## MANAGERIAL ACCOUNTING AND ITS ROLE IN DETERMINING THE EFFICIENCY OF PUBLIC SERVICES

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**Abstract:** Management accounting holds a position of utmost significance within the public sector due to its important role in enhancing decision-making processes by providing tailored financial information that meets the specific needs of public entities. This financial data serves a valuable purpose in predicting future outcomes, logically structuring resources, conducting in-depth analyses, making prompt decisions, and ensuring consistent monitoring, all aimed at attaining the highest levels of production efficiency.

Keywords: Public services, managerial accounting, cost analysis, efficiency, performance.

### 1. Introduction

Public services make up a significant part of a country's economy, playing a crucial role in using resources funded by taxpayers and emphasizing the importance of operational efficiency. The need for an effective accounting system in the public sector is highlighted by its key position in the economy. It is known that different government regulations and customs reforms have varied influences on public services. These reforms have included most modifications to the accounting and organizational configurations. Nevertheless, ongoing discussions continue about the functions and essential characteristics of accounting systems in public services.

This article sets the stage for exploring the importance of management accounting techniques in promoting transparency, accountability, and efficiency in public services. Moreover, the constant need from citizens for a transparent accountable allocation of governmental funds increases the pressure on public services [4].

The implementation of robust management control systems, coupled with the utilization of management accounting tools, can effectively serve as a deterrent against corruption, promote heightened levels of transparency, and streamline the allocation of resources within public services. Furthermore, the shift towards integrating management accounting practices within public or private institutions not only assists in fostering long-term strategic planning efforts but also plays a pivotal role in evaluating program efficacy and ensuring that financial endeavors are in alignment with the overarching public policy objectives. The realm of accounting within the public or private sector plays a critical role in upholding financial discipline, steering budgetary planning initiatives, and ensuring strict adherence to legislative mandates, thereby making substantial contributions towards enhancing financial stability and bolstering economic activities across various levels of government.

Management accounting assumes a central position in public services by facilitating and propelling organizational transformation, while simultaneously contributing significantly to accountability enhancement and reinforcement of decision-making processes. Several research works have illuminated the complex interplay between management accounting methodologies and diverse factors such as organizational ethos, styles of leadership, and the extent of decentralization in public sector establishments.

The deployment of robust management control mechanisms, in conjunction with the application of management accounting instruments, can effectively function as a deterrent to malpractice, foster increased levels of openness, and rationalize the distribution of resources in public services. Various models have been advanced to direct the development and implementation of Management Accounting and Control Systems (MACS) tailored explicitly for the public sector, with the objective of overcoming practical hurdles and raising the overall standard of data utilization.

Moreover, the trend towards integrating management accounting practices in public organizations not only aids in nurturing long-range strategic planning endeavours but also assumes a pivotal role in appraising program effectiveness and ensuring that financial activities are in harmony with the overarching public policy goals. The domain of accounting in the public sector plays a vital role in upholding financial rectitude, guiding budgetary planning schemes, and ensuring rigorous compliance with statutory directives, thereby making significant contributions to fortifying financial stability and boosting economic undertakings at various governmental echelons. Furthermore, the evolution of accounting practices in the public sector continues to shape the landscape of financial governance by fostering transparency, accountability, and efficiency in resource allocation processes.

Management accounting is beneficial for anticipating future outcomes, organizing resources logically, conducting thorough analysis, making timely decisions, and ensuring continuous monitoring, all with the ultimate objective of achieving optimal production efficiency. By harmonizing with public policy goals, management accounting in the public services facilitates activities such as budgeting, cost analysis, and performance evaluation in a manner that mirrors the distinctive attributes of the sector and the overarching mission of serving the public welfare.

# 2. Attributes of Managerial Accounting in the Public Sector

There has been ongoing discourse surrounding the functions and attributes of public sector accounting systems, often associated with historical perceptions of being slow and bureaucratic. In the late 20<sup>th</sup> century, public sector entities were often seen as slow, unresponsive, and overly bureaucratic compared to private sector counterparts. If a phasing out of the techniques and methods specific to managerial accounting was conducted, it would reveal that prior to 1970, the accounting of public entities focused on accurately recording economic activities to guarantee the accuracy of financial statements. This was done to monitor expenses and ensure adherence to budgets approved by funding sources [2].

According to Peters & Pierre, 1998 this perception led to the belief that the public sector was lagging in effectiveness [11]. Managerial accounting is important in all industries because estimating cost causation has always been an important part of the professional accountants' responsibilities. This involves identifying, classifying, and estimating the factors influencing a cost item's overall cost change.

During the 1970s, there was a significant increase in state institutions, leading to a burden on the general population. This growth prompted a shift towards a more efficient state, advocating for public sector reforms to integrate business principles and management strategies. The evolving relationship between public and private sectors has challenged the traditional role of the state as a controller. This shift was driven by the belief that market participants operate more efficiently than bureaucrats, leading to a restructuring of state organizations focusing on technical, value-based, and participation-cantered strategies.

This was followed by a shift from cash to accrual accounting by 1980, which allowed revenue and expenses to be recognised when incurred, not just when paid or received.

In the 1980s, OECD nations adopted new public management principles to address excessive costs and improve community services [13].

The introduction of management accounting in the public sector and the emphasis on measuring and evaluating

performance represent the core of the significant changes that occurred in the public accounting system in the last two decades due to the reforms of New Public Management [5].

The concept of the new public management is connected with a new era of transparent governance, focusing on results and performance.

In the context of the New Public Management reforms, public institutions have been under pressure to increase the efficiency, effectiveness and quality of their services by rationalising the use of available resources [5]. This paradigm shift has introduced new roles and responsibilities, aiming enhance efficiency. to decentralization, and the management of change within the public service. Moreover, it ensures transparency, accountability, and efficiency in the use of resources. By focusing on these aspects, the public services can strive towards achieving better results and delivering high-quality services to the citizens. It is evident that a regulatory framework oriented towards performance, sustainability, and transparency is essential for enhancing governance practices and promoting good stewardship of public resources. With a regulatory framework emphasizing performance, sustainability, and transparency, Romania is striving to ensure optimal utilization of resources while delivering highquality results [12].

The basic idea behind the value and participation approach is that public decision-making should involve stakeholders, not just the administrative body. Unlike new public management, this model focuses more on the civil sector than the business sector. Decision-making in this approach aims for consensus and extensive public input. This trend can be traced back to recommendations from the World Bank in the 1980s. Good Governance is defined as a political and institutional framework that upholds human rights, democratic principles, and the rule of law; it centres on transparent and responsible management of resources. Improving governance quality involves engaging stakeholders, ensuring transparency, and accountability [13].

The regulatory approach stresses the state's importance and its ability to influence behaviour through legal requirements, penalties for non-compliance, and incentives. There are overlaps among the three approaches. All emphasize transparency, accountability, and state oversight using similar organizational methods. The difference lies in the state's role: NPM aims to reduce it, the neo-Weberian approach aims to strengthen it, and Good Governance stresses its role in balancing societal factions [13]. Despite some similarities in state theories, they are not completely contradictory. The main goal remains the same: establishing a proficient, effective, transparent, and accountable state. Transparency requires that public services be handled openly [13].

By examining the influence of trends such as New Public Management, Good Governance, and Good Government on accounting practices and managerial decision-making, this study aims to shed light on the pivotal role played by managerial accounting in this evolving landscape. The emergence of these trends has significantly influenced accounting practices and managerial decisionmaking within public services, adapting to the changing landscape of governance, democratization, and globalization.

Until the 1980s, democratic state structures were based on the Weberian bureaucratic model, but the focus shifted towards management approaches. Public sectors grew in size but faced inefficiencies, failing to meet societal expectations. However, with the evolution of governance spurred by democratization and globalization, there has been a shift towards decision-making that is less state-centric.

Between 1990 and 2000, the implementation of cost accounting was initiated to oversee and manage costs at both activity and project levels. This enabled a more thorough examination of the efficiency and effectiveness in resource utilization, being created performance indicators for assessing accomplishments against set objectives.

We consider it appropriate to present the findings of a study by Lapsley and Miller, which critically reviewed the literature on public sector accounting. In this study, for the period 1998-2018, there were identified five key approaches or modes of theorising in the studies of public sector reform: New Public Management, Governmentality, Reform Processes, Actor-Network Theory, and Institutional Theory. From an accounting point of view these approaches were divided into two periods - one marked by high intensity (1998-2007) and another characterized of lower intensity (2008-2018), but with very reflective and consistent quality research in the field of public sector accounting. However, there are still a lot to be done in this respect, even though there are several researches in the field [8].

Therefore, management accounting techniques and principles are put into practice to support the organization in achieving its goals through enabling well-informed decision-making [7].

Studies highlight the significance of incorporating cost accounting tools to improve decision-making practices, leading to increased efficiency and effectiveness in the development of public policies.

Efficiency is the ratio of outputs to resources utilized, while effectiveness is the correlation between outputs and impacts. Management accounting aids stakeholders in decision-making by providing economic information.

Despite the challenges faced in cost analysis and the complexities of the accrual approach, a robust accounting system remains crucial for ensuring responsible and efficient use of resources in public services. Moving forward, continued emphasis on accountability and the judicious application of management accounting principles will be key in driving positive impacts and outcomes [13].

By conducting cost analysis, a deep understanding of resource allocation and the trade-offs involved is obtained, guiding decisions towards maximizing benefits for the overall welfare while also addressing broader societal concerns. Analysing cost implications comprehensively can provide decision-makers with valuable insights to optimize resource allocation and balance competing priorities effectively in public services.

### 3. Case Study

To illustrate how managerial accounting can contribute to the efficiency of public services we will consider how managerial accounting can be used to identify and implement strategies to reduce costs and thereby improve efficiency in the delivery of public services at the level of a nursery. The motivation for choosing the topic was the desire to identify ways to make a public service more efficient through costing, given the existing discussions on the underfunding of the education system and the need for evaluation, information and communication on the cost of education. All this can be achieved through management accounting.

In order to identify the information role for the management of a public entity, an essential element is the development of accounting policies, i.e. the set of procedures established by the management of each public entity, specialists in the economic and technical field, who know the specifics of the activity and agree on the strategy adopted by the entity, for all operations that will occur, from the preparation of supporting documents to the preparation of annual financial statements. The development of accounting policies must be based on legal accounting concepts, accrual accounting and not least accounting principles.

In Romania, during the communist period, nurseries functioned as sanitary units, so the focus was placed on health, and after the revolution they were turned into day centres, becoming social services, thus adding the care component. In recent years, the nurseries were subordinated to the local councils, belonging to the Social Assistance Directorates, within the ATUs, however, with the implementation of the " Educated Romania " Project, the concept of early education as an integrated system within the education system, pushes the activity of nurseries towards a systemic transformation, so that through the publication of GEO 100/2021 on amending and supplementing the National Education Law no. 1/2011, nurseries become part of the national education system as pre-school early education units. Nowadays, nurseries and kindergartens can function as educational units with legal personality, as structures attached to other educational units with legal personality or as groups within an educational unit with legal personality, according to Law 198/2023, the Law on preuniversity education.

When analyzing the information provided by managerial accounting, taking as a starting point the organizational and functional particularities of a nursery as a pre-school education unit, it is essential to consider various aspects. These include, but are not limited to, the human resource costs (other than salaries, which are borne by the state budget and are subject to significant legislative changes, as outlined in Framework Law no. 153/2017 on salaries of staff paid from public funds). In addition, the cost of stocks must be considered, which can be divided into two categories: the educational component, which includes teaching materials, games, furniture, and the component of support services, which includes food and cleaning materials,

as well as maintenance of premises. Furthermore, the cost of utilities must be taken into account too, particularly in terms of rational consumption, even if these costs are borne by the local budget. The managerial accounting of an educational institution that seeks contributions from beneficiaries (in our case study, this is the parents of the children attending the nursery) must also have as an objective the analysis of the fee structure. In this context, we present the standard cost method as a suitable approach to manage costs effectively and maintain quality standards for meal services within the cost limit.

Furthermore, even in the case of a public institution, it is essential to conduct an analysis of operational efficiency, which should include assessing the most effective utilization of resources, addressing and rectifying any negative deviations, and pinpointing opportunities for enhancing processes.

According to the Romanian legislative provisions, the sources of financing of a nursery are presented as follows: Source A, Title I personnel expenses = Fully from the State Budget, Source A, Title II goods and services = Local Budget and Source E = Activities financed entirely from own income. As far as we are concerned, we will turn our attention to the E funding source, which is self-financing on the basis of a cooperation contract concluded between the parents of children enrolled in the nursery for the provision of meal services. We have chosen this analysis because the other types of expenditure are covered either from the local budget (utilities, repairs and maintenance) or from the state budget through the standard/pre-school cost. The standard cost per pre-school/pre-primary/pupil for the expenditure on salaries, bonuses, allowances and other salary entitlements in money, established by law, as well as the related contributions, for the activity of the hostel/ dormitorycanteen, is calculated according to the number of pupils accommodated in secondary, high school, post-secondary and vocational education [6].

In this context, on the basis of a prescription drawn up by a paediatrician, the weight of food portions and menus for each day/child were drawn up and contracts were concluded with suppliers for the necessary food.

Currently, according to the legislative provisions in force, the accounting notes recorded within each month, related to source E, are drawn up by the accountant, but they are carried out only after a preliminary check with the import of data from the management accounting, and are as follows: -411.01.01.02.E.33.14 = 751.01.00.02.E.33.14 /debit

parents' contribution, for the previous month;

- 411.01.01.02.E.33.14 = 472.00.00.02.E / debit contribution from parents, in advance;

302.07.00.00.02.E

401.01.00.0001.02.E.68.50.50.20.03.01 / registration of amounts related to food invoices entered but not paid;

/record food consumption during the month or stock situation;

401.01.00.0158.02.E.68.50.50.20.03.01

770.00.00.02.E.68.50.50.20.03.01 / amount paid for invoices received from food suppliers;

- 562.01.01.02.E.33.14 = 411.01.01.02.E.33.14 / collection debit of parents' contribution debits with payment by bank transfer:

-531.01.01.02.E.33.14 = 411.01.01.02.E.33.14 / collection debit of parents' contribution debits with payment by cash with receipt;

- 581.01.01.02.E = 531.01.01.02.E.33.14 / internal transfer by depositing cash receipts within/to the treasury with deposit slip;

562.01.01.02.E.33.14 = 581.01.01.02.E / transfer to revenue account for money deposited within/to treasury;

For a good record of the items that can generate costs, the data recorded in the general accounting on the values of invoices, brought by suppliers based on orders, made by the manager must coincide with the values recorded in the management accounting based on the receipts of the goods, namely of food products. From the conducted analyses, it was noted that variations in food consumption might occur as a result of either saving or exceeding the allocated 10 lei per child per day for standard meal services. Favourable or unfavourable deviations must be highlighted separately. Each day's food consumption, starting from the set menu, is influenced by the attendance of children on that day, thus correlating expenses with the income to be recorded as a result of the value of the meal services provided.

To illustrate, we will take a concrete example by analysing the "Daily food list no. X dated N", a list which imports data, by value, into accounting, and which is kept both value-wise and quantitatively by product categories by the manager, in managerial accounting.

Tab. 1. Daily situation

FOOD:				1400 10 2		
NAME	1136	U.M. Quantity		Price	Value	
NAME	U.M.		Released		value	
RED PEPPER	v -	Requested 1	1	per unit 12,97	12.07	
ONION	Kg	3	3		12,97	
	Kg	-	-	3,16	9,60	
CEREALS 250		2,50	2,50	7,08	17,71	
CEREALS 500		4	4	14,17	56,68	
YOGHURT N.	Piece	52	52	1,58	82,18	
MILK C.	Piece	8	8	9,30	74,47	
APPLES	Kg	16,20	16,20	3,49	56,68	
CARROTS	Kg	3	3	3,48	10,57	
RICE S.	Piece	2	2	6,21	12,43	
BREAD F. 4000		5	5	2,61	13,08	
PASTA 200 GR		3	3	2,83	8,50	
PARSLEY	Kg	1	1	7,41	7,42	
CHICKEN BRE		3,60	3,60	31,75	114,25	
CHICKEN BRE	EAST Kg	0,60	0,60	31,74	19,05	
TOMATOES P.	Piece	1	1	7,63	7,63	
SALT 1 KG	Piece	0,10	0,10	2,39	0,24	
CELERY	Kg	1	1	3,48	3,49	
OIL F.	Piece	0,50	0,50	10,35	5,18	
TOTAL VALUE	E				512,13	
BREAKFAST, S	SNACK, LUNCH			No of portions	52	
CEREAL WITH MILK, YOGHURT-APPLES, BROTH SOUP			Aloc./ portion	10		
WITH PASTA, RICE PILAF WITH CU CHICKEN BREAST			Total allocation	520		
				Ove	rruns	Savings
	Total allocation for food/day:			520		Ū
SUMMARY:	Consumption resulting from the food list:			512,13		
	Overruns or savings resulting from today's list:			0		7,87
	Previous overruns and savings:			0		2095,11
	Total overruns and		0		2102.98	
				÷		,/0

Source: Created by the authors.

#### 4. Conclusions

The conclusions drawn from the analysis of the case study report, apart from the fact that they underline the link between managerial accounting (cost calculation using the

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standard cost method) and analysis of the performance of public services, are as follows:

- an important source of information from both a qualitative and an accounting point of view, as the food from which the three meals are prepared in a day is presented, both quantitatively and in terms of value;

- organising the menu for the three meals, so that it is in line with the doctor's indications;

- allows tracking the correlation between the number of children attending nursery school that day and the cost of meal services, an aspect which must be monitored to ensure the efficiency of this service by means of good communication between the persons responsible, the digitalisation of this activity being also indicated;

the standard cost of a full-day menu for each child is 10 lei;
the total standard cost/day for the 52 portions, which totals 520 lei;

- the total effective cost/day for the 52 portions, including the consumption resulting from the food list, which amounts to 512,13 lei;

- the deviations from the standard cost, in this situation being positive and amounting to 7.87 lei;

- the cumulative previous deviations, up to the present date, amounting to 2,095.11 lei;

- total deviations amounting to 2,102.98 lei.

In a context of high financial crisis and budgetary constraints, the emphasis on managing and optimizing resources grows, resulting in a demand for an accounting information system that offers insights into costs related to activities, products, and services, as well as metrics for efficiency and effectiveness [5].

In the context of defining the role of managerial accounting for public entities, we consider it appropriate to address the following aspects: its contribution to the improvement of the decision-making process (facilitating the identification of necessary resources for providing quality public services and their rational utilization based on strategic or operational priorities) [3], enhancing the transparency of the use of public funds (the reports generated by management accounting allow detailed monitoring of expenses and revenue and compliance with the three E's principle in their use) [10], enabling real budgeting of public entities (developing realistic and well-supported budgets, maintaining continuous budget implementation, detecting potential deviations, and allowing prompt adjustments to sustain financial balance), helping the public entities in achieving a higher level of performance and a better responsiveness to community needs [1], and last but not assisting economic entities in managing crisis least. situations (the most recent example being the Covid 19 crisis) [9].

### 5. References

[1] Brignall S., Modell S: "An institutional perspective on performance measurement and management in the 'new public sector", Management Accounting Research, 11, No. 3, p. 281-306, 2000.

[2] Broadbent J., Guthrie J.: "Public sector to public services: 20 years of "contextual" accounting research", Accounting, Auditing & Accountability Journal, p. 129-169, 2008.

[3] Cuganesan S., Dunford R., Palmer I.: "Strategic management accounting and strategy practices within a public sector agency", Management Accounting Research 23, No. 4, p. 245-260, 2012.

[4] Frias A., Conceição A., Lourenço C.: "Designing and implementing a hybrid management accounting system in a public sector organization", European Journal of Applied Business Management Special Issue IWAT, p. 14-32, 2023.
[5] Gomes P., da Costa Carvalho J.B., Fernandes M.J.: "As consequências da adopção das normas internacionais de contabilidade pública na contabilidade de custos: o caso português", XXII Congresso Brasileiro de Custos – Foz do Iguaçu, PR, Brasil, 2015.

[6] HG.68. "Hotărâre privind aprobarea normelor metodologice pentru determinarea costului standard per antepreșcolar/preșcolar/elev, pentru finanțarea de bază a unităților de învățământ preuniversitar de stat", 2024.

[7] Hossein S., Gholamreza K., Hossein K.: "The Role of Management Accounting in Improving Management Control System in Public Sector", IFA 6, No. 1, p. 54-82, 2022.

[8] Lapsley I., Miller P.: "Transforming the public sector: 1998–2018", Accounting, Auditing & Accountability Journal, p. 1-53, 2019.

[9] Leoni G., Lai A., Stacchezzini R., Steccolini I., Brammer S., Linnenluecke M., Demirag, I.: "Accounting, management and accountability in times of crisis: lessons from the COVID-19 pandemic", Accounting, Auditing & Accountability Journal 36, No. 6, p. 1305-1319, 2021.

[10] Napitupulu I.H.: "Internal Control, Managers Competency, Management Accounting Information Systems and Good Corporate Governance: Evidence from Rural Banks in Indonesia", Global Business Review, p. 563-585, 2023.

[11] Peters G.B., Pierre J.: "Governance Without Government? Rethinking Public Administration", Journal of Public Administration Research 8, no. 2, p. 223–243, 1998.

[12] Ștefănescu A., Trincu-Drăgușina C.P.: "Performance audit in the vision of public sector management. The case of Romania", Accounting and Management Information Systems 19, no. 4, p. 778-798, 2020.

[13] Tóth B.: "Why and how can managerial accounting be relevant in the public sector?", Public Goods & Governance 7, No. 1, p. 24-39, 2022.

