SUMMARY OF THE PHD THESIS

Costing in the international theory and practice perspective

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Managerial accounting, management accountants, skills and competencies, costing and cost accounting, cost calculation methods, decision making process, decisional models, managerial decisions, managerial instruments and techniques, budgets, tableau de bord, balanced scorecard, performance evaluation and measurement, the evolution and development of managerial accounting in Romania, managerial and cost accounting practices and techniques in Romanian companies, cost accounting information and their use in the decision making process, general framework, the management accountant in Romania.
Introduction

On global level as well as on local, researchers (Treece, 2000; Hamilton, 2003; Vamosi, 2003; Albu, 2005) consider that hypercompetition and globalization are the two phenomena that generate complexity in business environment. These phenomena not only create a state of disorder and turbulence in the competitive environment but modify the conditions of the market, bring change and development in organizations. Under these conditions companies around the world need to permanently update their products and services to fit the markets demands; they need sophisticated production processes, flexible internal processes to be able to react quickly to the changes of the environment.

These phenomena leave their marks on the accounting systems and the way that financial and managerial accounting is organized. Researchers (Anthony, 1989; Burns&Scapens, 2000; Pierce&O’Dea, 2003; Vamosi, 2003; Burns&Baldvinsdottir, 2005; Jarvenpaa, 2007) treats these aspects with special interest and there are a few, who suggest that due to competition and globalization, technologies, great speed of development (e-commerce and internet); liberalization and privatization of markets; appearance of competition in case of markets and products affects managerial accounting. It needs to deliver information that helps the change of organizations. Managerial accounting has to undergo to a procedure of „unlearning certain old operations” (Albu, 2005), it has to give up its role of “watchdog” or “scorekeeper” (Jarvenpaa, 2007) having to learn new practices to become an active consultant of management and a permanent participant of the decision making process (Burns&Baldvinsdottir, 2005).

Before becoming the consultant and the partner of management in the decision making process, managerial accounting has to pay special attention to cost studies. Cost calculation, cost analysis and control, cost optimization and then validation of information concerning costs are essential, because any organizations success, “from the corner shop to the largest multinational company” (Horngren et al, 2003), need the concepts, practices and methods of cost calculation.

In Romania, changes generated by globalization, the intensification of competition, technologies of production processes have penetrated more slowly, because the economic-political context and the development of the economy. Due to the same motives, managerial accounting has had a slower evolution as well than it had on international level. Along time, managerial accounting in Romania has met developments and studies, modern methods and instruments of administration that have been praised on international level have appeared in our country as well. Despite these appearances and modifications, researches in this domain “are very few and fragmented and study instruments from a certain technical point of view, without developing connection with the organizational context” (Albu, 2005).
We consider these changes and modifications, on national and international level, as a motive and challenge for any passionate researcher in the managerial accounting domain. Driven by the will to create an added value in a domain that is beautiful but difficult to research – managerial accounting – and by the will to gain knowledge useful in the academic circle as well as in practice, we propose the realization of the following objectives:

- **The first objective** followed is the presentation of the conceptual approach referring to the organizations and its functions; the place and function of managerial accounting in the informational system of organizations; the place, function and importance of managerial accounting in the activity of organizations, in the decision process and emphasizing the role of expertise in managerial accounting. The clarification of these conceptual aspects takes place in the first chapter, starting with the analysis of international specialty literature, referring to inland literature.

- **The second followed objective** is the presentation of the conceptual approach on cost calculation, methods and techniques of existing calculations. Having the existing literature, on international and national level, as a starting point, in chapters 2 and 3 we wish to offer a general image on the existing calculation methods with the help of comparisons; the advantages and disadvantages of existing methods; case studies referring to practices of organizations from around the world.

- Throughout the **third objective** we focus on the decisional process, analyzing and presenting methods and instruments with the help of which managerial accounting and cost calculation play an important role as consultant and partner of leaders in decision, planning and control processes. The presentation of decision processes and decision methods; the diversity of management decisions made on the basis of information delivered by cost calculation; of specific instruments useful in the decision process takes place in the 4th chapter.

- **The final objective** of this scientific statement is represented by an empirical study of managerial accounting and cost calculation in case of Romanian organizations. In chapter five we wish to present the Romanian reality concerning managerial accounting and cost calculation through presentations: (1) history, evolution and current stage of these activities – the opinion of researchers; (2) the practical opinion, methods and instruments used by organizations that choose managerial accounting.
Debates on international level concerning the necessity and importance of managerial accounting and cost calculation are very intense (Zimmerman, 2001; Falconer, 2002; Lukka&Mouritsen, 2002; Lee, 2003; Modell, 2005; Lukka, 2005; Scapens, 2006; Jarvenpaa, 2007; Malmi&Grandlund, 2009), researchers being interested in obtaining answers to questions like: Why is the field of managerial accounting studied? What is the role and purpose of these researches? How is a decent research made on the theme of managerial accounting?

Why study managerial accounting?

The answer to this question is relatively simple. In the past years, due to the growth of competition, complexity of internal processes and the number of products and services resulted by these processes, managerial accounting has become indispensable organization, because it not only simplifies cost calculation but helps setting sale prices as well. It allows foresights to be made, gives instruments necessary for following decision execution, realizing stated foresights and organizational performance. The continuous change and development of economies, processes and organizational activities, conditions of production and sale of products and services leads to the permanent monitoring and development of procedures, methods, techniques and instruments of managerial accounting on a practical and theoretical level in order to be able to respond to the needs of organizations.

Research in the field of managerial accounting exists on the level of organizations from around the world; because it is a dedicated and intensely used practice.

What is the role and purpose of researches in the field of managerial accounting?

Research is made in order to answer the need of information of two categories of users:

1. **Researchers** – these are interested in the results of the research in order to understand certain phenomena, theories, methods and to create and develop new, modern instruments that comply with demands through content and utility.

2. **Practitioners** – in the opinion of specialists (Falconer, 2002; Malmi&Grandlund, 2009) the goal of research is to describe, explain and disseminate techniques and practices used by organizations from around the globe and to improve and clarify existing practices used on large scale, opening towards practice oriented research. Based on obtained, published and disseminated results, practitioners can obtains solutions and proposals to certain problems; can obtain a general image concerning practices and orientation of organizations from the whole world or from a certain domain; get solutions for adopting, implementing or contrary, giving up certain techniques, methods or instruments of work; can get leads on ways to develop future activities.
The figure below expresses the utility of research in the field of managerial accounting, presents existing channels of communication and ways to absorb results in practice. In all of the research cases, results gained by academics/researchers are absorbed in practice directly, through transmitting results to practitioners or indirectly, through educational process.

**Figura 1 – The use of managerial accounting research**

![Diagram](image)

*Source: Falconer (2002)*

**How can we create good and qualitative managerial accounting research?**

In the opinion of famous researchers (Zimerman, 2001; Lukka & Mouritsen, 2002) research in the field of managerial accounting is realized using a set of qualitative criteria that generate relevant and profound knowledge that lead to creating value. The three criteria are: theorizing, testing and rigour.

Analysis of specialty literature in any research process; studying and presenting the actual knowledge is essential because it is the only way to understand and explain theories, phenomena, and existing notions; on the other side it enables further development of researches, making hypothesis necessary to test certain sample and phenomena. Developed theories and hypothesis have to be tested, gained results have to be capitalized and published in order to obtain feedback from other researchers, practitioners or from the public. All these
actions, testing as well as theorization have to be realized with precision in order to be useful in both academic and practical use.

These three aspects so intensely debated on an international level, presented in the last chapters represent the starting point of our research.

The chosen domain of research is managerial accounting and cost calculation because it has a strong practical side. In scientific circles as well as among practitioners, accounting is the domain and instrument of knowing the economical reality (Matiș, 2005). Information delivered by the two components of accounting – financial and managerial – form the basis of decision processes in every organization. In the past few years globalization and the fast growth of competition have made managerial accounting’s and cost calculations role become more important. It has become an indispensable instrument in managing companies, making decision and following performance.

These benefic changes that appeared on international level made us focus our attention to national level, being tented to research and analyze aspects tied to the perception of academics and practitioners about managerial accounting and cost calculation.

Due to these changes we considered research in this domain necessary and followed the creation of knowledge and value useful to both academics and practitioners. In order to realize a quality research we proposed to start from theory, setting the theoretical and conceptual basis of the researched theme and then reaching the practice for studying behavior and practices of organizations.

Taking these aspects into consideration we elaborated the PhD thesis titled “Cost calculation through the prism of international theory and practice” with the objective of creating a general image of managerial accounting and cost calculation on an international level and following the evolution and development of the domain, practices and applied methods in case of Romanian organizations. In the same time we try to propose certain methods and practices for organizing managerial accounting, cost calculation and stating values of information within Romanian organizations. We also propose solutions for improving the managerial accounting system in our country.

After establishing the objectives of the research, the next step of the scientific progress is identifying the type of research (qualitative vs. quantitative) that best fits the studied domain. Qualitative researches are those that generate consistent information necessary for understanding the general context (Cristea, 2007); those that permit the outlining the primary aspects of the problem or theme and diagnosing the situation, identifying hypothesis for future causal or describing researches (Lefter, 2004), being used in profound researches. Quantitative researches have the role to define, characterize and quantify relevant aspects identified with the help of qualitative methods, those being used to quantify certain phenomena, to define some statistical data and to verify and test existing or developed theories.
This way, starting the specifics of the researched domain and the recital “a research that is going to stand in time should combine optimal research methods in order to get to the desired objective” (Cristea, 2007) we classify the scientific progress in the category of **qualitative research containing quantitative elements**:

1. *Qualitative research* refers to the conceptual setting of organizations and their role in the economy of a country; concept analysis of the two components of accounting: financial and managerial accounting; presenting the role and objectives of managerial accounting and cost calculation; emphasizing the role of managerial accounting and cost calculation in the process of decision making.

2. *Quantitative research* refers to comparative case studies used to present methods of cost calculation; reflecting the current stage of managerial accounting researches in Romania; to the empirical study that presents ways of organizing accounting, methods of cost calculation and instruments of management used in Romanian organizations.

The second aspect that needs to be clarified the identification of existing research currents and directions. This paper contains features of **positivist researches**, characteristics of social sciences that inspect the process of research as well as features of **constructive research** that assume the development of new theories, forming new hypothesis and the empirical validation of them.

**Research methods** used in this work are: analysis of documents, comparative method, participating and non-participating observation and questionnaires. We can observe that methods enumerated represent a combination of longitudinal and transversal methods, these being used to form the basis of the **descriptive research**, setting conceptual and theoretic aspects concerning managerial accounting, cost calculation and methods of valuing information, studying organizational behavior on national and international level, through the prism of practice, calculation methods and instruments of management used.

Starting from theory; concepts, models and existing methods in order to get to practice, make this research a part of the **deductive** group of researches that goes on to the **inductive** approach due to the transfer of theory and concepts into practice.

Information sources used to deliver this work contain: books of specialty, inland and international; articles published in famous magazines; laws; regulatory notices of national and international professional organizations; studies and researches made by different professional organizations.
**Synthesis of research and main conclusions**

As we have mentioned in the previous paragraphs the present scientific approach aims at generating useful knowledge in the field of managerial accounting, knowledge that should be useful both for the academic environment and in practice. In order to reach the established objectives we have conducted the present scientific approach in a five chapter structure.

In every research process the first stage consists of knowing the current research phase, developing a literature review in order to understand and explain existing concepts, phenomena and theories, and then moving forward the research phase.

Thus, within the first chapter entitled *Organizations: the place of managerial accounting and cost calculation* we focused on organizations and their functions, given the fact that in a complex, uncertain and highly competitive environment organizations remain competitive only if they benefit from an adequate knowledge management and organizational learning.

In a dynamic economic environment implied by globalization and increased economic, technical, scientific and educational competitiveness (Matiş&Mustaţă, 2004) organizations worldwide are indeed compelled to concentrate their attention and efforts towards activities regarding change, adaptation and development according to the new market requirements. Because the accounting field is an actual point of interest in the business environment, it did not “escape” these changes. The globalization of economies and capital markets, the emergence and development of multinationals, the need for comparability and compatibility of financial statements are only a few factors that led to the accounting harmonization and convergence process.

With the appearance and development of societies and multinational corporations a separation of stakeholders took place, namely the stakeholders with technical and professional knowledge of the firm’s functioning became separated from the stakeholders with money. This division has lead to a change of the information needs, interests in information supply and ways to obtain information (Fekete, 2009). The accounting profession has adapted to these changes also through a separation into two fields, strongly connected but different nevertheless:

- **Financial accounting** – is the field that offers reliable information on the economic processes and transactions in certain periods; it is dedicated to external users of financial information, especially owners.
- **Managerial accounting** – is the field that moves away from financial information disclosure and tries to meet the information needs of internal users, more exactly managers.

Over time change in organizational and management practices had a significant influence over accounting, especially managerial accounting. Managerial accounting evolved considerably through four consecutive development stages and several definitions, while having to face
dramatic change in the business environment, triggered by enhanced international economic relations, globalization or the evolution of technology and the production process. In connection to these aspects researchers believe that managerial accounting has become, or should become, an aid for management in the decision making process, because only based on information supplied by managerial accounting, managers can plan, analyze and control internal activities and processes; they can also establish long, medium or short term strategies; they have the possibility to manage resources efficiently and they can eliminate those activities that do not add value to the organization.

The managerial accounting professional is closely connected to managerial accounting. The practitioners are “constrained” by current conditions, namely increasingly high requirements of management, to change, to recede from the role of “data collector, accounts preparer and person who reports results”, thus becoming change advocates or business partners involved in the decision making process. They have to identify both the strong and weak points of the internal activities and processes, while supporting knowledge and value development at all hierarchical levels and maximization of organizational performance. In order to complete these activities one needs adequate knowledge in the field of: accounting, IT systems, management and marketing; proficiency and knowledge in the business field; personal competences (vitality, flexibility), communication and team work. The key to the success of any organization could be openness to knowledge and learning, disseminating ideas from all hierarchical levels through internal communication channels and collaboration.

In the second stage of our scientific approach we focus on the role of cost calculation, thus within Chapter 2 – Costing and cost calculation we aim at clarifying certain concepts and notions specific to this theme: definitions, concepts and notions, comments, clarifications and classifications of costs, expenses and their utility. We believe that cost calculation focused on control and decision becomes one of the main components of profitable management in organizations and at the same time represents a common interest both for financial and managerial accounting.

The main conclusion of this chapter is that through an integrated cost management system, managers are able to include cost calculation and analysis in the organization’s strategic approach in order to create a solid competitive advantage, thus contributing not only to the foundation of certain decisions regarding the product portfolio, but also to the set of micro-decisions that continuously lead to change in the organization’s strategy.

Many times, the organizational efficiency of a company depends on its capacity to manage costs. Often the solution does not come in the form of establishing methods and means for cost reduction but rather optimizing costs starting with the product design and development stage and ending with their selling stage. Precisely because of these arguments we believe that cost management needs to have a “front” place within each organization, it must be a compulsory element of managerial accounting because it provides highly detailed information to managers
which is used for planning, controlling and decision making while laying stress on the cost of products, activities or process in organizations.

In close connection to cost calculation we wanted to present the methods of cost calculation and bring forward once again the important role that these elements play in the strategic management of every organization. Thus, Chapter 3 – Cost systems and cost calculation methods presents in detail the current methods of calculation used by organizations worldwide.

After we have established the objectives, we went through the international and national literature, especially the existent literature on cost calculation methods, and we considered necessary a classification into three categories of the cost calculation methods: classic or traditional, advanced and modern. The classification criterion was the occurrence in time of the calculation methods and the techniques of cost calculation.

For each calculation method we presented the following aspects: definitions, concepts and characteristics; the process stages, advantages and shortcomings; the applicability in practice for organizations globally; the comparative analysis of the presented methods. The common characteristic of the presented calculation methods is that each of them starts to determine the production cost of a product or service beginning with the sum of expenses incurred during the activity. The calculation procedure is conducted within each method in consecutive stages, using specific working procedures.

The main conclusion resulted was that the presented calculation methods have both advantages and disadvantages; some are adequate for production entities and others for service providers; some methods determine the unit cost using the running cost for one hour/machinery or determine the equivalence coefficients while others determine activity costs within organizations and then allocate costs to products and services or, when establishing the costs, they begin directly with the selling price and profit margins expected after sale.

For the past years the literature has discussed intensely and questioned the utility of classic cost calculation methods because it is considered that these methods do not produce advantages anymore, as they are based on information provided by a system designed for an early technological era characterized by local and not global competition, when organizations provided standardized products and services, and the distribution rate, quality and performance did not represent essential elements for an organization’s success. Moreover, while using these systems managers do not obtain useful and relevant information in order to coordinate and improve activities and they do not benefit from precise and reliable information in order to coordinate strategic decision regarding processes, activities, services and customers.

In order to diminish the disadvantages of traditional methods, modern calculation methods were introduced, according to the new market conditions, which provide, besides financial information regarding product or service costs, other non-financial information regarding
internal processes, customer costs that allow cost analysis to be integrated in the entity’s strategic plan, supporting both decision making related to the products and services portfolio and a set of decisions which leads to change in the organization’s strategy.

The literature comprises many opinions in favor and against classic or modern calculation methods. In relation to the wide use of these methods we believe that, despite the multiple advantages presented, the majority of organizations all around the world are still in favor of classic calculation methods, as many managers stated their content regarding implementation methods and obtained results.

We believe that for organizations the modern or advanced calculation methods are not always the ideal solution, as they have to keep in mind a set of factors, priorities, objectives and strategies when they decide to implement one calculation method or another. This does not mean that once the calculation method has been chosen it cannot be changed. Managers do not have to settle for mediocre results; they must be open to change if they notice ways to improve results, when there is a possibility to optimize resource consumption and there are possibilities to obtain efficiently products and services designed according to the requirements of customers. In an ever-changing, transforming, developing, dynamic environment managers must not forget that sometimes implementing new cost calculation methods can result in improved internal production processes that imply quality products and services according to market requirements; focusing on and assessing organizational performance, and in the majority of cases precisely the orientation towards these aspects, represents the key to success.

After the clarification of the concepts regarding cost calculation, analysis and management, the presentation of calculation methods and organizational practices, in Chapter 4 – Using cost type of information in planning, decision making and control, we focused on the decision making process in order to analyze the variety of decisions that can be made based on cost information and to present the management tools which sum up information needed by management, namely a pertinent informing is conducted regarding the undertaken activities, the implementation of future plans, critical aspects that must be considered as they respond very well to the foundation and support of management decisions.

It is unanimously acknowledged that management decisions and the decision making process are key points in every organization, round which all activities and actions to collect, process, analyze, interpret, centralize financial information, and not only, revolve within an organization. Moreover, costs (their calculation, analysis and optimization) are important because the whole activity of an organization is reflected through costs and based on information regarding costs managers are able to decide whether to purchase, produce or remove the production of a certain product; they can manage the existent product portfolio; they can underlie and establish selling prices or identify needs for improvement either for products or production processes; the words of businessman Andrew Carnegie – “Watch the costs and the profit will have a big smile” were not spoken in vain.
The American economist Bertrand Thompson states that “for a manager the beginning of knowledge represents the exact understanding of the production cost”. Taking into account not only these advices but also the activities, diversified internal processes and the external economic environment characterized by competition, more and more managers focus on the role and objectives of managerial accounting and cost calculation because managerial accounting includes processes of identification, quantification, collection, analysis, processing, interpreting and disclosure of financial (and non-financial) information, used by management in planning, assessing and controlling the activities in the organization and for assuring the usage and adequate salience of its resources. In order to select the best working alternative, to make the most adequate decisions in the right place, at the right time, managers can and should make use of decision models that allow for a quick and precise action, a creative and fast approach and solution of unplanned decision problems or of those that occur under risk and uncertainty conditions.

Moreover, given the intensification of competition we believe that more attention should be given to the orientation towards market and customers in every organization, along with attention given to customer behavior, buying behavior patterns, customer profitability, decisions to attract new customers or renounce to old customers.

The cost calculation methods implemented in an organization may become useful and valuable instruments when establishing and analyzing customer profitability. Complete costs, partial costs or activity costs may offer managers useful information not only when establishing selling prices or managing the product portfolio but also, based on them, reports, presentations and graphs can be draw up which are useful for managers and marketing specialists for customers and customer profitability analyses. Furthermore, advanced cost calculation methods – the ABC method and target costing – are designed so that a customer profitability analysis can be easily conducted, with little intermediary calculations; they enable the identification and separation of customers into profitable and non-profitable categories; in addition they allow for an analysis of the profitability triggered by actions undertaken regarding customers, such as production, sale, distribution and connected services.

In chapter four we focus on presenting specific management tools used for elaborating and implementing organizational strategies and performances, such as the budget system, the budget dashboard and the balanced scorecard. These tools are efficient in the decision making process and in the process of tracking and assessing performance; they assure transparency of objectives and strategies in the results; they enable comparison between obtained and planned results; they assure communication and collaboration between hierarchical levels; they provide financial and non-financial information in the shape of systems of indicators, more or less balanced, that present a global image of the organization. This is the reason why, according to the conducted activity, the complexity of internal activities and processes, customer orientation, the management’s need for information, each organization should decide which management tool to adopt and implement.
The first four chapters of this paper are in fact a detailed presentation of the status of knowledge in the field of managerial accounting, cost calculation and organizational performance, mostly internationally. In order not to neglect the national level Chapter 5 – *Empirical study regarding managerial and cost accounting techniques within Romanian companies* is dedicated only to discussion, analysis and study of the evolution of managerial accounting and cost calculation; the current Romanian status of knowledge; models of structure and administration of managerial accounting in Romanian organizations; cost calculation methods implemented by Romanian organizations.

Following the conducted studies several conclusions result. Whether it was called *industrial accounting*, or *cost accounting*, or *administrative accounting* it is certain that concerns regarding expenses’ classification and analysis, production cost calculation, pre and post cost calculations, resource consumption administration have existed since the beginning of the 90s. As a result, managerial accounting in Romania has had a certain evolution, a little different and slower compared to the international evolution, as it has been strongly influenced by political and social regimes and the development of Romanian economy.

Over the years there have been attempts to classify certain notions and concepts, to present some cost calculation methods, to underline the need and utility of managerial accounting, to propose solutions for an improved managerial accounting system. The specialized books, articles and scientific papers of renowned professors and specialists of the Romanian academic environment stand proof. The year 2000 brings a more modern approach of managerial accounting and cost calculation.

Thus, given the economic and political context and the development stage of the economy, we were able to identify the following periods in the Romanian managerial accounting evolution:

- **The first period between 1830 and 1950** is characterized by the appearance and development of the cost calculation technique for production units. Practically, this is the period in which the bases of cost calculation and analysis are laid, along with definitions and clarifications of certain notions, classification of some expenses and costs, and clarification of structure and composition of the production cost. The period is characterized by monism and specialists make reference to *industrial accounting*.

- **The second period** identified in the evolution of managerial accounting corresponds to the socialist period between 1950 and 1989. In this period there are attempts to improve accounting and cost calculation. Planned cost calculation and afterwards actual cost calculation allows for the control and analysis of both production costs and expenses related to certain products. The notion of “complete cost” is extended and the absorbing calculation methods developed in this period are going to be built around this concept. Also in this period partial calculation methods are developed but only theoretically, with no implementation into practice. Likewise, this period is characterized by monism and specialists refer mostly to cost calculation.
After the fall of the communist regime the third period starts in the evolution and development of Romanian accounting. The year 1990 represents the beginning of accounting dualism. It is the year when financial and administrative accounting came into discussion. In this period the main concerns are related to the delimitation of the two fields and solutions for organizing the two types of accounting. The calculation, analysis and cost control in order to provide relevant information to managers remain essential objectives of administrative accounting, but also others are developed with focus of planning, resource allocation through budgets and management tools.

The forth identified period starts in 2000 and continues until present. This is the period in which the academic environment admits that the influence sphere of managerial accounting is much wider, it does not reduce only to cost calculation. In this stage new calculation methods are introduced in our country, methods that take into account the technical evolution of production processes, are market-oriented, and focus on meeting the needs of customers. Tracking and assessing organizational performance through the means of modern tools and techniques become major concerns for researchers. Thus, the notion “administrative accounting” is replaced by “managerial accounting” equally highlighting the role of this activity in the decision making process.

On the second level of our research we looked to present a global image of the current status of knowledge, thus we analyzed specialized articles published in periodicals and journals rated CNCSIS between 2000 and 2009.

We have chosen to analyze the articles published between 2000 and 2009 because of the following argument. In the communist period entities were preoccupied only with production cost calculation and accounting was organized in a monist system, and so, there were few documents and articles on this subject. After 1989 managerial accounting (administrative accounting) went through series of changes. After Law no 82/1991 came into force managerial (administrative) accounting remained “in the shadows” (Dumitru&Calu, 2008) because managers and accountants considered that its establishment is not compulsory, reason why the literature also neglected to a certain degree this aspect. But, after 1995 articles started to be published on technical and practical solutions regarding the organization and functioning of managerial accounting in a dualist system. After 2000 managerial accounting is approached modernly, Romanian specialists give increased attention to the international literature, advanced cost calculation methods, usage of information provided by managerial accounting in the decision making process, as articles and papers are issued on this subject. In addition, after the year 2000 the number of specialized papers and journals in Romania increases which proves that the academic environment and the Romanian researchers are interested in research, knowledge and learning.

Out of a total 935 periodicals and journals acknowledged by CNCSIS we have selected 44 specialized journals or periodicals having an economic theme. As a result of a detailed
analysis of the selected journals, because of the profile and the theme approached, we have eliminated 17\textsuperscript{1}, out of the 44 selected, leaving a number of 27 specialized journals, shown in the table below. Besides CNCSIS articles we have analyzed other periodicals and journals such as *Business Administration and Accounting Journal* and *Economy, Transdisciplinarity, Cognition Journal* published by “George Bacovia” University in Bacău.

The study includes articles dealing with managerial accounting topics separately, or dealing with managerial accounting topics together with other areas and topics which are closely related to it, such as financial accounting, management, marketing, decision making, management control, competitiveness and organizational performance. Moreover, within each article we were interested in analyzing three aspects: (1) the theme that was treated in the article, (2) the type of research that was applied: qualitative or quantitative, and (3) the origin of the authors, respectively.

The results obtained make us believe that there are concerns coming from academics, and sometimes from the practitioners, regarding managerial accounting and cost calculation, the increasing trend of specialty items coming as a proof, from 19 articles in 2000 to 80 in 2009. The topics covered in the article address sub-domains of managerial accounting (cost calculation, management tools, harnessing information). Moreover, the positive international influence is felt in what concerns the guidelines of managerial accounting, cost calculation methods tools used in the decision making process and the organizational performance measurement process. It is these influences that make us feel more optimistic about the evolution of Romanian research in managerial accounting and cost calculation.

On a third level we wanted to conduct a research from which the "voice" of the practice and practitioners would be heard. After analyzing the current stage of research we found that there is an upward trend in what concerns articles and specialized papers which have been published. Slowly, academics seem to recognize the importance and necessity of managerial accounting and cost calculation. Wishing to know if the same enthusiasm regarding these aspects is shared by practitioners, we developed a questionnaire on the organization and conduct of managerial accounting and cost calculation, addressing it to professional accountants, members of CECCAR. After processing the data obtained we found that Romanian organizations seem to recognize the importance and necessity of managerial accounting and cost calculation, as they are implementing managerial accounting systems. However, in implementing managerial accounting, organizations do not rely on current regulations and the proposed scheme, rather preferring to develop their own methods and techniques.

\textsuperscript{1} Some economic journals (*Romanian Journal of Economic Forecasting – CNCSIS A; Romanian Economy Journal – CNCSIS B+; Romanian Economic and Business Review – CNCSIS B+; Public Administration and Management Journal – CNCSIS B+; Annals of „Dunărea de Jos” University in Galați – CNCSIS B+; Review of Economic and Business Studies – CNCSIS C; and others*) have been eliminated from our study because, on the one hand they were written on subjects like: general economy, micro and macro economy, administration and management, and on the other hand, there were no articles written totally or partially on management accounting and cost calculation in the mentioned journals.
Another confirmed aspect is the Romanian organizations’ focus on cost calculation. Most of the questioned organizations associate managerial accounting to the calculation of costs, having concerns about the production cost or complete cost calculation, then using this information largely for the control and reduction of costs; to determine the selling price; in deciding the purchase or production of certain products, and, to a lesser extent, to design and develop products which are market-oriented and oriented to the requirements of customers; or to determine ways to improve products or internal production processes.

Many Romanian organizations, micro and small enterprises seem not to understand the importance of managerial accounting, neglecting in this way aspects related to the analysis of expenses, cost management or the implementation of procedures and methods to generate added value. Moreover, most organizations still apply traditional costing methods and do not "show signs" that they would prefer to implement modern or advanced methods of cost calculation. It is interesting that in a world of globalization and increased competition; of automation and the emergence of advanced production technologies; in the era during which the means of production and the production lines and replacing people, most Romanian organizations are not concerned with the implementation of advanced management systems; with product development to meet customer requirements; or with analyzing the effectiveness of activities and internal processes.

Managerial accounting still faces gaps, it is still considered "the poor relative of financial reporting, auditing and taxes", it is associated “and forever tied to an organizational role of calculating costs and budgeting” while managerial accounting is much more, being associated with the management process and the techniques oriented towards adding value in the organizations by using resources efficiently (Albu, 2006:30).

Moreover, the lack of interest from standard setters and the inexistence of more precise legal regulations on managerial accounting, the lack of a specialized professional body makes practitioners not pay the wanted attention to this area, very important in the "life" of any organization, rather making them focus their attention to what is strongly regulated and what is compulsory, i.e. financial accounting, taxation and financial reporting.

We believe that academics understand the importance and necessity of managerial accounting and cost calculation, having as a proof the evident increasing trend of journals and papers published in recent years. Their role is, from now on, to prepare, through courses, workshops, practical and thematic seminars, specialists in managerial accounting and to make the organizations aware of this accounting system’s component’s usefulness.

Managerial accounting needs professionals "armed" with skills and expertise; personal and interpersonal skills; who are willing to learn production and internal processes technologies; willing to work in interdisciplinary teams; being at the same time advisers and management consultants not only in the decision-making process but in the everyday work of organizations.
This "reform" should continue with more stringent regulations; interest from management; concern and commitment from managerial accounting professionals and cooperation and effective communication to / between all hierarchical levels within organizations, respectively. Only this creates a strong managerial accounting system which can become, at the same time, advisor for the management in the decision making process.

Moreover, we consider that globalization continues fierce competition and the growing momentum of organizations will be felt among Romanian organizations, which will lead to the development of an interdisciplinary managerial accounting, flexible and adapted to the needs of each business, using their own tools for processing, presenting and making use of information. These changes bring a "ray of hope" because they reinforce the belief that new methods of calculation and management systems will become the centre of attention, not only of researchers but also of practitioners and organizations. Value and performance will gradually become two concepts that will characterize any modern management of Romanian organizations.
Contributions to the state of knowledge

Falconer (2002) considered that the role of the research made in the field of managerial accounting is to obtain information, new knowledge and results, which have to be first of all useful to practice and practitioners. Moreover, he considered that the purpose of research in managerial accounting is to describe, explain and disseminate the techniques and practices used by organizations worldwide, i.e. to clarify and improve existing organizational practices which are widely used, thus opening to practice-oriented research.

Moreover, we align with the idea expressed by Falconer in the sense that we believe that managerial accounting and cost calculation are closely related to practice and to the activity of organizations, which is why, through this approach, we started from studying the theoretical and conceptual aspects, in order to describe, explain and afterwards disseminate the techniques and practices used by organizations worldwide and from our country, finally trying to clarify, to propose new solutions, methods and practices that could improve processes and organizational performances.

Therefore, in the following paragraphs we want to render the elements and ideas that we consider a personal contribution to the research conducted.

At the conceptual level we consider that this scientific approach allows:

- detailed presentation and development of conceptual approaches, at an international level, regarding the functions of organizations, knowledge-based organizations; development of managerial accounting and cost calculation; conceptual clarifications regarding the role, functions and usefulness of managerial accounting in organizations; approaches regarding management functions and the decision-making process; the technical tools and information used by management in decision-making;
- detailed development of conceptual approaches regarding the development of managerial accounting and cost calculation in our country and identifying the current research trends, at a national level, in the area of investigation;
- the design of relationships that exist between the accounting system of organizations, financial accounting and managerial accounting; between managerial accounting, cost calculation and management.

In relation to cost calculation and methods of cost calculation we believe that by presenting comparatively the calculation methods developed by leading specialists in the field and by showing both the advantages and disadvantages of each method, practitioners are able to familiarize themselves with these methods, they can receive guidance on the development, improvement, implementation of work methods or techniques. Also, by presenting the practices of worldwide organizations regarding the implementation and use of cost calculation
methods both researchers and practitioners have the opportunity to know and better understand whether new technologies, innovations and automation of production processes, globalization and fierce competition, the increasingly demanding requirements of customers put or do not put their mark on the way of organizing cost calculation, on the methods or calculation systems which are implemented and which are those factors that currently constrain or accelerate the deployment and use of modern, evolved calculation methods, respectively.

With regard to the valuing level of information provided by managerial accounting and cost calculation we believe that the study provides a thorough review on (1) the presentation of the decision making process and the decision models, (2) the types of decisions that can be adjusted based on the cost type information, (3) the management tools and techniques which should help management in piloting the organization.

In this respect we have identified a new area of research, which is analyzing the relationship between modern methods of cost calculation and the analysis of customer profitability, the management of relations with them respectively. Moreover, this topic is extensively discussed internationally, while few specialists have dealt with this subject nationally. Facing fierce competition, Romanian organizations must think and work together with the client, developing products and services that meet their requirements while achieving economic success at the same time.

We believe that organizations should pay greater attention to those methods of calculation and to that payment type information on the basis of which they can analyze the profitability of the customers and can manage the relations with them, respectively. In the current competitive environment organizations must move towards customers and to meeting their needs and requirements because they are the ones that make firms win or lose, the organization's success depends on their attitude, behavior and their loyalty.

The empirical study conducted in Chapter 5, on managerial accounting and cost calculation within organizations in Romania, is an element of novelty and utility, at the same time. This study, conducted in the Romanian context, was necessary for:

(1) achieving an overview of everything that is managerial accounting and cost calculation in Romania, both theoretically and practically;
(2) learning how managerial accounting evolved from past to present;
(3) obtaining an overview on the state of knowledge; analyzing the evolution of specialized Romanian articles and publications in local specialized magazines and journals;
(4) obtaining an overview of the guidelines of Romanian organizations and to identifying strengths, weaknesses, opportunities and threats facing the Romanian organizations in the field of research, respectively.
The survey reflects "the voice of practice" and is distinguished through:

- Identifying and presenting the ways in which managerial accounting is structured within Romanian organizations;
- Identifying and presenting methods and practices of cost calculation applied by Romanian organizations;
- Presenting the way in which Romanian organizations “have received" advanced calculation methods and presenting their attitude towards the implementation of these methods, respectively;
- Presenting the ways of exploiting the provided information in the process of managerial decision-making;
- Identifying professionals responsible for the calculation, analysis and management of costs respectively;
- Establishing, on an empirical basis, the correlations between different factors or variables and the role they have in the organization of managerial accounting and cost calculation.

As a result of the study we have identified a number of shortcomings or gaps in the managerial accounting system (absence of more stringent regulations; lack of professional bodies in the field; lack of managerial accounting professionals), which is why we propose certain solutions and suggestions for improving the current system:

- Wording and reasoning of the opinion that managerial accounting in Romania needs a stronger and more severe regulation, because only on the basis of a well-developed organizational structure; on a set of rules and on the dedication and collaboration of management and professionals, this field can operate effectively and the desired results can be obtained;
- Proposing a conceptual framework for organizing and conducting managerial accounting and cost calculation, namely the formulation and argumentation of the opinion according to which the proposed conceptual framework constitutes a part of the accounting policies of each organization. Being a part of the accounting policies of the organizations, this context would lead to "the auto-normalization" of managerial accounting, would constrain accounting professionals and organizations to structure managerial accounting and cost calculation; and which would ensure, at the same time that organizations are awarded with a certain freedom of choice in what concerns the developed approaches and practices. The purpose and role of this conceptual framework is to "mobilize" organizations and professionals, by forcing them to be concerned not only with financial accounting, but also with managerial accounting, because very often the success of organizations depends upon detailed analysis of expenses and the efficiency of calculation, analysis, control and optimization of costs process;
- Phrasing and supporting the opinion according to which managerial accounting needs well-trained specialists, "gifted" with expertise and skills characteristic to the field, specialists which have to distinguish themselves from reporting the financial position, financial performance requested by financial accounting and which, due to knowledge
and skills, would lead organizations to the paths of success, becoming partners of “management in the financial strategy and decision making.

✔ Proposing a general framework regarding the skills and competencies of managerial accounting professionals, framework developed by taking into account the professional’s Competencies Standards in managerial accounting developed by IFAC (English for International Federation of Accountants), and the Standards of Professional Ethics issued by the IMA (English for Institute of Management Accountants).

Finally we believe that the research has achieved its purpose, it answers the needs for information both of researchers and practitioners. Researchers have the opportunity to know the current trends of research, identified at an international and national level, they can understand better certain concepts, phenomena and working methodologies; and through the identification of new research issues, the doors are open to new opportunities for research in managerial accounting. Practitioners have instead the opportunity to know and understand better, besides the traditional and established methods, also modern management methods and tools. Moreover, the results of the research can be "absorbed" by practice by submitting the solutions and proposals that were evoked, solutions and proposals that would generate an improved system of managerial accounting.
Research perspectives

The perspectives taken into consideration in regard to future research in the field of managerial accounting and cost calculation are linked to the elimination of shortcomings or drawbacks mentioned in the previous paragraphs, namely:

✓ Conducting practical studies regarding the testing of modern methods of costs calculation (ABC method or target costing) in Romanian organizations, namely the implementation of the same method of cost calculation in more organizations from different industries, in order to analyze and follow the results to confirm or refute the usefulness of this method, so much recognized and appreciated at an international level, in Romanian organizations.

✓ Expanding the sample of professional accountants to carry out a national study on the organization and conduct of managerial accounting, which would make the study more relevant and objective. Indeed, the creation of such a study at a national level also generates large volumes of work and to achieve the desired effect implies making this project under the aegis of a reputable research institution and through the collaboration with other centers or groups of researchers to obtain a high degree of utility.

✓ Conducting investigations regarding the level of preparation, attributions and competencies of accounting professionals, particularly those in the field of managerial accounting, and the role they play when organizing managerial accounting and calculation of costs, and also in implementing and using modern management tools (Balanced Scorecard or budget dashboards).
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