

THE EVALUATION OF EFFECTIVE USE OF BUDGET FUNDS

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Abstract

Improving the efficiency of budget expenditures is one of the most important tasks facing government bodies and local self-government. The concept of public financial policy, focused on the transition from cost management to results management, defines a new approach to assessing the effectiveness of using budget funds. When assessing the effectiveness of the use of public funds and developing methods for measuring and formulating performance criteria, one should take into account not only the economic component linking the volumes of the budget service with the costs of providing it, but also various other components of efficiency.

Keywords: public expenditure, financial control, budget, public revenue, efficiency

JEL Classification: H61, H71, H83

Introduction

In recent years, governments have faced not only unprecedented fiscal stress but also the pressure of the community to cut costs, so considerable budget cuts have been a must for most governments. Many governments have realized that their traditional budgeting process does not help managers make the necessary decisions to reduce costs to the required levels. The State Financial Policy Concept, geared to the shift from spending management to outcome management, defines a new approach to assessing the effectiveness of the use of budget funds. This is a more complex issue for the public sector than for the private sector, because, in addition to economic efficiency, it is necessary to evaluate the many social, scientific, environmental and other components of public spending efficiency.

Description of the Problem

In the context of the MFP reform at the international level, the Republic of Moldova stated the intention to modernize the public finance management by adopting / approving the necessary normative framework and by initiating some activities of reforming some elements of the system in question. The normative framework was supplemented by provisions for reforming public finance management, in particular, introducing innovative elements that were previously lacking. The most important new elements refer to the medium-term budgetary framework (originally used was the term medium-term expenditure framework), the internal financial audit of public authorities and the Law on Public Finances and Budget-Tax Responsibility, which introduced key changes in budgetary process and provides for the substantiation and reporting of budgets on performance-based programs, the allocation and use of budgetary resources in an economical, efficient and effective way, in line with the principles of good governance. The aforementioned law defines performance as "the result of the activity of the budgetary authorities/institutions as a result of the implementation of the programs, expressed as a social-economic or other impact, as a volume of services rendered or as an efficiency of using the budgetary resources". Thus, the law provides that performance is defined as a result, as a volume of services and as efficiency, respectively measured by result, product and efficiency performance indicators on subprograms (rather than programs).

In order to ensure the implementation of the aforementioned law and to improve the management of the use of public funds, in 2013, the Public Finance Management Development Strategy for 2013-2020, structured on the most important areas of public finance management, was approved identified the issues in the field and outlined the directions and actions for their resolution and improvement of the situation in the field. Although a number of important changes have been made in the Republic of Moldova in the field of MFP over the past years, the harmonization of the budgeting process with the best practices of the developed countries is still under way.

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In the context of the Moldovan budget reform, the need to develop a modern financial control system, changes in the target orientation of cost-to-performance control, becomes the development of a methodology for assessing the effectiveness of the use of budget funds. When conducting financial control, the assessment of the effectiveness of the use of public money must be seen as a process or set of actions that improve financial relations, budget balance, improving the quality of life of the population and, on the other hand, as a system which includes government bodies implementing financial programs and policies based on the principles of efficient and responsible public finance management.

Many times, public managers have been too interested in the outcome and little in the way it is touched. Countless cases can be given as examples of public funds in a totally unjustified, most such examples being found in investments in infrastructure and acquisitions of goods. Organizations become solely concerned with the supply of public goods and services, without taking into account the waste of the processes. Therefore, in achieving public sector goals and outcomes, efficiency and economy must take precedence. Thus, performance in the public sector can be viewed from the point of view of allowing an overview of efficiency and effectiveness to be observed, and not just one or the other. Ignoring effectiveness in terms of effectiveness can have negative economic and social consequences and is even more dangerous in the public system.

Due to the nature of the public sector (the multiplicity and diversity of stakeholders and differences in values and perceptions about their performance, the lack of a competitive environment in which they are offered some services because of monopoly position for some services that have some public services or administrative authorities), performance measurement is generally a complex and difficult process, especially when it comes to the public sector.

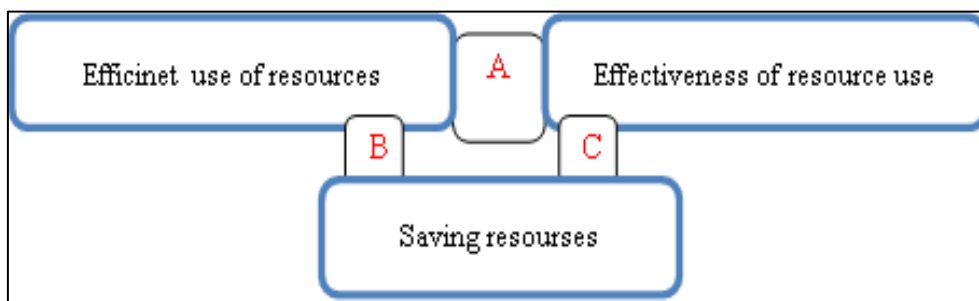
Methodology and Data Sources

Economic efficiency characterizing the expenses regarding efficient use of budgetary funds, assuming that budget funds are used for their intended purpose, there is no wasteful use of surplus resources, exceeding minimum standards etc. The efficiency of resource utilization is manifested by increasing labor productivity, increasing the level of funds and material production, accelerating the speed of rotation of funds.

Resource efficiency indicators are the same for all segments of the financial system and the national economy sectors. Effectiveness of budget expenditures characterizes compliance spending and the results obtained with their specific objectives are determined by state bodies and local self-government in accordance with programs and projects developed.

Of particular importance, as the transition to results-based budgeting, a gain evaluating the effectiveness of budget expenditures, while improving resource efficiency and effectiveness are the prerequisites for attaining the defined plans and government programs (Figure 1).

Figure 1 - Correlation of efficiency indicators for the use of budget funds³⁸



Source: author's work

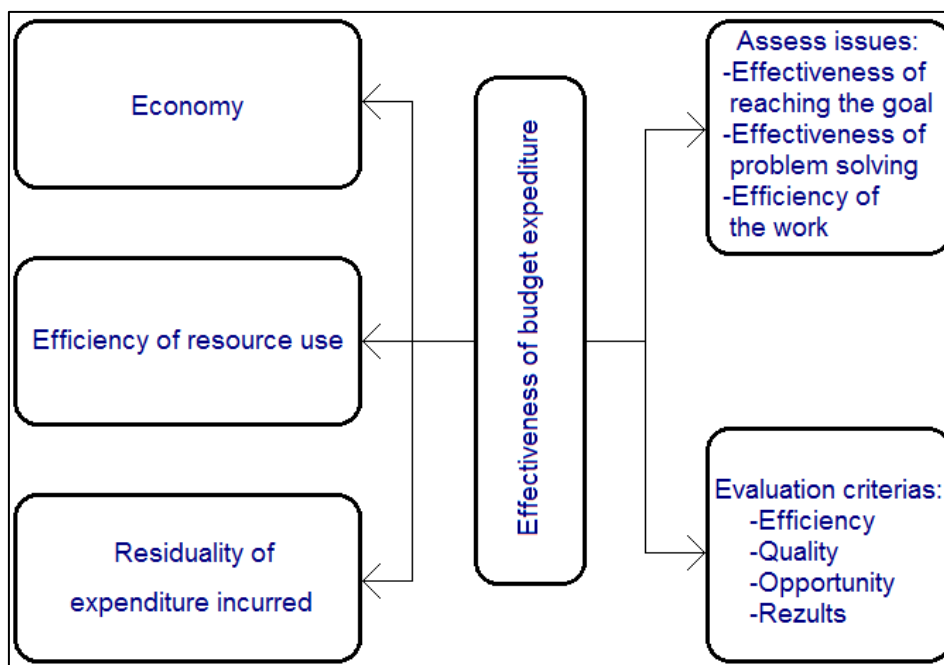
³⁸ A - the link between efficiency and effectiveness with the goals and objectives of financial policy, compared to which the outcome of the use of budget funds is assessed; B - the link between efficiency and economy: the condition of efficiency - minimizing the costs to achieve the planned outcome, ie, the economy; C - the link between efficiency and economy: minimizing spending to achieve the goal.

The assessment of the effectiveness of the use of budget funds is based on the application of an integrated approach and involves the use of a system of indicators, which includes:

- absolute indicators that characterize the achievement of planned targets or planned outcomes in terms of both natural and value indicators (births, deaths, unemployed, rich and poor, number of offenses, consumer basket price, etc.);
- quality indicators that reflect the quality of the operation of the object or management system when using budget funds (the level of pension insurance, the degree of housing insurance, social benefits, etc.);
- relative indicators that reflect the "cost" of performance in terms of costs per unit of production or services (volume of social services per unit of investment, increase in births or decrease in unit mortality of invested funds, reduction of morbidity per unit of investment, etc.);
- dynamic indicators that characterize the change in indicators previously characterized in time, i.e. growth or decreasing rates (birth rate, actual salaries, pensions, etc.).

The specific structure of the indicators of the effectiveness of budget expenditures, their aspects and evaluation criteria is presented in Figure 2.

Figure 2 - Directions for assessing the efficiency of budget expenditures



Source: author's work

An integrated approach to assessing the efficiency of the use of budget funds should be based on the principles outlined in table no. 1.

Financial performance analysis can be important from a double perspective: both to substantiate internal fiscal (revenue) and expenditure policy policies and to determine the level of local authority investment.

Concerns expressed at the different levels of decision-making have determined the outlining of several dimensions of performance. In OECD countries, performance can be assessed using several general categories of measurement:

a. Measurement of the resource economy, defined as obtaining adequate quality resources, with lower costs than predicted. All relevant costs must be included in this assessment. A measure of resource economy may be the ratio between input or resource acquisition prices and the expected value, scheduled or approved as an objective;

b. Measurement of costs and means: means the measurement in monetary terms of the consumption of resources made to provide a certain volume of services;

c. *Measuring efficiency*: Takes into account the relationship between the result obtained and the means used to obtain it. A process is effective if it achieves the maximum of possible outcomes at a given amount of resources or if it uses the minimum of resources at a given volume of results;

d. *Measurement of effectiveness*: it considers the ability of an activity to produce the expected result. Its quantification is given by the ratio between the result obtained and the target set at the start of a program. This requires the objective to be defined in advance, and the result obtained can be measured by means of an indicator. Efficiency is the most important element of the value-for-money ratio. Goods or services can be provided in an economical or efficient manner, but if they do not achieve the expected outcome, we can say that the resources used will be largely scattered;

e. *Measuring service quality*: follows the degree to which the product or service responds to the needs of consumers. In this sense, quality includes the effectiveness of a program;

f. *Measuring financial performance*: it is mainly pursued by public services of an economic nature;

g. *Measuring global performance*: Considering the dimensions of performance, globally approached.

Table 1

Principles for the evaluation of performance indicators of public finance management and the efficiency of the use of budget funds

Principles	Content
Scientifically	Applying the scientific methods of knowledge, the use of new methods, indicators reflecting the effectiveness of budgetary and administrative reforms, developing new methods and techniques based on the best practices in public finance management
Systematic	It manifests itself in interdependent and dynamic relations of development of the quality of public finance management and improvement of the social and economic situation of the state, region, municipality
Independence	Non-application by any state authorities, local self-government bodies and officials of methods of voluntary and material influence
Advertisement	The results of assessing the efficiency of the work of the authorities, the effectiveness of budgetary funds should be communicated to the public
Effectiveness	The results of the evaluation should be applied in practice to improve the quality of public finance management and the efficiency of budgetary funds
Economy	All the means invested in assessing the effectiveness and quality of public finance management should deliver. When the planned result is achieved, the emphasis is on minimizing costs
Efficiency	Timely monitoring of the state of public finances will enable rapid action to be taken to achieve the established objective
Objectivity	Using reliable sources of information on the state of public finances, the level of socio-economic development, the effectiveness of government bodies and local government
Statehood	The search for ways to improve the state of public finances involves a mix of state and public interests (public interests are related to the quality and volume of budget services, state interests are related to the efficiency of budget expenditures)
Complexity	A comprehensive study on the effectiveness, quality of public finance management, the effectiveness of budgetary funds, an analysis of all the factors affecting them (internally and externally)
Regularity	The assessment of effectiveness, quality of public finance management, efficiency of budget funds should be made with a clear periodicity
Comparability	The results of quality assessment, the efficiency of public finance management and the effectiveness of budget funds should be comparable in dynamics and territories

The evaluation activity is closely correlated with the monitoring process, as the data obtained from this process is one of the sources of information used in the evaluation. However, the evaluation

examines much more than the extent to which the financial and physical progress achieved at some point in the implementation of the program is in line with the initial planning. In order for the evaluation activity to respond to the goals pursued by this complex process, at the level of the European Union, 5 criteria were used in any evaluation exercise - the "DAC" criteria, these are described in table no. 2.³⁹.

Table 2

The conceptual essence of the "DAC"

Criteria	Description
Relevance	The relevance of a project is the extent to which the objectives set and the proposed implementation plan address correctly the identified problems. Changes in the nature of the problems initially identified or certain circumstances in which the implementation of the project takes place, whether physical, economic, institutional or political, may make the project irrelevant to the problems / needs it was intended to address.
Efficiency	The efficiency criterion refers to how well the available resources were used to transform the proposed activities into the intended results. This criterion addresses profitability issues, namely whether better results could have been achieved in other ways and at the same time cheaper.
Effectiveness	The Efficiency Criterion tries to identify whether the project has reached the objectives set in the programming phase. The key question is what benefit the project has brought into practice, by reference to the extent to which the subjects concerned actually benefited from the products or services that the project made available to them.
Impact	Impact term refers to the overall effect of benefits of a particular project on a larger number of people than the main beneficiaries in a particular sector, a particular region or even across the country.
Sustainability	The sustainability criterion shows whether the positive outcomes of the project are likely to continue after the end of the external financing period and also whether the long-term impact of the program on the wider development process can be maintained at sector, region or country level.

These evaluation criteria are not necessarily reviewed in any evaluation, but are tailored to the timing of the evaluation, the status of the program implementation and the objectives of the evaluation.

To test the effectiveness of public spending, traditional methods of economic statistics and mathematical and statistical methods of linking such as: index method, regression analysis, packet data analysis (table 3) are widely used.

Table 3

Methods of measuring the effectiveness of public expenditure

Method	The essence of the method	Shortcomings
Analysis of indices	Comparing the organization's performance with previous-period indicators and similar organization indicators	The presence of restrictions: it is impossible to take into account objective factors that have influenced the outcome of management. The method is useful in terms of industrial financial structure
Regression analysis	Efficiency is assessed on the basis of an analysis of the deviations of the mean of the effective factor indicator	It requires continuous monitoring of the main and explanatory data generated within the organization
Analysis of data packets	Focuses on maximum performance or efficiency. Activities are recognized as inefficient if the pointer is below the "advanced"	Artificialness in determining the maximum possible level

³⁹ The criteria were first described in a document of the OECD Development Aid Committee (1991), entitled "DAC Principles for the Assessment of Development Assistance"

The choice of the method depends on the objectives set by the state or local government, the state financial control body, independent experts, and so on.

Because public sector efficiency is accomplished through the Pareto chart, the set of tools for assessing the effectiveness of budget expenditures should include decision theory, game theory, situational analysis, simulation modeling, and so on.

Modern instruments for assessing the efficiency of budget expenditure should include methods of analyzing and modeling factors, which will allow for an increase in the number of factors the management of which will allow authorities to increase the efficiency of budgetary spending.

To assess the effectiveness of budget spending, we will use 3 key indicators:

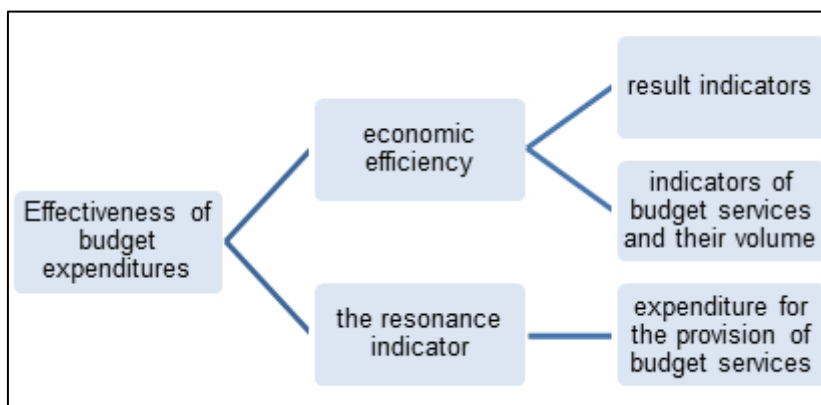
- 1) direct result (direct) (budget service and its volume);
- 2) the cost of providing a budget service;
- 3) the final social result that can measure the quality of the budget service.

Estimating the effectiveness of budget expenditures in this case will be based on the calculation of the following indicators:

- economic efficiency (the ratio between the budget service indicator and the cost of providing it);
- efficiency (ratio of final result to budget service);
- the effectiveness of budget expenditure (the ratio between the final result and the cost of providing a budget service).

The relationship between these indicators can be demonstrated using a multiplier model with two factors. The data in Figure 3 helps us identify ways to improve the efficiency of budget spending.

Figure 3 - Scheme of modeling the efficiency factor of budget expenditures



Source: elaborated by author

Good management of public expenditures implies the use of taxpayers' money to achieve priority objectives that society (through its elected representatives) finds useful and desirable. Good management also implies achieving these stated objectives in an efficient, effective and economic way, as well as the fact that the system of control and balance of power provides adequate democratic accountability and effective governance.

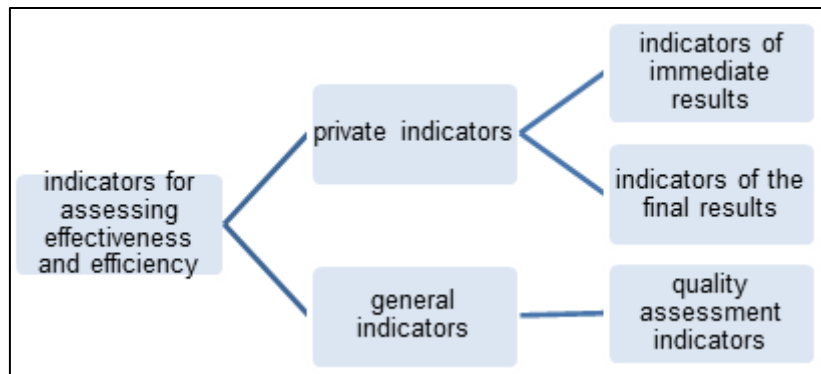
In our opinion, the system of indicators for the evaluation of efficiency and effectiveness can be divided into general and private indicators, shown in figure 4.

The general indicators are applicable to all spending areas of the budgetary funds in all public institutions of the Republic of Moldova and municipalities and must include indicators of the quality of budgetary expenditure management:

- indicators of the quality of the planning (the ratio of the planned and the current indicators, the quality of the medium-term planning, etc.);
- indicators for assessing the structure of the budget (debt burden, weight of wages, etc.);
- indicators for assessing the quality of budget execution (creditor and receivables, energy consumption limits, etc.);

- indicators of quality control and analytical work and subsequent application of planning results (population surveys, budget audit, inappropriate use of funds, etc.)

Figure 4 - The system of indicators for assessing the efficiency and effectiveness of budget expenditures



Source: elaborated by author

Individual indicators of efficiency and effectiveness, developed for each direction of budget expenditures - education, health, agriculture, etc., which in turn are divided into:

- Indicators of the immediate results - Characterization of the volume and quality of state (municipal) services provided by the executive authorities;
- indicators of final results - characterization of socially significant outcomes for external consumers (population) from the provision of state (municipal) services.

This approach will link the cost of the expected return on these costs to their economic and social efficiency in order to ensure the relationship between budget expenditures and the results achieved, as well as the establishment of a system of indicators for the different budget planning disciplines and the providers of budget services, which allows to quantify the assessment of the degree of fulfillment of the objectives and objectives of the socio-economic policy.

An important role in the process of assessing the effectiveness of the use of budgetary funds is given to non-formalized methods. Assessing the effectiveness of government programs and budget spending implies, for example, the widespread use of a comparison technique. The basis for comparison can be:

- the normative value of the indicators, the realization of which indicates the efficiency of the use of the budgetary funds;
- similar indicators of past periods obtained in neighboring regions, similar processes and foreign practices.

The necessary condition for the use of the comparison technique is to ensure data comparability, which is very important for social spending, when the result of an activity can be expressed in natural values. It should be noted that, in the budgetary sphere, a significant part of the effects of programs and projects financed from the budget is not intended to obtain financial benefits but is of a social nature. The value of these effects can only be determined by expert methods, which lead to the widespread application of non-formalized assessment methods. In all cases, an evaluation score and expert opinions can be used as a basis for evaluating the effectiveness. Thus, heuristic methods become an essential tool for assessing the effectiveness of budget funds.

By comparing the effectiveness of different projects and programs to selecting one of the possible managerial decisions or to solving the problem of financing a number of projects and programs in the context of limited budget resources for their full implementation, then a formalized assessment compared to the expert is preferable.

Thus, the analysis of the existing practice of assessing the effectiveness of the use of budgetary funds has highlighted the fact that it is based on analytical tools and combines formalized and non-formalized methods. The quality of public finance management is determined by the extent to which it directs public finances towards achieving social and economic objectives in line with the needs of society and the economy. It is characterized by the quality of the management processes: the scientific nature of the management methods used, the progressive means of management.

Increasing the efficiency and effectiveness of public spending not only has a major influence on the maintenance of fiscal discipline, but also reduces budget constraints and allows for the same results with lower budget expenditures.

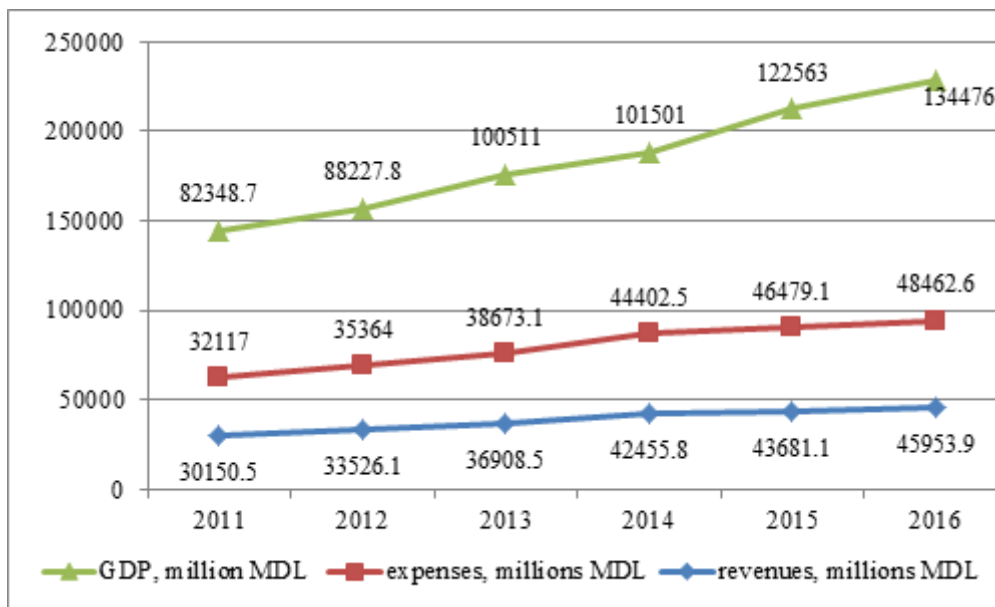
Financial performance assessment is performed using the financial performance indicators grouped into four relevant categories:

1. Indicators of revenue showing the appropriate level of tax (and non-fiscal) revenue of government.
2. Indicators of expenditure, reflecting the flexibility of authorities in allocating resources for different purposes. Some categories of expenditure are less flexible (e.g. operational expenditure), others - more flexible (e.g. capital expenditure can be postponed if budget resources are insufficient), according to legal provisions.
3. Indicators of investment capacity, debt contracting and its structure, which define the long-term financing ability of investments. This category of indicators provides information on the financial solvency of the public administration. In this context, the share of debt service financing costs (representing repayment and debt payments) as a percentage of total expenditure is analyzed.
4. Operational result (surplus / deficit) indicators, which relate to the relationship between revenue and expenditure and reflect the ability to implement a performing financial management. This category of indicators includes the gross operating result (which represents the difference between the operational and operating expenses, the gross operating result in the total operational revenues (which represents the ratio between the gross operational result and the operational revenues). The total revenues of the administration must cover the operational, capital and annual debt service.

Results Obtained

To assess the efficient use of budgetary resources, we will analyze the evolution of revenues and expenditures for the national public budget in correlation with the GDP dynamics for the period 2011 - 2016, using the data from the budget execution reports submitted by the Government and approved by the Parliament.

Figure 5 - Variation of public finance indicators



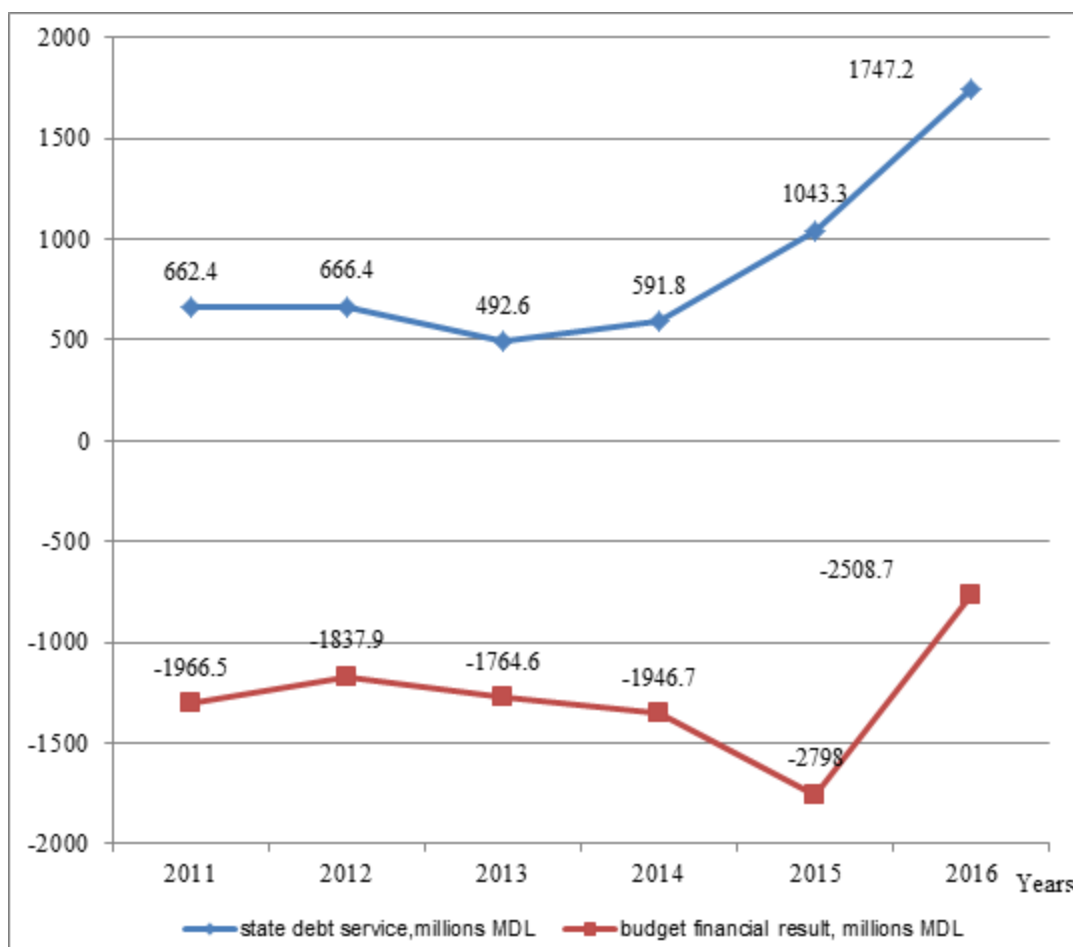
Source: elaborated by author based on

<http://mf.gov.md/ro/content/raport-privind-executarea-bugetului-de-stat-pe-anul-2016>

According to the data presented in Figure 5, we observe an increase of all analyzed elements, which suggests that there is a direct link between the increase of national public budget revenues and GDP growth. At the same time, we note that the growth rate of national public budget expenditures is lower than the growth rate of public revenues (104% < 105%), which can be

positively appreciated given the negative financial result at the end of the analyzed period, presented in figure 6.

Figure 6 - Variation of budget financial result and state debt service



Source: elaborated by author based on

<http://mf.gov.md/ro/content/raport-privind-executarea-bugetului-de-stat-pe-anul-2016>

The budget financial result for the investigated years is negative and indicates decreasing values in the years 2011 - 2013 from -1966.5 million lei to -1746 million lei, after which we are witnessing a considerable increase towards the end of 2015 to -2798 million lei or by 1033.2 million lei more than in 2013. For the year 2016 the situation improved slightly, as the decrease of the budget financial result constituted only 289.3 million lei in the conditions of the increase of the state debt service, the values of which are indicated in Figure 6.

The changes in the dynamics of the state debt service are negative, since it increased from 492.6 million lei for the year 2013, a minimum value for the entire analyzed period, to the maximum value of 1747.2 million lei in 2016. This evolution has a negative effect on the budget financial result, which also increased in the investigated years.

Conclusions

So, as a result, the authorities can:

- 1) to increase economic efficiency while maintaining efficiency, reducing the cost of delivering budget services without damaging the quality of the service and the end result;
- 2) increasing efficiency, while maintaining economic efficiency, improving service quality without increasing the cost of providing it.

Thus, it can be assumed that as a measure of the efficiency of the use of state budget funds, the results of the activity can be used or taken into account, taking into account that the criteria and the performance indicators of this activity are established, including by the control bodies. The criteria

are reasonable and achievable quality and control standards, based on which it is possible to perform comparative analyzes and evaluate the efficiency of program implementation, economic operations, etc.

Future Directions to Be Approached

Currently, local authorities face two major challenges in different ways: the phenomena of globalization and decentralization. Globalization leads to an increase in the number of interactions between communities, but it can be said that they are selectively operating, and most of those involved in such interactions are those who are part of wider networks. These networks tend to act separately from the rest of the community, being the subject of frequent restructuring and transformation. To become competitive, communities need to connect to these networks and become able to exploit the benefits of globalization. The second phenomenon, decentralization, is a way of responding to the complexity and diversity of the needs of local communities and the demands of citizens or other types of clients of the administration, the aim being the closest and appropriate response to these demands, to ensure maximum efficiency of budget funds.

Bibliography

Ciubotaru M., Hîncu V. (2008), "Financial Management in the Public Management System in the Contemporary Economy". Economic Studies, 2008, Year II, no. 1-2. Kishinev: ULIM, 2008, p. 271-287.

Oleinik A. (2006) "Administrative reform: failure to score on the quality of power". <http://www.vedomosti.ru/newspaper/article.shtml72006/II/29/116666>.

Profiroiu, A., Profiroiu, M. (2007), "Public Sector Performance Analysis Framework", Theoretical and Applied Economics, no. 1, pp. 41-50.

Siclovan Gh. (1974), "Economic efficiency". Bucharest: Academiy Publishing House, 211 p.

* * *, Budgeting on programs in the Ministry of Economy, Ministry of Agriculture and Food Industry. Chisinau: Expert-Grup Independent Analytical Center, 2013 <http://expertgrup.org>.

* * *, Gazette of the Republic of Moldova, 08.08.2014, no.223-230/519.

* * *, Government Decision on the approval of the Public Finance Management Development Strategy for 2013-2020. No. 573 din 06.08.2013 In: Official Gazette of the Republic of Moldova, 09.08.2013, no.173-176/669.

* * *, Guide to Financial Performance Indicators. www.falr.ro

* * *, Law on Public Finances and Budget-Tax Responsibility. No. 181 of 25 July 2014. In: Official