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The summary of doctoral dissertation

Financial statements and their links to the management accounting and internal control

instruments in a manufacturing company

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Reasons for the choice of a dissertation subject

A company may be perceived and assessed from various perspectives. Undoubtedly, a

strictly financial dimension plays a significant role in its assessment, as almost all managerial

decisions are reflected in the financial measures that express a company's situation or its results.

Therefore, the ability to link the data presented in financial statements with activities and

processes that take place in an organization seems to be an exceedingly valuable competence.

Thanks to that knowledge, it is possible to identify the cause-and-effect relationships between

financial data, decisions, and actions of managers. It is important to develop such competences

within a company and equip managers with instruments that support their efforts to achieve

particular company targets. The ability to look at the organization through the financial

effects of actions (or lack of thereof) enhance the understanding of links between results and

the areas that need to be improved within a company. In order to achieve this, it is necessary to

create a comprehensive tool that comprises management accounting instruments liaising

with the internal controls.

From the organisation's viewpoint, financial reporting provides a very limited range of

information, and what is more, it is not always detailed enough. That is why, in order to

complement and improve the informational data quality, a set of management accounting

instruments should be implemented in companies. Such tools help executives to deepen the

understanding of organisation's financial situation and its results. However, to use that

knowledge effectively, it is also important to define the links between the financial data and

specific internal control instruments.

Thanks to such an interdisciplinary approach, it is possible to link the financial

outcomes with decisions and actions taken in the organisation. Nevertheless, the source

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literature describes all these three areas¹ mainly theoretically, and studies **consider them separately**². That is why, the analysis of liaisons between the management accounting instruments and internal controls, as well as the effects of their application for the managerial purposes, seems to be a very interesting research material. **The choice of the dissertation topic** comes from, above all, the urge to promote knowledge and to increase the awareness of benefits that the implementation of management accounting and internal control tools can bring to organisations³. Another important benefit of the following dissertation is its practical **applicability.** When applied to business, a model developed in this study allows executives to manage and control the company in a holistic way in order to achieve its targets. Apart from that, the **analysis of** implementation **effects** of the proposed solutions is also a vital part of this thesis.

Research objectives and key research questions

The links between the financial statements, management accounting instruments and internal controls were the key **research problem** of the dissertation. Various dilemmas and numerous doubts in this area led to the following **research objectives**:

- O1: The study on links between selected elements of financial statements, management accounting, and internal control instruments in a company.
- O2: The demonstration of practical application of selected management accounting and internal control instruments to achieve company's financial targets.
- O3: The analysis of the impact of the implementation of particular management accounting and internal control instruments on selected company's financial indicators over the years 2016-2019.

To achieve the above-listed objectives, the following **research questions** were posed:

- RQ1: Should the company, apart from the financial reporting, design and implement additional management accounting and internal control instruments?
- RQ2: Should the company employ the model: financial statements → management accounting tools → internal control instruments, to enforce particular activities in order to achieve the financial targets?

² There are no studies about the links between analysed instruments that describe their interactions and feedback loops.

¹ Financial reporting, management accounting and internal control.

³ As far as the author is concerned, it is important that the application of those tools is done at the very early stage of a company's development, when the entire process is not as time-consuming and significantly less expensive.

- RQ3: Can management accounting tools support the company's goals and activities without a simultaneous internal controls implementation?
- RQ4: Can management accounting and internal control instruments support a company's financial management?
- RQ5: Does the implementation of the model: financial statements → management accounting tools → internal control instruments, influence a company financial indicators and support the accomplishment of its financial targets?

The **subject of research** was a manufacturing company, the **object** of the dissertation was the connection between the elements of financial statements, management accounting, and internal control instruments. **The time frame** of the paper covers years 2016-2019⁴.

Research methods and dissertation structure

There were two major research methods used in the dissertation:

- in the **theoretical** part literature studies, the analysis of regulations and guidelines issued by Polish and international institutions,
- in the empirical part model development: financial statements → management accounting tools → internal control instruments, the analysis of company data for the years 2016-2019, and multidimensional comparative analysis by the linear ordering method for years 2016-2019, which presented the company situation before and after the implementation of management accounting and internal control tools.

The dissertation has both – theoretical and empirical nature and was based on the example of a specific production company. The research procedure is presented in diagram no. 1.

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⁴ It was not possible to base the analysis on data for 2020 year as Covid-19 pandemic had a significant impact on the company financial performance. The net sales for 2020 amounted to approx. 17% of the average net sales in years 2016-2019. Moreover, the financial performance was distorted by significant amount of one-off transactions caused by the extraordinary situation of Covid-19 pandemic.

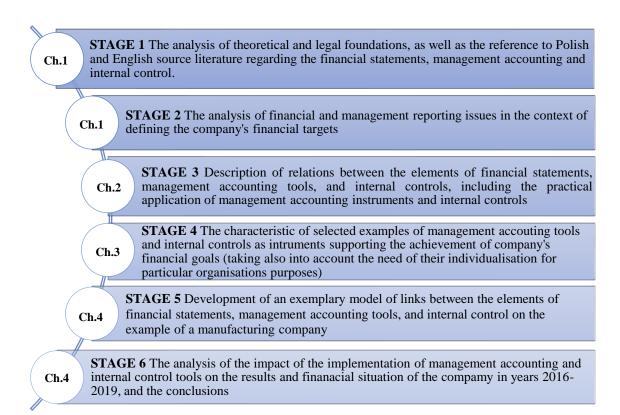


Diagram 1. The research procedure

Source: own elaboration.

All the above described research stages were conducted and described in **four chapters of the paper**. Chapter One contains the analysis of Polish and international legal regulations relating to the financial statements. Apart from that, it presents the search literature in the management accounting field and regulations relating to the internal controls. The last part of Chapter One is dedicated to the management accounting and internal control tools as the foundation for defining the company's goals.

Chapter Two provides the analysis of links between the elements of financial statements, management accounting, and internal control tools along with the practical application of these instruments. Further, the relationship between the financial and management accounting, internal control, and risk management in the enterprise is discussed.

In Chapter Three, the particular solutions and tools are described. As a starting point, the management business reviews are presented as a holistic management accounting tool that extends the scope of data reported in the financial statements. In the further part of this chapter, another management accounting tools, such as budgeting and managerial cost records, are presented. Apart from managerial accounting instruments, the digitalisation and centralisation of purchase order process, inventory management supervision, and

electronic timesheets, are described as the examples of internal controls. Another important aspect which is presented in Chapter Three is the notion that all the instruments should be **individualised** according to the needs of particular organisations.

Chapter Four describes the exemplary model of relations between selected elements of financial statements, management accounting tools, and internal controls. It also contains the **analysis of impact** that the implementation of the above-mentioned tools had on the organisation's financial indicators. As a summary, the **multidimensional comparative analysis by the linear ordering method** for years 2016-2019 is conducted, which provides comprehensive information about the changes in company's performance after the implementation of management accounting and internal control instruments.

Research results and final conclusions

The results of the dissertation confirmed that the achievement of goals set in the organization can be supported by designing and implementing the model: financial reporting → management accounting tools → internal controls. The paper also presented the **feedback loop** between management accounting and internal control tools, as well as its impact on the organisation. As assumed initially, the research also allowed to describe links and the **synergy effects** between managerial accounting and internal control.

As far as data and the information presented in the dissertation is concerned, it can be unequivocally stated that the questions raised in the paper are of great importance from a company's management point of view. In particular, it is essential to ensure the achievement of organisation's financial targets. The results of the analysis clearly confirmed that the implementation of management accounting and internal control tools had a positive impact on the financial situation of the enterprise. An additional important conclusion that comes from the dissertation is the confirmation that it is possible to effectively influence the financial indicators of the enterprise by **applying** the model of relations between the financial reporting, management accounting, and internal control. What is more, thanks to the analysis conducted in the last chapter, the advantages of the comprehensive use of these tools have been documented and confirmed.

Therefore, it can be said that the subsequent stages of the dissertation confirmed that the exemplary model can be applied to the organisations in order to effectively support the achievement of company's targets. Particularly, it was clearly proved in the analysis based on the financial data describing the company situation before and after the implementation of

managerial accounting and internal control instruments. All the materials that were the subject of the dissertation, as well as conducted analyses, allowed to answer all the **research questions**. Each answer to the question was affirmative, and has been properly justified and supported by scientific resources. In particular, it was confirmed that enterprises should implement management accounting and internal control tools, and that a comprehensive form of applying these solutions can be a model: **financial statements** \rightarrow **management accounting instruments** \rightarrow **internal control.** It has also been shown that the application of these tools supports the organization's financial management and contributes to the more effective achievement of its financial targets.

The value added of the dissertation is an exemplary model of relations between financial reporting, management accounting, and internal control tools, the use of which brought measurable results to the organisation. The positive outcome was confirmed in the final stage of the dissertation – the analyses presented in Chapter Four. As a summary of results, a multidimensional comparative analysis using the linear ordering method, additionally gave a comprehensive comparison of the state before and after the implementation of the tested solutions. In addition, the conclusions of this dissertation confirmed that the management accounting instruments must be implemented together with the internal control to achieve the effective outcomes of their simultaneous liaison.

It is worth emphasising that the innovative solution, which the model of links and relationships between the financial reporting, management accounting and internal control is⁵, can be designed and applied to various entities in many different ways. It is important, however, and it was also mentioned in the paper, that the tools used in the model should be well-suited to the organisation, especially as far as their implementation cost and level of complexity are concerned.

Undoubtedly, the dissertation contributes to the **development of economics and finance fields,** in particular by presenting the essence of a holistic perception of activities and their effects that are reflected in the financial reporting. It also thoroughly describes the model of links and liaisons between the financial statements, management accounting tools, and internal control, which is the instrument that enables the organisations to achieve their goals. Apart from that, the paper points to the feedback loops that occur between those three areas and bring measurable benefits to the organizations, which can be easily quantified and demonstrated.

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⁵ That has not been described so comprehensively in the literature so far.

Additionally – what is worth mentioning – the application of the model proposed in the dissertation prompts the managers to look at the enterprise through the **prism of the processes**. Such approach results in the increase of manager's knowledge about the activities which take place in the organization. This perspective not only helps to implement the internal controls, but also allows to review the company's processes, evaluate them, and introduce the optimization, if needed. Changes in this area may additionally bring the increase of organisation's efficiency, reduce processes' time-consumption or significantly reduce their costs. That changes may additionally have a positive impact on the results and financial situation of the company.

It is also worth emphasizing that the aforementioned **applicability** of the model has its additional economic advantage - the implementation of such solutions, as a rule, is not expensive. As it was indicated in the dissertation, it is recommended to use the analysed tools already in the early stages of enterprise development. The individual character and flexible design of instruments make it possible to implement them also in the organizations with high development dynamics – in effect, that equip the managers with better control over the organization. Besides, the **individualized** design of links between the three areas allows managers to use the model in numerous industries and various business scales. The model can be successfully implemented both in developing enterprises and serve strictly restructuring purposes – as it supports those areas of the organization that require changes and are of particular interest to executives.