/ASEM/ Academy of Economic Studies of Moldova

DSpace CRIS Repository at ASEM **https://cris.ase.md**

IREK ASEM Facultatea Contabilitate

Modern methods used in performance-based budgeting

Graur, Anatol

ASEM

https://cris.ase.md/handle/123456789/5039

978-9975-75-895-6

Downloaded from DSpace CRIS Repository at ASEM, DSpace CRIS at ASEM serve as Institution's institutional repo

MODERN METHODS USED IN PERFORMANCE-BASED BUDGETING

Anatol GRAUR, ag@sistematis.md
Nicolai JIERI, jierinicolai@gmail.com,
Academy of Economic Studies of Moldova,
Anastasia MIHAILA, mihaila.anastasia@yahoo.com,
Moldova State University,

Abstract: *In this article, the authors main objective is to discuss the modern instruments of the budgeting process within a company - as an important phenomenon for each entity which has implemented a functional system of financial control. However, any entity has the right to choose which method is more efficient for managing its profits, expenses, and revenues. The authors will try to describe every way of budgeting emphasizing the advantages and weaknesses that the practitioners could encounter while implementing each method.*

Keywords: *budget, financial instrument, planning, economic advantage, financial control, strategy, financial management.*
JEL: M40, M21.

The activity of an economic entity with a well-defined economic structure is virtually impossible without the presence of a thoughtful system of budgeting. Besides the fact that the budgeting process ensures the elimination of the risks of resource shortages at each stage of the activity (supply, production, sales), it is also an effective financial control tool, which aims to achieve the company performance indicators, in accordance with its main purpose.

The budget is not only a useful tool for financial analysts. From the first people who carefully prepared arrows and tools, depending on the expected hunting and up to mega companies with billion turnover, the budget has evolved only in some aspects which are not always essential. One thing has remained the same: without a budget, it makes no sense to think about business! The time of blindly taken decisions (if it has ever been this way) has totally gone and on the market there is place only for the organized ones, those who know where they come from, where they are at this point and what they want to achieve. No one knows better than the entity's management that the term business actually means to have an insight vision, talent, agility, intelligence, and a good reaction speed. Equally, however, business also means taming this beast represented by accounting, financial management, financial analysis and forecasting.

Broadly speaking, economic entities draw up the budget by summing up information from the revenue and expenditure stage, with some details according to managerial needs. In practice, budgeting techniques are known as classical and modern methods. With regard to classical models, they are most commonly used by domestic entrepreneurs. Thus, the diversity of budgeting methods can be seen in Figure 1:

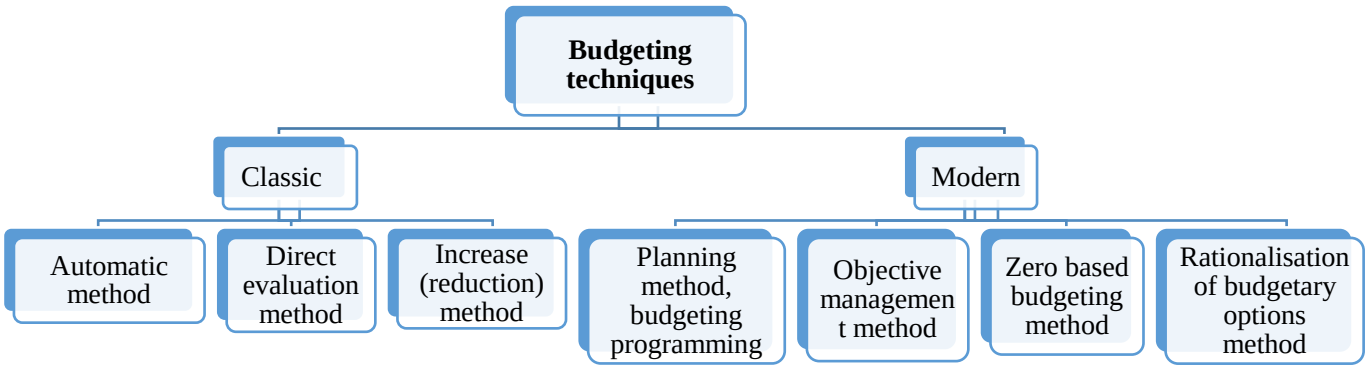


Figure 1. Methods applied in the budgetary process
Source: Developed by the author

The classic methods of sizing budget revenues and expenditures are: the automatic method, the increase (reduction) method and the direct valuation method [2, p.527-528]. *The automatic method* is used as the basis for the budget for the following year (t + 1) the results of the penultimate year of the one which is being planned (t-1). This occurs because while preparing the draft budget for the next year we don't yet know the achievements of the budget for the ongoing year (t). *Increase (reduction) method* is based on statistical procedures, taking into account the results of the budgetary exercises over a period of five or more consecutive years from the period preceding the year for which the budget is being drafted. Based on these data, the average annual growth rate (or decrease) of budget revenues and expenditures are determined. The automatic method and the increase (reduction) method do not correspond to a modern budgeting practice, whose main requirement is to obtain the most realistic assessment of the needs and possibilities in terms of purchasing public resources. This has led to the application of the direct assessment method, which involves calculating each source of income and each category of expenditure. The starting point for the projections are both the preliminary execution of the budget for the current year and the economic and social forecasts for the next budget year.

Modern methods of sizing of budgetary indicators. Under these circumstances, traditional methods have begun to be replaced by modern methods of sizing indicators which have an advantage in giving priority to the efficient use of allocated finances. The reforms initiated in the post-war period have the same common goal-shifting emphasis in the budget from simple categories of input (input costs) to activities, outputs (output of finished products) and results. In the international practice two main categories of methods were structured[7]:

- ✓ American-type methods: Planned Programmed Budgeting System (PPBS), Zero Base Budgeting (ZBB) Management by objectives (MBO);
- ✓ French-inspired methods: The Rationalization of Budget Options Method (La Rationalisation des Choix Budgetaires (RCB).

Programme Planning and Bugeting System (PPBS). This is an attempt to optimally use budget expenditures in the context of making decisions as effective as possible. The objective pursued in the development of the PPBS is to define more rational criteria in the management of financial resources, in the sense of allocating credits on the basis of performance or net benefits of the various categories of expenditure.[8]

For the first time, this method was successfully applied in the US Department of Defense in the early 1960s.[9] Previously the president of the American corporation Ford, in applying the method, was inspired by the practice of private corporations management, and later as the World Bank president in 1968-1981, he continued to popularize the method. Although the attempt to extend the method to the rest of the US administration suffered a fiasco, in the 1970s it was considered obsolete and forgotten, however, eventually the academic environment got back to it in the 1980s. Initially the method was limited to the following: Based on national security expectations, a strategy was developed, which was then evaluated and deployed through programs. The latter were made through the budget.

Based on the analysis of the costs and benefits of various options, the method involves first identifying the objectives to be achieved, assessing the costs and benefits of different programs that can lead to the attainment of the identified objectives and funding those programs that have the best efficacy indicators. Within the PPBS method, entity budgets are carried out from top to bottom. Hence, the use of the method leads to the consolidation of unitary decisions, eliminating their fragmentation, but at the same time it can be applied to solve major problems, but not to tackle the least important ones.[10]

[7] Văcărel I. ş.a., Finanţe Publice, ed. a IV-a. - Bucureşti: Didactică şi Pedagogică, 2004
[8] Văcărel I. ş.a., Finanţe Publice, ed. a IV-a. - Bucureşti: Didactică şi Pedagogică, 2004
[9] Cobzari L., Manole T. Metodologia Planificării Bugetare: elaborare de bugete. - Chişinău: CEP USM, 2004
[10] Buchanan J.M. The Public Finances: an introductory textbook, ed. a III-a. - Homewood: Richard D. Irwin INC, 1970

Other criticisms of the literature regarding the limitations and difficulties of the method that have reduced the possibilities for its widespread use are the following: the large amount of information and the complexity of the method, the risk of the increase of the technocratic power and the stagnation of the exercise capacity of the managers at the lower levels, the inflexibility and rigidity of the decision-making system and the inability of public authorities to react quickly through operative decisions, etc. Even if it did not deliver the expected results, this method laid the foundations for developing the other modem budgeting methods by using the grouping of program expenditure for the first time, evaluating these programs and comparing them in the budget decision.

Zero base budgeting (ZBB) is the method that encourages the "decrementalist" movement. Again, the US becomes the country where it originated, the method that began to be practiced after 1980, to prevent excessive budget spending from one year to the next. It presents a bottom-up approach to the budgeting process. According to T. Manole's analysis a distinction must be made between two forms of this method, namely the form applied for the first time in the US Department of Agriculture in 1962, and the form applied since 1977. Theoretically, the first one analyses the costs of all programs in each budget year. The essence of this method is that the budget for each year is made from scratch. Unlike the traditional budget system, ZBB it does not assume that ongoing programs will continue automatically in the following year. Thus the initial experiment "proved to be very complicated: the abundant work with insignificant documents and modifications, or even their total lack in size and budget directions."[11]

The second form of the method begins to be applied in the USA in 1977 and consists in concentrating spending programs at different levels of resource allocation, critically examining each type of budgetary expense, and assessing its utility and efficiency. This way the decisions were taken from the smallest unit, department, office, agency, to the highest level of leadership. It is assumed that each agency starts from the premise that it does not have a budget for the previous year, and the funding starts from scratch, and it is necessary to establish, evaluate and rank the programs. The programs to be funded are grouped into the so-called "decision-making packages" forwarded to the next level of decision. This unit, subsequently, analyses the "decision-making packages" of subordinate units and ranks them according to their usefulness and effectiveness. Here the unit can group the programs into four groups: the zero level corresponds to the cancellation of the budgetary resources for an action deemed not to be a priority; low level means continuing the action with lower resources; the normal level indicates that the activity is continued at the same level as the approved one; and the increased level allows intensifying priority actions. Subsequently, this unit forms its own package by aggregating the subordinate packages, which is then transmitted the same way, the process continuing to the level of the local or government budget. In this way, zero-based budgeting ensures that all decision-makers at various levels of budget preparation are involved in making the final decisions. Another important aspect of the method, according to T. Manole, is the medium-term budgeting procedure. At the same time, due to the fact that this method generates competition and conflicts between budgeting officers, this one has been rarely used.[12]

Although being a very good method in terms of concept, showed a relative failure because it was introduced in haste. So, among the disadvantages of the method are included:

- The method did not take into account the political factor, which as it is known, has a determining role in the allocation of funds, which has resulted in a distortion of the decision-making hierarchy due to the interests and influences of the higher decision-making bodies.
- In the process of drafting the budget, as outlined above, the information flows from the bottom to the top, in the process of budgeting, and from top to bottom in the implementation of the budget

[11] Cobzari L., Manole T. Metodologia Planificării Bugetare: elaborare de bugete. - Chişinău: CEP USM, 2004

[12] Rubin I. The politics of Public Budgeting: Getting and Spending, Borrow- ing and Balancing. // New Jersey: Chatham House Publishers Inc., 1993

decision. This greatly complicates the budgeting process due to the huge amount of information included in the thousands of proposed programs, and their processing is sometimes virtually, impossible.

- The ranking of decision-making packages, mainly based on the criterion of efficiency, did not take into account the differences between the tasks of the decision-making units.
- Last but not least, one of the most important disadvantages is the time factor. For such a large amount of information and due to the multiple levels of processing, it takes a fairly long time to make the budget decision.

The difficulties encountered in applying this method are mainly related to identifying and evaluating the overall results reported at a certain expenditure level.

Management by objectives (MBO). The very name of the method tells us about its essence, which is that it focuses on identifying and achieving the objectives for each spending program. MBO is a method of budgeting that identifies to what extent the allocation of resources ensures the achievement of the objectives set in the program. The method shows a continuation of the previous method, which turned out to be extremely complex.[13] In the case of MBO, the focus was on organizing, on administrative issues, decisions being taken from bottom to top, managers having flexibility in making decisions, and this is about decentralization. Each public resource manager defines his or her own goals, contributing to their realization. Within each ministry there is redistribution of the final objectives, as well as the coordination of objectives and resources. The main argument of the method is that those who manage spending programs are better aware of the situation on the ground and can make operative decisions. Hence the critique of the method, which implies too much freedom of action and too little constraint. The limits of the method consist in taking responsibility at the level of the new decentralized centers related to the precise determination of the objectives, as well as the correlation of the partial objectives with the final ones.

The method of rationalizing budget options,Rationalisation des choix budgetaires (RCB) is the method that was the most conceptually thought. As in the case of MBO and ZBB, this is based on the American PPBS method, but it is a refinement and adaptation to French reality. Like the PPBS method, it involves several phases of deployment, namely: study, decision, execution, however, here appears a new phase, that of control. This method also involves defining the objectives and identifying the alternative means of achieving them, the originality element of the method consisting in systemic analysis, due to the control phase, which follows the way the objectives were achieved and the problems originally identified , thus ensuring adaptability and reformulation of options and objectives, making the RCB a very flexible system.

Having an iterative character, the method allows you to analyse goals and drag them through so-called "plan-revolving." Successive iterations scheme is as follows: formulation of the problem, selection of objectives, proposal of alternatives, data collection, model construction, cost / benefit comparison, sensitivity test, hypothesis review, objective review, proposing new alternatives and new formulation of the problem. Most often, the same objective can be attained in several ways, which is why it requires comparing alternative solutions, determining the total cost of achieving the proposed programmes in different variations and decision based on cost analysis benefits, cost-effectiveness or multi-criteria analysis.

The advantages of the RCB method are the following: it allows the determination of the overall cost of operations regardless of the source of funding, which means that it has gone from exclusive budget financing to the coverage of public expenditure from multiple sources, provides information on the cost of a particular expenditure chapter in the functional budget, the elements of which are scattered over several budget credits, presents the entire existing and additional resources that will be used to achieve the proposed objectives, substituting the authorization to spend with the

[13] Rubin I. The politics of Public Budgeting: Getting and Spending, Borrow- ing and Balancing. // New Jersey: Chatham House Publishers Inc., 1993

obligation to achieve the budgetary targets, decreasing the importance of the expenditure structure. The essence lies in their contribution to the achievement of objectives and not in the nature of spending. The disadvantages of the method consist in difficulties in the preparation, approval and execution of the budget. Thus, by applying the RCB method, the requirements of budgetary principles such as annuality and universality can not be respected.[14]

Although modern budget planning methods, based on program budget, are considered to be the most advanced, however, they involve certain limits, failing in their pure essence. Thus, in applying modern methods of budget planning, the problem of cost analysis becomes complicated, as some can not be evaluated, and it is also not easy to fully assess the social benefit. These methods can be applied to solve major problems, but not to solve the less important ones. However, these methods are effective, by taking elements adapted to their own conditions. As T.D. Lynch says: "Modern methods of sizing budget indicators also include expenditure and revenue projections, and as long as these estimates are perceived as projections rather than as forecasts of the future, they can improve people's perceptions of the long-term implications of budgetary decisions."[15]

Based on the authors' research, we conclude that regardless of the method chosen by an economic entity, it needs to meet managerial requirements, given that budgeting as a financial instrument involves control, and a way of mitigating financial risks. At the same time, the economic reality being very flexible and dynamic, makes possible the existence of a multitude of tools, methods, budgeting concepts, which vary from company to company or from one economic system to another. Budgeting methods are always modified, adapted to the business environment, but at the same time, they are the pillars of the budgets mentioned by the authors in that article. In selecting a particular budgeting technique, the institution's management will resort to financial reasoning, making optimal decisions about economic and financial activity.

Bibliography

1. Axelrod, Donald, „Budgeting for Modern Government", St. Martin Press, New York, 1995;
2. Schick Allen, „Capacity to Budget", The Urban Institute Press, Washington D.C., 1990;
3. Lăzeanu M. Curs de ştiinţă şi legislaţie financiară. - Bucureşti: M.Bădeanu,1942;
4. Văcărel I. ş.a., Finanţe Publice, ed. a IV-a. - Bucureşti: Didactică şi Pedagogică, 2004;
5. Buchanan J.M. The Public Finances: an introductory textbook, ed. a IlI-a. - Homewood: Richard D. Irwin INC, 1970;
6. Wildavsky, Aaron "The Politics of the Budgetary Process – 3rd ed.", Little, Brown and Company, Boston, 1979, p.137;
7. Radu B., Haruţă C. Incrementalism sau raţionalitate în luarea deciziei în instituţiile publice de la nivel local şi judeţean din România // Revista Transilvana de Ştiinte Administrative, Cluj-Napoca: 2011, p.173-190;
8. Rubin I. The politics of Public Budgeting: Getting and Spending, Borrow- ing and Balancing. // New Jersey: Chatham House Publishers Inc., 1993;
9. Aronson J.R. Public Finance. - San Francisco: McGraw-Hill Company, 1985;
10. Bland, Robert L, Rubin Irene S., „Budgeting – A guide for local Governments", ICMA, Washington D.C., 1997, p.125;
11. Cioponea M. Finanţe publice şi teorie fiscală. - Bucureşti: Editura Fundaţiei România de Mâine, 2007;
12. Cobzari L., Manole T. Metodologia Planificării Bugetare: elaborare de bugete. - Chişinău: CEP USM, 2004;

[14] Văcărel I. ş.a., Finanţe Publice, ed. a IV-a. - Bucureşti: Didactică şi Pedagogică, 2004

[15] Aronson J.R. Public Finance. - San Francisco: McGraw-Hill Company, 1985