Abstract—“MC (Management Control) & IC (Internal Control) – What Is the Relationship?” (an empirical study into the definitions between MC and IC) is based on the wider considerations of Internal Control and Management Control terms. Attention is focused not only on the financial aspects but also more on the soft aspects of the business, such as culture, behavior, standards, and values. The limited considerations of Management Control are focused mainly in the hard, financial aspects of business operation. The definitions of Management Control and Internal Control are often used interchangeably and the results of this empirical study reveal that Management Control is part of Internal Control; there is no causal link between the two concepts. Based on the interpretation of the respondents, the term Management Control has moved from a broad term to a more limited term with the soft aspects of the influencing of behavior, performance measurements, incentives and culture.

This paper is an exploratory study based on qualitative research and on a qualitative matrix method analysis of the thematic definition of the terms Management Control and Internal Control.

Keywords—Management Control (MC), Internal Control (IC), definition, causal link, COSO 1992/2004, CoCo (Canadian Institute of Chartered Accountants), Russian CG code (КОДЕКС), limited and broad concepts MC and IC.

I. INTRODUCTION

The indications of possible discrepancies in attitude in respect of concepts of Management Control and Internal Control caused me to undertake an explanatory study in the form of in-depth interviews. A total of nine in-depth interviews were held with nine practicing auditors in the field of internal control and management control. In this exploratory study, an examination is made of the way in which the definitions of the terms Management Control and Internal Control are explained and interpreted by practicing auditors.

The definitions for Management Control and Internal Control are often used interchangeably and the experts generally provide a more detailed definition focused on the different aspects of one or other dimension or elements of the terms. To date, no empirical study has been carried out to clarify the comparison between the two concepts. The aim of this study was to gain knowledge of and deliver an insight into the definition of the terms Management Control and Internal Control. For that reason, the decision was taken to first further explain the development of each term, on the basis of a literature study, as well as carrying out an empirical qualitative study (in-depth interviews).

An answer was found to the study questions: How are the terms Management Control and Internal Control defined in literature and by practicing accountants in the Netherlands (auditors)? What is the relationship between the concepts Management Control and Internal Control?

In the first part of the study, the development of the two terms, as contained in literature are discussed. The results of the in-depth interviews and on the basis of the generated results are reproduced and the terms are discussed.

II. MANAGEMENT CONTROL DEFINITION DEVELOPMENT

Management Control and Internal Control are terms that have undergone considerable changes over the course of time. These definitions are often interchanged, and various models for Internal Control have been developed that are also described as Management Control Systems. These include the COSO model [6], CoCo [27], Merchant and Van der Stede [16], and Simons model of four levers of Control [23].

The wide variety of definitions relating to Management Control also reveal a variety of approaches to the concept; the strict, limited school of thought focusing exclusively on financial objectives, and the broad school of thought which not only includes financial but also other aspects of the business operation.

Hartog and other authors suggest that traditional attitudes to Management Control are focused mainly on hard, financial aspects of business operation, in particular in respect of the approach from the point of view of management accounting, in which there is no attention for the soft aspects of the business such as culture, behavior, standards and values, competences, etc. [12]. The definition proposed by Anthony is the starting point for the development of the term Management Control, often referred to and cited by many authors in the 1970s and 1980s. Anthony’s definition (1965) is an example of this limited approach to Management Control [1].

Anthony describes Management Control as follows: “Management Control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives” [1]. He makes a distinction between the various ‘responsibility centers’, for which the degree of inputs and outputs is measured in monetary units (financial aspects, such as costs / benefits / income / profits / investments). The organization’s objectives referred to by Anthony in his definition are the objectives aimed at a financial result [1].

The function of Management Control relates to ‘the work a manager performs to assess and regulate work in progress and completed’ and its results: ‘the outcome of performance’. Performance is measured according to the existing standards compared with the results, evaluated, and wherever necessary corrected [25].

Later definitions tend more towards the influencing of employees in respect of both financial and non-financial...
results [2]. Several years later, Anthony describes a number of elements and details of Management Control (environment, process and variations) [3]:

- Management control environment: behavior, responsibility centers, profit centers, transfer pricing, investment centers, strategies;
- Management control process: programming, budget, preparation, operations, analysis of operations, incentive compensation;
- Management control variations: service organizations, financial services organizations, multinationals organizations, management control of projects).

Flamholtz defines Management Control systems (MCS) as processes whereby behavior can be influenced [10]. Niemark and Tinker include the performance of the organization and the interaction with Management Control systems in defining the Management Control concept. They introduce an alternative dialectical approach of mutuality and interaction with the social and organizational dimensions. They illustrate this theory according to the development of General Motors' strategy of internationalization, the changes to and saturation of the market, and competition in the motor vehicle industries [18]. Langield-Smit particularly emphasizes the role of Management Control and the strategy in the organization, and specifically the aspects of 'cost control orientation, performance, evaluation and reward systems, the effect of resource sharing' [15].

In his definition, Simons refers to the strategy of implementation and creation: "MCS Systems are the formalized procedures and systems that use information to maintain or alter patterns in organizational activity" [24]. In his article, Whitley discusses various dimensions from literature on Management Control systems, and emphasizes the mutual dependency between the MCS and organization types, working management and individual employees and strategic decision making, and eventually their effectiveness: "the ways that managers of different kinds try to control and coordinate the behavior and performance of organizational units are greatly interdependent with the sorts of firms and organizations they are members of and the nature of the political, financial, labor and cultural systems they are embedded within" [29].

Otley refers specifically to the development of the definition of Management Control, its precise definition and the central problem of Management Control: how can organizations be certain that the managers and staff are acting in the interests of the business? In his opinion, two important aspects play a role in this question: 'information and accountability systems & behavior': "How could systems be designed that would always indicate appropriate action and report when it was being attained(....) how could managers be motivated to do what was best for the organization, even if it meant reporting numbers which could be interpreted adversely?" [19].

Davila introduces a broader definition of MCS with a new role for Management Control in regulating uncertainties in the development of new products and technologies and performance. "MCSs are a good vehicle to reduce uncertainty rather than to monitor and control". He studies the definition of the concept according to 12 business units at seven organizations in Europe and the US. He also develops three measurement methods for the quality and content of the information in MCSs, according to the degree of detail, frequency and use of the information by the managers [9].

The definition of Management Control put forward by Carrison and Noreen is focused on organizational objectives: "Those steps taken by management that attempt to increase the likelihood that the objectives set down at the planning stage are attained and to ensure that all parts of the organization function in a manner consistent with organizational policies" [11].

Covaleski et al. illustrate the social relevance of the various Management Control practices and transaction cost economics (TCE) according to the 'State of California case, and the related role of Enron Corporation'. He emphasizes the importance of the concepts of 'asset specificity' and 'opportunism', which in the case referred to played an important role and sees "incorporate institutional change as important to considerations of the viability of alternative forms of governance including various management control practices" [8].

Merchant and Van der Steede expressed the opinion that "management controls include all the devices managers use to ensure that the behaviors and decisions of people in the organization are consistent with the organization’s objectives and strategies" [17].

Management Control is also a form of governance by the organizations in which multiple aspects play a role and the definition of which is subject to change. The definitions of Management Control referred to reveal the development of the definition of the term, as well as showing a shift from a traditional and limited position to a more all-encompassing term with attention for soft aspects of business operation, including culture, strategy, employee behavior and measures aimed at supporting desired behavior within the organizations. The next paragraph deals further with the developments and definition of the term Internal Control.

III. INTERNAL CONTROL DEFINITION DEVELOPMENT

In modern literature, a distinction is also made between the limited term as expressed in Dutch literature ‘Financial Control’ and the more broadly interpreted term ‘Internal Control’: Financial Control - more restricted, more limited definition comprising the examination of the financial information for reliability [13]; Internal Control - broader definition that as well as relating to the assessment of information, also includes an assessment of decisions and implementation of business activities (efficiency and effectiveness) [28].

Van Rietschoten [21] employs a more limited definition of Financial Control: “all control in the company in the service of the management and implementation by officers in the service of the company, in as much as no specific exception is made for account control”. The broad interpretation of Financial
Control can be attributed to the Anglo-Saxon origin of the meaning ‘to control’ which means both to manage and to regulate. In other words, it includes more than the limited meaning of Financial Control “confronting standards and reality”, thereby including corrective action [26].

Internal Control relates to the introduction and enforcement of various guidelines and procedures within an organization. Each organization faces necessary yardsticks which everyone must comply with in the form of a specific relationship.

Over time, a number of different definitions have been given for the term ‘Internal Control’ within the teaching of accountancy, from Structure Studies and Administrative Organisation through to Administrative Information Provision [14].

What actually is internal control? Is it the art of grouping figures together (“l’art the grouper les chiffres”, but then carried out correctly”) or can more meaningful relationships and characteristics be identified? - Heirness [13].

The Internal Control issues are going about the systematic measures as reviews, checks and balances, methods and procedures instituted by an organization to conduct its business in an orderly and efficient manner, to detect errors/fraud, to ensure accuracy and completeness of its accounting data and adherence to its policies and plans, to safeguard its assets and resources, to produce reliable and timely financial and management information. It is also the plan of organization and all the methods and measures used by a business to monitor assets, prevent fraud, minimize errors, verify the correctness and reliability of accounting data, promote operational efficiency, and ensure that established managerial policies are followed. Internal control extends to functions beyond the accounting and financial departments.

In literature, the definition of Internal Control is explained in different ways by different authors:

- Politics, processes, tasks, behavior patterns and other aspects of a business[5];
- “all control in the company to serve the management and implementation by other employers in the company” [20];
- ‘control’ include not only the check between the norm and reality, but also all controls and regulation of the company [26];
- “a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations; reliability of financial reporting; compliance with applicable laws and regulations.” [6].

According to the COSO definition, internal control is made up of several different components “Internal control consists of five interrelated components: control environment, risk assessment, control activities, information and communication, monitoring.”[6].

The COSO definition is the most complete and most extensive description of internal control in the organization. In particular the following elements of the control environment of COSO determine the quality of internal control: “the integrity, business ethics and expertise of the employees, the style of management, the way in which authorities and responsibilities are directed by the management, and the dedication and development of the personnel, the attention paid by the management to the business and the extent to which they direct the business, the so-called “tone at the top” [20].

The definition of Internal Control in COSO ERM is converted into a broader definition of Internal Control, namely the definition of Enterprise Risk Management, of which Internal Control is an integral part (COSO 2004) [7]:

“Enterprise risk management is a process, affected by an entity’s board of directors, management and other personnel, \applied in strategy setting and across the enterprise, designed to identify a potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. […] This framework establishes four categories of entity objectives: (strategic, operations, reporting, compliance) […] Enterprise risk management consists of eight interrelated components […]”[7].

The Russian Corporate Governance code (‘КОДЕКС КОРПОРАТИВНОГО ПОВЕДЕНИЯ’, hereinafter КОДЕКС) was published on 5 April 2002 in response to developments in Corporate Governance practice abroad and unsolved behavioral problems by major corporations in the US, the United Kingdom and Canada. The first examples of such a Governance code were the Cadbury Rapport 1992, General Motors Board of Directors Guidelines 1994 in the US and the Dey Report 1994 in Canada [22].

The ‘КОДЕКС’ also gives the definition of the term Internal Control as referring to control of the business and financial activities including the planning and the duly appointed bodies within the company (“ДляцелейнастоящегоКодексаподвнутреннимконтролемхозяйственнойдеятельностьюобщества (в томчислеисполнениемфинансово-хозяйственнойполитики) структурнымиподразделениями и органамиобщества.”). Russian Corporate Governance Code ‘КОДЕКС’, http://www.fcsm.ru/ru/) [22].

By means of Financial Control, the business can rapidly identify financial and operational risks, and prevent abuse. The Russian Corporate Governance code (КОДЕКС) places an emphasis on the transparency of action by the business to increase confidence among possible investors, also those from abroad. ‘КОДЕКС’ contains the recommendations on ethical action by businesses, the rights of shareholders, authorities of the Executive Board and other company bodies, conflict settlement schemes and dividend payment [22].

The French report “Le gouvernementd’entreprise des sociétés cotées” dated October 2003 contains no definition of Internal Control. The report does focus attention on good Corporate Governance, and places it in relationship to the good performance of the Executive Board, which is required to fulfill the expectations of shareholders (“9.1. Pour une bonne pratique de gouvernementd’entreprise, le Conseilprocède à l’évaluation de sacapacité à répondre aux
attentes des actionnaires qui lui/sont donn/é mandat d’administrer la société, en passant en revue périodiquement sa composition, son organisation et son fonctionnement (ce qui implique un même revue des comités du Conseil) [4].

The CoCo framework of the Canadian Institute of Chartered Accountants, from 1995, continues on the basis of the principles of the COSO model 1992 and was published by the Canadian Institute of Chartered Accountants in November 1995. The same three COSO categories for reliable financial reporting, efficiency and effectiveness in accordance with applicable law and regulations recur in this report [27].

CoCo [27] adds further nuance in respect of control, and defines control as ‘effective control’: “Control is what makes an organization reliable in achieving its objectives. Control is effective to the extent that it provides reasonable assurance that the organization will achieve its objectives. Or, stated another way, control is effective to the extent that the remaining risks of the organization failing to meet its objectives are deemed acceptable” [27].

The level of nuance within CoCo goes even further, given the fact that it defines twenty criteria for effective control in the following four areas: purpose (5), commitment (4), capability (5) and monitoring & learning (6) [27].

CoCo provides an explanation for each area (purpose/commitment/capability and monitoring & learning) and deals in considerable detail with each of these criteria in terms of content, examples and methods for assessing their effectiveness. The concentration on the effectiveness of Internal Control of an organization and a further elaboration of the effectiveness aspects in each area within the CoCo framework is an interesting example for any organization for attempting to apply and assess the aspects referred to. The underlying principle of this framework assumes that each of the criteria referred to must be sufficient in order to be able to talk of effective Internal Control and good Corporate Governance. CoCo offers a range of different examples of effective internal management systems, and in this connection of the most extensive framework for effectiveness aspects in respect of the COSO concept and all other Corporate Governance frameworks [27].

The majority of definitions of Internal Control, as seen from literature, discuss the way in which the various measures are implemented by the management, and the other parties within the company. As concerns the term Internal Control, both the limited and the more broadly explained and interpreted definitions are considered.

Below, the results of the empirical study, in-depth interviews, are presented in the next paragraph.

IV. QUALITATIVE APPROACH OF MC & IC

This chapter reproduces and discusses the results of the in-depth interviews with practicing accountants (9). The terms Management Control and Internal Control are once again discussed in this empirical study. According to the reactions received from the respondents, a short version of the answers has been reproduced in a table form, for each respondent – based on the 5–10 lines of a reply from the respondent. The basic analysis is a literally reproduced answer from an in-depth interview. An example of such an answer is reproduced in the table below, on the basis of a single random respondent.

In an in-depth interview, the respondent was asked about the definition of the terms Internal Control and Management Control and about the differences between the two terms. The interview question posed to the respondents was: What is the relationship between Internal Control and Management Control? The answers given by a number of random respondents are reproduced in a table below, by way of illustration.

<table>
<thead>
<tr>
<th>TABLE I</th>
<th>ANSWERS RESPONDENTS ABOUT RELATIONSHIP MC &amp; IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: “I, myself, see very little difference between the two, if you look at the coso model, there are certain areas, control environment. I see you can also add layers that go beyond people. Then for example you see in my understanding of internal control, for example supervision by the supervisory board, and that is not covered by management control.”</td>
<td>R1: “management control is the influencing of behaviour; internal control is not. Indirectly it is the case if you know that there are produced and job divisions, then that will influence your behaviour.”</td>
</tr>
</tbody>
</table>
| Q2: “no there is no difference between the two. By adding the word management you emphasise a little that it is about management. But what is management?” | R2: “management control is is the influencing behaviour, internal control is not (... you offer incentives when someone shows desirable behaviour. In other words, you start rewarding people to show targeted behaviour and by achieving targets. Data is far more direct”.

The answer given by each respondent is then observed and rated according to pattern analysis in respect of the thematic definition. Two different approaches can be employed: deductive and inductive, exploratory or on the basis of an existing theory/knowledge.

In this study, an inductive method is employed to group together the answers given in respect of each term into more specific themes and to then apply labels to the named themes. The next paragraph discusses further the method employed and the results.

V. THEMES OF INTERNAL CONTROL & MANAGEMENT CONTROL

This section is given an answer to study question - How is Internal Control in relation to management interpreted and defined by a practicing accountants in the Netherlands (auditors)?
According to the answers given, a matrix table was compiled in which the themes from the answers to the question about the relationship between Management Control and Financial Control recur. The given themes are ticked in the table and according to the outcome the results and development patterns are reproduced. In addition, according to the named key words, an observation is made of which themes were named in respect of the definition of Management Control and Internal Control.

For all answers given to the question: “How does Internal Control relate to Management Control (MC)?” on the basis of the themes, a determination is made of how often the respondents name these terms.

On the basis of the in-depth interviews about Management Control and Internal Control, the following themes were identified:

1. Corporate Governance aspects: supervision by the Board of Supervisory Directors (RvC) and other bodies of the company.
2. Financial Control: ICT, BIF subjects, accounting controls, budget reviews, mechanisms from Starreveld;
3. COSO Internal Control issues: control environment, performance, behavior, incentives, etc.

Based on the keywords named, we see that in the definition of Internal Control, subjects are named which relate not only to the aspects of Financial Control, but also the aspects of Corporate Governance and Internal Control according to the COSO definition. Internal Control is therefore the sum of an actual check/control activity, organization culture (Control environment, risks/risk management), Corporate Governance aspects (supervision by board of Supervisory Directors).

As concerns the definition of Management Control, opinions vary widely. Management Control can above all be viewed as a subset of Internal Control, but there are opinions that argue precisely the opposite: Management Control is far broader than Internal Control.

In the definition of Management Control, no Corporate Governance aspects are named, but a number of elements of Financial Control (process control, focus on products) are mentioned. Management Control does contain a number of elements of Internal Control as based on the COSO model, in particular those elements aimed at influencing behavior, performance, performance measuring systems, incentives.

The respondents do agree with one another that Internal Control relates to indirect influencing of behavior, whereas Management Control brings about a direct influence on behavior.

<table>
<thead>
<tr>
<th>nr.</th>
<th>research question</th>
<th>interview question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How is Internal Control interpreted and defined by experts in relation to Management Control in the SME sector?</td>
<td>How does Internal Control relate to Management Control (MC) in the SME sector?</td>
</tr>
</tbody>
</table>

In the answers from the respondents, an examination was made of the subjects named or not named in the concept of Internal Control and Management Control. According to the results from Table IV, two figures were drawn up, to reproduce the themes in a three-dimensional figure, as shown below. According to the three-dimensional figure produced of the themes from the two investigated concepts, it becomes clearly visible that the concept of Management Control (Fig. 2) in particular scores high in respect of the elements of COSO Internal Control and low in terms of Financial Control on figures. All three elements are represented in the Internal Control concept (see Fig. 1), whereby in particular Financial Control and issues from the COSO framework achieve a high score. The subject of Corporate Governance scores the lowest in Fig. 1, although there is some representation of the theme of Corporate Governance in the concept of Internal Control.

![IC & MC](image)

**Fig. 2 IC and MC dimensions**

Fig. 2 is a combined reproduction of the two investigated concepts of Management Control and Internal Control. The Management Control concept is part of a more all-encompassing concept of Internal Control. The concept of Management Control focuses primarily on the following issues from the COSO framework – performance, influencing behavior, aiming for targets set and processes.

Fig. 2 shows how the term Management Control, in a three-dimensional figure, forms part of a broader reproduction of the term Internal Control.

The next paragraph is going about the elaboration of in-depth interviews and examines whether it remains one and the same term, or whether there are in fact two different terms,
and whether there is a causal link between those two terms.

VI. CAUSAL LINK OR SINGLE CONCEPT?

The table below shows an analysis of the results of the answers from the respondents, to the degree of causal link between the two terms, and whether there is indeed one and the same concept.

<table>
<thead>
<tr>
<th>TABLE IV</th>
<th>RELATIONSHIP BETWEEN MC &amp; IC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>within 1 concept</td>
</tr>
<tr>
<td></td>
<td>MC is broader than</td>
</tr>
<tr>
<td>Internal Control</td>
<td>between MC &amp; IC</td>
</tr>
<tr>
<td>MC &gt; IC</td>
<td>MC &lt;-&gt; IC</td>
</tr>
<tr>
<td>Total</td>
<td>II</td>
</tr>
</tbody>
</table>

Key: IIII = the number of answers occurring five times

Based on the answers above in respect of the relationship between Internal Control and Management Control in business, three different patterns can be identified, namely - "Within one concept, Management Control occupies a greater share than the instruments and measures in Internal Control", "Management Control influences Internal Control and relates to another concept than Internal Control" ; "Management Control and Internal Control are equivalent concepts which are often used interchangeably, and mean exactly the same thing".

The dominant pattern distribution relates particularly to the answers which argue that Management Control is the same as Internal Control in the company. The respondents gave the following answers: "Risk management, Internal Control, Management Control are simply the same thing; it is a question of definition but in my opinion it is all about sound management of your organization", "In my view, Internal Control happens when you apply Management Control ".

The lower pattern distribution relates particularly to the answers that argue that Management Control is another concept, referring to the ability to exercise an influence on specific Internal Control components:"Management Control is a rule or means for maintaining control over elements of Internal Control ", "Management Control is a means of arriving at Internal Control."

The next lower dominant pattern distribution relates to opinions about Management Control and Internal Control within a single concept, whereby Management Control occupies a greater share than Internal Control.

Based on the pattern distribution between Management Control and Internal Control, two patterns can be distinguished in respect of the conceptual division: "Management Control and Internal Control are part of one and the same concept "; "Management Control and Internal Control are two different concepts."

Based on the conceptual division demonstrated above between Management Control and Internal Control, it becomes clear that these two terms in the dominant pattern distribution belong to one and the same concept.

Opinions are divided as to whether Management Control and Internal Control are one and the same term. The majority of respondents expresses the opinion that it is one and the same concept, while a minority argue that MC is in fact also a broader concept than the concept of Internal Control.

It is nonetheless questionable whether there is a causal link only a very small minority (lower pattern distribution) of respondents who that they are different concepts, whereby one concept influences the other.

The following paragraph discusses the possible direction of the causal link between MC and IC, and the question of whether there is in fact any causal link between the two terms.

VII. CAUSAL LINK DISCUSSION

Based on the reproduction of the results in the Table VI the first two columns refer to a causal link – from left to right, from right to left or a mutual causal link (first column VII). The final column (2nd column VII) shows the results suggesting an absence of any causal link between the two concepts, MC and IC.

<table>
<thead>
<tr>
<th>TABLE VI</th>
<th>CAUSAL LINK BETWEEN MC &amp; IC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Causal link</td>
</tr>
<tr>
<td></td>
<td>Y \rightarrow X</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

Key: IIII = the number of answers occurring five times

The answers from the first two columns (Table VI) and first column (Table VII) are subsequently combined, to further clarify the comparison. Table VII shows the results for presence of a causal link (column one) and absence of a causal link (column two).

<table>
<thead>
<tr>
<th>TABLE VIII</th>
<th>CAUSAL LINK (TOTAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal links</td>
<td>No causal link</td>
</tr>
<tr>
<td>X2 \rightarrow X1</td>
<td>X1 \rightarrow X2</td>
</tr>
<tr>
<td>X1 \rightarrow X2</td>
<td>X1 \rightarrow X2</td>
</tr>
<tr>
<td>Total</td>
<td>IIIII</td>
</tr>
</tbody>
</table>

Key: IIIII = the number of answers occurring five times
In discussing the relationship between the two concepts of Internal Control and Management Control, it becomes clear that the respondents also maintain the position that there is no causal link, argue in their answers that the two are in fact one and the same concept. There are opinions that suggest the presence of a causal link, but the emphasis on the fact that the two concepts are in fact different, is too weak.

The Management Control system shares overlapping aspects with Internal Control; certain subjects occur in both areas. The subjects the influencing of behavior, specific Management Controls, incentives and rewards can be placed in a comparable manner in the perspective of the standard/culture and the method of taking action in a time perspective.

The perspective of the interaction between the concepts of Management Control and Internal Control can then be reproduced in the form of a four-dimensional Fig. 3.

![Four dimensions IC and MC](image)

The Management Control system shares overlapping aspects with Internal Control; certain subjects occur in both areas. The subjects the influencing of behavior, specific Management Controls, incentives and rewards can be placed in a comparable manner in the perspective of the standard/culture and the method of taking action in a time perspective.

The perspective of the interaction between the concepts of Management Control and Internal Control can then be reproduced in the form of a four-dimensional Fig. 3.

The element of Financial Control in the top left in the graph and the component of Internal Control in the bottom right in the graph.

The Management Control system also makes use of the information obtained in response to the undertaking of Financial Control procedures. Communication is a linking tool for Internal Control via Management Control activities.

The formal Management Control system is placed in the top right in the graph, and is achieved by means of material rewards and other rewards of a material nature. The informal Management Control system is located in the bottom left-corner corner in the graph, and is achieved by means of a range of immaterial rewards.

VIII. CONCLUSION

The objective of this study was to gain knowledge of and an insight into the definition of the terms Management Control and Internal Control. An answer was given to the study questions:

- How are the terms Management Control and Internal Control defined?
- What is the relationship between the concepts of Management Control and Internal Control?

The study described in this paper is a literature study together with an empirical study (in-depth interviews) into the definition of the two terms Management Control and Internal Control.

The paper starts with a brief overview of the development of the terms Management Control and Internal Control from the point of view of literature. Limited and more broadly applicable versions of both terms can be found in literature. The definition of the more broadly-defined term Internal Control based on the COSO model describes a role both for the management and the other parties in the company, in achieving the company’s objectives in the following categories: effectiveness and efficiency of operations; reliability of financial reporting; compliance with applicable laws and regulations.” (COSO, 1992). The limited definitions of Management Control are particularly focused on the hard, financial aspects of business operation. Based on the broad definitions of both terms, attention is further focused not only on the financial aspects, but also on the soft aspects of the business, such as culture, behavior, standards and values.

Based on the in-depth interviews, the conclusion can be drawn that opinions concerning the term Management Control and Internal Control are divided. There are respondents who argue that the two are in fact one and the same concept, whereby one concept is simply part of the other. There are also opinions that view both terms as different concepts. The results from the dominant pattern distribution lead to the conclusion that Management Control is a part of Internal Control. There is no causal link between the two concepts. According to the interpretation by the respondents, Management Control has shifted from a broad term to a more limited term:

- the financial aspects are nothing more than a very limited element of the concept;
- the soft aspects viewed from the viewpoint of the COSO model, with behavior and culture as the most important, are elements in the definition of the modern term Management Control.

A general conclusion that can be drawn is that practicing accountants view the direction for the change in the definition of Management Control as being based on current practice in modern businesses. Financial aspects are increasingly an element of Internal Control, in the same way that Corporate Governance aspects are associated with the practice of Internal Control. The term Management Control as part of Internal Control is increasingly associated with behavior, and in particular the direct influencing of the behavior of employees, for example by means of incentives. The influencing of
behavior is primarily the domain of the sub concept Management Control.

There could be two possible reasons for this conclusion: 1. practicing accountants in the Netherlands (auditors) are lagging forward in terms of applying modern approaches to internal control and management control. 2. Modern approaches in literature to internal control and management control are too far removed from practice to be able to be successfully applied. The purpose of this study was not to identify which of these two explanations is most plausible.

IX. LIMITS OF THE STUDY

The study is exploratory in character. The only point of investigation was whether there was a divergence in the priorities of professional practitioners. No attempt was made to explain any discrepancies in priorities.

This study was undertaken among a limited group of (9) auditors. The selection of respondents was non-random. There is therefore some doubt concerning the representativeness of the study. Furthermore, the sample is too limited in size to be able to make (statistically-reliable) statements on the entire population.

There may a response bias. The respondents probably wanted to make a good impression, as a result of which a discrepancy could occur between the answers given and their activities in practice or in the studies undertaken.

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