$>0,4$	-1												
	≥ 1	-2	1	0	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2
4) Coefficient characterizing level of deficit	-	2												
	≤ 10	1												
	15	-1												
	≥ 15	-2	1	2	1	1	2	1	1	2	2	1	1	1
5) Coefficient characterizing level of tax revenues	-20	1												
	≥ 80	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
6) Coefficient of budget coverage	≥ 1	2												
	0,05	1												
	$\leq 0,95$	-1	2	2	1	1	2	2	2	2	2	2	2	
7) Coefficient of budget efficiency	The growth rate of the coefficient must outpace inflation rate	1	2	2	2	2	2	2	1	1	0	0	0	0
8) Coefficient of budget provision for the population	The growth rate of the coefficient must outpace inflation rate	1	2	2	2	2	2	2	1	0	1	0	1	0
Overall rating		7	7	3	3	4	3	0	-2	-2	-4	-3	-2	

Hence, on the basis of the analysis, a fairly objective assessment of the regional budget can be made and relevance of the measures proposed by the Government of Kazakhstan on improvement of its financial condition can be confirmed.

Let us make a rating of the local budget of Kazakhstan for the period between 2002 and 2013.

4 Discussions

Experts approach the analysis of existing methods of analytical work in the area of budget analysis from different perspectives. Bogdanov, A.A. (2001), Kuzmin, D.V. (2001) describe in detail the sequence of actions for information gathering, processing and presentation. Dyubin, V.V. (2001), Orlov, A.I. (2001) focus on specifics of an object in the process of analysis.

Klistorin, V.I. (2002), Sumskeya, T.V. (2004, 2005) pay special attention to the content of the selected direction and description of the possible ways to improve it.

In the literature, there are different approaches to assessing financial and economic states of budget. For example, Kolesov, A.S. (2000). suggests using an index of integrated assessment, which takes into account only the change in payable accounts, for assessing financial position of the local budget. Lapushinskaya, G.K. (2001) used measure of logarithmic elasticity in the analysis of territorial budgets, with which one can calculate a measure of response of budget expenses (according to articles) for the change of its income. The result of such an analysis is to determine the priority items of budget spending without regard to other activities of an entity. Zenkina, I.V. (2003)

proposes to use tax burden coefficients, withdrawal of taxable capacity and intergovernmental fiscal exchange in the analysis of budget coefficients. Foreign scientists Hampton P. (1977), Rayner A.C. (1977), Newman J. (2001), Chu A.(2012), Yang C.C. (2012), Siegfried J. J. (2002) have examined different approaches in this area as well. The most complete method of analysis of territorial budgets is offered by Professor Polyak, V.G. (2008), but it is not capable of determining the degree of budget balance.

The advantages of the proposed procedures can be listed as follows:

- coefficients are maximum informative;
- coefficients make it possible to carry out a financial assessment of budgets both in space (compared with other areas) and in time (monthly, quarterly, and for a number of years);
- numerical standards of a minimum or maximum level or range of variations for the coefficients can be specified, or developed.

However, along with the undoubted advantages of these methods there are drawbacks as well:

- assessment indicators of states of budgets characterize, as a rule, either the income or expenditure side of the budget. A system of indicators which simultaneously takes into account the structure of budget incomes and expenditures has not been developed yet.
- the use of a certain part of the budget coefficients causes difficulty due to changes in the budget law and, in particular, with the abolition of such concept as “regulatory budget incomes.”
- There are no suggestions for techniques to assess the financial stability of the budgets on the basis of a complex indicator in the procedures, which takes into account all aspects of the local budget of Kazakhstan.
- there is a lack of objectivity in establishing points in this procedure, indicating a need for development of special verbal and numerical scales.
- importance and significant coefficients are determined by experts in the proposed technique, and therefore are subjective.
- The calculation of indicators to assess the financial state of the budgets uses information from various ministries and agencies, with some details absent in approved reporting forms, while in fact all the indicators should be calculated on the basis of a unified reporting.

The main drawback of existing techniques is the absence of proposals to assess the financial state of budgets on the basis of the complex index that takes into account all aspects of the local budget of Kazakhstan. Furthermore, recommendations for changing normative values of indicators due to changes in

legislation have not been developed in the method of budget assessment (Tishutina, 2008).

5 Conclusion

Thus, calculations and the rating show that in the period between 2002 and 2013, Kazakhstan had been a subventional region with stagnant type of development. The republic’s budget is unstable, unbalanced, with a high level depending on the republican center. However, in 2013 the situation improved slightly, which was the result of implementation of the regional budget policy in the Republic.

The concept of reforming state and local finance of Kazakhstan is aimed at improving the effectiveness of budget expenditures and optimizing budget management at all levels of the budget system, which has a significant impact on the budget security of the region.

Conducted budget analysis shows the need to intensify the activities of state and local governments to create conditions for the development of strategic advantages in all regions of Kazakhstan. It is required to perform a set of consecutive events to successfully meet the challenges of the local budget. An integrated national legislative framework for local cooperation must be created, which takes into account wealth of international experience. There is a high need to develop policies and special methods of regulation of local cooperation. It is necessary to create a fair and, most importantly, an effective system of distribution of revenues from local cooperation. This should encourage regions to strengthen foreign trade and investment flows. A strategy for regional development must be created to achieve the objectives above. It is important to bear in mind the ultimate goal - to ensure the financial sustainability of local budgets in accordance with their geopolitical position.

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References

- Babich, A.M., Pavlova, L. N. (2002) *State and municipal finances: Textbook for universities*. Moscow, M.: YuNITI, p 687.
- Bogdanov, A. A. (2001) *Guidelines on applied budget analysis in general and secondary education at the municipal level*. In: Vinogradova, T. I., Beskrovnaya, V. A. (ed.) *Applied budget analysis*. St. Petersburg. SPb.: Norma, p. 250.
- Chu, A., Yang, C. C. (2012) Fiscal centralization versus decentralization: growth and welfare effects of spillovers, leviathan, and capital mobility. *Journal of Urban Economy*. 71 (2). 177-188.
DOI: [10.1016/j.jue.2011.10.003](https://doi.org/10.1016/j.jue.2011.10.003)

- Dyubin, V. V. (2001) *Inter-budgetary relations in the subjects of the Russian Federation with the participation of NPOs in the process*. In: Vinogradova, T. I., Beskrovnaya, V. A. (ed.) *Applied budget analysis*. St. Petersburg. SPb.: Norma, p. 250.
- Hampton, P., Rayner, A. C. (1977) The use of multivariate methods in economics with reference to regional analysis. *Regional Science and Urban Economics*. pp. 267-287. DOI: 10.1016/0166-0462(77)90013-8
- Ivanov, V. V., Korobova, A. N. (2002) *Municipal management*. Moscow. M.: INFRA-M. p. 250.
- Ignatovm V. G., Rudoy, V. V. (2001) *Local self-government*. Rostov na Donu. R. n/D.: Feniks. p. 416.
- Kachanova, E. A. (2012) The budgets of urban districts: the introduction of the program budget. *Finances*. 1 (11-14).
- Klistorin, V. I., Sumskeya, T. V. (2002) Analysis of inter-budgetary relations in public interest (On an example of municipal formations of the Novosibirsk region). *Applied budget analysis: Methods and approaches*. (93-120). Saint Petersburg. SPb.: Norma.
- Kolesov, A. S. (2000) The integrated assessment of the financial position of objects of budget financing. *Finances*. 6. (9-14).
- Kuzmin, D. V. (2001) Guidelines on applied budget analysis in the field of social policy at the municipal level. In: Vinogradova, T. I., Beskrovnaya, V. A. (ed.) *Applied budget analysis*. St. Petersburg. SPb.: Norma. p.250.
- Lapushinskaya, G. K. (2001) Method of analysis of territorial budgets. *Finances*. 9 (18-20).
- Newman, J. (2001) *Modernising Governance: New Labour, Policy and Society*. Sage, London.
- Novozhilova, T. N., Morozov, I. A. (2012) Financial security of local budgets: problems and solutions. *Economic analysis of theory and practice*. 14. (23-29).
- Orlov, A. I. (2001) *Inter-budgetary relations. Regional view*. In: Vinogradova, T. I., Beskrovnaya, V. A. (ed.) *Applied budget analysis*. St. Petersburg. SPb.: Norma. p.250.
- Polyak, G. B. (2008) Analysis of territorial budgets. *Financial newspaper*. 7. (5).
- Polyak, G. B. (ed.) (2010) *The budget system of Russia: a textbook for high education institutions*. 2nd Edition. Moscow. M. : YuNITI. p.703.
- Sabitova, K. M. (2005) The issue of financial sustainability of the subjects of the Russian Federation. *Finances and credit*. 6 (174). pp. 29-31.
- Siegfried, J. J. (2002) The economics of regional economics associations. *The Quarterly Review of Economics and Finance*. 42 (1). pp. 1-17. DOI: 10.1016/S1062-9769(01)00122-3
- Statistical Bulletins of the Ministry of Finance of the Republic of Kazakhstan for 2002-2013 years http://www.minfin.gov.kz/irj/portal/anonymous?NavigationTarget=ROLES://portal_content/mf/kz.ecc.roles/kz.ecc.anonymous/kz.ecc.anonymous/kz.ecc.anonym_budgeting/budgeting/reports_fldr
- Sulzhenko, V. S. (2014) *Ensuring sustainability of the budgetary system of the Russian Federation in terms of institutional reforms*. (Thesis for the degree of Candidate of Economic Sciences). Rostov Economic University (REU). Rostov na Donu.
- Sumskeya, T. V. (2004) Analysis of budget coefficients in municipalities. In: *Inter-budgetary relations and economic growth in the municipalities*. Moscow. M.: MONF. pp. 220-228.
- Sumskeya, T. V. (2005) Analysis of state of local budgets of Novosibirsk region. In: *Project SIRENA: Experience of modeling and analysis of regional development*: coll. scientific. works. Novosibirsk: IEOPP SO RAN. pp. 150-173.
- Sumskeya, T. V. (2004) Evaluation of the structure and stability of local budgets using tools of budgetary coefficients. *Bulletin of the Siberian University of Consumer Cooperatives*. 2. (102-106).
- Tabakov, A. A., Yashina, N. I., Roganova, S. Yu. (2004) *Analysis of territorial budgets: development of methodological and financial aspects*. (Monograph). Novgorod. N.: Izd-vo VVAGS. p. 180.
- The Ministry of National Economy of the Republic of Kazakhstan, Statistics Committee. http://stat.gov.kz/faces/wcnav_externalId/homeNumbersPopulation?_afzLoop=381445400037375#@?_afzLoop=381445400037375&_adf.ctrl-state=8szu450o7_71
- Tishutina, O. I. (2008) Methodology budget analysis of the border region (for example, the subjects of the Russian Federation Far Eastern Federal District). *Audit and financial analysis*. 2. (18-26).
- Zenkina, I. V. (2003) *Directions of reform of inter-budgetary relations in the subjects of the Russian Federation*. (dissertation of the candidate of economic sciences). Rostov na Donu. p. 24.