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The Budget - Reference System in Assessing the Performance of the Public Enterprise

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Abstract

The objective of managers to efficiently manage their business and improve the performance of public enterprises has led to the emergence and use of budgets. These are considered to be managerial tools useful in running the business, allowing efficient allocation of limited resources, planning and coordination of activity, communication of objectives, control of activities and motivation of subordinates.

Key words

Budget system, budget, performance, public enterprise, evaluation, structural analysis, income and expenditure budget **JEL Codes**: M41

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1. Introduction

Budgeting is a complex process that takes place over several stages and involves the entire public enterprise, requiring thorough communication and consolidation between all its structures. In a limited view, according to the information gathered from the literature, the performance of public enterprises implies the achievement of objectives or achievement of results, superior to the chosen comparison standard. Starting from these aspects, we can link budgets to the performance of the public enterprise. The connection between the two elements is very easy to achieve, simply because budgets support measuring the performance of public enterprises. Moreover, budgets can be considered a benchmark in assessing or determining performance. In our opinion, budgets are managerial tools that support not only the assessment or performance analysis, but also its improvement, through the control that budgets entail on the conduct of business.

2. Literature review

Literature abounds in studies that present the role, utility, and benefits of using budgets as managerial tools. Budgets provide extraordinary opportunities to entities, transforming its objectives and strategies into action plans, linking short-term and long-term objectives and bringing together different levels of leadership within organizations (Libby and Lindsay, 2010). They are used for the operational planning of the activity, for the performance evaluation, communication of the established objectives, but also for setting up a strategy (Hansen and Van der Stede, 2004). In addition to the fact that budgets allow goal setting, they promote coordination and control of activities, but also responsibility (King *et al.*, 2010). Moreover, by supporting planning, coordinating and controlling functions, budgets support improving the efficiency of the work (King *et al.*, 2010). Also, the use of budgets allows the entity to maintain a balance between income and expenses, representing a formal allocation process of resources, to achieve the objectives set by the entity for a specified period (Braga, 2006). Excessive expenses may affect the entity's financial stability, while too low a budget may have an adverse impact on the enterprise's competitiveness (Heidenberger *et al.*, 2003).

However, perhaps among the most important attributions of budgets, it is the support or improvement of the entity's performance. They are considered to be useful tools in obtaining the highest possible financial results (Ceauş, 2000) or achieving financial performance objectives (Turlea *et al.*, 2012). According to international studies, correct budgeting has a positive impact on the performance of the entity and its employees (King *et al.*, 2010; Libby, 1999). If the budgeting technique takes into account business characteristics such as the size and structure of the entity, then the strategy adopted, and the perception of risk management, performance tends to grow (King *et al.*, 2010). Also, adopting a participatory budgeting system, coupled with giving an explanation to subordinates when they have no impact on final budgets, positively influences performance (Libby, 1999). Other research from literature suggests that the link between participatory budgets and employee performance is indirectly achieved through other variables such as ambiguity, subordinate dedication, and job satisfaction (Chong *et al.*, 2006). Among the advantages of using budgets are, therefore, the planning, coordination and control of the activity, the communication of the objectives to the subordinates, the establishment of the authority and the responsibility, as well as the motivation of the employees (Braga, 2006) and

improving performances. In terms of budgeting functions, the most important are considered to be forecasting, control and financial balance (Braga, 2006).

3. Methodology of research

The objectives of the research include the identification of the knowledge phase in the budgeting of the activity of public enterprises, the analysis of the participatory budgeting process as well as the empirical testing of the degree of use of the budgets in the analysis of the activity of the public enterprises. The study also proposes to identify the correlation between the budgetary process and the performance of public enterprises but also to define a model for structural analysis based on the budgetary indicators and the performance evaluation of a public enterprise. In order to achieve these objectives, we have used various research methodologies, such as fundamental, interpretative, empirical and positivist types; there have also been used deductive and inductive research mechanisms.

4. Budgeting-a complex process that involves, in its integrity, the public enterprise

The literature brings to discussion three main actors involved in the budgetary process: general management, managerial accounting and accountability centers (Caraiani *et al.*, 2010). General management has the role to establish the strategies and objectives of the entity, which the responsibility centers will take into account in the first drafting of budgets, but also in approving the final budgets. Managerial accounting transmits to the accountability centers the main assumptions about the external and internal changes that can occur and which can influence budgets; ensure the consistency and reliability of budgets, acting as a link between management and the responsibility centers they oversee. The role of responsibility centers is to develop, negotiate and execute budgets.

Analyzing in depth this issue, we find that those involved in budgeting are the *budget committee, the budget managers, the controller, the financial director and the financial and accounting department* (Băluţă, 2005). The Budget Committee is made up of representatives of the entity's main business structures (Călin *et al.*, 2002) and has the task of developing, discussing, negotiating and coordinating all budget versions developed by the responsibility centers, and adopting the final budgets. Budget officers support the work of the committee, providing information and assistance in drafting the budgets. They also coordinate activities, manage budgets and centralize budget deviations submitted by accountability centers. The attributions of the control department aim to identify, analyze and control deviations registered against the values entered in the budgets. Budget officers who seek to achieve it collect information on deviations during the course of their business and on the solutions proposed to remedy unfavorable situations, which they then pass on to the budget committee and management in order to take a well thought decision. Regarding the role of the financial and accounting department, it provides the information underlying the budget forecasts as well as data on the actual values that are to be subsequently confronted with the budgetary values in order to identify deviations and achievement of the budgetary control.

The main departments that provide useful data for budgeting are: the finance and accounting department, the mechanic and energy department, the commercial department, the logistics department, the human resources department and the technological and productive design department (Băluţă, 2005). The finance and accounting department can provide information on the values recorded in previous years, such as: the turnover level, the amount of salaries and paid contributions, the amount of advertising expenses, the level of depreciation expenses, the insurance and rent expenses, the amount of the expenses on raw materials, value and level of inventories, value and structure of existing assets and sources of finance, the level of costs of taxes and charges, available cash, etc. These data, together with information on accounting policies and the accounting system on which recorded costs have to adapt to, may be the basis for estimating the amounts to be included in the budgets. In our opinion, however, the role of the financial and accounting department continues during the budgetary control, when it can provide information about the actual values.

The Technology Department influences budgeting by providing information on the type, number and lifetime of the assets, technology, machines and equipment owned by the entity in terms of their production capacity, operating times, physical and moral degree of decay, their value, the necessary repairs and maintenance activities, the planned investments and upgrades, etc. All of this data helps the entity to better understand the resources it needs to produce and carry out its work. The Department of Business, together with the Legal and Marketing Department, provides data on sales, prices of products and services, purchase prices of raw materials, terms included in trade contracts or pre-contractual mail. Information about sales, sales promotions, advertising, distribution and sales, cost of product storage, marketing costs, and results generated by the sales department can also be taken from this department, etc. They can also provide information obtained from the market research conducted by the entity, such as customer preferences, market demand, situation of main competitors, market prices of their main competitors, their position on the market, etc. Equally useful in drafting the budgets are information on the level of legal obligations of the entity such as taxes, salaries, insurance and other.

Other useful information in the preparation of budgets can be taken from the human resources and payroll department. These include issues such as the number of employees, the share of directly productive employees, labor requirements, salary levels, wage rates, contributions, labor standards, employees' attributions, etc. Information on production activity, such as the level of production capacity, the number of products manufactured, the quantities of raw materials and materials consumed, the number of hours of activity, the level of discounts recorded, the time and steps required for production, etc., can be obtained from the production department. The administrative department may provide useful information for the preparation of the general administrative expenses budget and other budgets, such as those relating to the administrative management of the entity, to the level of expenditure required to carry out this activity, etc. The Transportation Department can also provide essential business budgeting data, such as the size of the car fleet, the value of the cars owned, their lifetimes, the level of depreciation, the amount of repairs and upgrades made or necessary, and so on. The Department for Quality Management and Environmental Protection provides information on the procedures, obligations and activities related to quality testing and environmental protection, along with the main costs generated by them. And as in any entity there will be logistics costs, information about them can be retrieved from the Department of Logistics or Computer Systems. In order to obtain all the necessary information for budgeting, those involved in this process need to know, in addition to the departments that can provide these data, the documents in which these data are included.

With regard to internal documents that need to be analyzed for reliable budgets, these include: production schedule, cash flow, business plan, collective labor agreement, commercial contracts, pre-contractual correspondence, quality manual, GMS (General Meeting of Shareholders) decisions, final court sentences, operating permits, articles of incorporation and amendments, technical books on machinery and equipment, manufacturing technologies, technical prescriptions, etc. (Băluţă, 2005). Essential information can also be found in: organization chart, accounting policies, professional standards and regulations, deontological norms, cost requirements in control reports, evaluation studies, offers submitted to clients, professional development plan, improving working conditions, authorizations received, etc. (Băluţă, 2005). Also, knowledge of accounting policies such as depreciation, provisioning/adjustments, asset valuation, capitalization of expenses, etc., will contribute to the achievement of reliable budgets. The budgeting process has two stages. The first involves estimating the values to be included in the budgets, and the second involves the completion of the forecasting budgets and financial statements.

In practice, there are a variety of ways in which forecasts for the next periods can be made (Băluţă, 2005). Each of them has advantages and disadvantages. Thus, the entity may start in making estimates from the values recorded in the prior year. The advantage of adopting this method is that forecasts are based on actual data. The disadvantage occurs when there are significant changes in the internal or external environment. Also, the entity can base its estimates on the values actually recorded during the current year in which they have their budgets. Although in this case the entity has the benefit of forecasting based on the most current and realistic data, problems may arise due to the fact that this information can be analyzed over a period of only a few months. Other entities take into consideration to achieve the average forecasts of the values actually recorded over a period of three to five years. However, there may be problems that will affect the credibility of budgets if the data in the analyzed years are not comparable. Another method, specified in literature, but not recommended, is to carry out the forecasts based on the budget values of the current year. The disadvantage of this practice is that it allows estimations based on other estimated values. Other solutions include making estimates by extrapolating trends over the last three to seven years, or inserting data from the previous year and the year following the current one.

Making estimates allows for the preparation of budgets and forecast financial statements. The first budget developed by economic entities is the *sales budget*. It presents the entity's estimates over a period of one-year generally, broken down into either months, quarters or semesters (depending on the information needed by each individual entity), on the quantities to be sold per each product/service category and related prices. Also within this budget a forecast can be made, of the turnover to be achieved during the budgeted period. In the preparation of the sales budget we will take into consideration the sales policy of the entity, the level of sales made in the previous period, estimates of sales centers, general economic conditions, changes in the range of products offered, changes in sales prices, consumer preferences, or production capacity. Equally important in sales forecasting are contracts and pre-contractual correspondence with customers, changes in the structure of competition, information provided by market studies, actions taken to promote products. Estimated sales also influence the costs involved in the business activity, but also the forecasted profit and loss account, which will include the estimated turnover to be obtained from the sale of the goods or services.

The business activity budget reveals the estimated spending on the sale of the products. These include distribution costs, salary and salary contributions for employees responsible for business, sales related expenses, depreciation, maintenance

and repair of the means of transport used to distribute the products. Also included are expenses on raw materials and consumables related to commercial activity, rent expenses and the provision of sales centers, advertising and promotion costs for goods or services, post-sale and other expenses related to commercial activity. When drafting this budget, we take into consideration the values actually registered in the previous period, the personnel policy and the number of employees assigned to the business activity, the evolution of wage and commissions, the information on the network and the distribution centers, the number and value of the means transportation used in distribution activity, depreciation policy related to them, expected sales level, etc. The business activity budget influences the procurement budget, the treasury budget, and the forecasted profit and loss account. The production budget includes production activity planning for a specified period, by detailing the quantities expected to be produced on months, quarters or semesters. The production schedule will take into account the estimated sales guantities included in the sales budget, but also the estimated stock level and inventory level at the start of the budgeted period. Determination of production will also be influenced by the production capacity of the entity, by the direct productive human resources, by the entity's ability to bear production costs, the need to meet the delivery deadlines of the products etc. Production budget is the starting point in achieving the procurement budget. The production budget also influences the human resources budget (if employees are paid according to the number of manufactured products), the production costs budget and the investment budget (example. to get the necessary production capacity).

The human resources budget determines the labor force and related costs for the estimated period. For each product or service, an estimate of the number of hours and corresponding hourly rates is made for each process activity. Direct labor costs are then calculated for each product or service according to the number of hours, hourly rates, and the number of products to be manufactured or services to be delivered and which can be found within the production budget. In order to achieve this budget, information on working rules, salary rates, production schedule, the number of directly productive employees, changes in the staff structure (such as holidays, redundancies, promotions, resignations, retirements, etc.), contribution rates, changes in staff policies are needed etc. The human resources budget influences the investment budget (for example the need to make investments in production equipment to reduce working hours, etc.), the production costs budget, the treasury budget, and the profit and loss predicted account. The budget for indirect production costs allows estimation of production costs committed to achieve scheduled production, but cannot be identified on the product. These may be material expenses, wages, energy expenses, fuel, water, taxes, insurance, depreciation, rent, repair, etc., and are estimated on the basis of the information obtained from the financial-accounting department, human resources department and based on forecasts made by the economic entity. Indirect production costs affect the supply budget, production cost budget, treasury budget, and forecasted profit and loss account.

The general administrative expenses budget presents the indirect costs generated by the entity's management activity. This category includes the expenses of general management departments such as general management, secretariat, public relations, financial accounting department, human resources, IT, auditing, market research, etc. Expenses that may arise are material expenses, wages, energy and water, computer services, insurance, taxes, rents, depreciation and other similar expenses. Being indirect costs, their estimation often starts from the values recorded in the previous year, correlated with accounting and human resources policies, with information included in insurance and rental contracts, and so on. Also, the general administrative expenses budget may influence the procurement budget, the treasury budget and the forecasted profit and loss account.

The supply budget allows forecasts to be made on the direct consumption of materials necessary for the realization of the products or the provision of services, but also on the program of supplying the entity with direct and indirect materials necessary for carrying out the activity (production, administration). The supply budget thus, supports the entity in effectively managing the supply business. The information needed to build this budget is taken from the other elaborated budgets as well as from the management accounting. We need to bear in mind that it will be necessary to make estimates for the purchase prices of raw materials for the budgeted period. As a starting point for forecasting, the entity must take into account the business contracts with the suppliers. The supply budget also influences the production costs budget, the treasury budget and the forecasted profit and loss account.

For each type of product that the entity makes, or for each type of service provided, a budget for production costs is performed. This allows the determination of operating costs or costs of products or services. Production costs include direct costs, such as material and labor costs, as well as indirect production costs allocated on a rational basis (OMFP no. 1802/2014). In turn, these costs can be classified into variable costs and fixed costs, which do not vary according to the volume of activity. For the production cost budget, the entity must take into account the information contained in the previously prepared budgets. Knowing production costs supports decision making, setting production structure and sales prices.

The investment budget or the capital budget estimates the investments to be made by the economic entity during the budgeted period, depending on the needs, the available resources and the financial capacity of the entity. In preparing this budget, when engaging in an investment, the entity must take into account the opportunity cost associated with it, because any investment is a current sacrifice of resources that must generate future economic benefits. The investment budget will influence the treasury budget and the forecast financial statements. The VAT budget includes an estimate of VAT receivables and payables. These are calculated from the values included in previous budgets such as sales budget, supply budget, indirect production budget, general government spending budget, investment budget, etc., and will influence the treasury budget or forecast balance sheet.

As far as the Treasury budget is concerned, it allows the entity to estimate cash inflows and outflows for the projected period. Receipts will be estimated based on the sales budget and collection policy adopted by the entity. In estimating payments, the entity's payment obligations included in budgets such as the procurement budget, human resources budget, indirect production expenditure budget, general government expenditure budget, and business activity budget will be taken into account. Other useful information may also be other information such as corporate income tax, collection policies of business partners or suppliers, but also payment policies of the entity's personnel. The forecasted profit and loss account presents a centralization of all income and expenses expected to occur during the period under review. These are retrieved from previous budgets. Income are mainly found in the sales budget, and expenses in the business activity budget, human resources budget, etc. Estimation of future performance supports the entity in its efficient management and adoption of measures aimed at achieving the desired results or improving them.

The projected balance sheet indicates the financial position that the entity expects to record at the end of the period for which the forecasts are made. The information required to prepare this estimate is taken from accounting, from other budgets such as the treasury budget showing the entity's assets, the investment budget, etc., and are correlated with the management's forecasts. The analysis of the projected balance sheet supports the adoption of relevant decisions for the maintenance of the financial equilibrium, by calculating and interpreting economic indicators such as: working capital, working capital requirements, stock turnover, liquidity, solvency, indebtedness and other indicators that are interesting for the entity (Vâlceanu *et al.*, 2005). The informational sources of budgets and the links between them are presented schematically as follows:

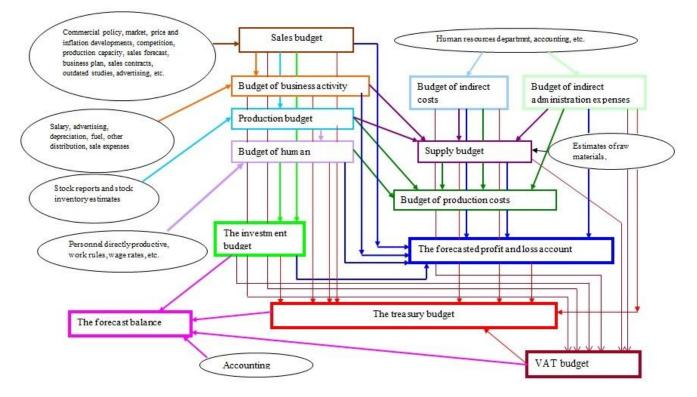


Figure 1. The informational sources of budgets and the links between them

Source: own design

5. Budgeting of the business and the performance of the public enterprise - integrated approach.

International studies present budgets as recognized tools for achieving higher financial results (Ceauşu, 2000), which contribute to increasing efficiency (Chadwick, 1998), especially through planning and coordination (Hansen *et al.*, 2003) and supporting the achievement of the entity's objectives, such as *increasing performance*, improving liquidity, profitability, etc. (Dumitru, 2005). In our opinion, all these benefits that budgets offer to entities support the improvement or achievement of performance desired by management. Even the literature considers that the role of budgets in improving the efficiency of the activity is achieved through careful planning of the activity, by providing a useful flow of information, through the participation of the management and subordinates, by ensuring efficient communication, through coordination and cooperation, authority and implementing control through responsibilities. Equally useful in this sense are the skills of the budgeting process to stimulate employees, to detect trends and deficiencies, to support the adoption of necessary corrective measures, and to act as an appropriate evaluation system.

In the first place, budgets allow setting economic entity objectives for a predetermined future period. Thus, it influences performance in two ways. The first focuses on the ability of budgets to act as a reference in the conduct of business, guiding managers in making decisions so that the results achieved are consistent with the objectives set. Achieving goals is a sign of performance (Gruman and Saks, 2001; Tabără *et al.*, 2007; Verboncu and Zalman, 2005; Folan *et al.*, 2007). And how budgets support their achievement, we can say that they support achieving the desired performance. The second way in which this budget feature influences performance is to use it as a benchmark for evaluating the results. For an entity to be considered performant, the results recorded by it should be superior to a reference chosen for evaluation. And budgets allow quantification of performance (Verbeeten and Boons, 2009) by comparing the results actually achieved by the entity by carrying out the activity with the predefined objectives. Negative deviations may be a failure to achieve the desired driving performance. Instead, positive deviations provide a clue as to the recording of superior performance.

Secondly, as managerial tools, budgets are not only a reference in the performance of the activity and performance evaluation, they also contribute to the management of performance. The budgets allow the estimation and management of the future financial performance of the economic entity by forecasting the total income, total expenses, turnover to be achieved or profit to be realized over the period under review. Knowing the key goals that have to be achieved to accomplish the desired performance, the entity can control or manage future performance. Also through budgets, the entity performs an efficient allocation and management of available resources. Thus, these managerial tools allow the company to capitalize on its limited resources and achieve maximum effect with minimal effort. Elimination of waste and inefficiency will support the improvement of effective performance. We must not lose sight of the fact that budgets allow the establishment of authority and responsibility in the work tasks. By defining authority, budgets allow delegation of tasks and empowerment of subordinates. Thus, those who will have the budgets executed and will be responsible for their realization will be more responsible in the conduct of their work. In addition, freedom of decision can motivate employees and can increase the degree of satisfaction they experience at work. These considerations can lead to the dedication of subordinates to the achievement of objectives and thus to the performance improvements (both of the employees and of the entity as a whole). Moreover, setting budget targets can motivate subordinates to devote themselves to achieving them. Achieving goals will improve the performance of the entity. In addition, empowering employees can also help make subordinate performance more efficient. And if their performance grows, the performance of the entity also increases. This brings us to another feature of budgets that support performance improvements, namely the ability of these tools to support the detection of shortcomings and to allow corrective measures to be taken to remedy them in a timely manner.

Execution of budgets allows comparison of the actual results achieved by the activity with those estimated through the budgets. In this manner, deviations that negatively affect the performance of the activity and the achieved performance are identified. Once these irregularities have been identified, management can establish and adopt corrective measures to enable it to manage its activity effectively and still achieve its predetermined objectives. In addition, budgets and their execution support management in *making decisions* that enable it to operate efficiently and effectively and achieve superior performance. According to the ideas published in literature, the substantiation of decisions and the increase in performance can be achieved through budgetary planning and analysis of budget deviations (Popescu, 2006). And the ability of budgets to support effective control of business performance ensures the desired performance. The more control is exercised by the entity over income, expenses and other financial or non-financial indicators that influence the results to be recorded, the more efficient is, the more the performance to be achieved will be more advantageous. Budgets do not only support improvement, but also *performance evaluation*. This is done by analyzing the actual results compared to the budgetary targets. The influence of budgets on the performance of an entity can also be achieved indirectly through other elements that link the two variables. The literature discusses the impact of *the participatory budgeting process* on the performance of subordinates. The impact of participatory budgeting on *employee performance* is achieved through the exchange of

information (Parker and Kyj, 2006), the correctness or adequacy of budgets (Nouri and Parker, 1998), through the ambiguity of the role (Parker and Kyj, 2006; Chong et al., 2006), through employees 'satisfaction, through employees' dedication to the organization, by accepting goals (Renn, 1998), or through the importance attached to budgets in performance evaluation (Lau and Tan, 1998). The links between the budgets and the performance of the activity or the way in which the budgets affect the performance of the public entities are presented in Table 1.

Table 1. Budgets and business performance in public enterprises

Elements of influence The impact on the entity's performance				
	Budgets and their characteristics			
Budgets allow to achieve the objectives set	The objectives of the entity are established through budgets. These managerial tools present the action plans of the company, guide the conduct of the activity and support the achievement of the objectives. Any performance involves achieving the goals. Thus, budgets improve performance. Moreover, they can be considered as a reference in their assessment by comparing the actual results with the budgetary targets.			
Budgets allow for the estimation and management of financial and non-financial performance	The budgets estimate the entity's income and expenses as well as the non-financial indicators that the company will need to achieve to accomplish the financial targets. Thus, budgets actually predict the performance of the economic entity (profit, turnover, total income, etc.). The company thus knows the goals it has to achieve in order to accomplish the desired performance. Such planning allows for optimal management and efficient control over future performance.			
Budgets help plan and coordinate the work	Planning and coordinating activities, through budgets, supports the achievement of the entity's objectives and the efficient deployment of the activity in optimum conditions. This ensures the achievement of the estimated performance.			
Budgets ensure efficient resource management	Budgets allow efficient management of the limited resources available to the entity. Thus, they support achieving maximum performance with minimal effort and no loss. We can say that budgets ensure a balance between effectiveness and efficiency, as well as the realization of a resource saving, all of which are attributes of performance .			
Budget setting determines authority and responsibility	Empowering subordinates vis-à-vis budget execution determines the achievement of budgeted values, the achievement of established goals and motivation of employees and managers. All this leads to improved performance .			
Budgets help motivate subordinates	Budgets motivate subordinates to obtain the estimated results by management. Thus, by achieving the estimated goals, the performance achieved by the entity increases.			
Budgets increase employee performance	The desire to achieve the budgeted values motivates subordinates who work harder and are more involved. This improves their performance and, implicitly, the performance of the entity.			
Budgets allow the detection of deficiencies and the adoption of corrective measures	Budgets, together with budget execution, allow the detection of deficiencies by comparing the actual results with the budgetary targets. Their identification supports the adoption of corrective measures, so that the performance of the entity is not affected.			
Budgets are considered decision-making tools	Based on budgets and deficiencies, decisions are made to improve the activity and performance. These decisions have the role of supporting performance management.			
Budgets allow for effective control Budgets support the entity's effectiveness, efficiency, economy and competitiveness	Control ensures compliance with budgets and thus achieves the desired performance. Efficiency is achieved through the ability of budgets to support the achievement of objectives. Efficiency is supported by budgets by controlling resuscitation, preventing losses and waste and supporting maximizing the available resources. In terms of economy, budgets allow, through the estimates they include, a plan of the acquisition of the necessary resources at the lowest cost as well as their efficient use. Moreover, these considerations, along with other features of budgets such as investment and innovation management, can enable the entity to retain its competitive advantage over competition.			
Budgets allow performance to be evaluated by comparing the actual results with the reference amounts set by budgets	Performance does not have to be just measured. Indicator values do not tell us anything unless we refer to certain reference levels. In our case, performance can be analyzed by comparing the values obtained with those estimated by budgets. Thus, we can say that budgets can be considered a benchmark in performance evaluation.			
	Participatory budgeting			
Participatory budgeting allows efficient allocation of resources	The involvement of subordinates in the budgeting process allows an efficient allocation of resources on the basis of the information received from them. Entity performance increases when resources are not scattered.			

Elements of influence	The impact on the entity's performance
Participatory budgeting allows the development of budgets with a high degree of accuracy	Subordinates can provide superiors with useful information in the preparation of budgets, information known only to them as a result of direct involvement in the work carried out. This leads to more pertinent budgets and, in conclusion, to improved performance.
Participatory budgeting reduces the ambiguity of the role of employees	Employee and management communication enables an efficient exchange of information, thus helping to clarify work tasks. Clarifying the role of the subordinates allows them to increase their performance.
Participatory budget motivates subordinates	The involvement of subordinates in the decision-making process gives them a sense of control over the final budgets. Thus, they will be more motivated to achieve the objectives they have contributed to, and individual performance will increase.
Participatory budgeting improves employee satisfaction	Employees' involvement in budgeting gives them a sense of satisfaction. This can lead to individual performance improvement, especially through the dedication that subordinates can feel.
Participatory budgeting increases the loyalty of subordinates to the entity	If subordinates participate to the process of making decisions, they will consider leadership, procedures and budgets as correct. This will improve trust and loyalty to the entity. Employees will work harder to achieve the desired performance and so their performance will improve.
The participatory budgeting system supports the performance of subordinates	Participatory budgeting supports adequate budgets, improves employees 'confidence in the budget process and budgets, reduces the ambiguity of the subordinates' role, motivates employees and helps increase their satisfaction and dedication. These aspects will allow the participatory budgeting system to influence favorably the performance of the subordinates. We believe that improving the performance of the management will later lead the entity to achieve superior performance. The positive effects of participatory budgeting on performance are accentuated by giving an explanation to subordinates if they cannot influence final budgets, achieve participation at higher hierarchical levels, use a performance-based control system, and hold a high level of knowledge by managers, in terms of costs. The impact of participatory budgeting on performance is also influenced by the importance of budgets in performance assessments and by the difficulty of workload.
	Budget of non-financial objectives
Defining and using a budget of non- financial goals improves the trust of subordinates in the budget process	The use of non-financial performance indicators determines the trustworthiness of subordinates in the accuracy and faithfulness of the evaluation process. Thus, they will be satisfied, motivated and dedicated to achieving the objectives of the entity.
Non-financial goals budget supports performance analysis and management	The use of non-financial indicators will improve performance analysis and management, providing the entity with additional information on the results compared to management's expectations.
The budget of non-financial goals allows the entity's budgets to be linked to the budget	Using a budget of non-financial goals will enable the entity to link strategy, planning, and performance appraisal.
The budget of non-financial goals is useful in high environmental uncertainty	Using a budget of non-financial goals will allow the entity to focus on customers, product quality and efficiency, innovation, etc. These issues will support the entity's development in a business environment dominated by uncertainty.
The budget of non-financial objectives supports the achievement of operational objectives and financial performance	The non-financial objectives budget will present the conditions that the entity will have to meet in order to meet the projected financial targets through budgets. Thus, the development and use of such a budget will support the achievement of operational objectives and financial performance.

Source: own design

6. Structural analysis of budget indicators and performance appraisal at a public enterprise

In order to highlight the importance of the BVC in the governance of an "IP" public enterprise and the role of the relevant financial and accounting information, a structural analysis and the degree of achievement of the budgetary indicators are presented (approved by the Government Decision on the budget execution at 9 months, respectively 30.09.2018). The situation regarding the performance of the economic and financial indicators of the public enterprise "IP" on 30.09.2018 compared to the BVC on the same date is presented as follows:

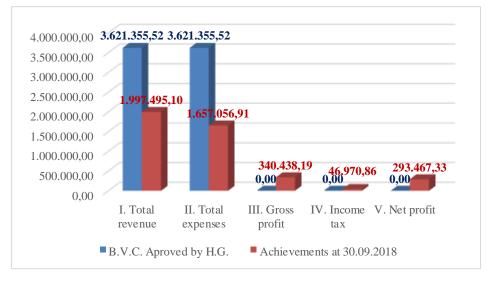
• on September 30, 2018, the IP recorded a gross profit of 340,438.19 thousand ROL, a positive result obtained as a difference between the total incomes recorded in the amount of 1,997,495.10 thousand ROL and the total expenses registered in the amount of 1,657. 056.91 thousand ROL, respectively a net profit of 293,467.33 thousand ROL, resulting from the diminution of the gross profit with the value of the profit tax amounting to 46,970.86 thousands ROL;

• the total of Class 7 "*Incomes*" (from the balance sheet) is decreased by the value recorded on September 30th, 2018 for the "*Operating Income Provisions*" indicator, and the total of Class 6 "*Expenses*" (from the balance sheet) is diminished in view of the inclusion of the indicators "*Income from provisions on operating activity*" amounting to 68,509.78 thousand ROL, respectively the indicator "*Expenses with Profit tax*" amounting to 46,970.86 thousand ROL;

• the comparative situation regarding the achievements recorded on 30.09.2018 compared to the values allocated by B.V.C. on the same date, is as follows:

Indicator	B.V.C. at 30.09.2018 approved according to H.G [thousand ROL]	Achievements at 30.09.2018 [thousand ROL]	Difference [thousand ROL]	%
0	1	2	3=2-1	4=2/1*100
I. Total income	3.621.355.52	1.997.495,10	-1.623.860,42	55,16
II. Total expenses	3.621.355,52	1.657.056,91	-1.964.298,61	45,76
III. Gross Profit	0,00	340.438,19	340.438,19	
IV. Income tax	0,00	46.970,86	46.970,86	
V. Net Profit	0,00	293.467,33	293.467,33	

Diagram 1. The comparative statement of achievements as of 30.09.2018 relative to the values assigned by B.V.C - [thousand ROL]



Source: own design

• the situation of Total income achieved at 30.09.2017 is as follows:

Table 3. Total income	
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Indicator	B.V.C. at 30.09.2018 approved according to H.G [thousand ROL]	Achievement at 30.09.2018 [thousand ROL]	Difference [thousand ROL]	%
0	1	2	3=2-1	4=2/1 *100
I. Total income, from which:	3.621.355,52	1.997.495,10	-1.623.860,42	55,16
1. Operating income	3.415.130,50	1.884.876,38	-1.530.254,12	55,19
2. Financial income	206.225,02	112.618,72	-93.606,30	54,61
3. Extraordinary income	0,00	0,00	0,00	0,00

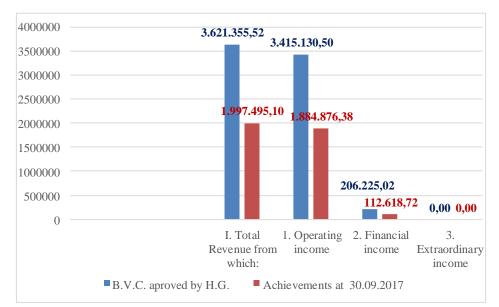
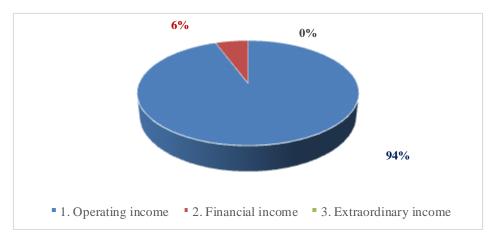


Diagram 2. Comparative Statement of Income Realized at 30.09.2018- [thousand ROL]

Source: own design





Source: own design

• on 30.09.2018 the total Income was 55.16% compared to the value programmed by B.V.C. approved for the year 2018. We mention that the total of class 7 "Income" (from the balance sheet) is diminished by the value recorded on 30.09.2018 for the indicator "Income from provisions for operating activity" amounting to 68,509.78 thousand ROL;

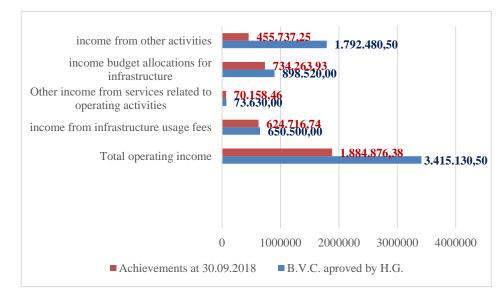
• the Operating income was realized on 30.09.2018 in 55.19% of the value allocated by B.V.C. for the same date, which represents a 44.81% non-realization of the value allocated by B.V.C. for the same period, non-realization, which comes mainly from the indicator "*Income from investment subsidies*" for which on 30.09.2018 the value of 1,653,803.70 thousand ROL was allocated and the value of 227,553.53 thousand ROL was registered. Income from exploitation has the highest share in the total Income realized on 30.09.2018, the value of which amounts to 1,884,876.38 thousand ROL and represents 94.36% of the total Income recorded during this period;

• the comparative statement of operating income realized on 30.09.2018 compared to B.V.C. is thus presented:

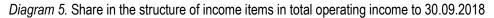
Table 4. C	omparative stateme	nt of operating	income
			,

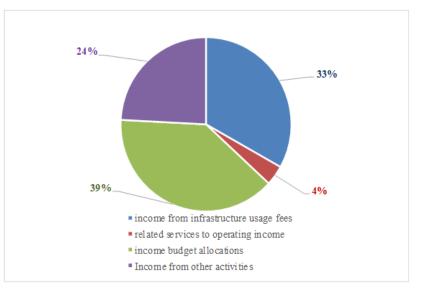
Indicator	B.V.C. at 30.09.2018 [thousand ROL]	Achievements at 30.09.2018 [thousand ROL]	Difference [thousand ROL]	%
0	1	2	3=2-1	4=2/1*100
Operating income	3.415.130,50	1.884.876,38	-1.530.254,12	55,19
- income from infrastructure usage fees	650.500,00	624.716,74	-25.783,26	96,04
- Other income from services related to operating activities	73.630,00	70.158,46	-3.471,54	95,29
- income budget allocations for infrastructure, from which:	898.520,00	734.263,93	-164.256,07	81,72
 current repairs 	40.800,00	3.012,00	-37.788,00	7,38
o for maintenance	857.720,00	731.251,93	-126.468,07	85,26
- income from other activities	1.792.480,50	455.737,25	-1.336.743,25	25,42

Diagram 4. The comparative representation (in structure) of operating income at 30.09.2018 reported to B.V.C. approved - [thousand ROL]



Source: own design





Source: own design

• on September 30th, 2018 the income from the infrastructure use tariff is in the amount of 624,716.74 thousand ROL, representing 96.04% of the value allocated by B.V.C. for the same period, respectively 33.14% of the total operating incomes recorded during this period;

• the income from services amounted to 70,158.46 thousand ROL, representing 95.29% of the value allocated to the BVC for the same period, namely 3.72% of the total operating income recorded during this period;

• the income from budget allocations for infrastructure are in the amount of 734,263.93 thousand ROL, representing 81.72% of the value allocated by B.V.C. for the same period, namely 38.96% of the total operating income registered during this period and is related to the budget title "*Maintenance of the public railway infrastructure*" as well as to the budgetary title "*Transfers for current repairs to the public railway infrastructure*";

• on 30.09.2018 the incomes from other activities were realized in percentage of 25.42% compared to the value allocated by B.V.C. for the same period, respectively 24.18% of the total operating income recorded during this period;

• under the item "*Income from other activities*" whose value at 30.09.2018 is of 455,737.25 thousand ROL, the following items are mainly mentioned:

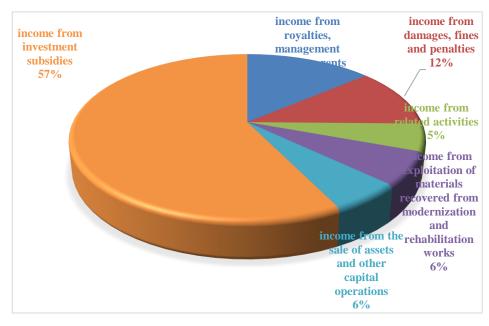


Diagram 6. Structure of Income item from other activities performed on 30.09.2018

Source: own design

Table 5.

Indicator	Achievements at 30.09.2018 [thousand ROL]
- income from royalties, management locations, rents	54.730,34
- income from damages, fines and penalties	45.701,83
- income from related activities	21.133,33
- Income from exploitation of materials recovered from modernization and rehabilitation works	25.622,54
- income from the sale of assets and other capital operations	22.450,24
- income from investment subsidies, from which is:	227.553,53
- public patrimony	219.661,48

• the financial income in amount of 112,618.72 thousand ROL represents 5.64% of the total income registered on September 30th, 2018 due to exchange rate differences;

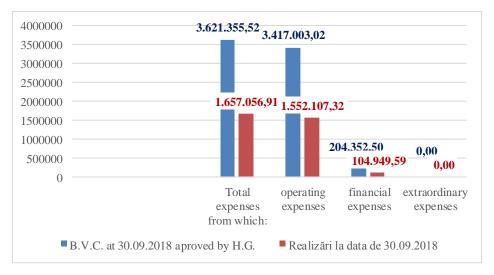
• the statement of total expenses made on September 30th, 2018, is presented as follows:

Indicator	B.V.C. at 30.09.2018 approved acc. To H.G. [thousand ROL]	Achievements at 30.09.2018 [thousand ROL]	Difference [thousand ROL]	%
0	1	2	3=2-1	4=2/1*100
Total expenses from which:	3.621.355,52	1.657.056,91	-1.964.298,61	45,76
Operating income	3.417.003,02	1.552.107,32	-1.864.895,70	45,42
Financial income	204.352,50	104.949,59	-99.402,91	51,36
Extraordinary income	0,00	0,00	0,00	0,00

Tabla G	Tha	statement	of total	expenses
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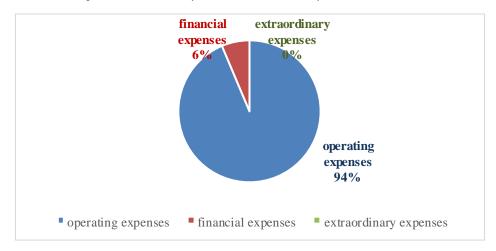
• as of September 30th, 2018 total expenses were made at 45.76% of the value programmed by B.V.C. approved for the year 2018. The total of the 6th class (from the balance sheet) is diminished, considering the inclusion of the indicators "*Income from provisions on operating activity*" amounting to 68,509.78 thousand ROL, respectively the indicator "*Expenses with Income tax*" of 46,970.86 thousand ROL;

Diagram 7. Expenses execution on 30.09.2018 vs. B.V.C. approved at 30.09.2018 - [thousand ROL]



Source: own design

Diagram 8. Share of expenses items in total expenses to 30.09.2018



Source: own design

• operating expenses were 45.42% compared to the amount allocated by B.V.C., which represents a saving of 54.58% compared to the value allocated by B.V.C. for the same period;

• operating expenses have the highest share in total expenses realized on 30.09.2018, whose value of 1,552,107.32 thousand ROL represents 93.67% of total expenses made during this period (at this stage of analysis we could detail the structure of the expenditure in question);

• expenses with goods and services amounted to 360,841.62 thousand ROL as of 30.09.2018 and represents 23.25% of the total operating expenses recorded on this date;

• during the budgetary analysis on expenses items we can analyze the structure and the degree to which the expenses of services made by third parties, insurance and security expenses, professional training expenses, expenses with the revaluation of tangible and intangible assets, loss from receivables, tax expenses, taxes and assimilated payments, staff costs are accomplished etc.;

• both the income and expenses analysis at 30.09.2018 can be made from operational and non-operational income or from operational and non-operational expenses point of view;

• the gross profit at 30.09.2018: the public enterprise "IP" registers on 30.09.2018 a gross profit amounting to 340,438.19 thousand ROL, a result obtained as a difference between the total income registered in the amount of 1,997,495.10 thousand ROL and total expenses registered in the amount of 1,657,056.91 thousand ROL. Total Class 7 "*Income*" (from the balance sheet) is decreased by the value recorded on September 30th, 2018 for the "*Income from operating provisions*" indicator, and the total of Class 6 "*Expenses*" (from the balance sheet) is diminished considering the inclusion of the indicators "*Income from provisions on operating activity*" amounting to 68,509.78 thousand ROL, respectively the indicator "*Expenses with the income tax*" amounting to 46,970.86 thousand ROL;

• net result at 30.09.2018: the public enterprise "IP" registered on 30.09.2018 a net profit in the amount of 293,467.33 thousand ROL, resulting in the reduction of the gross profit amounting to 340,438.19 thousand ROL with the value of the income tax amounting to 46,970.86 thousand ROL;

No	Explanations	B.V.C. at 30.09.2018 approved by H.G.	Achievements at 30.09.2018	%
0	1	2	3	4=2/3*100
1.	Total expenses to 1000 ROL total income	1.000,00	829,50	120,55
0	1	2	3	4=3/2*100
	Productivity of labor in units of value per total average personnel (thousand ROL/person)	109,56	51,05	46,60
3.	Average number of employees	22.925	22.535	98,30
4.	Number of employees	23.468	22.971	97,88

Table 7. Efficiency indicators

• on 30.09.2018 "IP" records debts amounting to 52,722.20 thousand ROL compared to the value of 72,933.44 thousand ROL allocated by B.V.C. for the same period;

• the public enterprise "IP" records on 30.09.2018 outstanding claims amounting to 1,228,193.88 thousand ROL compared to the amount of 1,099,744.21 thousand ROL allocated by B.V.C. for the same period, and an analysis of the evolution of receivables over the analyzed period can also be made. In the case of non-settled claims on maturity, "IP" issues penalty payments according to the contractual provisions and the legal provisions in force. Moreover, the "IP" is constantly considering the recovery of claims for which it sends payment notifications, summons, draws up legal and/or criminal files, as the case may be. When "IP" records mutual debts and debts with various legal entities, it performs clearing receipts and payments, and for insolvency clients "IP" enters the creditor's table with the amount it has to recover from them;

• budget management allows monitoring of the monthly breakdown of existing staff and the average number of staff in 2018.

7. Conclusions

Identifying the factors that should be considered in budgeting and which will influence the activity of an entity is essential, especially because of the impact that budgets can exert on its *performance*. Performance is the fundamental objective of public interest entities, and how they design their budget system will affect the performance of the business. Budgets can have a positive influence on the *performances* of public entities through their ability to support the achievement of objectives together with the planning and coordination of the activity, but also to allow the management of resources, financial and non-financial performance. It is also noted that budgets have a role to play in determining the authority and responsibility of subordinates in motivating them, implementing effective control, detecting and correcting deviations, and in making decisions and evaluating outcomes can help increase performance of employees and public entities as well.

In our opinion, streamlining of public entities' results can also be supported by the use of a budget of non-financial goals. It will support performance analysis and management, enable budgets to be linked to the entity's strategy, help achieve operational objectives and financial performance, and help increase subordinate confidence in budget and evaluation processes.

References

Băluță A., (2005). Contabilitate de gestiune: noțiuni fundamentale. Fundația României de Mâine Publishing House, Bucharest.

Braga, V., (2006). Bugetarea activităților, sursa de informații pentru contabilitatea managerială în cadrul societăților comerciale, Finanțe Publice și Contabilitate Review, nr. 5.

Călin, O., Manolescu, M., Ţurlea, E., Tudorache, S., Caraiani, C., Man, M. & Bălan, I., (2002). Contabilitatea de gestiune, Tribuna Economică Publishing House, Bucharest.

Caraiani, C., Dascălu, C., Guşe, R. & Lungu, C., (2010). Contabilitate managerială. Tehnologii contabile integrate de raportare și decizie, ASE Publishing House, Bucharest.

Ceauş, I., (2000). Dicționar enciclopedic managerial- enciclopedia managerială, Vol. 2, Academic Management Publishing House, Bucharest.

Chadwick L., (1998). Contabilitatea de gestiune: tehnici de gestiune contabilă, contabilitatea costurilor, evaluarea rezultatelor firmei, Tribuna Economică Publishing House, Bucharest.

Chong, V. K., Eggleton, I. R. C. & Leong, M. K. C., (2006). The multiple roles of participative budgeting on job performance, Advances in Accounting, Vol. 22.

Dumitru, M. (2005). Gestiunea financiară a întreprinderii, Fundația România de Mâine, Publishing house, Bucharest.

Folan, P. & Browne, J. (2005). A review of performance measurement: Towards performance management, Computers in Industry, Vol 56, Issue 7, https://www.sciencedirect.com/ science/article/pii/S0166361505000412.

Gruman, J. A. & Saks, A. M. (2011). Performance management and employee engagement, Human Resource Management Review, Vol. 21, No. 2, https://www.sciencedirect.com/science/article/abs/pii/S1053482210000409.

Hansen, S.C. & Van der Stede, W. A. (2004). Multiple facets of budgeting: an exploratory analysis, Management Accounting Research, Vol. 15, Issue 4.

Hansen, S., Otley, D. & Van der Sted, W., (2003). Practice developments in budgeting: an overview and research perspective, Journal of Management Accounting Research Vol.15.

Heidenberger, K., Schillinger, A. & Stummer, C. (2003). Budgeting for research and development: a dynamic financial simulation approach, Socio-Economic Planning Sciences, Vol 37, Issue 1.

King, R., Clarkson, P.M. & Wallace S., (2010). Budgeting practices and performance in small healthcare businesses, Management Accounting Research, Vol.21, Issue 1.

Lau, C.M. & Tan, J.J. (1998). The impact of budget emphasis, participation and task difficulty on managerial performance: a cross-

cultural study of the financial services sector, Management Accounting Research, Vol. 9, Issue 2.

Libby, T., (1999). The influence of voice and explanation on performance in a participative budgeting setting, Organization and Society, Vol. 24, Issue 2.

Libby, T. & Lindsay, R.M., (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice, Management Accounting Research, Vol. 21, Issue 1.

Nouri, H. & Parker, R.J. (1998). The relationship between budget participation and job performance: The roles of budget adequacy and job organizational commitment, Accounting Organization and Society Journal, Vol. 23, Issue 5-6.

Parker, R.J. & Kyj, L. (2006). Vertical information sharing in the budgeting process, Accounting, Organizations and Society, Vol. 31, Issue 1.

Popescu, D., (2006). E-management – planificarea resurselor financiare și performanța firmei, Finanțe, bănci, asigurări Review, Vol. 9, No.4.

Renn, R. W. (1998). Participation's effect on task performance: Mediating roles of goal acceptance and procedural justice, Journal of Business Research, Vol. 41, No. 2, https://www.sciencedirect.com/science/article/abs/pii/S0148296397000209.

Tabără, N., Horomnea, E., Marcel, F. & Dicu, N.R., (2007). Considerații privind performanța globală a întreprinderii, Contabilitatea, expertiza și auditul afacerilor Review, No.8.

Tabără, N., Horomnea, E., Marcel, F. & Dicu, N.R., (2008). Performanța firmei în contextul reglementărilor internaționale, Part I, Contabilitatea, expertiza și auditul afacerilor Review, No.5.

Ţurlea, E., Ştefănescu, A., &Tănase, G. L., (2012). Dezvoltări privind dimensiunea predictivă a bugetelor, Audit Financiar Review, Vol. 9. Vâlceanu, Gh., Robu, V. & Georgescu, N., (2005). Analiză economico-financiară, Second Edition, Tribuna Economică Publishing House, Bucharest.

Verbeeten, F. H.M. & Boons, A. N.A.M. (2009). Strategic priorities, performance measures and performance: an empirical analysis in Dutch firms, European Management Journal, Vol. 27, Issue 2, https://www.sciencedirect.com/science/article/ pii/S0263237308000996. Verboncu, I. & Zalman. M. (2005). Management şi performanţe, Universitară Publishing House, Bucharest.