THEORETICAL FRAMEWORK OF COST ACCOUNTING AND FIRM PERFORMANCE

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ABSTRACT: *This paper explores the foundation of cost accounting and its impact on firm performance, emphasizing the importance of financial information for planning, financial control and tax compliance. Emphasis is focused on environmental cost accounting as mean of improving corporate decisions by integrating environmental considerations and management accounting practices as an essential tool for sustainability and competitiveness in today's economic context. By analyzing the structure and principles of cost accounting, the paper highlights the distinctions between different types of costs and the allocation approach, providing a comprehensive perspective on how accounting practices directly influence the performance and efficiency of firms. Finally, future research directions are suggested, highlighting the importance of continuous exploration of this vital area for effective corporate resource management.*

Keywords: *cost accounting, centers, performance, firms*

JEL Classification*: M40*

1. INTRODUCTION

For future operational purposes, companies require the information elaborated in financial reports. This data is necessary for several purposes, for instance planning and controlling the company's finances, assessing performance, and checking solvency and taxes due (Gale and Stokoe, 2001; Gale, 2006; Al-Delawi et al., 2020; Murti, 2023). Additionally, the company's financial reports emphasis on cost control, which is linked to environmental and accounting facets. In particular, environmental costing highlights the importance of identifying and reclassifying environmental influences and costs to support improved decisions (Okafor et al., 2013; Chaudhry et al.,2020; Sari et al., 2021). The implementation of environmental cost accounting is likewise a phase of the company to design an environmentally responsive accounting system and supports the collection of information regarding the reclassification of environmental costs: material flows, social responsibility and cost accounting related to sustainable development (Zeng et al., 2019; Okafor et al ., 2013; Chaudhry et al., 2020; Afifa et al., 2021).

On the other hand, management controlling practices implemented in companies can support the accessibility of significant and effective data for managers, especially to maintain the sustainability of companies in the present global competition (Sunarni, 2013; Shahzadi et

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al., 2018; Bartolacci et al., 2020; Oyewo, 2021). In addition, Pavlatos and Kostakis (2015) stated that the recent worldwide economic situation, mainly influenced by the climate of financial recession, has highlighted the need to implement management controlling practices for continuous improvement and maintaining profitability to cope with market dynamics (Sunarni, 2013; Shahzadi et al., 2018; Pelz, 2019; Oyewo, 2022). Furthermore, Farouk Abdel and McLellan (2017) found that management controlling practices determine a significant influence on the performance of a company. Therefore, management controlling practices are considered comprehensive for various reasons in an organization's perspective, for instance cost control, strategic planning, resources and operational actions, and are considered complementary methods to managing the many mechanisms of organizational performance (Al-Delawi et al., 2020; Wagner et al., 2021). Islam and Kantor (2005) described management controlling practices as approaches of management accountants that apply present approaches and techniques to provide management controlling data to managers in carrying out their management functions (Lepistö et al., 2020). Over the last 40 years, numerous studies have been carried out in the area of management controlling. The development of management controlling refers to the professionalization of the function.

We believe that the present research provides a better understanding of this topic and suggests some future research directions in the field of management controlling. After a detailed analysis of cost concepts, the research highlights conclusions, limitations, and suggests areas that future researchers should further explore.

2. SCOPE AND ROLE OF COST ACCOUNTING

For a better understanding of the topics covered and to shed light on the main concepts, we review the main aspects covered by cost accounting and company performance.

Since the aspect of spending money is in the foreground with this financial variable that dominates household management, yet the aspect of consumption is decisive in business practice. A distinction must be made between capital-forming expenses and income-generating expenses as to be transferred to the concept of business management of costs (Abernethy et al., 2019). The distinguishing criterion in this case is the consumption time.

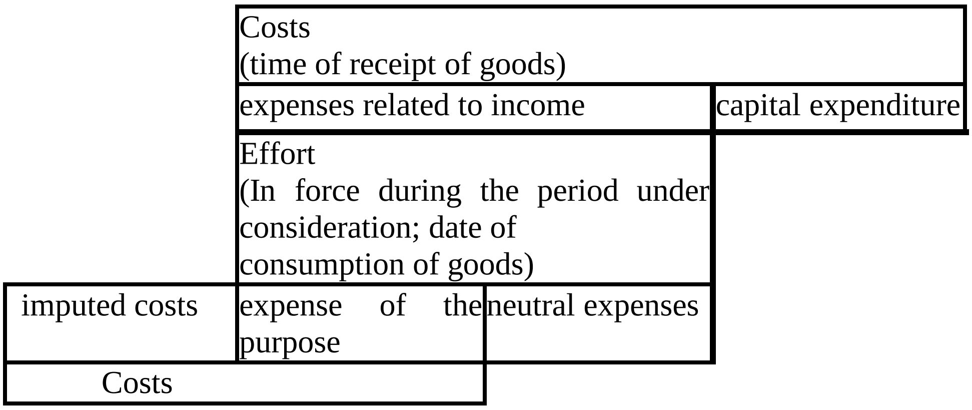
In the case of capital formation expenses, the purchased goods are used only at a later time. They do not include any direct depreciation, however representing only a transformation of funds into material resources. They flow into a business administration system and into a storage account. Capital formation expenses are therefore present if the purchased goods represent an increase in fixed or current assets. Depreciation is taken into account at the time of consumption as imputed costs in cost accounting (Afifa et al., 2021).

In the case of expenses that affect income, on the other hand, the consumption of production factors or services provided by third parties coincides with the occurrence of associated expenses (Oliveira Fontenelle et al., 2021). The part of effort that is causally related to the company's performance process is called intentional effort (Al-Delawi et al., 2020). All other expenses are summarized as neutral expenses and are not included in the cost calculation. The sum of operating expenses and imputed costs form the total costs of a company.

From this distinction follows the subsequent definition of the cost concept: Costs are defined as the value expressed in money of goods consumed and services used, insofar they are necessary for the provision of services and can be allocated to the billing period considered.

It should be emphasized that there is no generally accepted definition of the concept of costs, since cost accounting is always a tool with a purpose and must be designed in a way appropriate to the defined objective. The concept of costs must therefore be structured according to the accounting objective pursued. The following figure illustrates the described derivation (figure 1):

Figure 1 The relationship between expenditure, effort and cost

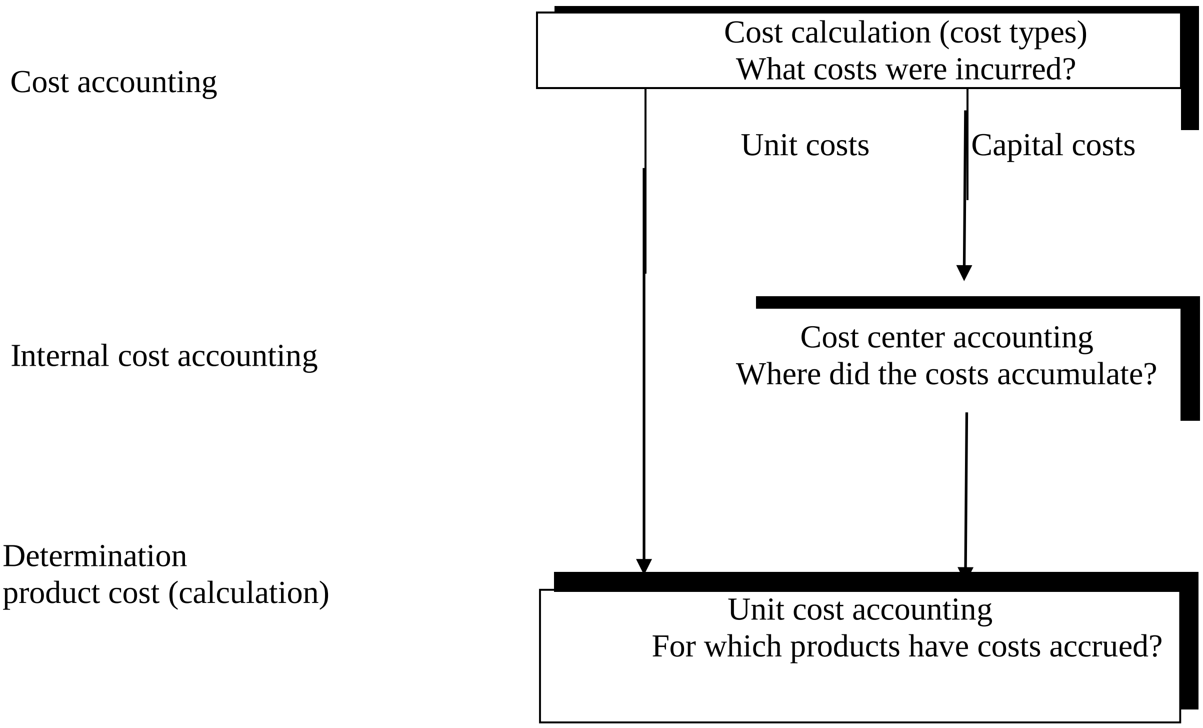


In the following, we present the formal structure of a cost accounting system and it's different forms will be highlighted. Cost accounting systems used in business practice are grounded on three basic elements:

- the type of costs,
- the cost center,
- and the unit cost.

The cost type is designed as a recording system, all primary costs incurred during operation are recorded and broken down into cost types. Cost unit overhead is assigned to cost centers within cost type accounting and cost unit direct costs to cost units without going through cost center accounting. A cost center is perceived as the accounting units of the company. In general, cost units are any independent unit of service or product. The three elements of cost accounting are interdependent and therefore must demonstrate structural equality. The basic scheme of cost accounting is shown in the figure below (figure 2).

Figure 2 Cost accounting



As follows, the various possible classifications of the cost concept are presented and discussed.

3. FIXED AND VARIABLE COSTS

Costs can be separated into fixed and variable depending on the ability to influence them in he short term. In principle, when distinguishing between fixed and variable costs, there is need of specifying as to which influencing variable the costs are fixed or variable.

Fixed costs are the ones whose value does not change with employment. They can only be influenced by a change in the company's capacity. Fixed costs arise mainly from maintaining operational readiness. Therefore, they are also called preparation costs.

Variable costs, on the other hand, summarize costs, the value of which depends only on employment. Variable costs can be further divided into proportional, progressive and regressive. Proportional costs react in the same ratio as the occupancy factor. Progressive costs change more than the baseline benchmark, while declining costs change less. Regressive costs behave in the opposite direction to the underlying influencing variable, therefore, costs decrease with increasing occupancy.

Although theory and practice distinguish between variable and fixed costs, it should be noted that on longer periods all costs tend to be variable, since in long timelines run also fixed costs can also be adjusted based on employment through changes in capacity. This fact also directly affects the type of cost accounting system used. The great advantage of partial costing is precisely the calculation of short-term earnings, since only variable costs are taken into account.

➢ Individual costs and overheads

As the costs can be attributed directly or indirectly to the services or products provided, they are called individual costs or overheads.

- Individual costs: - can be assigned directly to the products or services created (cost bearers).
- Overhead costs: - can only be charged indirectly to cost units using cost center accounting.

In principle, as many costs as possible should always be charged as individual costs to ensure a high degree of accuracy in cost accounting (Lepistö et al., 2020). When dividing into individual costs and overheads, it is important that the separation is done consistently in all areas of cost accounting, otherwise double counting of costs might be encountered.

➢ Costs related to the factor of production

Depending on the type of production factors consumed, the concept of costs can be subdivided as follows:

- Personnel costs: include all costs incurred in performing HR functions. In addition to direct wages and salaries, so-called auxiliary wage costs are included in personnel costs. This includes all additional statutory and voluntary costs.
- Material costs: All costs for materials that are physically used in the production process are included in this category. Depending on the type of use, the material concept can be further subdivided into raw materials, auxiliary materials and operating materials.
- External Costs: are incurred when the operation or administration uses services from other business units.

- Capital costs: In addition to the types of costs listed, the costs related to the capital engaged must also be considered in the cost calculation.
- Primary and Secondary Costs: A cost distinction that is particularly important for cost accounting is the division into primary and secondary categories. Primary costs are understood as the ones that the company incurs by using goods, services and other factors of production from outside. These costs are recorded in cost accounting and, if they are individual costs, further allocated to cost units. Provided the costs are overhead, they are included in cost center accounting. Secondary costs, on the other hand, are generated for internal services. They are not offset by any expenses or payments, as they reflect the re-use of the goods or services produced by the business. Each cost type is made up of several primary and/or secondary cost types. Secondary costs are offset in cost center accounting.

4. PRINCIPLES OF COST ACCOUNTING

The task of cost accounting is to record all costs and allocate them according to their cause. The basic purpose of cost accounting is therefore the realistic and value-based representation of the use of goods. It serves primarily to document operational events and internal information. These results are mandatory requirements for the development of cost accounting, which are briefly outlined below.

Cost recording principles: The basic principle of cost accounting is the congruence between the costs actually incurred and the figures recorded in the cost accounting. In addition, the recording of costs must comply with the subsequent principles:

- Completeness: all costs must be recorded;
- Accuracy: costs must be recorded with as accurate as possible;
- Timeliness: costs should be recorded as soon as possible after they are incurred.

Of course, not all three principles can be fully fulfilled at the same time. Another principle to bear in mind when recording costs is the "principle of efficiency"; any information gain must be commensurate with the additional costs incurred.

Principles of cost or distribution accounting: When recording using cost element accounting, these are distributed in cost object accounting. Different principles must be followed when distributing, depending on the desired information and billing objectives:

- Principle of causality of costs: Allocation must be made to the bearers of costs that caused them. Defining the costs caused by the provision of the service is of central importance when applying this principle. There are different opinions on this matter in the literature. Proponents of partial costing argue that only variable costs can be allocated to cost units in accordance with causality. On the other hand, total cost accounting strives, as much as possible, for a causal distribution of fixed costs. The extent to which causality-based cost allocation is possible is questionable and depends on the application.
- Carrying capacity principle: Costs that cannot be directly allocated based on who caused them must be allocated to cost bearers using a proportional distribution key. Overhead is allocated to individual services based on their contribution margin. This principle assumes that overhead costs should be allocated to services based on their viability.

The principle of averaging evenly distributes overhead costs among all services by averaging. As can be easily seen, this type of cost allocation is inappropriate for multi-product companies because the principle of cost causality is violated by the uniform distribution of overhead costs among individual cost units.

- **Cost center accounting**

Cost center accounting is the allocation based oncost type. The primary task of cost center accounting is to distribute elements recorded in cost accounting to where they originate. An additional function is represented by determining allocation rates for distributing overhead costs to cost units and monitoring compliance with budget specifications for cost centers. Through cost center accounting, all overheads that cannot be directly assigned are recorded and prepared for clearing. It thus combines cost type accounting with cost unit accounting (Wagner et al., 2021).

The structure of cost centers must be individually adapted to the organization of the company or administration. In most companies, therefore, classification according to organizational functions prevailed. In a manufacturing firm, functional breakdown results in cost centers of materials, sales, administration, research and development, and production, with the same or similar activities grouped together. Ideally, cost centers, which are broken down by function, coincide with areas of responsibility so that the cost center manager can immediately identify budget deviations and intervene to control them. The level of detail depends on the need for information and must be individually aligned with the objectives of cost accounting. In this case, taking into consideration the whole concept of cost accounting, the principle of economy must also be observed.

Each cost centre breakdown must also meet the following criteria:

- The structure must be clear to be able to allocate all costs to cost centres using accounting assignment documents
- The structure must allow an economic accounting of costs
- Costs must be able to be assigned to cost centres based on where they were incurred. This applies to both primary and secondary cost distribution. Also, it is compulsory to find reference values for both stages, as basis on which costs can be compensated
- To enable a control function, each cost centre should represent its own area of responsibility.

5. CONCLUSIONS

As major ideas this paper on cost accounting and firm performance underlines some essential aspects for the management's effectiveness within company. First, detailed financial information, including financial statements and cost control, is vital for strategic planning, performance evaluation, and tax compliance. Environmental cost accounting emerges as a key element, encouraging companies to integrate sustainability considerations into the decision-making process, thus contributing to more environmentally responsible management.

On the other hand, management accounting practices have proved to be fundamental instruments to continuous improvement and maintaining competitiveness in the face of global market challenges and economic changes. These practices provide a solid foundation for cost control, strategic planning, and resource optimization, with a direct impact on overall company performance.

The detailed analysis of different types of costs, as well as the structure and principles of cost accounting, reveals the importance of a deep understanding of how costs are allocated and managed within an organization. The distinction between fixed and variable costs, individual costs and general expenses, as well as the different costs related to production factors, highlights the complexity and the need to adapt accounting practices to the specifics of each company.

The principles of cost accounting and the effective implementation of cost center accounting are the foundation for the accurate and responsible allocation of resources, enabling managers to better monitor and control costs, thus making informed decisions to optimize performance.

In conclusion, cost accounting and associated managerial practices are essential for the strategic and operational management of companies, contributing to long-term sustainability and success in a dynamic and competitive business environment. The study also highlights the importance of continuous research in this area to develop new approaches and practices that respond to contemporary challenges in cost management and corporate performance.

REFERENCES

1. Abernethy, M. A., & Wallis, M. S. (2019). Critique on the “manager effects” research and implications for management accounting research. *Journal of Management Accounting Research*, 31(1), 3-40.
2. Afifa, M. M. A., & Saleh, I. (2021). Management accounting systems effectiveness, perceived environmental uncertainty and companies’ performance: the case of Jordanian companies. *International Journal of Organizational Analysis*, 30(2), 259-288.
3. Al-Delawi, A. S., & Ramo, W. M. (2020). The impact of accounting information system on performance management. **Polish Journal of Management Studies**, 21(2), 36-48.
4. Bartolacci, F., Caputo, A., & Soverchia, M. (2020). Sustainability and financial performance of small and medium sized enterprises: A bibliometric and systematic literature review. *Business Strategy and the Environment*, 29(3), 1297-1309.
5. Chaudhry, N. I., & Amir, M. (2020). From institutional pressure to the sustainable development of firm: Role of environmental management accounting implementation and environmental proactivity. *Business Strategy and the Environment*, 29(8), 3542-3554.
6. Dobroszek, J., Zarzycka, E., Almasan, A., & Circa, C. (2019). Managers’ perception of the management accounting information system in transition countries. *Economic research-Ekonomska istraživanja*, 32(1), 2798-2817.
7. Gale, R. (2006). Environmental costs at a Canadian paper mill: a case study of Environmental Management Accounting (EMA). *Journal of Cleaner production, 14*(14), 1237-1251.
8. Gale, R. J., & Stokoe, P. K. (2001). Environmental cost accounting and business strategy. *Handbook of environmentally conscious manufacturing*, 119-136.
9. Islam, M., & Kantor, J. (2005). The development of quality management accounting practices in China. *Managerial Auditing Journal*, 20(7), 707–724.
10. Lepistö, S., Dobroszek, J., Lepistö, L., & Zarzycka, E. (2020). Controlling outsourced management accounting to build legitimacy. *Qualitative Research in Accounting & Management*, *17*(3), 435-463.
11. Murti, C. D. (2023). What is Known About Environmental Cost Accounting? Systematic Literature Review. *Journal of Accounting and Investment*, *24*(1), 84-100.
12. Okafor, G. O., Okaro, S. C., & Egbunike, C. F. (2013). Environmental cost accounting and cost allocation (A study of selected manufacturing companies in Nigeria). *European Journal of Business and Management*, *5*(18), 68-75.
13. Oliveira Fontenelle, A., & Sagawa, J. K. (2021). The alignment between management accounting and lean manufacturing: rhetoric and reality. *Journal of Business & Industrial Marketing*, 36(8), 1322-1343.

14. Oyewo, B. M. (2021). Outcomes of interaction between organizational characteristics and management accounting practice on corporate sustainability: the global management accounting principles (GMAP) approach. *Journal of Sustainable Finance & Investment*, *11*(4), 351-385.
15. Oyewo, B., Ajibolade, S., & Obazee, A. (2019). The influence of stakeholders on management accounting practice. *Journal of Sustainable Finance & Investment*, *9*(4), 295-324.
16. Pavlatos, O., & Kostakis, H. (2015). Management accounting practices before and during economic crisis: Evidence from Greece. *Advances in Accounting*, 31(1), 150-164.
17. Pelz, M. (2019). Can management accounting be helpful for young and small companies? Systematic review of a paradox. *International Journal of Management Reviews*, 21(2), 256-274.
18. Sari, R. N., Pratadina, A., Anugerah, R., Kamaliah, K., & Sanusi, Z. M. (2021). Effect of environmental management accounting practices on organizational performance: role of process innovation as a mediating variable. *Business Process Management Journal*, 27(4), 1296-1314.
19. Shahzadi, S., Khan, R., Toor, M., & ul Haq, A. (2018). Impact of external and internal factors on management accounting practices: a study of Pakistan. *Asian Journal of Accounting Research*, *3*(2), 211-223.
20. Sunarni, C. W. (2013). Management Accounting Practices and The Role of Management Accountant: Evidence from Hotel throughout Yogyakarta, Indonesia. *Review of Integrative Business and Economics Research*, 2(2), 616-626.
21. Wagner, J., Petera, P., Popesko, B., Novák, P., & Šafr, K. (2021). Usefulness of the budget: the mediating effect of participative budgeting and budget-based evaluation and rewarding. *Baltic Journal of Management*, 16(4), 602-620.
22. Zeng, L. X., He, P., & Shi, J. P. (2019). Problems and countermeasures in environmental cost accounting: A case study of China's coal industry. *E3S Web of Conferences*, 83.