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Management Control Packages in Public Sector Organizations

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Management Control Packages in Public Sector Organizations

Berend van der Kolk

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1

Management Control Packages in Public Sector Organizations

This thesis addresses the question how management control (MC) packages are configured in public sector organizations and how they relate to employee motivation. Three studies are presented in this thesis, which will each shed a light on the research question, using a variety of research methods. This first chapter introduces the main topics of the thesis and outlines an overview of the remaining chapters.

1.1 Management control packages

Although the extant literature acknowledges that MC elements should be studied in the context in which they operate (Hopwood, 1976a; Speklé, 2001; Quattrone and Hopper, 2005; Ahrens and Chapman, 2007; Malmi and Granlund, 2009), many scholarly papers still study MC elements as isolated practices, rather than examining them as parts of a 'package'. An MC element is a system, rule, practice, value or other activity that is in place in order to direct employee behavior (Malmi and Brown, 2008), and accordingly, the sum of all MC elements is called the MC package. For instance, MC elements can be budgets, codes of conduct and instruments for performance management, but also corporate values and tone-at-the-top can be considered MC elements. Despite the fact that many researchers agree that MC is multifaceted and that an MC element's effectiveness depends on the absence or presence of other MC elements, their interrelation was often neglected in prior studies. Various scholars have claimed that this has led to a fragmented, simplified account of reality in the extant academic literature (Chenhall, 2003; Fisher, 1995; Malmi and Granlund, 2009; Otley, 1980). They indicated that important questions remained unanswered, such as: how do MC elements interrelate, which factors affect the use of certain configurations of MC, and how do MC packages relate to employee motivation and behavior. These and other, related, questions will be addressed in the current thesis, drawing on theories from the fields of economics, management, sociology and psychology, using a variety of research methods.

The importance of examining MC 'as a package' was emphasized in a special issue of *Management Accounting Research* (Malmi and Brown, 2008). The main argument for studying MC packages, as articulated in that special issue, is the interplay between and among MC elements. This means that, in some circumstances, an MC element's effectiveness is (partly) dependent on the configuration of the remainder of the MC package. Studying MC elements 'in isolation' may lead to finding spurious relations and therefore, prior studies argued, MC should be examined 'as a package' (Malmi and Brown, 2008; Malmi, 2013; Otley, 1980; Sandelin, 2008).

Since the call for more studies in the aforementioned special issue, an increasing number of papers examining MC package configurations saw the light. For instance, Cristofoli et al. (2010) conducted case studies in the Italian public sector to examine

inter-organizational MC packages, which they connected to the organizations' task characteristics. Friis et al. (2015) also adopted a qualitative approach to study the effectiveness of incentive pay and its dependence on the interaction with other MC elements in a manufacturing firm. Van der Kolk and Schokker (2016) examined hierarchically coupled MC elements in an MC package, and assessed their usability to implement the strategy of a municipality. Although studies that compare MC packages among organizations have the potential to further enhance our knowledge about the usability of certain configurations in different contexts, such qualitative studies are not available yet. The current literature primarily contains conceptual, explorative papers on this topic (e.g. Bedford and Sandelin, 2015; Grabner and Moers, 2013; van der Kolk, 2015) and a few quantitative studies examining MC package configurations. Bedford and Malmi (2015), for instance, used cluster analysis to construct 'ideal types' of MC packages, and explored their use in practice in 400 for-profit firms. The current state of literature, however, leaves the calls of, amongst others, Malmi and Brown (2008) to study MC packages using qualitative research methods largely unanswered. This thesis aims to address – at least partially – the aforementioned gaps in the literature, by exploring MC packages in public sector organizations, which will be further introduced in the following section.

1.2 Public sector organizations

During the past decades, major attention has been paid to practices that aimed to make public sector organizations more businesslike and results-oriented. This movement was called 'NPM': New Public Management (Hood, 1995; Hood, 1991). From the eighties onwards, this movement influenced the way in which practitioners and academics thought of the way in which public sector organizations should be managed. Among other things, the 'traditional' NPM movement aimed to realize more efficient and effective public sector organizations, by, amongst other things, implementing 'businesslike' MC elements (cf. Osborne and Gaebler, 1993).

An example of the implementation of such a businesslike MC element in the Dutch public sector is the increased emphasis on local government's outputs in the annual budgets (just as in the for-profit sector), instead of the traditional focus on the

'input' and activities of such organizations (ter Bogt et al., 2015a; van Helden, 1998). Another example is the use of private sector pay-for-performance mechanisms to align employee motivation with the organizational goals (cf. Frey et al., 2013). Such implementations of businesslike MC elements in a public sector environment have, however, been criticized for not taking the public sector context into account, which has limited the usability of these MC elements (Cristofoli et al., 2010; de Jong and van der Kolk, 2013). As a result of critical studies, the NPM movement became more and more contested and its assumptions and claimed successes have been repeatedly challenged (Boden et al., 1998; Humphrey et al., 1993; Lapsley, 2009; ter Bogt et al., 2012). Although NPM-practices were, and still are, criticized by many accounting scholars, the financial crisis and the subsequent era of austerity seem to reinforce some of its key ideas, especially regarding becoming more efficient and businesslike (Bracci et al., 2015; Kickert, 2012; Lodge and Hood, 2012). So, NPM-ideas regarding MC are at the center of attention again, which emphasizes the need and relevance of studying MC in the public sector today.

The aforementioned 'lens' of studying MC 'as a package' may serve as a useful tool to examine MC in the public sector. Although neglecting the specific public sector environment was often posed as a main critique of implementing NPM practices, another question is less well articulated and probably at least as interesting: how do the NPM-inspired MC elements interact with other MC elements and how do they together affect, for instance, employee motivation and organizational performance? The interaction of the different types of MC elements, their antecedents and some effects will therefore be explored in this thesis.

1.3 Research question and use of theories

The central question in this thesis is: how are management control (MC) packages configured in public sector organizations and how do they relate to employee motivation? Although there are many factors that can affect the motivation and behavior of employees (cf. van der Kolk, 2011), in this thesis, the focus is on the effects MC can have on them. In order to theoretically inform this research question, this thesis draws on a number of theories from the fields of economics and management (MC

theory, complementarity theory and agency theory), sociology (stewardship theory) and psychology (self-determination theory). Each of these theories sheds a complementary light on the issues dealt with in this thesis and enables theorization about possible findings. This section briefly introduces each of the theories and outlines how these theories will be used in answering the main question of this thesis.

1.3.1 Management control theory

First, this thesis draws on the ideas of MC that are articulated in so-called ‘mainstream’ MC research, and follows the definition of MC by Flamholtz et al. (1985, p. 35) “attempts by the organization to increase the probability that individuals will behave in ways that will lead to the attainment of organizational objectives.” In order to achieve this goal of directing employee behavior, it is of paramount importance that the right MC elements are selected in a given context (Merchant and van der Stede, 2007). Prior studies already pointed to the importance of a ‘fit’ between the chosen MC elements and the context in which they are used (Gerdin and Greve, 2004). Others also argued that MC elements should be ‘consistent’ with other MC elements. For instance, Anthony and Govindarajan (1998) propose that

“the designers of formal systems should consider the informal processes in their design choices because formal mechanisms should be consistent with informal processes in order to effectively implement organization strategies.”
(Anthony and Govindarajan, 1998, p. 94)

Both the formal systems and the informal processes can be considered MC elements, as long as they are aimed at directing employee behavior. This thesis extends research in this area by empirically examining the interplay of MC elements within MC packages, and the extent to which the used types of MC are in line with the context in which they are used.

The seminal work by Ouchi (1979) and a recent paper by Speklé and Verbeeten (2014) guide initial ideas about possible MC package configurations in the cases examined. These papers claim that the use of certain MC elements depends on the task characteristics of a department or organization. For instance, when the output of a task

is highly measurable ('contractible'), it is expected that results controls are used, and if this is not the case, the expectation is that organizations will resort to other types of MC, such as cultural controls. MC theory is used in each of the three studies presented in chapters 2, 3 and 4.

1.3.2 Complementarity theory

In order to theorize about the interplay of MC elements and their effects, ideas derived from complementarity theory are operationalized in this thesis. The central idea of complementary elements is that they reinforce each other's outcomes. When applied to the field of MC, this means that two MC elements reinforce each other's usability or effectiveness, i.e., 'the whole is more than the sum of its parts' (Milgrom and Roberts, 1995; van Veen-Dirks, 2006). This thesis extends this theory by proposing ideas about 'conflicting relations', which are in essence 'negatively complementing' relations: they limit each other's usability as tools to direct employee behavior.

Complementing elements are specifically discussed in chapter 2, and this thesis contributes to research in this area the possibility of 'conflicting' MC elements. When MC elements conflict, this means that they have a 'negative' complementarity and thus a lower usability when used within one MC package.

1.3.3 Agency theory

Agency theory is a theory that implicitly underlies much research in MC. At the core of agency theory, there is a notion of a conflict of interest between two parties, traditionally the 'principal' and the 'agent' (Jensen and Meckling, 1976; Zimmerman, 2000). The principal can be an owner of an organization and the agent can be an employee of the same organization. The theory assumes that the principal wants to maximize the outcomes and profits of the organization, which requires the agent to deliver the necessary effort. However, and this is where the conflict of interests arises, the agent is assumed to be 'effort averse' and egoistic. Therefore the agent (the employee) needs to be monitored or incentivized to motivate him or her to act in line with the attainment of organizational goals. In this way, the initial conflict of interests

can be mitigated. Agency theory is one of the core theories that underlie NPM-like reforms in the public sector (cf. Gruening, 2001).

This theory underlies many of the ideas expressed throughout this thesis, and it surfaces mainly in chapter 3. In the third chapter, the type of MC that agency theory seems to prescribe (i.e. the ‘constraining’ type of MC) is contrasted with the type of MC that can be associated with stewardship theory (the ‘facilitating’ type of MC).

1.3.4 Stewardship theory

Whereas agency theory uses a rather ‘negative’ model of human behavior (Jensen and Meckling, 1994), stewardship theory proposes a more positive attitude toward the nature of human beings (Davis et al., 1997; van der Kolk, 2013; van Veen-Dirks, 2012). The theory, which is rooted in sociology and psychology, assumes that employees are intrinsically motivated to attain the organizational goals and that they are serving the collective, rather than pursuing only their own interests (Hernandez, 2012). Different assumptions regarding human behavior lead to different types of MC, therefore stewardship theory proposes a type of MC that we coin ‘facilitating MC’ to direct the behavior of employees. Facilitating MC is about providing employees with autonomy and resources in order to better conduct their tasks, and not so much about ‘monitoring’ and ‘incentivizing’ them.

Stewardship theory is predominantly used in chapter 3, in which MC elements that are proposed by stewardship theory are identified in multiple cases. Furthermore, the effect that austerity policies have on the use of stewardship-informed MC elements is analyzed. The study in chapter 3 contributes to stewardship theory by identifying MC elements in different cases that seem to function in ways consistent with stewardship theory.

1.3.5 Self-determination theory

Self-determination theory (SDT) is a theory from the field of psychology that proposes that the satisfaction of three human needs enables human beings to be intrinsically motivated for some type of task. The three needs are: the need for relatedness, the need for autonomy and the need for feelings of competence, and the theory can be applied to

hypothesize about motivation in organizational settings (Gagné and Deci, 2005). The theory is increasingly applied in the field of management accounting and control to hypothesize possible relations between accounting instruments and the effects they have on employee motivation (Adler and Chen, 2011; de Baerdemaeker and Bruggeman, 2015).

Chapter 4 draws on self-determination theory to hypothesize the effects of the use of different types of MC on employee motivation. It uses the distinction between extrinsic and extrinsic motivation (Ryan and Deci, 2000a) and examines how these types of motivation relate to MC and performance.

1.4 Research setting and methods used

Beside its theoretical relevance, there are also practical reasons for studying MC in public sector organizations in the Netherlands, and more specifically: municipalities. The Dutch government mainly consists of three levels: the central government, the province level and the municipality level, and this thesis will focus on the latter. Municipalities in the Netherlands are the second largest employer in the Dutch public sector, with 177,000 employees¹. Enhancing the understanding of MC and theorizing about possible improvements and implications can be relevant for a vast number of employees and organizations. Furthermore, the department structure of Dutch local governments is fairly similar across the country, which enables comparison among the case organizations to identify recurring patterns. The findings can therefore help to recognize settings in which certain MC elements work well, and may facilitate a more effective delivery of services and thus benefit both the public sector and its future clients.

Chapters 2 and 3 draw on a multiple case study in two medium-sized municipalities: 'Bluetown' and 'Greentown'. The chapters focus on four different departments within these municipalities: Buildings and Installations (BlueEx), Social Development (BluePol), Public Administration (GreenEx) and Spatial Policy (GreenPol), using 51 fully transcribed, semi-structured interviews, multiple observations and desk

¹ Trendnota Arbeidszaken Overheid 2011, official document produced for the Dutch parliament. The population of the Netherlands was 16.69 million in this year.

research. The obtained data was used to identify configurations of MC packages and to explore conflicting relations between MC elements (chapter 2), and to examine the effects of austerity on the use of MC elements (chapter 3).

Chapter 4 draws on the results of a survey under Public Administration employees in 105 different municipalities. Members of the NVVB² and subscribers to their weekly newsletter were surveyed, which resulted in a 12% response rate, obtaining 351 useful responses. The chapter focuses on the responses from employees with non-managerial tasks in 105 different departments, and the data is analysed using structural equation modeling.

1.5 Outline of the remainder of the thesis

The remainder of this thesis consists of three connected studies, which can be found in respectively chapters 2, 3 and 4. All chapters shed a different and ‘complementary’ light on the topic of MC packages in public sector organizations, aiming to answer the question: how are management control (MC) packages configured in public sector organizations and how do they relate to employee motivation? Chapter 2 focuses on the interplay between MC elements in a package, chapter 3 discusses the effects of austerity on the use of different types of MC elements, and how that in turn affects the motivation and behavior of subordinates, and chapter 4 studies the relations among MC, motivation and performance (see figure 1.1).

Also in terms of the methodologies used, the chapters are somewhat complementary. Chapters 2 and 3 draw on four case studies conducted in 2013 and 2014, using qualitative research methods such as 51 semi-structured interviews, desk research and observations. Chapter 4 analyzes the results from a survey study in 105 departments of public administration in the Netherlands using structural equation modeling. By combining different research methods, this thesis aims to obtain a more complete and reliable picture of how MC packages are used in public sector organizations, and what their drivers and effects are (cf. Modell, 2009). In the

² NVVB stands for “Nederlandse Vereniging Voor Burgerzaken”, which translates as the “Dutch association for public administration”.

remainder of this section, each chapter's main characteristics and findings will be discussed.

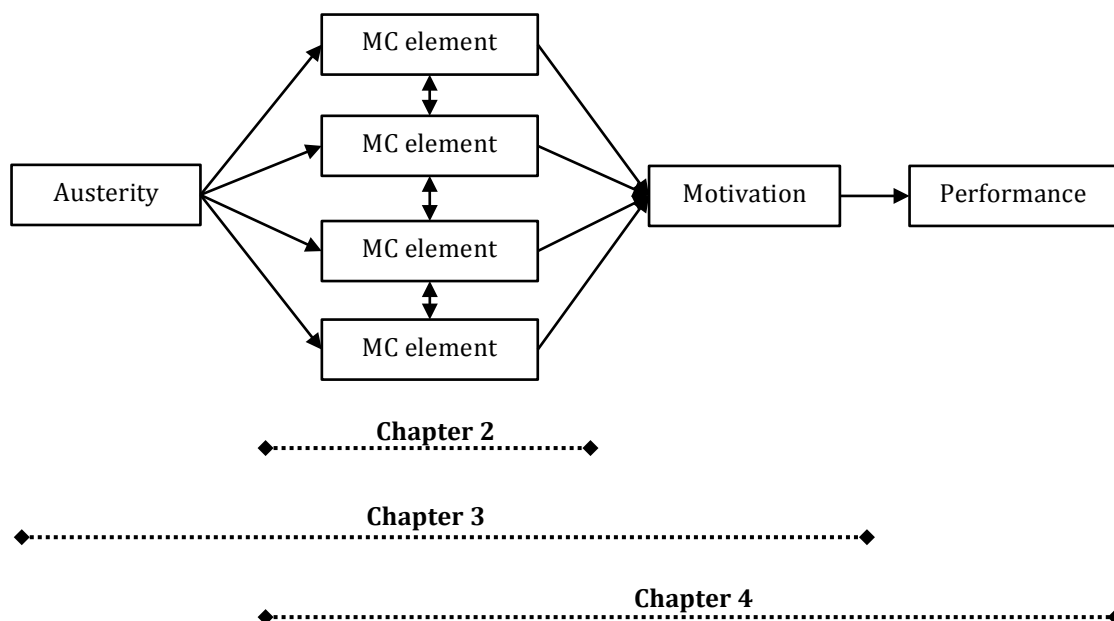


Figure 1.1: An overview of the topics covered in the three main chapters

1.5.1 Chapter 2: When the Whole is Less than the Sum of its Parts

Chapter 2 is a study of the interplay of MC elements, using a multiple case study approach. It studies and compares the configurations of MC packages in different settings and examines conflicting relations within these packages. The question addressed in this chapter is how individual elements *within* the MC package conflict with (the effectiveness of) each other. The chapter draws on four case studies in two medium-sized municipalities in the Netherlands and identifies the four MC packages used. Several conflicting relations between MC elements are scrutinized and the situational factors that facilitated the emergence of these conflicting relations, i.e. the ‘triggers’, are discussed. This chapter contributes to the literature by empirically informing the literature on MC package configurations, by developing the notion of conflicting MC elements and by identifying triggers that cause conflicting relations to emerge.

1.5.2 Chapter 3: Management Control in Times of Austerity

Chapter 3 examines how MC within governmental departments is used in times of austerity, and how insights from agency and stewardship theory can enhance the understanding of this issue. Two types of MC (constraining and facilitating) are distinguished in this chapter, based on their different assumptions regarding human behavior (agent-like and steward-like). The chapter empirically analyzes changes in the use of these types of MC in four cases located in two municipalities. The findings suggest that MC at the departmental level becomes more constraining in times of austerity, and that an overemphasis on constraining MC has negative consequences. It can, for instance, evoke agent-like, opportunistic behavior while it disregards potential steward-like behavior. The chapter indicates that these negative consequences are less prevalent when there is a simultaneous increase in emphasis on the use of facilitating MC elements.

1.5.3 Chapter 4: Management Control and Motivation

The fourth chapter examines the relations among MC, motivation and performance. It draws on self-determination theory to hypothesize that intrinsic motivation and extrinsic motivation can be reinforced by different types of MC. These predictions are tested using survey responses from employees with similar, non-managerial tasks in 105 Dutch local governments. Merchant and Van der Stede's (2007) object-of-control framework is operationalized, and the collected data is analyzed using structural equation modeling. The findings indicate that the use of personnel and cultural MC positively associate with employees' intrinsic motivation, and that using results controls is positively associated with employees' extrinsic motivation. Both intrinsic motivation and extrinsic motivation are in turn positively associated with performance, and a positive direct relation between action controls and performance is also identified.

1.5.4 Chapter 5: Conclusions

Chapter 5 reiterates the findings and contributions from the studies described in chapters 2, 3 and 4, and discusses three overarching contributions. First, this thesis shows how MC elements can interact and which effects MC can have on employee

motivation and behavior. Second, the research in this thesis points in detail to the limits of using results controls in public sector organizations. Third, this thesis demonstrates how theories from psychology and sociology can contribute to a better understanding of MC and its drivers and effects. Chapter 5 ends with practical implications and suggestions for further research.

2

When the Whole is Less than the Sum of its Parts

In this chapter, we examine configurations of management control (MC) packages and focus on conflicting relations between elements within these MC packages. Prior literature studied complementary and substitutive relations between MC elements. We argue that a third type of relation should also be acknowledged: a ‘conflicting’ relation. MC elements are ‘conflicting’ when they are 1) simultaneously present in an organization, 2) hinder each other’s usability as tools to direct employee behavior and 3) do not substitute each other. We conducted four case studies in two municipalities using 51 semi-structured interviews, desk research and observations. We scrutinized situations where two or more MC elements were ‘in conflict’, and we studied how these conflicting relations came into place. We identified causes for these conflicting relations, which we categorized as hierarchical and historical ‘triggers’. This chapter contributes to the literature by empirically informing the literature on MC package configurations, by developing the notion of conflicting MC elements and by identifying triggers that cause conflicting relations to emerge.

Earlier versions of this chapter have been presented at the *8th EIASM Public Sector Accounting Conference in Edinburgh* (2014), the *8th EIASM Performance Management Conference in Nice* (2015) and at a research seminar at the *University of Groningen* (2015).

2.1 Introduction

Calls to study management control (MC) 'as a package'³ (Abernethy and Chua, 1996; Malmi and Brown, 2008) have resulted in a limited but growing body of literature on MC packages (Malmi, 2013). Proponents of 'MC package research' claim that researching specific MC elements in isolation has led to a 'distorted' account of reality in the MC literature (Chenhall, 2003; Fisher, 1995; Malmi and Granlund, 2009), which has left us with a limited understanding of MC, and more specifically: the interplay between MC elements. Therefore, research that studies MC package configurations and relations within such an MC package is necessary for a better understanding of MC elements in the context in which they operate (Hopwood, 1983). Prior literature already provided many useful insights regarding the possibility of complementary and substitutive relations of MC elements. For instance, job rotation and multitask job design can be viewed as substitutes of one another (cf. Friis et al., 2015), whereas decision rights and incentive compensation can be considered complements (cf. Widener et al., 2008). We argue that, besides complementary and substitutive relations, a third type of relation can be distinguished: a conflicting relation. We consider MC elements to be 'conflicting' when they are 1) simultaneously present in an organization, 2) hinder each other's usability as tools to direct employee behavior and 3) do not substitute each other. In the current study, we examine configurations of MC packages and scrutinize conflicting relations between MC elements within an MC package. We rely on evidence gathered from four case studies in the Dutch public sector, using 51 semi-structured interviews, desk research and observations to study configurations of MC packages and to scrutinize conflicting relations between MC elements. In addition, we identify hierarchical, historical and contextual triggers that cause conflicting relations between MC elements to emerge.

³ Conceptually, we distinguish MC elements, MC systems and MC packages. We define an MC *element* as an attempt by management to align the behavior of employees in accordance with the organizational goals (Flamholtz et al., 1985, p. 35), for instance by imposing rules and targets, but also by selection and training of employees (Merchant and van der Stede, 2007). An MC *system* is a consistent and coherent set of MC *elements*, and is designed and intended to address a particular control problem. An MC *package* however, includes all MC elements that are employed in a department or organization, and is thus not necessarily consistent or coherent, so different types of MC elements can be included simultaneously to address different control problems. In other words, an MC system is designed or intended to address one control problem, whilst an MC package is the collection of all MC elements at a given time and place, perhaps unintended, which addresses all control problems within the department or organization.

A major drawback for the study of MC package configurations using qualitative research methods is that it is almost impossible to carefully discuss an organization's MC package within the boundaries of an average-length journal article (Malmi and Brown, 2008), let alone studying multiple packages in one paper. Attempts toward exploring MC package configurations have been rarely conducted in the extant literature. A few studies focused on the MC package *between* organizations (e.g. Cristofoli et al., 2010; van der Meer-Kooistra and Scapens, 2008), and some studies focused on the MC package of a single organization (e.g. Friis et al., 2015; Sandelin, 2008; van der Kolk and Schokker, 2016). To our knowledge, qualitative studies addressing MC package configuration variety in different settings have not been conducted in the extant literature, while this was recognized as an important avenue for further research (Malmi and Brown, 2008). In this chapter, we address this gap by exploring different configurations of MC packages in four departments.

A central claim of those in favor of 'MC package research' is that the interplay between MC elements is of paramount importance for understanding MC and its effectiveness. When two or more MC elements interact with one another, for instance when a results-oriented culture complements the use of results controls (see e.g. Verbeeten and Speklé 2015), it follows that leaving out one of these elements in a study may "lead to a partial or even wrong understanding of MC elements' effectiveness" (van der Kolk and Schokker, 2016, p. 2). Several studies therefore focused on two types of relations between MC elements: complementary and substitutive relations (Abernethy et al., 2015; Aral et al., 2012; Friis et al., 2015; Grabner and Moers, 2013; van Veen-Dirks, 2006; Widener et al., 2008), following definitions such as those provided by Friis et al. (2015, p. 246): "We define complementarity (substitution) as when the being or doing more of one control element increases (decreases) the returns on the being or doing more of the other element". An underlying assumption of these definitions is that complementary MC elements can be used simultaneously, i.e. in an 'additive' way, while a substitutive relation between MC elements will (eventually) decrease the use of one of those substitutive MC elements, i.e., one element will be 'substituted' by the other. However, when two elements are simultaneously present and hinder each other's usability as a tool to direct employee behavior, and when one of these elements does

not substitute the other element over time, this is neither a complementary nor a substitutive relation. We coin such a relation a ‘conflicting’ relation between MC elements. In our empirical study, we explore such conflicting relations and, furthermore, we identify two ‘triggers’ that lead to such conflicting relations.

Our study contributes to the literature in three ways. First, we contribute to the literature by providing a concise literature review on MC package research and by empirically informing the literature on MC package configurations, with multiple case studies. Second, by developing the notion of ‘conflicting’ MC elements we enrich the literature that studies interrelations between MC elements. Third, we contribute to the literature by identifying hierarchical and historical triggers that caused the conflicting relations to emerge.

In the next section, we discuss the concept of the MC package against the backdrop of prior research, and situate our paper in the existing gap of qualitative empirical studies of MC packages. Subsequently, we examine the literature to propose two archetypal MC package configurations and develop the notion of conflicting MC elements. Section three provides a description of the research methods. In section four we show the MC package configurations of the four cases and focus on conflicting relations between MC elements. We also aim to answer the question how such conflicting relations can emerge in an organization. In section five, we confront the MC package configurations and the conflicting relations with the extant literature, and we discuss three triggers that lead to conflicting relations between MC elements. The final section concludes and provides suggestions for further research.

2.2 Literature review

2.2.1 A history of studying management control ‘as a package’

Calls for studying MC ‘as a package’ know a long history. Horngren (1972) already stated that management accounting systems and the structures of organizations are interdependent and inseparable, and thus should not be researched separately. Hopwood (1976b, p. 287) referred to our fragmentary understanding of the world around us as “one of the most damaging weaknesses of the Western intellectual tradition”, and Otley (1980, p. 421) regarded researching accounting information

systems outside the context of an organization control package as a “folly”. Despite the statements of Hopwood, Horngren, Otley and many others, a large stream of so-called ‘fragmented research’ emerged from the 1970s and 1980s onward. According to Otley (1980), it was mainly contingency theory – and its popularity among accounting scholars – which was responsible for giving birth to this large stream of research. The growth of contingency theory research, which initially focused on the fit of a particular control practice with the environment, led researchers to focus on a limited set of variables to examine causal relations. Although the benefits from this strand of research were recognized, it was also criticized: “the highly interconnected nature of the components that make up an organizational control package suggests that the management accounting information system cannot be studied in isolation from its wider context” (Otley, 1980, p. 425-426).

One of the later studies that picked up the idea of MC packages is a paper by Macintosh and Daft (1987), who studied the relationship between departmental interdependence and the use of three separate control sub-systems. They gathered data from 90 departments in 20 organizations, and the word ‘package’ was used to describe the configuration of the three sub-systems. However, because only three control sub-systems were selected, Macintosh and Daft (1987, p. 58) also had to conclude that their results only provided a partial answer to the questions about control package configuration variety. In later literature reviews (e.g. Abernethy and Chua, 1996; Luft and Shields, 2003) the study by Macintosh and Daft (1987) was represented as an *attempt* to research packages that did not succeed, since it researched only a relatively small, integrated set of MC elements. Fisher (1998, p. 57-58) even categorized the Macintosh and Daft (1987) paper among those having “very little complexity” in their research method. More generally, Abernethy and Chua (1996, p. 571) later commented that statistical methods might be ill equipped to address the issue of MC packages.

Abernethy and Chua (1996) used a longitudinal case study to examine changes in the control package of a hospital, in order to answer the question how accounting control systems fit in the package of controls (Abernethy and Chua, 1996, p. 578). They found that many MC elements function as substitutes for one another. Furthermore, they claimed that older informal systems could be substituted whenever a new, more

sophisticated accounting system is implemented. However, according to them, this did not necessarily affect the effectiveness of the complete MC package. In later studies this phenomenon was called 'equifinality': the principle of achieving the same ends by other means (cf. Sandelin, 2008).

In the years that followed, much attention was still paid to the contingency stream of research in control, as discussed in the literature reviews by Fisher (1998), Chenhall (2003) and Luft and Shields (2003). On the basis of his review, Fisher (1998) stated that there are (too) many different definitions of control used in the literature, which hinders the development of MC research. Ten years later, Malmi and Brown (2008) concur with this view when reflecting on the papers published in their special issue on MC packages in *Management Accounting Research*:

“there is no consistent typology of the MCS package which would enable us to compare these configurations across the four papers and compare the influences on these configurations so that we can begin building a more coherent theory” (Malmi and Brown, 2008, p. 297; Kennedy and Widener, 2008; Sandelin, 2008; van der Meer-Kooistra and Scapens, 2008; Langfield-Smith, 2008).

Grabner and Moers (2013) responded to the many different ideas about definitions of MC packages and presented an analytical approach to align definitions of MC packages as such. Briefly summarized, they stated that MC systems are consistent and coherent sets of MC elements intended to address one control problem, whereas MC packages are just collections of all MC elements that are employed in a given unit of analysis. Recently, Friis et al. (2015) and Van der Kolk and Schokker (2016) used these concepts to further enhance the understanding of relations between MC elements in an MC package. Friis et al. (2015) scrutinized the complementary and substitutive relations between MC elements in a manufacturing firm, and Van der Kolk and Schokker (2016) explored the use of coupling theory to examine relations between MC elements. We add to this literature by empirically exploring the configuration of multiple MC packages and by developing the notion of 'conflicting MC elements'.

2.2.2 Taxonomies, the objects-of-control framework and archetypes

Several frameworks are available to distinguish various types of MC elements (see e.g. Malmi and Brown, 2008; Ouchi, 1979; Simons, 1995; Speklé, 2001; and see for an overview Strauss and Zecher, 2013). We use the ‘objects-of-control’ (OOC) framework (Merchant and van der Stede, 2007) to classify MC elements and to identify configurations of MC packages. This framework has two important advantages over other frameworks, which collectively form the reason we adopt it in the current study. First, it does not include ‘positive’ or ‘negative’ connotations, which allows a more ‘objective’ classification of MC elements that is less influenced by personal perceptions, biases or preferences (cf. Tessier and Otley, 2012, who comment that subordinates may perceive the use of MC different than supervisors, referring to the levers-of-control framework). Second, the boundaries among the MC elements in the four categories (personnel controls, cultural controls, results controls and action controls) are clear and leave less room for overlap when compared to other frameworks (see also Strauss and Zecher, 2013). Moreover, some other frameworks have been criticized for being not ‘collectively exhausting’, i.e. missing some types of MC in their framework (cf. Grabner and Moers, 2013, who criticize Malmi and Brown's framework), while the four categories as distinguished by Merchant and Van der Stede (2007) provide a more elaborate picture of an organization's MC elements.

Merchant and Van der Stede (2007) distinguish personnel, cultural, results and action controls. *Personnel controls* refer to mechanisms that aim at organizing the ‘human resources’ in organizations. Examples of it are selection interviews and training, but also appraisal interviews and coaching activities may be classified as ‘personnel controls’. *Cultural controls* deal with the use of norms, values and group dynamics to align subordinate behavior in line with the organization. For example, norms and values expressed by top management are cultural controls, but also the ‘tone-at-the-top’ can be considered as one. *Results controls* focus on the outcome or output of the subordinate. The monitoring of results and individual performance evaluations can be seen as results controls. *Action controls* aim to influence the behavior of subordinates through prescribing and monitoring desired behavior, for instance by protocols, rules and procedures (Merchant and van der Stede, 2007). Since we are interested in the

configurations of MC packages and the interplay between different MC elements, such clear distinctions between categories of MC elements are important. We will now discuss archetypal configurations of MC packages, using the controls by Merchant and Van der Stede (2007).

In his seminal paper, Ouchi (1979) identified two characteristics that drive the use of different types of MC: measurability of the output and knowledge of the transformation process. If a task has low measurability of output and imperfect knowledge of the transformation process, the use of personnel and cultural controls⁴ can be expected. Furthermore, if the measurement of the output is high and the knowledge of the transformation process is relatively perfect, he expects that managers resort to results and action controls to direct employee behavior. Although Ouchi (1979) does not explicitly refer to the idea of an MC package, his rationale for expecting different types of control in different settings can inform our exploration of MC package configurations.

By combining insights from Merchant and Van der Stede (2007) and Ouchi (1979), we can propose probable MC package configurations in different environments. In this study, we distinguish two possible archetypal configurations. First, in a situation with high measurability of output and a high level of knowledge of the transformation process, the MC package used will probably have a strong emphasis on results or action control, and a smaller, supportive, role of other control types (personnel and cultural control). In such situations, managers' emphasis will be on MC elements related to monitoring activities and measuring results, while MC elements such as training, norms and values and tone-at-the-top play a supportive role. With a supportive role we mean that they do not contradict the results and action controls of this MC package, and that they help to facilitate the use of the results and action controls. This can be done, for instance, by having a results-oriented culture, which supports the use of results controls (cf. Verbeeten and Speklé, 2015). We call this first archetype the "technical MC package", and we expect that MC packages used in, for instance, factories or departments with

⁴ We use Merchant and Van der Stede's terms here in order to be consistent and because their terms highly resemble Ouchi's categories. Ouchi (1979) originally distinguished Clan control (which highly resembles personnel and cultural control), Bureaucratic control (which highly resembles action control) and Market control (which highly resembles results control).

highly repetitive tasks and clear and easy to measure outputs will resemble this archetypal configuration.

Second, in a situation where the two task characteristics (measurability of the output and knowledge of the transformation process) are respectively ‘low’ and ‘imperfect’, the emphasis of the MC package will probably be on the use of personnel and cultural controls, with a smaller, supportive role for action and results controls (Merchant and van der Stede, 2007; Ouchi, 1979). Although the use of action and results controls is expected to be relatively low, in terms of for instance emphasis, frequency and use – because they do not fit the task characteristics very well – they can play a supportive role. For instance, even a distorted output measure can be used to facilitate conversations and to direct attention to certain tasks, however, it should then be taken into account that its use is limited and it has to be accompanied by other types of MC. Personnel and cultural controls play a major role in this second archetypal MC package: for instance, the selection of qualified new employees, a strong organizational culture and training for employees are emphasized by management and can form the core of the way in which employee behavior is directed in line with the organizational goals. We call this configuration the “social MC package”, and we expect to find MC packages that resemble these ideas in complex work environments, such as research or policy developing departments.

The two aforementioned configurations of MC packages can be seen as ‘ideal types’, which probably do not exist in this pure form in reality in the situations sketched. For instance, prior studies pointed out that action controls and results controls are increasingly used in situations with imperfect knowledge of the transformation process and a low measurability of the output, even though this increased use leads to problems with the task characteristics or with other MC elements (see e.g. Power, 1994; ter Bogt et al., 2015b). However, even though archetypal configurations will probably not be found in their purest form, they can be of great help when addressing different types of MC packages, as explained by Speklé (2001):

“a control archetype can be defined as a characteristic, discrete configuration of control devices that is descriptively and theoretically representative of a significant group of observable management control structures and practices.

The idea of control archetypes seems especially useful for it is compatible with the need to address control in its entirety, i.e. at the level of the organizational (sub-)system rather than at the level of the individual mechanisms or actors, whilst simultaneously reducing the complexity associated with the attempt to deal with control as an organizational phenomenon.” (Speklé, 2001, p. 427)

When an archetypal, ideal MC package is used, MC elements work together well in order to attain the organizational goals. However, in reality it is possible that the MC package configurations deviate from the illustrated ‘archetypal’ MC packages, and sometimes MC elements within a package may even conflict with one another. In the section that follows, we discuss the issue of using conflicting combinations of MC elements in an MC package.

2.2.3 Conflicting MC elements

One of the most important reasons articulated in the literature to study MC ‘as a package’ is probably the assumption that MC elements interrelate, i.e., they affect (the effectiveness of) each other (Malmi and Brown, 2008). Such interrelations among MC elements are currently still underresearched; a few studies focused on relations between MC elements within a single organization (e.g. Friis et al., 2015; Sandelin, 2008; van der Kolk and Schokker, 2016) or combinations of MC elements between organizations (Cristofoli et al., 2010; van der Meer-Kooistra and Scapens, 2008). We contribute by studying four MC package configurations and by focusing on the conflicting relations that exist between individual MC elements in such a package.

Traditionally, the literature distinguished between complementary and substitutive relations between elements. Elements are complements if “any one of them increases the returns to...the others” (Milgrom and Roberts, 1995, p. 181), and they are substitutes “when the benefits of one MC practice decrease with the use of (some) other MC practice (and vice versa)” (Grabner and Moers, 2013, p. 412). An assumption that implicitly underlies the notion of ‘substitutive’ elements, however, is that, because of the substitutive relation, the use of (at least one of) the elements will decrease over time. In other words, it is assumed that the elements do not have an ‘additive’ relation, but a ‘substitutive’ relation instead. We, however, want to emphasize that it is possible that MC elements decrease each other’s effectiveness, may still both be used in an

organization or business unit, for varying reasons (for instance, this can be the case when the MC elements are imposed on subordinates by different managers or managerial layers). This is the reason we call such relations between MC elements ‘conflicting’: they interact (conflict) with each other, but do not necessarily ‘substitute’ each other over time. A conflicting relation can thus be understood as a ‘negative complementary’ relation between two elements. In the accounting literature, the issue of negative complementarity has received some attention, predominantly limited to the context of principal-agent models and task complementarity. For instance, Nikias et al. (2005) used the term ‘negative complementarity’ to examine the situation in which an agent performed two tasks which decreased each other’s returns. In the current study we use the term ‘conflicting relations’ in order to stress that the type of relation is different from complementary and substitutive relations. So, MC elements have a conflicting relation when they are 1) simultaneously present in an organization, 2) hinder each other’s usability as tools to direct employee behavior and 3) do not substitute each other.

In this study, we examine four MC package configurations, and we focus on conflicting relations of MC elements within these packages. In addition, we explore which triggers have led to these conflicting relations. Although prior literature suggested that it was hard to study aggregated ‘categories’ of MC elements (cf. Friis et al., 2015), we think that studying the MC elements on a more aggregated level is a necessary step that can help to develop thinking about MC packages further. After an exploration of aggregated categories, we will also discuss how specific MC elements interrelate, in order to give some flesh to our analyses. In addition, we will explore which triggers lead to such conflicting relations. In the following section we convey details about our research method, after which we will present our case findings.

2.3 Methodology

2.3.1 Case study

We chose to adopt a case study method to research MC packages, because this is an appropriate method for further developing the concept and understanding of MC packages (Ahrens and Dent, 1998; Otley and Berry, 1994). Malmi and Brown (2008, p.

298) recommended conducting case studies “in a range of theoretically different contexts” in order to explore the concept of MC packages further. Therefore, we conduct multiple case studies in order to be able to compare cases to discover underlying mechanisms (Miles et al., 2014).

From September 2013 until June 2014, we scrutinized the MC packages of four departments within two different municipalities in the Netherlands. We conducted interviews, desk research and observations to scrutinize the MC package configurations and to explore conflicting relations between MC elements and their ‘triggers’. We conducted our case studies within Dutch municipalities, because medium-sized municipalities have very comparable organizational structures and contexts, which facilitates a structured comparison among the cases. Greentown and Bluetown are two medium-sized Dutch municipalities that inhabited respectively around 200,000 and 130,000 citizens and employed around 3,000 and 1,200 full time equivalent (fte) at the time of our study. In both municipalities we selected – together with the municipal financial controller – two departments on the basis of an assessment of the department’s task characteristics, using Ouchi’s (1979) two dimensions. Two cases were selected with an assumed ‘high’ level of knowledge of the transformation process and a ‘high’ measurability of output (we call these cases the ‘Executing’ departments BlueEx and GreenEx), and the other two cases had an assumed ‘low’ level of knowledge of the transformation process and ‘low’ measurability of the output (we call these cases the ‘Policy’ departments BluePol and GreenPol). In total, this leads to a total of four cases: GreenEx and GreenPol in Greentown, and BlueEx and BluePol in Bluetown – which are more elaborately introduced in section four. We expect to find the ‘technical’ MC package in GreenEx and BlueEx and we expect the ‘social’ MC package in GreenPol and BluePol.

2.3.2 Interviews and data triangulation

We used several methods of data collection, in order to triangulate and verify the obtained findings (following Modell, 2009; Vaivio and Sirén, 2010). The core of our research consists of 51 recorded and fully transcribed semi-structured interviews, which we held with civil servants and politicians from September 2013 to January 2014

(see appendix 2.A for a list of interviewees). We chose to conduct interviews because Malmi and Brown (2008), amongst others, specifically advised using interviews to explore MC packages, to “guarantee” – to some extent – data quality (Malmi and Brown, 2008, p. 298). The interview questions we used to discuss the use of MC elements were mainly derived from Merchant and Van der Stede (2007), as discussed in the literature review (see appendix 2.B for the interview questions). The interviews were fully transcribed, which led to a total of 829 pages of interview transcriptions based on 61 hours of interview data.

Complementary data was gathered from field observations and desk research. We spent over 50 days – in the period from September 2013 to June 2014 – in the four departments, and witnessed a wide selection of departmental events, such as official meetings, but also day-to-day work activities. A detailed account of activities undertaken was kept by, and field notes were written down in a research diary. A list of official meetings that were attended is provided in appendix 2.C. Informal conversations, observations and meetings (e.g. in elevators and corridors and near the coffee machines) are not listed here, but also helped the researchers to make sense of the data during the case analyses. Such informal meetings were reported in the field notes. Because we were granted full access to departmental and municipal documents, a large set of minutes of meetings, policy documents, strategic plans and other documents could be collected, which provided additional information about the MC package configurations and relations between MC elements (see appendix 2.D for a list of the documents used in this study).

2.3.3 Identification of the variables

In Atlas TI, a software tool for analyzing qualitative data, the previously mentioned data was analyzed and ‘open’ coded, relying on the OOC-framework by Merchant and Van der Stede (2007). The interviews were semi-structured and Atlas TI provided a possibility to simultaneously view multiple transcriptions, which allowed convenient comparisons between the transcriptions of each of the cases studied. Using pattern matching (Yin, 2014), we were able to identify the use of the MC elements per department. All information regarding the use of the four categories of MC elements

was summarized per department. The four summaries (of approximately 1,000 words⁵ each) were subsequently triangulated with information from the field notes, official observations and the retrieved documents going back and forth between the data and the summary. We aimed to overcome potential biases and gaps in these summaries by sending them to the research assistants who transcribed a part of the interviews. Then indicated whether they recognized the picture that was sketched in the summaries, and they provided some additional feedback on the summaries. After receiving their feedback, we made a few minor changes in the summaries.

2.3.4 Case setting

Because our research primarily focuses on the MC packages that are used to direct the behavior of employees in the department, we will only briefly sketch the broader context in which the municipalities and departments are embedded⁶.

In the 1980s, many municipalities in the Netherlands changed their focus from input control toward output-oriented control (van Helden and Jansen, 2003). Encouragements for local governments to employ businesslike MC elements came, amongst others, from the Dutch ministry of Home Affairs. Many changes were introduced under the umbrella of the so-called PMI (Policy and Management Instruments), a movement that closely resembled the international 'New Public Management' movement (Hood, 1995; Lapsley, 2009). These movements may have resulted in an increased focus on results controls in many public sector organizations, even though their task characteristics may not always be suited for these types of control (cf. Cristofoli et al., 2010). For more complete overviews of the Dutch situation, we refer to the extant literature (e.g. ter Bogt and van Helden, 2000; van Helden and Jansen, 2003; Groot and Budding, 2004; van Hengel et al., 2014; Speklé and Verbeeten, 2014).

⁵ We acknowledge that we had to make concessions in the level of detail that we could include in these four 'MC package summaries' in order to fit them in a paper with an acceptable length, consistent with Malmi and Brown's (2008, p. 288) expectations about limitations of possible MC package research. We believe, however, that the length of our summaries is appropriate for outlining the MC package configurations and relations that we aim to study in this chapter.

⁶ Paragraph 3.4.1 describes the characteristics of the two municipalities in more detail.

2.4 Findings

Below, each case is first briefly introduced, and then discussed along the categories of the OOC-framework by Merchant and Van der Stede (2007). Subsequently, we focus on the conflicting relations within the MC packages examined and the triggers that have led to these conflicting relations.

2.4.1 GreenPol

GreenPol was a policy department that employed around 50 employees (40 fte). The main tasks of GreenPol consisted of developing policy for the municipality in the fields of accessibility, housing and energy. The structure of the department followed a so-called ‘matrix’ organization: four task programs (previously these were four individual departments) were each led by a ‘program leader’, who aimed to supervise the content of the work, and two ‘team leaders’, who were in turn responsible for the well-being of the employees. The program and team leaders were supervised by the department head. The department’s advisors were generally highly educated (i.e., most policy advisors obtained academic degrees). Almost 40% of the employees were females and the age of the subordinates was almost equally distributed between 25 and 60 years of age. Most policy advisors shared an office with three other colleagues; the team leaders randomly allocated employees over the offices.

2.4.1.1 Configuration MC package GreenPol

Personnel controls – The selection of new hires was considered an important MC element because of the high task complexity in the department. However, since Greentown faced fierce budget cuts, the number of newly hired people had decreased in recent years. Yet, when new advisors were hired, a ‘trainee program’ had to be followed for them to become familiar with the tasks of a policy advisor. Although an education budget was available for all employees, interviewees often mentioned that this budget was very low and that requests for taking courses were often neglected. The team leaders admitted that a long-term education plan for the staff was lacking. Most interviewees mentioned, however, that the professional quality of their colleagues was

very high. Program and team leaders jointly assigned tasks to the employees, and, in addition, others could also assign tasks, for instance during the weekly 'briefings'. These briefings were quasi-formal meetings near the coffee machine, led by those in supervising positions, and where most employees were present. Interviewees often smiled or laughed when talking about their task or job descriptions, since they were granted a lot of freedom, and such descriptions were not helpful for them. Interviewees in supervising positions posed that policy advisors should be very flexible, and engaged in many different fields and disciplines. As the department head indicated:

"Self-management is a basic requirement in this department." (DEPARTMENT HEAD)

Cultural controls – The culture in GreenPol could best be described as informal, cooperative and ad hoc. "We often work with multidisciplinary teams, without too much 'formal meetings'; we work very *ad hoc*" (DEPARTMENT HEAD). Those in supervising positions were aware of the use of exemplary behavior as a means of MC. The seniors in the group – i.e. the team leaders, program leaders, department head, referred to as 'alpha's' – could be referred to as 'bearers of culture'.

"We exhibit a lot of management control via exemplary behavior. If you think about group norms, it's very important what the Alpha's in a group do. What is their behavior? What are they used to? If they work half an hour longer to get a job done, all of us should do that." (DEPARTMENT HEAD)

The weekly briefings near the coffee machine also served as important moments for the communication of the department's values. Typical expressions during these meetings were sentences such as "Quick action, that's what we like!"⁷ (in response to a problem that was quickly dealt with) and "He'll eventually get used to *our* way of working!" (in response to an announcement that a new politician wanted to change a process). Collegial feedback was rarely given and most interviewees indicated that it could be improved. Interviewees still recognized the former four departments as 'islands' within the department, who mostly listened and talked to each other.

⁷ Both quotes stem from our field notes.

Results controls – According to the interviewees, using results controls in this department was difficult, for two reasons: the output of tasks was often not measurable, and outputs were often co-produced with other stakeholders. The following two quotes illustrate these points.

“Numbers say absolutely nothing. I can produce one very complicated document, on which I work for a complete year, and I can make twenty documents that are fairly easy to make and that don’t cost a lot of time. And one is not better than the other.” (TEAM LEADER 1)

“I am leading the program ‘Housing’, however, we don’t build the houses ourselves. Other people, outside the organization, have to do the real work. The only thing we can do is to facilitate them.” (PROGRAM LEADER 1)

Evaluation of policy advisors’ performance is mainly on the basis of their actions’ timeliness and the politicians’ opinion about their work. In other words, a policy report was ‘good’ if it was handed in before the deadline, and if the politicians were satisfied. The reports should be “readable and understandable, but the satisfaction of the municipal council is also important. The report is not an end in itself” (ALDERMAN 1). Sometimes, the program and team leaders used ‘results’ or ‘outputs’ to evaluate the work of individual employees, however, this way of evaluating subordinates has also led to problems (see next section). Monetary rewards and sanctions were not often used in the GreenPol department, they were by exception granted to policy advisors when they engaged in a lot of additional tasks that exceeded their standard workload. Although the measurability of the output was acknowledged to be very low, many interviewees indicated that they preferred a stronger connection between achieved results and rewards and sanctions.

Action controls – Procedures and protocols were not emphasized; perhaps the most prevalent action control in GreenPol was the process of delivering reports to the municipal council and the aldermen to support political decision-making. Although this process was described in detail in official documents, the informal process around it was of equal importance. The central principle was described as: ‘make sure that everyone who wants to say something about a report, has an opportunity to do so before you send it to the political level’. The time schedules and deadlines for handing in

reports were experienced as 'strict', however, when there were good reasons – or if an alderman asked you to do so – one could deviate from the prescribed procedures.

“What must be, must be. For instance, our department head can send an e-mail to the alderman which reads: ‘This is very important, but it is too late, however, I want you to discuss it in your meeting on Monday’ [...] I experienced this a lot lately, so often that I asked myself: how did it work again, if the department head does not send his ‘high urgency’ e-mail?” (POLICY ADVISOR 3)

Furthermore, there were some other action controls written down in the department’s official documents (such as filling out timesheets). However, the employees did not take these very seriously.

2.4.1.2 Conflicting MC elements GreenPol

Most interviewees indicated that informal cultural controls were the most ‘dominant’ type of MC elements in this department, closely followed by results controls, even though interviewees indicated that the measurability of their tasks was ‘low’.

Interviewees indicated that the combination of the informal culture and the use of some ‘output’ controls sometimes led to problems:

“Our jovial culture and the tendency to ‘sweep things under the rug’ [...] severely hinder a strict use of results controls.” (PROGRAM LEADER 1)

The informal department culture was visible in almost all day-to-day activities; the department was experienced to be rather flat, in terms of hierarchy, and many appointments were made ‘ad hoc’, i.e. in the corridor and near the coffee machine. The jovial culture, which was reinforced by the informal way in which the department head organized the weekly meetings near the coffee machine, made it sometimes difficult for program or team leaders to be ‘stern’ and to sanction someone because of relatively bad performance in terms of ‘outputs’. The department members were not used to being held too strictly accountable for the success (or failure) of executed tasks. At the same time, such directive attempts by program or team leaders were not well received by subordinates because they challenged the informal way in which things were done in

the department. So, the jovial, informal cultural controls and the more directive, constraining way of using results controls hindered each other's use as MC elements.

These two conflicting MC elements have different origins in terms of time, although it is difficult to mention an exact moment of 'introduction' or 'use'. The jovial and informal culture was in the municipal department (and its predecessors) already for a very long time. The department (and its predecessors), with its high average level of education, complex work processes, political relevance and close connection to the political level, could be seen as an 'island' in the municipal organization, with a strong, informal and proud departmental culture. When the current department was created, however, two years before our study, it was decided that the program leaders should have a clearer role in the department, and that the control of the programs should also be more strict. It was at that moment that the results controls, in the form of stricter budgets, policy programs and evaluations, received more attention.

"The policy programs were not very well controlled in the beginning [...] but we really wanted to improve on that. [...] Controlling policy programs has to do with targets, resources and that kind of stuff, but we were not really paying attention to that. We now [starting two years ago] use the policy program budget more extensively, which helps us to connect the two worlds: the world of the politicians and the world of the people developing and executing the policy."
(DEPARTMENT HEAD)

These newly implemented results controls were used by a group of young program leaders who were more concerned about showing results of their policy to politicians. These new results-oriented MC elements conflicted from time to time with the informal and 'jovial' department culture.

2.4.2 GreenEx

GreenEx could be viewed as the 'front-office' of Greentown. The department was responsible for making and issuing official governmental documents, such as passports, driver's licenses and birth certificates, registering life events, such as births and marriages, processing adjustments to local taxes and answering and registering phone calls to the municipality of Greentown. Employees generally worked behind counters

and at the telephones, and were to some extent able to observe each other's activities. The work was divided over four teams, which were led by a team manager. Approximately 60 subordinates (45 fte) were employed in this department, and the average age in this department is about 48 years. Approximately two third of the department was female, and employment agency workers were mostly hired during busy periods. However, since a few years, there has been an increase in the relative number of employment agency workers, because employees were not given tenure anymore. GreenEx was considered an important department, by politicians, because of its public visibility:

“it's a strategic department, which has a significant effect on the public image of the municipality.” (ALDERMAN)

2.4.2.1 Configuration MC package GreenEx

Personnel controls – The majority of the tasks of GreenEx was highly routinized and there was not much room for 'self-management'. Job descriptions were relatively general, but attention was paid to the training of new employees. However, because of austerity measures in Greentown, the length of the training program for new hires was lately cut to half its original length. The director of GreenEx commented:

“That's a very sensitive point. Education budgets are being centralized again. Now we have to negotiate about the budget we can 'get back' in order to do our work properly.” (DIRECTOR)

They had to follow a mandatory basic training and for the first one or two weeks, they had to work alongside more experienced employees.

Cultural controls – Employees in GreenEx were very keen on rules and regulations, and referred to the departmental culture as 'rule-centered' and 'individualistic'. Although some team leaders expressed that 'comradeship' within the department was high, other interviewees contradicted this.

“The culture is like: you don’t know where other people are, what they are doing, and what they are working on. Communication is not great around here.”
(EMPLOYEE 3)

Providing each other with feedback was not really incorporated in the departmental culture, as indicated by several interviewees.

“I don’t see it [i.e. giving feedback] happening. It’s part of a culture I was not able to change yet. They do talk to me about their colleagues, but directly speaking to other colleagues is experienced as something very difficult apparently”
(TEAM LEADER 2)

“sometimes I refrain from giving feedback, because then I’m afraid that I’ll receive a growl back or so” (EMPLOYEE 1)

Employees generally had difficulty recognizing shared norms and beliefs of the department, however, ‘adherence to rules’ and the principle that ‘the client is king’ were mentioned a few times as core values.

Results controls – Anyone in GreenEx is able to view ‘effectiveness and efficiency’ metrics of each individual employee through a software package that measures the ‘throughput time’ per client. Since last year, these aggregated numbers were also discussed in the yearly assessment meetings. During the assessment meetings it was communicated that, if throughput times were higher than average, the employee would have to ‘improve’ on that, i.e. work more efficiently in terms of time spent per client. These results were not connected to any system of rewards. However, small monetary rewards were available, but they were exceptional. They were only issued when an employee takes up tasks or projects that were on top of his or her usual workload. And regarding poor performance, a team leader reflected:

“Only when someone is doing a really, really bad job, we start a very lengthy process to do something about it.” (TEAM LEADER 1)

However, because of the length and intensiveness of such a process for a supervisor, it was admitted that this sanction was seldom carried out.

Action controls – The real focus in GreenEx was on procedures. Most task descriptions and procedures were written down in easily accessible handbooks. Thereby, a software program was available, which contained a database with frequently asked questions and answers to them. Also, procedures that had to be followed were available there on the basis of past experience. Behavioral constraints – both physically and electronically - were also present. For instance, the access to the passport room was only for authorized employees during a certain period of time, the rights to edit the municipal records were only for registered employees and an ‘audit trail’ was kept, to review the actions of individual employees in the system.

“The procedures are very strict. Of course, there is the national legislation to which we have to comply. Furthermore, we have workflows that are specifically designed for municipalities. And there are also the job descriptions and the appointments you make with your supervisor during yearly appraisal conversations.” (ADVISOR)

Protocols regarding dress codes were also in place, since this department functions as a front office of the municipality. Thereby, separation of duties, action accountability and preaction reviews were also recognized as important aspects of the daily work. An employee mentioned that following procedures was “all we do, and that’s how it should be” (EMPLOYEE 5). Actions were generally not connected to any form of rewards: “It’s just part of their jobs. We won’t reward them extra for just doing their job. We discuss these [work-related] matters in appraisal conversations” (TEAM LEADER 2).

2.4.2.2 Conflicting MC elements GreenEx

Many interviewees indicated that procedures and protocols were dominant in GreenEx:

“Procedures prevail.” (EMPLOYEE 6)

“You just have to follow the procedures. You simply must. And because I work here for a very long time now, it is normal to do so, it’s a kind of automatism.” (EMPLOYEE 5)

However, these rules and procedures increasingly conflicted with other job requirements, most importantly with the value of being ‘client-friendly’ and the recent focus on decreasing the throughput times per client. We observed that these MC elements were conflicting (the protocols, throughput times and customer-friendliness) and led to problems at the individual and department level, which was supported by our interviews. Although some interviewees mentioned that a certain level of tension between client-friendliness and a short throughput time per client was fine, they also indicated that since the throughput times were part of the yearly appraisal interviews, this led to more stress and perhaps concessions regarding the compliance with rules and protocols.

“Now that we are economizing, you can see that less people have to do more work. So, it becomes more difficult to follow the procedures strictly, because the [budgeted] time [to help clients] is very limited. Not that illegal things happen around here, but I do think that concessions are being made...” (EMPLOYEE 6)

The reason for the increased focus on throughput times (results controls) were the austerity measures taken recently by the municipality’s top management, which cascaded down to the departments. Because of these recent austerity measures, the departments received less money and had to economize substantially, while doing the same or a higher amount of tasks. The action controls (the rules and protocols) and the cultural controls (the central value of client friendliness) did not necessarily conflict with each other, but now that the focus on throughput times was added approximately one year before our study, this led to conflicts between the MC elements.

2.4.3 BluePol

BluePol was a policy department in Bluetown, focusing on the fields of education, culture, health and society. Three senior policy advisors were responsible for the three policy areas, and one department head led the department. The activities of the employees in this department were mostly non-routinized and partly routinized, and the daily work often involved meetings with external stakeholders. The average level of education was medium to high: most policy advisors obtained degrees from universities

or institutes of professional studies. The department consisted of about 35 policy advisors, and the percentage of females in it was slightly over 50 %. The ages of the employees were almost equally distributed, ranging between 25 to 60 years. Almost all employees in BluePol shared an office with one colleague.

2.4.3.1 Configuration MC package BluePol

Personnel controls – Many personnel controls in Bluetown were centrally coordinated and initiated by their award winning⁸ Human Resources (HR) department. For instance, coaches were available to support individual employees or teams, who could help to develop (team) skills, but could also help if there were problems at the level of the individual. Another way in which the HR department affected other departments was via the standardization of yearly appraisal meetings. Employees in the BluePol department had three meetings per year with their department head to discuss so-called RDAs (*“Result Driven Appointments”*). These RDA’s concerned for instance individual ‘output’, personal competences, plans to attend workshops or follow educational programs. In other words, these RDAs expressed the expectations toward employees for a certain year. The employees set their personal targets in consultation with the department head, before and during the RDA meetings.

“I feel that *that* [the RDA meeting] is the place where I can express my ambitions and desires.” (POLICY ADVISOR 1)

Education plans were discussed there as well; a yearly lump sum dedicated to education and training was available for employees to follow required or desired additional training. Generally speaking, most requests for education were approved. Although job descriptions were available to most employees, they were considered too general to guide their behavior: self-management was stressed instead:

“Much attention is given to individual responsibility, professionalism and making choices independently.” (POLICY ADVISOR 3)

⁸ It was one of the first municipalities in the Netherlands to receive the certificate “Investors in People” in 2007. It was awarded because the municipality invested heavily in the development of its employees. Thereby, Bluetown was chosen as the “Best Employer” in 2010 among non-profit organizations that were larger than 1,000 employees.

Cultural controls – The aforementioned HR programs were deeply embedded in BluePol. Autonomy and professionalism were considered important values for Bluetown:

“Everywhere in our organization we say: ‘*our employees are professionals*.’“
(DEPARTMENT HEAD)

The municipality’s core values were Connection, Responsibility, Trust and Craftsmanship (in Dutch, these values all start with a ‘V’ and are therefore better known as the *Four V’s*⁹). The large majority of the interviewees spontaneously listed these values and was able to apply them to their own work environment. Although these *Four V’s* had been initiated centrally, they were strongly embedded in the department. Many interviewees also included these values – implicitly and explicitly – in their own communications toward others, inside and outside the organization. The four V’s were part of a program termed ‘the New Official’, which had been implemented in Bluetown, advocating a new ‘type’ of civil servant, namely one who is result-oriented and ‘accessible’ for inhabitants. Besides these values, another cultural control is mutual monitoring, which was considered to be not very strong in BluePol. The majority of interviewees explicated that they would like this to improve, and the department head was working on plans to improve this situation.

Results controls – Although all employees and supervisors *within* BluePol expressed that the achievement of specific results was the single most important MC element, two interviewees *outside* the department were very critical about BluePol’s use of results controls.

“They [the advisors and the department head] feel like they’re making good agreements with respect to results. However, if you ask me – and I think I’m an expert in this field – I’d like to see those agreements! I have taken some samples in other departments, and the outcomes were saddening.” (HR ADVISOR 1)

The RDA’s were filled out by employees and their supervisors in a standardized format, indicating their ‘expected results’ for the next year. However, at the same time they

⁹ See e.g. Appendix 2.D, Doc# 49, 50 and 52

recognized that measuring their results was something 'hardly doable' or 'very difficult', because often it took time to observe the outcomes of proposed policy measures. The connection between results controls and financial rewards and punishments was almost neglectable. However, non-monetary rewards, such as compliments, were sometimes used by politicians to reward policy advisors. Sanctions were also seldom employed in BluePol; sanctioning – and eventually firing – employees was said to be a very lengthy and time-consuming process, and therefore many supervisors indicated that they refrained from it. As a consequence of the limited usability of results controls, almost all employees were given an average score for performance during the RDA meetings with the department head.

Action controls – Policy advisors within BluePol were, in general, only marginally restricted by action controls. Some prescribed workflows had to be respected, such as the so-called 'piece flow', which was considered to be the most important procedure in the BluePol department. It concerned the process of getting a report or advice from a policy advisor to the political decision makers. Although the procedure for the piece flow was generally respected, it was possible to deviate from it, for instance in cases of high (political) urgency or sensitivity. Furthermore, some protocols were in place with respect to providing subsidies to organizations (e.g. some subsidies required a signature from the department head), and it was not allowed to deviate from these. Because of the political sensitivity of their work, the timely delivery of policy advice was considered very important, but advisors were granted freedom in how they achieved this: "you have your own responsibility" (POLICY ADVISOR 5).

2.4.3.2 Conflicting MC elements BluePol

Personnel and cultural controls can be considered crucial for the well functioning of BluePol. We observed two different relations between elements from these two categories of MC elements. First, supervisors, but also Bluetown's HR department, actively used the training and coaching (personnel controls) to strengthen the culture of results orientedness (cultural control). The coaching and training sessions helped employees to recognize – and embed – the municipality's core values, and vice-versa,

some of the often repeated ‘core values’ – such as ‘craftmanship’ – increased the employees’ enthusiasm for voluntary training and coaching. So, to some extent, these MC elements could be viewed as complements of each other. Second, at the same time, some MC elements within the categories of personnel and cultural controls were in conflict with one another. For instance, the municipality highly emphasized that employees should be ‘self-managed’ professionals, and ‘self-management’ can be considered to be a form of personnel control. Although this had some positive effects (e.g. employees felt that they were ‘empowered’), this also resulted in more individualistic, ‘solo’ behavior on the part of the policy advisors in the department, which undermined the use and effectiveness of cultural controls, such as mutual monitoring.

“Policy advisors don’t really work together or share experiences amongst each other. Neither do they provide feedback to each other extensively. It just doesn’t happen a lot. However, [the department head] tries to implement those things via team coaching processes.” (DIRECTOR)

Cultural controls require that subordinates in a department have strong ties to others to enable, for instance, possibilities to provide each other with feedback or to reinforce some cultural values. The connection with the peer group was, however, weakened by the individualistic way of working of many of the department members. This has led to limited usability of ‘mutual monitoring’, even though the department head tried to embed this in the departmental culture.

The cultural values such as ‘craftmanship’ and ‘self management’ originated from the central HR department of the municipality and the municipality’s top management. They were communicated via training, newsletters, speeches, blogs, booklets and other channels. Mutual monitoring was, however, an MC element that the department head wanted to embed in the department. The two MC elements thus originated from different places in the hierarchy of the municipality, which did not fully take into account each other’s place in the departmental MC package.

2.4.4 BlueEx

BlueEx was a department in Bluetown, responsible for the maintenance of all municipal buildings and installations, such as bridges, water pumps and traffic lights. The department employed 44 employees (38 fte), who could roughly be divided into two equally large teams: a service team, who often work 'on the road', and a team of preparers and coordinators, who mainly work in their municipal offices. BlueEx was led by one department head, and the service team had its own supervisor, who in turn was supervised by the department head. Most subordinates had vocational education and additional technical training (both internal and external) to be able to operate the municipality's installations and equipment. All 44 employees of BlueEx were males, except for one secretary. The average age of the subordinates in this department was around 45.

2.4.4.1 Configuration MC package BlueEx

Personnel controls – When hiring new employees, the most important selection criteria were skills and experience, but a 'fit' within the social group was also an important criterion. Internal and external training was frequently offered to keep the employees updated about new developments in their domains of expertise. Some of this training was obligatory, however, employees could also select additional training themselves.

“When I started working here, the only requirement for my position was to have technical vocational education; and of course I had to fit in the existing group. Well, that was back then. But I also remember that later on, when others joined, management insisted that more diplomas were required to be employed here.”
(SERVICE EMPLOYEE 2)

During yearly RDA meetings, employees made plans about education, coaching and development together with their supervisors. 'Self-management' was frequently mentioned in departmental policy documents, and during our interviews it was often repeated. However, we also observed that employees were often given very specific instructions, and that many work flows had to be followed when conducting certain tasks (see action controls).

Cultural controls – The culture in the department was frequently described as ‘informal’, but also as ‘direct’. Remarks about culture were often followed by a reference to the fact that all employees in this department were men. The director elaborated:

“There is also a lot of humor in that group, and they like to make fun of each other [...] The central norm seems to be: ‘Work hard, but take care of your colleagues as well.’” (DIRECTOR)

Mutual monitoring did take place, often in a very informal way, which is however deeply embedded in the culture of the department.

“We have a sanction policy: if you make a stupid mistake, you have to buy cookies. [...] That’s the culture we have. If we make or see a stupid mistake, we post the picture in the Whatsapp group of our team. And then you ask ‘Who will buy the cookies today?’ And most often...it’s me.” (SERVICE EMPLOYEE 2)

The municipality’s central values (Connection, Responsibility, Trust and Craftsmanship) were also often repeated and embedded at the BlueEx department. Many of the employees had training, individually or with their team, in which they learned how to make sense of the municipality’s core values in their everyday work (e.g. how to communicate the municipal core values when you are ‘on the road’, or how to connect with inhabitants who are upset about maintenance-related issues of infrastructure).

Results controls – Via Microsoft Sharepoint, a software system used to assign tasks to employees, supervisors were able to see and measure the ‘efficiency’, ‘timeliness’ and ‘effectiveness’ of the actions and responses of the service employees. However, tasks that were not entered in Sharepoint (e.g. because entering or reporting the task costs time, and when urgent tasks have to be completed, the employees did not fill out every task in the system) could not be observed by supervisors, which distorted the reliability of these performance metrics. Furthermore, the yearly RDA meetings were important moments in a year during which goals were set and results were evaluated.

“The RDA meetings are a very important tool for management control; that’s where we call the things by their names.” (DEPARTMENT HEAD)

The connection between the achievement of results and rewards or punishments was experienced as 'weak'.

Action controls – Sharepoint was used to assign tasks to the employees of BlueEx. The software package could 'automatically' assign tasks, for instance when a sensor 'saw' that a bridge was not working anymore it sent a message to the system. However, tasks could also be entered manually. Subsequently, the tasks were assigned (manually or automatically) to one of the service team employees, who then received a message concerning the problem on his cell phone. When a task was finished, service employees had to report this in the system. Other important action controls related to the procedures for safety. Especially regarding working in the public space, these received much attention in GreenEx. However, sometimes – when something, e.g. a bridge, had to be fixed quickly without causing too much trouble for traffic – some of these safety procedures were interpreted more 'loosely'. In Sharepoint, workflows were available to solve frequently encountered problems. However, when installations, such as water pumps or bridges, broke down, it was up to the service employees to solve the problems, possibly with the help of prescribed routines or other colleagues. Although rewards were not really linked with achieved results, team rewards were rewarded when teams 'worked together very well'. The supervisor of the service team reflected:

“The water pump team did cooperate very well internally [last period], while they were working on an extremely difficult task. [...] The only thing I can do to reward them is by giving them vouchers, which can be for instance dinner vouchers or gift vouchers [for the complete team].” (SUPERVISOR SERVICE TEAM)

These team rewards were awarded in meetings of the service team, and they were greatly appreciated among them.

2.4.4.2 Conflicting MC elements BlueEx

We identified a conflicting relation between action controls (the reporting of activities) and personnel controls (self management) in BlueEx. On the one hand, it is communicated to the employees, especially the service employees, that they are 'craftsman' and that they are expected to be 'autonomous professionals'. However, at

the same time, the registration and measurement of all their activities (results controls) signals that they have to report every single thing they do. Sharepoint enables the measurement of the time spent per task, which is now available to the supervisors in the department, however, it required the service employees to register everything they do in the software program. Interviewees indicated that these newly implemented results controls have their limitations and require a lot of administration efforts from the employees.

“Some things are measurable, but not everything. If we had to report everything we do, we needed a private secretary. Of course, [the higher level managers] want me to report everything, but I simply have no time for that; if I did, I couldn’t finish all my tasks in time, which is more important than all the administrative stuff. I think we [the service employees] all see it this way. [...] So we fill out very little things in Sharepoint.”

(SERVICE EMPLOYEE 3)

Higher-level managers in the department, however, repeated and reemphasized the relevance of reporting tasks in Sharepoint, because this was one of their main sources of information to evaluate employees and activities of the department. As illustrated in the quote, self-management of the service employees was compromised because of the compulsory reporting of tasks in Sharepoint, and the reliability of the output measures in Sharepoint was lowered, because only a limited number of tasks was filled out by the service employees. So, both MC elements (self-management and measuring results via Sharepoint) are conflicting: they decreased each other’s usability as a means of directing employee behavior.

The personnel control (emphasizing self-management and employee autonomy) originated from the centralized HR department in the municipality and the higher levels of management who initiated this value program. The results control originated within the department itself, because the department head and the work planners wanted to have more information about the whereabouts of the service employees and their finished tasks. The conflicting relation between the two MC elements is thus a result of, what we call, a ‘hierarchical trigger’: the origins of the two conflicting MC elements are in different hierarchical layers.

		Greentown		Bluetown	
		<i>GreenPol</i>	<i>GreenEx</i>	<i>BluePol</i>	<i>BlueEx</i>
<i>Personnel controls</i>	Emphasis on hiring professionals, less focus on training, self-management is stressed	Applicant requirements low, some internal training is provided, self-management is low	Emphasis on hiring autonomous professionals, coaching and training are frequently used	Skills and fit within group important, training are frequently offered, self-management	
<i>Cultural controls</i>	Informal and individualistic culture, alpha's serve as role models, less mutual monitoring, shared offices with 3 colleagues	Value of sticking to routines is often stressed, formalized culture, less mutual monitoring, transparent work places	Individualistic, values are well-known, but not always employed, mutual monitoring is low, offices shared with 1 colleague	Informal culture, direct communication, informal mutual monitoring, desks in a square and employees 'on the road'	
<i>Results controls</i>	Moderate emphasis on results; success is dependent on politicians' judgments	Exploratory use of metrics, norm values, weak connection of results and rewards	Paradoxical use of results controls, since measurability output was low, weak link results and rewards	RDA meetings used for result evaluation, results measured in Sharepoint, weak link results and rewards	
<i>Action controls</i>	Less emphasis on action controls, however, decision-making requires 'political sensitivity'	Strong emphasis on rules, procedures and protocols, strict planning of tasks per employee	Less emphasis on procedures, own responsibility to engage in the 'right' actions	Tasks are assigned via Sharepoint, many safety protocols, teams are rewarded for good work practices	
<i>Conflicting MC elements</i>	<ul style="list-style-type: none"> • Informal, jovial culture (<i>Cultural control</i>) • Rewarding and sanctioning results (<i>Results control</i>) 	<ul style="list-style-type: none"> • Output measures (<i>Results control</i>) • Rules (<i>Action control</i>) • Customer friendliness (<i>Cultural control</i>) 	<ul style="list-style-type: none"> • Mutual monitoring (<i>Cultural control</i>) • Stimulating self-management (<i>Personnel control</i>) 	<ul style="list-style-type: none"> • Registering finished tasks (<i>Results control</i>) • Stimulating self-management (<i>Personnel control</i>) 	
<i>Trigger of conflicting relation</i>	Historical trigger (conflicting MC elements introduced at different moments in time)	Hierarchical trigger (conflicting MC elements introduced by different organizational layers)	Hierarchical trigger (conflicting MC elements introduced by different organizational layers)	Hierarchical trigger (conflicting MC elements introduced by different organizational layers)	

Table 2.1 – Overview of the identified MC elements, conflicting relations and triggers

2.5 Discussion

We study four MC package configurations and conflicting relations within these packages. In table 2.1 we provide an overview of the identified MC elements, conflicting relations and triggers for these relations. In our discussion we focus on two main themes: first we discuss the MC package configuration variety, and second, we discuss the conflicting relations of MC elements that we identified in our case studies.

2.5.1 MC package configuration variety

When comparing the cases, we find some expected similarities between BlueEx and GreenEx, and between BluePol and GreenPol. For instance, in the ‘executing’ departments, protocols and procedures were often used as a means of MC, i.e. they emphasized the use of action controls. In the ‘policy’ departments (GreenPol and BluePol) we observed a stronger use of personnel controls (selection of new employees, training). The increasing use of results controls seemed problematic in the policy departments. We, however, also found some unexpected dissimilarities between the cases. In the following sections, we will compare the cases in some more detail, and provide some reflections on the four MC packages.

In the policy development departments, managers placed emphasis on MC elements in the personnel control category, such as self-management and hiring capable professionals. Furthermore, action controls, such as procedures, were in both cases of lesser importance. These findings are consistent with Ouchi’s (1979) predictions and our description of the ‘social’ MC package archetype. However, it is notable that cultural controls were less emphasized in these cases than expected on the basis of Ouchi (1979). One crucial aspect of cultural control, mutual monitoring, was even considered ‘low’ by the managers and subordinates in both departments. A possible explanation for this can be that the emphasis on ‘autonomy’ and ‘self-management’ on the part of the employees may have led to a more individualistic atmosphere, which may hinder the willingness and possibilities to provide feedback to peers (see also the next section).

Regarding the use of results controls, both policy departments found themselves in a somewhat ambiguous situation. Although they wanted to show ‘results’ of their work to others (such as the political level, but also to the society in general), the output

of their work was not easily measured, because it was for instance often a co-production with other parties or because it takes much time to observe the effects of new policy measures (cf. ter Bogt et al., 2015b). This low measurability of output in combination with the desire to 'show' concrete results was dealt with in different ways in the two departments. In BluePol, this has led to a 'looser' use of the word 'result' as indicated by the interviewees (some activities were now seen as 'results'), whereas in GreenPol, attention shifted to results that could be measured, such as the timeliness of the delivery of policy advises.

When comparing the 'executing' departments (BlueEx and GreenEx), we see that action controls play an important role in both MC packages, as expected on the basis of our 'technical' MC package archetype. In GreenEx, the action controls were the most emphasized types of MC, whereas in BlueEx cultural controls were the most emphasized MC elements. This emphasis of different types of MC in the two departments with similar task characteristics can be explained in several ways. First, although we classified both GreenEx and BlueEx as having 'perfect knowledge of the transformation process' (Ouchi, 1979), we found that the tasks in GreenEx were more repetitive, and the task variety in GreenEx was also more limited than in BlueEx. Second, it is possible that the relatively higher educational requirements in BlueEx (compared to GreenEx) 'substitute' for some action controls. So, because employees in BlueEx have to be, in general, more skilled and better trained, there is less need to employ certain rules and procedures. Third, the dominance of cultural control in BlueEx can perhaps be related to the relative homogeneity of the department: all employees working in the department (except the secretary) were men with a technical background. In GreenEx, however, the teams were more mixed in terms of gender and background, and only basic internal training was required for employees in this case. Our findings point to a possible effect that departmental homogeneity can have on the usability of cultural controls. For instance, the findings suggest that it can be the case that a more homogeneous department facilitates a better use of cultural controls, because the departmental members already have strong ties to each other (which possibly enables feedback mechanisms). In the field of accounting, previous research focused on similar backgrounds of employees and its effects in audit firms. For instance, the phenomenon

of 'selection socialization', i.e. hiring and promoting only those persons with similar backgrounds and values, can lead to more homogeneity and a stronger firm culture – which in turn can enhance the usability of cultural controls - however, homogeneous cultures can also have adverse effects on ethical decision-making (Abdolmohammadi et al., 2003; Ponemon, 1992). Future research could point out how the relation between departmental homogeneity and the usability of cultural control works.

Juxtaposing the executing and the policy departments yields some additional insights. We observed in all cases an increased emphasis on results controls, consistent with the 'New Public Management' movement (Hood, 1995; van Helden and Jansen, 2003). However, all researched cases encounter some difficulty with this increased focus on results controls, as indicated before. Whereas the critique of interviewees in GreenEx and BlueEx focused on the incompleteness and the non-representativeness of some of the performance measures, the interviewees in the policy departments acknowledged the 'low' measurability of their output, but started to pay more attention to those parts of their job that could be measured, such as timeliness and satisfaction of politicians.

When comparing the two municipalities in which the four cases were embedded, it seems that MC elements in the municipality of Bluetown have a more 'centralized' character, which had its effect on the way in which MC was carried out throughout the municipal organization. Whereas in BlueEx and BluePol many 'central' MC elements could be recognized (such as the availability of coaches, central values and the RDA meetings), centralized MC elements were only very scarcely observable in GreenEx and GreenPol. This difference may relate to differences in size (3,000 fte in Greentown and 1,200 fte in Bluetown), but other aspects may also have played a role. For instance, the municipal organization of Greentown was divided over several autonomous divisions, each with their own physical locations and directors, whereas the municipality of Bluetown was – also geographically – more 'centralized'. Bluetown had only two main locations: one building for the political body and the staff, and another building for most other departments.

In general, the MC elements used in the four cases match to some extent the expectations from our theoretical framework, but, as mentioned above, there are a few

differences. We will now continue with the conflicting relations between different MC elements within the MC packages.

2.5.2 Conflicting MC elements

In each of the cases observed, we identified MC elements that were in a ‘conflicting’ relation with other MC elements (see table 1 for an overview). In this section, we reflect on the case findings, aiming to identify recurring patterns of conflicting MC elements. Furthermore, we discuss the two causes for conflicting MC elements: hierarchical and historical triggers.

In GreenEx and BlueEx, we identified conflicting relations between the use of results control and other types of MC. The performance metrics that came available about the time spent per client (GreenEx) or per task (BlueEx) could, when used in isolation, help to direct employee behavior in these departments. However, because other types of MC conflicted with these performance metrics, their usability as an MC element was limited. In GreenEx, the primacy of rule-following strongly conflicted with the focus on outputs, and the departmental value of ‘customer friendliness’ also caused tension among the employees. The employees felt that they could not simultaneously be ‘efficient’ (fast) and remain as customer friendly as they wanted to be, which led to observable stress among employees. In BlueEx, the metrics and the accompanying necessary registration of every task conducted were in conflict with the organizational ideals about self-management and seeing employees as ‘autonomous professionals’. Service employees indicated that the organization should not on the one hand say that they are professionals, and on the other hand monitor every single thing they do. During our interviews and observations, we recognized that the combination of the increased use and importance of results controls led to a feeling of disharmony in both departments; the interviewees explained that the MC elements implicitly expected different and sometimes conflicting behaviors at the same time. To some extent, the concept of ‘conflicting MC elements’ resembles ideas from literature about ‘dynamic tensions’ when using different types of MC, for instance with respect to how two MC elements can “disturb the relative emphasis” of one another (Mundy, 2010, p. 502). However, the difference between conflicting relations among MC elements and dynamic

tensions lie in the fact that the former are not ‘balanced’ nor ‘intended’ by the managers, rather, they are unbalanced and hinder each other’s effectiveness. Whereas MC elements in a dynamic tension require “purposeful intervention by senior managers in order to create the conditions in which productive tensions can emerge” (Mundy, 2010, p. 516), we argue that the lack of such interventions may cause conflicting relations to emerge. Typically, the (hierarchical and historical) triggers identified in this study point to an unintended use of individual MC elements without taking their relation with other MC elements into account. MC elements in a ‘dynamic tension’ may thus, when used in a balanced way, be complements, i.e. enhance each other’s effectiveness, while two conflicting MC elements cannot be complements of each other, by definition.

In the policy departments, some of the cultural controls conflicted with other types of MC. One could argue that in GreenPol the cultural controls worked well but were perhaps ‘too informal’, whereas the culture in BluePol was ‘too individualistic’. The informal culture (GreenPol) and the highly autonomous and individualistic employees (BluePol) might align with the high professional quality of the employees, however, it was mentioned by several interviewees that the departmental cultural controls conflicted with other types of MC. In GreenPol, the strong jovial culture limited the possibility to reward or sanction employees for their contributions, and vice-versa, rewarding employees also endangered the informal culture that was in place in the department. In BluePol, the individualistic culture, reinforced by personnel controls advertising ‘autonomy’ and ‘self-management’, hindered the use of peer feedback as a cultural control. At the same time, some of the feedback mechanisms decreased the experienced autonomy of the subordinates in BluePol.

The four conflicting relations identified in the findings indicate that there is a third type of relation, besides complementary and substitutive relations, that can – and should – be accounted for in MC package research. This relation supports the call by accounting scholars to study MC ‘as a package’, because the findings indicate that the MC elements studied do not operate in isolation (Malmi and Brown, 2008). We add to literatures that scrutinized relations between different MC elements, such as Friis et al. (2015), by identifying conflicting MC elements and their ‘triggers’, both theoretically and empirically.

The triggers for the conflicting relations can be classified as ‘hierarchical’ or ‘historical’ triggers. Hierarchical triggers mean that the conflicting relation emerged because MC elements were imposed by different organizational layers, and historical triggers mean that MC elements are implemented in different moments in time. Hierarchical and historical triggers do not necessarily have to result in conflicting relations between MC elements, but they may be a ‘trigger’ for such relations to emerge. Regarding hierarchical triggers, we see that within BluePol two conflicting relations emerged because of the centrally coordinated personnel controls. The central value of seeing all employees ‘as autonomous professionals’ conflicted with other, departmental (‘local’) MC elements. Such a centrally implemented MC element may work well in some parts of the organization, however, as we demonstrate, there are risks attached to applying such ‘one-size-fits-all’ values at all departments within an organization. We identified a historical trigger in GreenPol; two MC elements (strong informal and jovial culture and rewarding or sanctioning individual employees) originated in different moments in time. Now that they are both part of the departmental MC package, they conflict with one another, i.e., they weaken each other’s usability as a tool to direct employee behavior.

2.6 Conclusion

In this chapter, we examined four MC package configurations and we investigated conflicting relations between elements in these packages. We identify three key contributions of this chapter to the literature. First, we provided a concise literature review on MC package research and identified important gaps in the current literature. We empirically studied four MC package configurations and identified how different MC elements within an MC package can interrelate. Second, we theoretically developed the notion of ‘conflicting’ MC elements and we identified such relations in our case studies. Conflicting MC elements are 1) simultaneously present in an organization, 2) hinder each other’s usability as tools to direct employee behavior and 3) do not substitute each other. Conflicting MC elements are not in a ‘dynamic tension’ (Mundy, 2010), because that requires ‘purposeful intervention’ by senior managers, which is lacking in the cases

of conflicting MC elements. Third, we identified hierarchical and historical triggers that enabled the emergence of conflicting relations within the MC packages studied.

There are a few limitations to this study. First, the multiple case study method has the advantage of scrutinizing several cases in-depth and comparing and replicating the findings, however, the limited ‘generalizability’ inherent to this type of research remains an issue. We suggest that future research, focusing for instance on larger samples, could provide further evidence of the conflicting relations explored in the current study. Second, this research took place in a specific context – municipal departments in the Netherlands – which enabled a meaningful cross case analysis, preventing too much external factors from influencing our case findings. However, we suggest that case studies in different contexts may also enhance our understanding of the relations that we discussed in the current study. By providing our interview guide and additional information about our research protocols, we hope to facilitate future research that is interested in researching MC packages. Third and last, the current study focused on configurations of the MC packages and the conflicting relations in MC packages at one moment in the time, while the emergence of configurations and conflicting relations received less attention. We suggest that future studies, for instance (longitudinal) case or event studies, build further on the conflicting relations between the MC elements identified, in order to enhance our understanding of MC package configurations and conflicting relations within such packages.

Appendix 2.A – List of interviewees

GreenPol			BluePol		
<i>Job title</i>	<i>Date</i>	<i>Min.</i>	<i>Job title</i>	<i>Date</i>	<i>Min.</i>
Department head	25-11-2013	63	Department head	16-10-2013	99
Municipal topmanager	25-11-2013	54	Director	3-10-2013	86
Team leader 1	15-11-2013	75	Alderman 1	13-11-2013	49
Team leader 2	19-11-2013	90	Alderman 2	28-11-2013	59
Alderman	16-12-2013	50	Controller	3-10-2013	63
Policy advisor 1	20-11-2013	69	HR Advisor	9-10-2013	82
Policy advisor 2	28-11-2013	81	Senior policy advisor 1	1-10-2013	74
Policy advisor 3	18-11-2013	77	Senior policy advisor 2	9-10-2013	74
Policy advisor 4	14-11-2013	65	Policy advisor 1	3-10-2013	60
Policy advisor 5	11-11-2013	72	Policy advisor 2	26-9-2013	63
Program leader 1	18-11-2013	65	Policy advisor 3	26-9-2013	54
Program leader 2	27-11-2013	95			
GreenEx			BlueEx		
<i>Job title</i>	<i>Date</i>	<i>Min.</i>	<i>Job title</i>	<i>Date</i>	<i>Min.</i>
Department head	7-11-2013	79	Department head	11-10-2013	89
Team leader 1	1-11-2013	70	Mandator	14-10-2013	74
Team leader 2	1-11-2013	57	Teamleader Service Team	14-10-2013	71
Team leader 3	1-11-2013	97	HR Advisor 1	15-10-2013	73
Planner	4-11-2013	129	HR Advisor 2	31-10-2013	65
Advisor	20-12-2013	77	Controller	11-10-2013	71
Alderman	16-1-2014	48	Director	24-10-2013	91
Director	22-1-2014	56	Alderman	22-11-2013	60
Employee 1	27-11-2013	76	Service employee 1	18-10-2013	58
Employee 2	21-11-2013	78	Service employee 2	16-10-2013	82
Employee 3	17-12-2013	47	Service employee 3	5-11-2013	66
Employee 4	29-11-2013	70	ICT administrator	16-10-2013	77
Employee 5	14-11-2013	53	Planner 1	17-10-2013	57
Employee 6	18-11-2013	87	Planner 2	23-10-2013	56
Totals					
Interviewees	51				
Minutes	3623				
Hours, minutes	60h 33m				
Pages transcription	843				

Appendix 2.B – Interview questions concerning the MC package

PERSONNEL CONTROLS (Merchant and van der Stede, 2007, p. 83)

1. Is ensured that the subordinates are capable to perform their tasks? If so, how (with respect to employee selection and training)?
2. Do employees know what is expected from them in their current position? If so, how (e.g. by job descriptions)?
3. Are empowerment and self-monitoring encouraged? If so, how?

CULTURAL CONTROLS (Merchant and van der Stede, 2007, p. 85)

4. How would you describe the culture at your department?
5. Are values and norms promoted by the superiors with respect to your tasks? If so, which ones and how?
6. Do employees mutually monitor each other?

RESULTS CONTROLS (Merchant and van der Stede, 2007, p. 29)

7. Are you controlled by results? If so, by whom?
8. In which areas are you expected to deliver results?
9. How are these results measured?
10. How are targets w.r.t. these results developed?
11. Are any rewards and/or punishments connected to reaching the targets?

ACTION CONTROLS (Merchant and van der Stede, 2007, p. 76)

12. Do you need to follow procedures in your current position?
13. Are there any physical or administrative constraints in your current position (e.g. authorizations and acces)?
14. Do you need to approve your planned activities by a colleague or superior?
15. Are you being kept responsible for your activities? If so, how?
16. Is it clear what 'accepted' and 'not accepted' actions are?
17. Is that communicated somehow?
18. Are your activities written down somewhere by yourself or someone else?
19. Are accepted actions rewarded and not accepted actions punished?
20. Are there tasks in which more colleagues are working than strictly necessarily?
21. Is there a way of management control that is not mentioned yet? If so, which one(s)?

MC PACKAGE CONFIGURATION (Abernethy and Chua, 1996; Ferreira and Otley, 2009; Milgrom and Roberts, 1995)

22. Which MC element is dominant according to you?
23. How strong are the connections between the MC elements and the way they are used?
24. Are there any MC elements that conflict with each other?
25. Which MC elements complement each other?

MC PACKAGE ANTECEDENTS (Merchant and van der Stede, 2007; Ouchi, 1979)

26. How came the complete MC package about?
27. Who are the primary designers of the MC package?
28. Were there any specific antecedents that lead to the implementation of new MC elements during the last two years?
29. Can you mention any instance of the inclusion or exclusion of an MC element because it conflicted with another MC element?
30. To what extent are the specific tasks of this department taken into account?
31. To what extent are the results of your work measurable (measurability of output)?
32. To what extent do colleagues and/or your supervisor know the tasks you are doing (knowledge of the transformation process)?

Appendix 2.C – Attended meetings

<i>Code</i>	<i>Date</i>	<i>Observation</i>	<i>Time</i>	<i>Dept.</i>
01	12-09-2013	Familiarization meeting with Department Head	1:00	BluePol
02	12-09-2013	Familiarization meeting with Department Head	1:00	BlueEx
03	17-09-2013	Meeting about Budget Cuts and Austerity	1:00	BluePol
04	17-09-2013	Monthly Meeting with Service Team	1:00	BlueEx
05	24-09-2013	Monthly Meeting Team Society	1:15	BluePol
06	24-09-2013	Evaluation of Education Program	2:15	BluePol
07	26-09-2013	Introduction into SharePoint	1:00	BlueEx
08	26-09-2013	Weekly Meeting Department	0:40	BluePol
09	01-10-2013	Monthly Meeting Department	2:00	BluePol
010	07-10-2013	Familiarization meeting with Department Head	1:00	GreenEx
011	07-10-2013	Familiarization meeting with Department Head	1:00	GreenPol
012	15-10-2013	Monthly Meeting Team Health	1:30	BluePol
013	28-10-2013	Familiarization meeting with Team Leads. & D. Head	1:00	GreenEx
014	01-11-2013	Observation Front Office (appointment)	0:15	GreenEx
015	11-11-2013	Weekly Meeting Team Leaders	1:00	GreenPol
016	13-11-2013	Weekly Meeting with Department	0:40	GreenPol
017	18-11-2013	Program Meeting Accessibility	1:30	GreenPol
018	22-01-2014	Weekly Meeting with Department	0:40	GreenPol
019	28-01-2014	Meeting about Social Work in Districts	1:30	BluePol
020	28-01-2014	Observation Service Team work	5:00	BlueEx
021	07-02-2014	Observation Front Office (counters)	5:00	GreenEx
022	18-02-2014	Monthly Meeting Team Customer Contact & Tax	1:00	GreenEx
023	25-03-2014	Monthly Meeting Team Administration	1:00	GreenEx
024	03-06-2014	Monthly Meeting Team Documents	0:50	GreenEx

Appendix 2.D – Overview of collected and examined documents

#Doc	Description document	Domain	Pages
1	Financial examination municipal budgets 2014-2017	Greentown	53
2	Program Budgets 2014	Greentown	455
3	Report on political information delivery	Greentown	20
4	Program plans 2013-2016	Greentown	16
5	Municipal accounts 2012	Greentown	462
6	Report budgets 2013	Greentown	34
7	Program Budgets 2013	Greentown	301
8	Piece flow policy documents for directors	Greentown	1
9	Leadership style format	Greentown	2
10	Intranet message leadership styles	Greentown	2
11	Organization chart service center	Greentown	1
12	Mission document GreenPol 2013	GreenPol	3
13	Employee overview	GreenPol	5
14	Minutes meeting with alderman A 11-11-2013	GreenPol	3
15	Minutes meeting aldermen & mayor 12-11-2013	GreenPol	5
16	Minutes meeting directors 12-11-2013	GreenPol	3
17	Minutes meeting with alderman B 11-11-2013	GreenPol	2
18	Minutes meeting program Accessibility	GreenPol	2
19	Minutes meeting with alderman C 11-11-2013	GreenPol	3
20	Evaluation of training about policy development	GreenPol	5
21	Var. documents used in training for policy developers	GreenPol	34
22	Development plan department GreenPol	GreenPol	11
23	Evaluation of 2012 and planning 2013	GreenPol	1
24	Memo procedure policy document stream 2013	GreenPol	1
25	Main procedure policy document stream 2013	GreenPol	1
26	Proces political decision making	GreenPol	1
27	Analysis and development of department 2012	GreenPol	11
28	Main results employee satisfaction survey	GreenPol	1
29	Developments GreenEx 2013-2017	GreenEx	17
30	Employee overview	GreenEx	2
31	Description of competences for employees	GreenEx	10
32	Various employee profiles customer contact	GreenEx	7
33	Internal evaluation of department 2007	GreenEx	46
34	Values document	GreenEx	2

Appendix 2.D (Continued) – Overview of collected and examined documents

<i>#Doc</i>	<i>Description document</i>	<i>Domain</i>	<i>Pages</i>
35	Comments on quality manifest	GreenEx	1
36	Quality manifest	GreenEx	2
37	Business Plan 2010-2014 GreenEx	GreenEx	46
38	Procedure to examine official documents	GreenEx	34
39	Procedure for first enrollment	GreenEx	55
40	Procedure found passport	GreenEx	11
41	Measurements effectiveness counter employees	GreenEx	4
42	Production 2012 GreenEx	GreenEx	2
43	Procedure to edit address of inhabitant	GreenEx	33
44	Monthly mail of dept. head to employees	GreenEx	14
45	Desired profile of leaders in GreenEx	GreenEx	3
48	Program Budgets 2013	Bluetown	236
49	Note compact organization	Bluetown	6
50	Memo new working practices	Bluetown	11
51	Function handbook 2013	Bluetown	24
52	The New Official introduction	Bluetown	2
53	Comments on function handbook	Bluetown	1
54	Report about research on remuneration of employees	Bluetown	64
55	Book about HRM practices in Bluetown	Bluetown	250
56	Development BluePol 2009-2011	BluePol	6
57	Focus points BluePol 2012	BluePol	2
58	Change plan division	BluePol	39
59	Employee overview, tasks and teams	BluePol	12
60	Vision department & competences policy advisors	BluePol	1
61	Change plan 2003	BluePol	6
62	Change plan 2003 comments	BluePol	8
63	Downsize measures policy development 2004	BluePol	6
64	Action plan downsizing 2004	BluePol	3
65	Capacity planning 2008	BluePol	6
66	Development BluePol 2008-2010	BluePol	4
67	Development BluePol 2009-2011	BluePol	6
68	Minutes BluePol new style meeting	BluePol	1
69	Appointments subsidy organization	BluePol	12
70	Task description policy advisors	BluePol	3

Appendix 2.D (Continued) – Overview of collected and examined documents

#Doc	Description document	Domain	Pages
71	Job description policy advisors	BluePol	3
72	Control report department 2013	BluePol	11
73	Documents concerning procedures of subsidy allocation	BluePol	81
74	Business plan division	BluePol	9
75	Management contract of division	BlueEx	5
76	Department plan	BlueEx	18
77	Overview employees, tasks and meetings	BlueEx	22
78	Comments on Department plan by department head	BlueEx	1
79	Focus points department	BlueEx	1
80	Work flow technical installation issues	BlueEx	19
81	Work flow building issues	BlueEx	19
82	Task allocation spreadsheet	BlueEx	2
83	Development plan 2011-2015	BlueEx	27
84	Minutes meeting buildings team 10-9-2013	BlueEx	2
85	Minutes meeting buildings team 30-9-2013	BlueEx	5
86	Minutes meeting buildings team 3-10-2013	BlueEx	3
87	Personnel plan of the division 2013 and further	BlueEx	9
88	Change plan 2015 division	BlueEx	13
89	Focus points division	BlueEx	2
#89	TOTAL		2541

3

Management Control in Times of Austerity

The purpose of this chapter is to examine how management control (MC) within governmental departments is used in times of austerity, and how insights from agency and stewardship theory can enhance the understanding of this issue. We distinguish two types of MC (constraining and facilitating) based on their different assumptions regarding human behavior (agent-like and steward-like). We empirically analyze changes in the use of these types of MC in four cases located in two municipalities. The collected data consists of 51 semi-structured interviews, desk research and multiple field observations. We find that MC at the departmental level becomes more constraining in times of austerity, and suggest that an overemphasis on constraining MC has negative consequences. It can, for instance, evoke agent-like, opportunistic behavior while it disregards potential steward-like behavior. These negative consequences are less prevalent when there is a simultaneous increase in emphasis on the use of facilitating MC elements. We acknowledge “human ambivalence,” i.e. an employee’s recurring choice between agent-like and steward-like behavior, and illustrate the dangers of overly relying on constraining types of MC. The chapter also contemplates alternative strategic managerial responses to austerity in a public sector context.

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3.1 Introduction

Since the financial crisis surfaced in 2008, many governments have taken austerity measures in order to bring their expenses closer to their revenues (Gordon Murray et al., 2012). For European countries such as Germany, Italy, the United Kingdom and the Netherlands, these measures included the sharpest spending cuts since World War II (Borooah, 2014). To sketch the size of austerity in the Dutch public sector: the central government initiated several programs from 2010 onwards, to cut its spending by 51 billion euro¹⁰, on a total budget of 258 billion euro (in 2013). Many of these austerity measures especially affected local governments, because the Dutch central government started to decentralize various tasks, after the budgets for these tasks had been cut considerably. This means that municipalities were required to provide these new tasks with less funding than previously available for these tasks. In addition, the municipalities also had to realize their own spending cuts. Little is known yet about the effects of austerity measures on the management control (MC) in the organizations affected. An exception is a recent paper by Johansson and Siverbo (2014), who stated that budgetary challenges may have urged governments to amplify and refocus their budget control activities. However, although such austerity measures may initially improve the financial position of organizations, they can endanger the achievement of their goals, because the types of MC associated with these measures can be less effective in the longer term. In this chapter, we particularly focus on the use of MC in four departments within two Dutch local governments that were confronted with fierce austerity measures: in 'Bluetown' and 'Greentown' these cuts amounted up to respectively 8% and 10% of their annual budgets. We aim to address the question how MC within governmental departments is used in times of austerity, and how insights from agency and stewardship theory can enhance the understanding of this issue.

Within the literature, two approaches toward the use of MC can be distinguished, which have different underlying assumptions with respect to human behavior. The first one assumes that employees are opportunistic and self-serving *agents*, whereas the second views employees as trustworthy, collective-serving *stewards*. In addition, the MC literature identifies two different roles for MC elements: 1) they are aimed at

¹⁰ This number was calculated by the Dutch National Audit Office, www.rekenkamer.nl, retrieved at 19 March 2015.

constraining the subordinates by monitoring and incentivizing them, so that they will act in line with the organization's goals (Jensen and Meckling, 1976), and 2) they are focused on fostering autonomy and *facilitating* the subordinates in better serving their organization (Davis et al., 1997). Mainly selecting MC elements that constrain behavior is in accordance with the assumption that employees have a tendency to act as opportunistic agents. The use of facilitating MC elements is more in line with the stewardship view of human behavior, which assumes that employees have a tendency to act as a steward. Previous research starting from the assumption that organizational members have a choice in deciding to behave either as agents or as stewards, i.e. 'human ambivalence', is scarce (Segal and Lehrer, 2012). Although there are several studies that simultaneously investigated different roles of accounting in different contexts (e.g. Hopwood, 1987; Humphrey, 1994), they primarily focused on accounting or financial management initiatives. Our study, however, complements this literature by paying attention to MC elements – which can also involve MC elements that are not necessarily related to accounting or financial management – and their different underlying assumptions regarding human behavior. In this chapter, we recognize the connectivity between notions of agency and stewardship theory and examine in which circumstances one such set of tendencies dominates the other, in order to enhance our understanding of constraining and facilitating MC in times of austerity.

When faced with major budget cutbacks, organizations are likely – at least initially – to be more inclined toward using constraining MC elements, such as tighter budget control (Johansson and Siverbo, 2014) or stricter performance auditing practices (Power, 1996). These constraining MC elements are particularly aimed at effectively monitoring and incentivizing the civil servants. Several authors have studied the pressures that budgetary stress can exert on public sector organizations over the last few decades, in particular since the rise of the New Public Management (NPM) movement (for an overview of this research we refer to Broadbent and Guthrie, 2008; Humphrey and Miller, 2012). Accounting scholars critically followed (changes in) public sector MC, and often connected practices such as 'managerialism' and 'accountable management' with general movements in society toward economic rationalism, neo-liberalism and agency theory (see Broadbent and Guthrie, 1992; Gruening, 2001;

Humphrey et al., 1993). Although practitioners who introduced such practices typically did not refer to, for example, neo-liberalism or agency theory, it seems fair to state that the ideas sketched in these theories can be recognized in practice. Furthermore, although some of these ideas and theories were occasionally heavily criticized (Fogarty et al., 2009), they may still play an important role. The recent period of austerity even seems to reinforce ideas about budgetary restrictions and constraining MC elements that go back to NPM (see e.g. Johansson and Siverbo, 2014; Lodge and Hood, 2012). However, we also stress the difference between the short-term orientation of most austerity measures to yield financial stability vis-à-vis the long-term orientation of the 'traditional NPM agenda' to make the public sector more 'businesslike', effective and service-oriented.

We argue that an overemphasis on constraining MC elements (e.g. an increased use of performance auditing) and a de-emphasis of facilitating MC elements (e.g. cuts in training budgets or less space for self-management) can evoke undesired side effects. Some of these effects identified by prior literature are resistance (Humphrey, 1994), less motivated employees (Frey and Jegen, 2001) or less effective control (Davis et al., 1997). We scrutinized these issues in our case studies, drawing on a period of extensive fieldwork, including 51 interviews, desk research and multiple field observations. We found that the municipal departments studied tended to emphasize some of the constraining MC elements in times of austerity. Facilitating MC elements, however, were in some circumstances emphasized and in others de-emphasized, which yielded different effects among the departments studied.

This chapter has two main contributions: 1) it illustrates the dangers of relying predominantly on constraining MC elements or presuming a pre-dominance of agency-like thinking, and 2) it contemplates alternative strategic managerial responses to austerity in a public sector context.

In the next section, we review the literature on public sector MC and its links with austerity, as well as with constraining and facilitating MC. In addition, we explore the effects of under- or overemphasizing one of the MC types. In the section that follows, we describe our method choices. After that, we present the findings per case. Subsequently,

we discuss and compare these findings, deliberate on their differences and similarities, and convey our conclusions.

3.2 Literature review

3.2.1 Austerity and public sector MC

The recent ‘era of austerity’ seems to reinforce some NPM ideas about MC. However, there are also notable differences between the effects of austerity and NPM on MC. During the past decades, major attention has been paid to making MC in governmental organizations more businesslike and results-oriented. This ‘traditional’ NPM movement was fuelled by periods of financial distress, criticism from society and calls for improved service quality and efficiency in the public sector (Hood, 1995; Pollitt and Bouckaert, 2011). The required changes were to be achieved by, among other things, the increased use of monitoring and incentivizing MC elements. Examples of such MC elements are performance auditing (Leeuw, 1996), performance reporting (Bracci and Llewellyn, 2012) and pay-for-performance (Frey et al., 2013). Although their implementation has been criticized over the past decades by a wide selection of academics (Broadbent and Guthrie, 1992; Humphrey and Miller, 2012), Gruening (2001, p. 2) indicated that these types of MC elements fit NPM’s “undisputed characteristics”. NPM, with its desire to make the public sector more ‘economically rational’ and businesslike, can be argued to be mainly rooted in public choice theory, modern institutional economics, and ideas about managerialism and scientific management (Gruening, 2001).

Different from the ‘broader’ NPM agenda, accounting and MC changes seem in times of austerity to have only one, straightforward aim: reducing government debts and budget deficits (cf. Lodge and Hood, 2012). To illustrate this, austerity measures may explicitly imply a reduction of the service levels (see e.g. Pollitt, 2010), whereas the NPM ‘ideology’ particularly focuses on maintaining or “improving service quality”, albeit with more efficient and businesslike processes (Pollitt and Bouckaert, 2011, p. 7). Although NPM practices vary among countries, NPM’s focus on reducing budget deficits has been much less prominent in comparison to the recent austerity measures, at least in the Netherlands (Kickert, 2012; van Helden and Jansen, 2003). The reason for this strong financial focus is that the recent austerity measures in the Netherlands, as well as

in other countries in the 'euro area', were directly related to the financial crisis, which started in 2008. The financial crisis caused, for example, that the government budget deficit in the Netherlands exceeded the 3% that was allowed under the Stability and Growth Pact agreed by the euro countries in the European Union (cf. Lane, 2012). For that reason, subsequent austerity measures emphasized budget cuts and related measures that yielded visible financial effects in the short term. In the Netherlands, the austerity measures taken after 2008 implied severe budget cuts at the levels of both the central and local government (Kickert, 2012). So, although there may be overlapping issues, we stress that the current focus on austerity differs from earlier NPM-related initiatives, because the former is primarily focused on fierce, often short-term, financial measures, whereas the latter incorporates a 'broader' agenda generally aimed at making the public sector more businesslike and improving its service quality.

Regarding changes in public sector MC, Cristofoli et al. (2010, p. 368) argued that it was "overly simplistic" to reform the public sector by introducing businesslike MC elements without taking the specific public sector context into account. They contended that researchers and practitioners should view MC changes in a broader perspective and consider MC elements as a package¹¹. Some prior studies have also employed a more 'integrated' approach by looking at the interrelatedness among different accounting techniques, 'accountable management', financial management and the reactions of those involved (Broadbent and Guthrie, 1992; van Helden, 1998). Humphrey (1994), for instance, sought to explain why reactions to accounting reforms may differ across different organizational contexts (cf. Hopwood, 1983). The approach in this chapter is different because we also incorporate other, non-accounting, types of MC, such as norms and values, training and organizational culture. In doing so, we also follow the suggestion by Van der Stede (2011) to not only focus on 'technical' accounting instruments but also on 'softer' types of MC, thereby adhering to the idea that MC consists of a 'package' of different types of MC elements (Abernethy and Chua, 1996; Malmi and Brown, 2008).

¹¹ An MC package is the sum of all MC elements – intended or unintended, designed or spontaneously emerged – which aligns the subordinate's behavior to the organizational goals (Abernethy and Chua, 1996, Malmi and Brown, 2008).

3.2.2 Dual roles of MC

MC elements can be categorized in many different ways. One often-used categorization is based on the distinction between diagnostic, interactive, belief and boundary systems (Simons, 1995). It relies on an appreciation of the opposing forces required in managing the tensions “between freedom and constraint, between empowerment and accountability, between top-down direction and bottom-up creativity, between experimentation and efficiency” (Simons, 1995, p. 4). These tensions are managed by what Simons (1995) calls ‘positive’ and ‘negative’ controls. And as Tessier and Otley (2012, p. 174) indicate: “The notion of positive/negative controls can be linked to a more general concept labeled the dual role of controls which is gaining importance in the literature” (see e.g. Ahrens and Chapman, 2004; Mundy, 2010). In a recent paper on MC in the public sector, Speklé and Verbeeten (2014) also refer to this dual role, which they describe as ‘decision-facilitating’ and ‘decision-influencing’. “The decision-influencing role refers to the use of information for motivating and controlling managers and employees (‘incentive-oriented use’), while the decision-facilitating role refers to the provision of information to guide decisions and managerial action” (Speklé and Verbeeten, 2014, p. 134). For the purpose of this chapter it is important to emphasize that our distinction between constraining and facilitating MC elements relates to this strand in the literature on dual roles of control. Our distinction, however, concentrates on how these roles are connected to the views of human behavior as held by the managers in public organizations. In that respect, this chapter is more in line with Simons’ (1995) distinction between positive and negative controls, a distinction still almost unexplored in accounting research, as pointed out by Tessier and Otley (2012).

In the next two subsections we discuss constraining and facilitating MC elements in more detail. The constraining type of MC elements is in line with a view of human behavior embedded in mainstream economic MC literature, which takes the opportunistic and self-serving *agent* for granted (Jensen and Meckling, 1976). The facilitating type of MC elements is in line with stewardship theory, which typically advocates a different perspective, governed by the assumption of collective-serving, trustworthy *steward-like* behavior on the part of employees (Hernandez, 2012). After the two subsections, we discuss the choice between agent-like and steward-like

behaviors, and we elaborate on the effects and risks of under- or overemphasizing facilitating or constraining MC elements.

3.2.2.1 Constraining MC elements

Traditionally, agency theorists have assumed that human behavior is based on opportunism, rationalism, effort-averseness and self-interest (Jensen and Meckling, 1976). People were expected to behave as a '*homo economicus*' or, in agency terms, as an 'agent'. The origins of this view of human behavior at least date back to Epicurus and his followers in ancient Greece, who argued that all human efforts are aimed at minimizing pain and maximizing pleasure. Jeremy Bentham (reissued in 1988) combined the Epicurean 'pain' and 'pleasure' perspectives in the term 'utility', and argued that people should act in such a way that the total utility of everyone involved increased most. The associated 'calculative behavior' was picked up in the 'ethics of selfishness', which advocates that a person should not be concerned with maximizing *everyone's* utility, but only his or her *own* utility (Rand and Branden, 1998). The view of human behavior used in agency theory is rooted in this line of thought: agents are considered to be maximizers of their *own* 'utility' (Jensen and Meckling, 1976). This view of human behavior has greatly influenced public choice theory, which – together with, for example, agency theory and transaction cost theory – has provided the theoretical basis for neo-liberalism and NPM (Gruening, 2001).

From the assumptions regarding the agent's self-interested behavior, the so-called 'agency problem' ensues: the organization's owner (the principal) and its manager (the agent) are considered to have diverging interests. The principal wants to maximize the organization's utility, whereas the agent is merely focused on maximizing his or her own utility. According to agency theory, this conflict of interests between the principal and the agent can be solved by using MC elements that constrain the agent's self-interested behavior, i.e. by monitoring the agent's activities and by incentivizing him or her to operate in line with the organization's goals (Jensen and Meckling, 1976). We call these types of MC 'constraining MC elements'.

Some examples of constraining MC elements are "processes of auditing, control, regulation, assessment, inspection and evaluation" (Diefenbach, 2009, p. 899). Increases

in the use of such MC elements in the public sector have often been fuelled by a desire of politicians to cut expenditures (cf. Humphrey, 1994), and a ‘need for transparency’, as expressed in literature about the ‘audit explosion’ (Power, 1994).

3.2.2.2 Facilitating MC elements

Stewardship theory proposes a very different view of human behavior than agency theory, as far as motivational aspects are concerned. Stewardship theory sees people as so-called ‘self-actualizing individuals’, commonly referred to as a ‘stewards’. Stewards are characterized as “collectivist, pro-organizational, and trustworthy” (Davis et al., 1997, p. 20), which is why there is no conflict of interests between the steward and the principal or organization (Tosi et al., 2003). Therefore, stewardship theory argues that employees should be ‘facilitated’ in conducting their tasks to the best of their ability and be provided with the proper resources to do so.

Stewardship theory originated in the fields of psychology and sociology, and was introduced about two and a half decade ago as an alternative to agency theory. As indicated, it does not specifically consider people as calculating agents; its assumptions about human behavior are more socially oriented (Hernandez, 2012). As Hernandez (2012, pp. 177-178) explains: “In contrast to agency theorists, who have proposed a model of governance that constrains employee behavior through the rules and regulations imposed by the organization, stewardship theorists have put forth a model of governance that promotes the ability of employees to contribute to strategic objectives and to make decisions.” In studies in the field of management, this theory – with its more ‘positive’ view of human behavior – is employed to explain the serving behavior of subordinates in organizations, i.e. behavior that is not self-interested (e.g. Segal and Lehrer, 2012).

The MC elements that are proposed by stewardship theory can be characterized as facilitating. Davis et al. (1997) mention that, if subordinates are stewards, “empowering governance structures and mechanisms are appropriate. Thus, a steward’s autonomy should be deliberately extended to maximize the benefits of a steward, because he or she can be trusted.” (Davis et al., 1997, p. 25). Typical examples of facilitating MC elements are participative budgeting (Davis et al., 1997; Libby, 1999) and

cultural values, such as a shared work ethos (Hernandez, 2008). Training and education may in some instances also be used to facilitate¹² subordinates to better fulfill their tasks (Merchant and van der Stede, 2007).

3.2.3 Human ambivalence and under- and overemphasized types of MC

It has already been argued that neither agency nor stewardship theory can *in isolation* offer a full understanding of managerial behavior (Martynov, 2009). Furthermore, most introductory textbooks on management accounting present similar arguments, claiming that one single view cannot comprehensively describe human behavior, and that choosing a particular approach over another one always involves a trade-off between predictive ability and complexity (e.g. Zimmerman, 2000). However, in the extant literature it is still sometimes stated that subordinates *are* one or the other: either an agent or a steward. Rather than rejecting one of these two views of human behavior, we want to use them both to construct an understanding of MC that can accommodate these divergent points of view. We argue that employees may *act steward-like* in one situation, and *agent-like* in another, and this may be explained by both personal and situational characteristics (Davis et al., 1997). Because acting *like* a steward or *like* an agent can be an everyday choice, it cannot be claimed that subordinates *are* agents or *are* stewards (Tosi et al., 2003). This idea was recently articulated by Martynov (2009), who also distinguished agent- and steward-like behaviors. By recognizing both agent- and steward-like behaviors, we acknowledge human ambivalence (see also Segal and Lehrer, 2012). If superiors only use (or overemphasize) facilitating MC elements, they overlook the possibility that the subordinate may also act agent-like, and vice-versa. Segal and Lehrer (2012) therefore stress that – because self-interested or even corrupt behavior can never be ruled out – organizations should not exclusively rely on facilitating MC elements. They argue that also other controls should be implemented to protect organizations from opportunistic temptations: these are what we call ‘constraining MC elements’. So, Segal and Lehrer (2012) explicitly recommend using these controls *in addition* to the facilitating (stewardship-informed) controls. However, if these two types

¹² Yet, we acknowledge that training and education can sometimes also be experienced as ‘constraining’ if subordinates are coerced into taking it. The same goes for cultural values, for instance when subordinates are forced to adopt the new values promoted by top management.

of MC elements are not used in addition to each other, or if one of those types is overemphasized, this may lead to risks and effects that can harm the organization and the attainment of its goals. We will now discuss such risks and effects.

Although constraining MC elements may prove to be effective in some situations, an overemphasis on them may have severe consequences. We will discuss two consequences as identified by prior MC research which - implicitly and explicitly - pay attention to the role of the assumptions regarding human behavior that underlie the MC elements used. First, prior research has found that a strong emphasis on constraining MC elements (which assumes *extrinsic* motivation) may 'crowd-out' subordinates' *intrinsic* motivation (see Deci et al., 1999; and for an overview of applications in the accounting literature see Kunz and Pfaff, 2002). This process, which is called the 'crowding-out effect', occurs when the use of constraining MC elements (assuming extrinsic motivation) replaces intrinsic motivation by a lesser amount of extrinsic motivation. Ergo, the total work motivation decreases. So, control can be counterproductive when it neglects and undermines the intrinsic motivation of employees (Davis et al., 1997).

Second, overly relying on constraining MC elements may foster the subordinates' opportunistic and egoistic side, which is sometimes called the 'performative effect' of MC (Vosselman, 2012). The performative effect refers to the principle of a self-fulfilling prophecy: employees tend - to some extent - to start behaving in the way the supervisor expects. For instance, a manager's emphasis on short-term results may evoke a short-term orientation of subordinates and lead to dysfunctional behaviors (cf. van der Stede, 2000). And similarly, merely assuming that subordinates are egoistic and opportunistic may eventually evoke egoistic and opportunistic behavior. So, assumptions with respect to human behavior that underlie constraining MC elements may result in a self-fulfilling prophecy. Humphrey and Miller (2012, p. 308) applied this idea to public sector management: "ideas and instruments of phenomena such as new public management are likely to transform the actors, actions and entities they target", while Vosselman and Van der Meer-Kooistra (2009) stated in this respect that an overemphasis on control can have "negative consequences in terms of an increased proclivity to behave opportunistically" (Vosselman and van der Meer-Kooistra, 2009, p. 278).

There are also risks involved in an overemphasis on facilitating MC elements and an underemphasis of constraining MC elements. If an organization overemphasizes facilitating MC elements and underemphasizes constraining ones, it makes itself extremely vulnerable to various forms of misconduct or abuse on the part of its employees. Davis et al. (1997) describe this situation as the 'fox-in-the-henhouse'. It implies that subordinates may (eventually) take advantage of the trust and autonomy provided by their superiors via the facilitating MC elements, and (ab)use this situation for their *own* benefit. This can be harmful to the organization and the attainment of its goals. However, an underemphasis of facilitating MC also bears risks. A drop in autonomy or cuts in the educational budgets can have detrimental effects. Jick and Murray (1982), for instance, claim that such austerity measures can have severe effects on the morale of the work force and lead to cynicism, job dissatisfaction, and less innovative behavior.

So, we acknowledge the connectivity between notions of agency and stewardship theory and examine how constraining and facilitating MC elements are used in times of austerity in different settings. The extent to which constraining and facilitating MC elements are present may differ per situation, and be contingent upon the view of human behavior that a supervisor employs toward his or her subordinates, but it may also depend on other factors, such as task characteristics (Ouchi, 1979; Speklé and Verbeeten, 2014). Research that studies MC elements and their underlying assumptions in different contexts is scarce, and in the current study we aim to fill this gap. The austerity context offers a unique setting for our study since austerity is likely to lead to a shift in emphasis on constraining MC elements. We conducted a multiple embedded case study to explore how MC is used in times of austerity in different settings, which has enabled us to develop the theory further (Scapens, 2004). The following section presents our research method.

3.3 Research methods

3.3.1 Selection of the cases

In our study we scrutinized four departmental level cases embedded in two municipalities in a time of austerity. In this way, we could enhance our understanding of

the use of constraining and facilitating MC elements in different case settings (following Humphrey and Scapens, 1996). Since the nature of our study was explorative, we designed our case research in such a way that there were similarities as well as differences among the characteristics of the cases. However, we did not know ‘up front’ which characteristics would affect the relative uses of constraining and facilitating MC elements. Because prior literature often identified ‘task characteristics’ as an important antecedent for variation in MC (see overviews by Luft and Shields, 2003), we also relied on this item in selecting our cases. We particularly paid attention to task contractibility (cf. Speklé and Verbeeten, 2014)¹³, i.e. task clarity, concreteness and measurability. In an attempt to capture different types of situations, we examined in each municipality one department with a relatively low task contractibility (the ‘policy’ department, see cases 1 and 3) and one with a relatively high task contractibility (the ‘operational’ department, see cases 2 and 4). We selected these case departments in consultation with the financial controllers of both municipalities using these criteria (see also table 3.1).

3.3.2 Data collection

The data used in this study was collected over the period September 2013 to June 2014¹⁴. We applied three different methods of data collection to inform our research: semi-structured interviews, observations and desk research (Flick, 2009). Before starting our data collection, we engaged in meetings with two financial controllers from both municipalities, who functioned as our initial contacts. Thereafter, we had one or two meetings with the head of each department. In these non-recorded meetings, we introduced the research, arranged practicalities and received access to the four cases. To increase the overall reliability of the collected data, we designed a detailed protocol before we entered the field. This included procedures for conducting interviews, making

¹³ A high (low) contractibility of tasks resembles what Ouchi (1979) calls a condition of high (low) measurability of output and ‘perfect’ (‘imperfect’) knowledge of the transformation process. Ouchi (1979) suggested that different types of MC may be associated with different types of task characteristics. Ouchi (1979) uses his own classification of MC elements, which does not explicitly refer to underlying views of human behavior, or to the notions of constraining and facilitating MC elements.

¹⁴ The interviews and observations took place from September 2013 to June 2014. In the same period, we collected documents that had been produced from 2005 to 2014. The ‘times of austerity’ (from the title) are the years following the financial crisis that surfaced in 2008, which had continued to affect the financial position of the two municipalities in the subsequent years. This was supported by our collected data. For instance, both municipalities confirmed in recent (2013, 2014) official documents (program budgets, financial statements) that the effects of the economic crises were still felt at the time.

observations, writing field notes and transcribing the interviews (Flick, 2009).

We conducted interviews with 51 civil servants and politicians who were employed in, or had a supervisory position in relation to the four case study departments. In order to further increase our understanding of the MC elements used, we also needed to include an internal client in our selection (in case 4) and two HR advisors who functioned as coaches (in cases 3 and 4)¹⁵. To mitigate potential biases, the interviewees selected were representative of the people working within the departments in terms of age, work experience and gender (following Miles et al., 2014, p. 33). The interviewees in supervising positions, the advisors and the internal client were added to this initial selection (see appendix 3.A) to complement the views and perspectives of the departmental staff (cf. Tessier and Otley, 2012, who claimed that supervisors and subordinates may have different, complementary perceptions of MC). The interview questions were developed based on the literature introduced in the previous sections of this chapter, following Horton et al. (2004). Our semi-structured interviews contained several topics, which were addressed in five sections of related questions (see appendix 3.B). In this study we will particularly focus on those MC elements that in each of the four cases had been changed as a result of the austerity measures, although during the interviews we discussed a broader range of MC elements employed in the case departments (e.g. also MC elements that had not necessarily been changed). The changed MC elements were not limited to 'technical' accounting instruments only: following Van der Stede (2011), also other MC elements to facilitate or constrain employees were considered, such as coaching, training, and organizational norms and values.

In addition to the interviews, we attended eighteen official departmental meetings, and were able to make informal observations for a total of 56 days, equally distributed over the four cases. We made observations during departmental meetings, meetings of teams within a department, as well as day-to-day work practices. A detailed diary was kept and field notes were written down separately (following Flick, 2009). Some of these observations allowed us to obtain informal reactions of employees to the

¹⁵ These three interviewees could tell us more about the MC elements used and their origins, such as individual and team coaching activities (the HR advisors) and the use of targets and individual appointments (the internal client).

(proposed) austerity-driven changes, for instance during coffee breaks. Here the employees did not feel limited by a ‘formal’ interview setting. In addition, we also consulted a broad variety of documents (e.g. strategy and policy documents, procedures, minutes; see appendix 3.C) to enrich our understanding of practices at the individual, departmental and organizational levels. We consulted these documents to interpret, complement and triangulate our findings from other sources.

3.3.3 Data analysis and identification of the variables

In total, 51 interviews were held, resulting in over 60 hours of recorded interview data. All interviews were literally transcribed and imported in Atlas.TI software to analyze the qualitative data. Identification of the variables of interest took place as follows. We reviewed the constraining and facilitating types of MC per department, specifically focusing on the interviewees’ reflections on the MC elements discussed during section four of the interviews. In Atlas.TI it is possible to view multiple interviews simultaneously, which allowed us to search for patterns in the data for each case and thus to conduct ‘data source triangulation’ (Miles et al., 2014, p. 299), which was facilitated by the interviews’ semi-structured nature. Where possible, we triangulated our findings with the documents and our impressions and field notes.

Because our data was mainly of a qualitative nature, we cannot speak of a quantitative and precise ‘measurement’ of the variables. Instead, we ‘identified’ and obtained a qualitative picture of our variables of interest, following the structure of our literature review. We used ‘descriptive coding’ to construct a detailed inventory of the links between the austerity measures, changes in MC and their effects in the four cases, following Miles et al. (2014, p. 74). We analyzed and coded all sections in the interviews where the interviewees addressed topics such as ‘budget cuts’, ‘economization’ and ‘austerity measures’. We considered MC elements facilitating when the interviewees classified or described them using Dutch equivalents of words like ‘supporting’, ‘helping’ and ‘facilitating’. A use of descriptors such as ‘binding’, ‘we are forced to’, ‘strict’ and ‘curbing’ suggested that the MC elements could be considered ‘constraining’. Furthermore, when interviewees spoke about an MC element in terms of descriptors such as ‘more’, ‘emphasized’, ‘newly introduced’, ‘increased’ and ‘stricter’, and if these

labels were validated in other interviews and data, we considered this result as an increased emphasis on this type of MC. And the other way around, when interviewees referred to a particular MC element as 'decreased', 'neglected', 'underemphasized' or just 'less', we considered this element as 'de-emphasized' (in table 3.2, we denoted all these changes). Furthermore, in order to obtain a good understanding of the austerity measures in place, how they related to shifts in the use of MC elements and what their effects were, we reviewed per department all coded sections and triangulated them with the other available information (field observations, notes and documents).

While looking for matching patterns in the data, we wrote detailed summaries of each case, which are presented in the findings section. We organized these summaries using the three themes that we identified in the literature review (austerity, constraining and facilitating MC and the possible effects of changes in emphasis), following Miles et al. (2014). By organizing our findings in this way, we aimed to enhance the understanding of (changes in) MC in a period of austerity. We used the structured case summaries to analyze cross-case patterns (following Eisenhardt, 1989), which have been included in the discussion and conclusions section.

3.4 Findings

3.4.1 The setting of the cases

The departments researched were: Spatial Policy (SP) in Greentown and Social Development (SD) in Bluetown (both 'policy' departments), and Public Administration (PA) in Greentown and Buildings & Installations (BI) in Bluetown (both 'operational' departments), see table 3.1. Bluetown and Greentown were both medium-sized municipalities within the Netherlands with respectively 130,000 and 200,000 inhabitants. Their municipal organizations consisted of 1,200 and 3,000 full time equivalent (fte), respectively.

Municipality	Greentown		Bluetown	
	<i>Case 1</i>	<i>Case 2</i>	<i>Case 3</i>	<i>Case 4</i>
<i>Department</i>	<i>Spatial Policy</i>	<i>Public Administration</i>	<i>Social Development</i>	<i>Buildings & Installations</i>
<i>Type of tasks</i>	Policy development	Operational	Policy development	Operational
<i>Activities</i>	Policy development on issues such as public transport, living and energy	Front office for citizens, issues official documents, registers life events and handles phone calls	Policy development on issues such as sports, culture, youth and healthcare	Plan and conduct maintenance of public buildings, infrastructure and water pump stations
<i>Contractibility</i>	Low	High	Low	High
<i>Number of employees</i>	48 (40 fte)	60 (45 fte)	37 (32 fte)	44 (38 fte)
<i>Average level of education</i>	High	Low	High	Low / medium

Table 3.1– Overview departmental characteristics

Although we initially selected the two municipalities because we expected them to be more or less the same since their sizes were comparable, we found after the first rounds of interviews that they differed substantially in some respects. Whereas Greentown was a large municipality that used to be divided into several highly autonomous divisions, Bluetown could be regarded as a more centralized and ‘innovative’ municipality. Bluetown had won several prizes for its innovative ideas about Human Resource (HR) management, and it was among the first Dutch municipalities to receive the ‘investors in people’ certificate. In addition, Bluetown used a more centralized and integrative program to implement its austerity measures (called TNO, which stands for ‘The New Official’), whereas Greentown responded to austerity with more ‘ad hoc’ and decentralized programs. So, Bluetown and Greentown used different approaches to deal with the challenges of austerity (centralized versus decentralized, integrative versus ad hoc), which may have reduced their similarity to some extent (cf. Liguori and Steccolini, 2012)¹⁶.

¹⁶ This led to an ‘ex post’ dimension of centralization/integratedness on the organizational (municipal) level of our embedded case studies. However, this dimension did not interfere with the explorative purposes of this study because

During the years after the crisis that surfaced in 2008, municipalities within the Netherlands have faced substantial budget cuts. Municipal controllers in Greentown and Bluetown indicated that the budget cuts over the period 2011-2014 had amounted up to respectively 10 % and 8 % of their yearly budget, and as a consequence the number of fte positions in each municipality had to decrease with about 10 %¹⁷. The way in which people felt about these ‘times of austerity’ at the municipality level was perhaps best expressed by an employee of the Public Administration department in Greentown:

“The Hague [i.e. the Dutch central government] demands an extremely high quality of our basic administration. But now they hand over even more tasks to the municipalities, which have already been cutting in their budgets, resulting in an enormous pressure on us.” (PLANNER PA)

Likewise, an interviewee from Bluetown also acknowledged the severity of the austerity measures:

“It’s for the first time in the history of [Bluetown] that such vigorous measures are being applied, and that job security is no longer assured for everyone. That’s not common for the public sector. It’s a situation which leads to a lot of stress on the part of the employees.” (ALDERMAN BI)

In other words, the ‘times of austerity’ and their consequences were impacting municipalities in all sorts of ways.

In the next section, our findings are presented as summary reports per case, each consisting of three paragraphs. In the first paragraph, we briefly introduce the department and its characteristics and describe what ‘austerity’ meant for this department. Second, we discuss the relation between austerity and the use of constraining and facilitating MC elements. In the third paragraph, we discuss the effects of the changes in MC on the departments and the services delivered by them. Table 3.2, at the end of this section, summarizes the findings from the four cases.

our focus was on the changes that took place at the departmental level. Moreover, in comparing the case studies the municipal differences are taken into account.

¹⁷ From 2011-2014, Greentown introduced budget cuts of a total of about 81 million on a yearly budget of 820 million (so, almost 10%), while Bluetown introduced budget cuts amounting up to 31 million on a yearly budget of about 375 million (so, about 8%). Both municipalities were at the moment of our study working on a decrease of fte positions employed of about 10%.

3.4.2 Case 1: Spatial Policy

The department of Spatial Policy (SP) in the municipality of Greentown advises politicians and develops policies in the fields of housing, infrastructure and energy. Most departmental staff are highly educated policy advisors (i.e., they have an academic background) while their tasks are often complex and non-routinized, and hence broadly defined. The department is the result of a merger between four policy departments, and its goal is “to anticipate future problems in the city, and develop solutions to these issues in the middle and long term in collaboration with other parties” (DEPARTMENT HEAD SP). Most interviewees specifically mentioned that austerity measures were visible everywhere in the organization, and that the municipality ‘pinches pennies like mad’. To illustrate this situation, the interviewees often referred to one of the most ‘visible’ budget cuts at the organizational level in Greentown; all the litterbins had recently been removed from the employees’ rooms, leaving only one or two central litterbins per department which were only occasionally emptied. Another often mentioned austerity measure was the downsizing at the SP department in terms of fte positions, which increased the pressure on the remaining staff.

“On the one hand we are expected to downsize our department [as a consequence of budget cuts], but on the other hand our work load keeps increasing, which makes things difficult here.” (TEAM LEADER 2 SP)

Furthermore, because of the budget cuts some of the policy programs on which several advisors had worked for more than two years were suddenly terminated. All advisors involved in the project had to stop their activities immediately, which caused a very cynical atmosphere among them: “Yeah, those were very hard measures. Some of them [the advisors] are still pretty frustrated about this” (POLICY ADVISOR 2 SP). Another austerity measure had abolished the possibility of tenure for new employees: “That leads to a lot of frustration! They [the younger employees] work very hard; they’re good at their jobs and passionate. They possess the skills that we need around here. And there are too many older staff members just ‘sitting’ here collecting their salary” (PROGRAM LEADER 2 SP).

At the departmental level, the interviewees experienced MC as largely facilitating, since they are given a lot of autonomy, as supported by the department head:

“It’s pretty much un-hierarchical here. The employees are fairly autonomous [...]. We mostly employ management control through exemplary behavior; therefore it is very important how the so-called ‘alphas’ [senior policy officers and team leaders] act within the group.” (DEPARTMENT HEAD SP)

Although this autonomy was highly valued by the SP department, in recent years more and more emphasis has been placed on constraining types of MC, for instance realizing auditable results.

“But these result-oriented management controls are very difficult for us. We have to cut costs, and at the same time the work load is very heavy [...] We would love to be able to show exactly what we did, because results are highly important, but their measurability is pretty limited around here.” (TEAM LEADER 1 SP)

The desire for auditable results led to the resort to ‘results’ that were easily measurable and observable, such as ‘timeliness’ and ‘adherence to deadlines’. Particularly when the mayor or aldermen demanded a quick ‘result’, the interviewees experienced this as constraining. For instance, during one of the departmental meetings we observed, it was communicated that the mayor wanted to receive the policy and advice documents in a more timely manner, and that compliance with deadlines would become more important. Another instance of a form of MC that was experienced as ‘constraining’ was the requirement to fill out one’s weekly hour allocation on a timesheet. And although the interviewees considered this activity as ‘useless’, they were forced to do it by the municipality’s top management. Furthermore, in recent years, the emphasis on and re-introduction of constraining MC elements had been going hand in hand with a de-emphasis of facilitating MC elements, such as less attention for education and training.

“[T]here is hardly room for that, which can to a large extent be explained by the budget cuts. I’ve repeatedly requested to take up a training or so, but I did not receive any responses.” (POLICY ADVISOR 1 SP)

Team leaders acknowledged that facilities such as these had not received much

attention in the department lately, and that decisions regarding education and training were often made on an ‘ad hoc’ basis. In general terms, these developments led to a stronger emphasis on constraining MC elements within the MC package, accompanied by a relative de-emphasis of facilitating MC elements, according to the interviewees.

The changes in emphasis had several effects. Most interviewees did not fill out the timesheets in a serious manner, because they did not believe that the information would actually be used by anyone. Some interviewees even had to laugh when asked about the subject, and jokingly told us that some of their colleagues sometimes drew ‘funny patterns and figures’ on the timesheets, which undermined the reliability and functionality of this particular MC element. In addition, at a departmental meeting the renewed emphasis on complying with deadlines was also ridiculed: some staff members joked that the mayor would ultimately ‘get used to *our* style and pace of working’, indicating more ‘distance’ toward the municipality’s top management. The alderman responsible for this department acknowledged the effects of the MC changes.

“I have the feeling that, because of our austerity measures and the focus on the reorganization of the work and everything that is connected to it, we are undermining our employees’ motivation to do something innovative [...] We should create a more inspiring and challenging atmosphere, which is something we have underemphasized lately.” (ALDERMAN SP)

3.4.3 Case 2: Public Administration

The department of Public Administration (PA) of the municipality of Greentown is primarily engaged in issuing official documents to citizens, such as driver’s licenses and passports, and recording life events, such as births and marriages. “Our mission is to welcome citizens here, and help them efficiently and effectively in a customer friendly manner” (DEPARTMENT HEAD PA). The average level of education of the staff of the department is rather low. Thereby, because of the recent austerity measures, there is a demand for a more ‘flexible’ pool of employees, which has led to an increasing preference for employment agency workers over tenured staff. The tasks of this department are highly routinized. Each service they provide is described step by step in a handbook. All activities of the employees are logged in the computer system and are visible to the team leaders. In this department the employees have widely experienced

the austerity measures:

“We are continuously confronted with requests like: ‘Can this be done more efficiently? Can you spend a little less? Can you downsize your department?’ It never seems to end.” (ADVISOR PA)

For instance, during one of the meetings in early 2014, it was – on behalf of senior management – explicitly stated that because the department had to cut down their expenses by ten to twenty percent, an increase in individual productivity was crucial. In addition, it was announced that the number of staff members had to be decreased to achieve the planned savings, which caused employees to be anxious about their future within the department.

Due to the economic situation, the PA department had recently resorted to types of MC that were experienced as ‘constraining’ by our interviewees. For instance, the time spent on an individual client was now recorded in the department’s software system, and this output measure had lately also become a key issue in the yearly appraisal interviews. Interviewees, but also other employees whom we spoke during our fieldwork, indicated that they perceived these types of MC as constraining: they increasingly felt that they were being ‘watched’ by their team leaders. One of the employees even mentioned cynically that the team leaders just ‘love’ these performance measures.

“At some point during the recent round of evaluations, we received individual statistics on which clients were served, which clients I helped, and what my average throughput time was. It seems that they are starting to use this information, probably as a means to cut costs.” (EMPLOYEE 6 PA)

Most subordinates were quite sceptical – if not cynical – about the trend to use these types of MC. It was argued that the information generated by the statistics was fragmentary and did not convey the everyday complexities in a realistic manner. Employees of the PA department indicated for instance that the time spent on a particular service greatly depends on the type of client, which – as they argued – limits the reliability of the MC element. The system automatically measures how long an employee works on a certain ‘product’ for a client:

“When we are working too long on a certain client, we receive a message on our computer screen, which says something like: ‘Are you still working on this product for this client?’ [...] I get this message a lot!” (EMPLOYEE 5 PA)

Another example of a change in MC elements that was experienced as constraining was the initiative to hire an external party to review all procedures, protocols and workflows in the department. The aim was to remove all ‘unnecessary’ tasks, while it was mentioned that the possibility to deviate from these redesigned procedures, protocols and workflows would be very limited. During the meeting where this initiative was announced, it was explicitly mentioned that these newly designed procedures were ‘binding’. Reactions to this change from the subordinates indicated that they felt that their ‘autonomy’ was reduced – once again. Moreover, besides the emphasis on MC elements that were experienced as constraining, one particular MC element aimed at incentivizing employees had been de-emphasized. Specifically, the possibility of rewarding a particular team or employee for their results had been reduced. Earlier it had, for instance, been easier to offer small monetary (incidental) rewards, but the requirements for granting these ‘tokens of appreciation’ were increased tremendously, leaving management with few possibilities for incentivizing the employees. On top of that, the facilitating MC elements have been de-emphasized in recent years. The budgets for education and training have, for instance, become much more limited.

“The education budget was already small, but it shrinks each year because of the budget cuts, which confronts us with a dilemma: we want to improve the quality of our services, but our resources decrease year by year.” (ADVISOR PA)

To illustrate this development, the number of training days offered to new employees has decreased by 50 % compared to previous years, simply for the sake of achieving cost savings. Reflecting on these changes in the emphasis on different types of MC, one of the interviewees explicitly complained that “all resources that a supervisor used to have to retain a motivated work force have recently been removed” (PLANNER PA).

The increased use of output measures has led to a change in the services delivered by the PA department. Two interviewees sketched this situation as follows:

“In the past it was more like: the client is king [...] but now, everything that is customer-friendly, and thus costs money, is being removed” (EMPLOYEE 3 PA)

“Earlier, we called organizations like the Chamber of Commerce or the Border Police to help our clients. But we don’t do that anymore; they [clients] have to solve things themselves now. Otherwise, I spend too much time on a client arranging these kinds of things!” (EMPLOYEE 5 PA)

Apart from this effect on the services delivered to clients, the increased focus on constraining MC elements has also led to a change in the employees’ behavior. During our interviews and observations, we identified the practice of ‘strategically’ picking ‘easy’ requests instead of more complex ones, leaving the difficult (more time-consuming) tasks to those colleagues who did not ‘play’ the system. Practices such as the strategic picking of clients limit the comparability of the output information, the validity of the department’s monitoring tools and – eventually – the functionality of output measurement as an MC element. When reflecting on the recent austerity measures, the director – one level above the department head – said he recognized these unwelcome effects on the employees:

“I think it [the management control] is overly constraining and this should change in my opinion. I think we are not getting the best out of our employees yet. I think we can provide a better service with the same amount of people, and maybe even with less staff. However, now that’s not the case yet. First, a different culture has to be embraced; a breath of fresh air is needed.” (DIRECTOR PA)

The need for a new culture was also stressed in several evaluation reports, written by internal advisory committees, who had interviewed staff about the changes within the department and the overall atmosphere. Briefly summarized, the evaluation reports point to low employee satisfaction and a ‘passive’ and ‘negative’ overall atmosphere. Although some supervisors stated that their subordinates were committed to their work, the general assumptions about their behavior were less optimistic:

“Unfortunately, they [the members of staff in the PA department] don’t do more than what is strictly necessary, and that’s it. I sometimes wished that they would be more passionate.” (ADVISOR PA)

3.4.4 Case 3: Social Development

The department of Social Development (SD) in the municipality of Bluetown is mainly responsible for developing policies in the fields of culture, health, society and sports. The departmental staff is average to highly educated. They are engaged in allocating subsidies to organizations, maintaining relations with these organizations and advising the municipal top management and the city council. Employees described the overall culture in their department as ‘professional’ and ‘individualistic’, while the department head viewed the departmental staff as ‘very committed’, but sometimes also ‘self-interested’. In the light of the austerity measures, the political and organizational top managements of the municipality of Bluetown initiated a project called ‘The New Official’ (TNO). This project was aimed at further professionalizing the work force and establishing a culture of self-management. According to the TNO documents, increasing employees’ self-management was intended to ‘support and enable’ the removal of one management layer. Most of the austerity-related adaptations to the management styles and structures of the municipality were embedded in this TNO project, including the removal of a managerial layer in the SD department which took place 15 months before we entered the department for our data collection.

Some of the changes were regarded by our interviewees as shifts toward more constraining MC elements, although other measures also enhanced the use of facilitating MC elements.

“I do recognize that the budget cuts and the financial crises have had an impact on the way in which I am seen and controlled by management [on the department level]. The focus on my results and my functioning is even stronger than before.” (POLICY ADVISOR 3 SD)

The increased emphasis on output was primarily experienced during the yearly appraisal meetings with the department head. All employees had to self-evaluate the extent to which they achieved the year’s planned targets and define new ones for the next year. The fact that these plans had to be filled out in a fixed format in combination with the low ‘measurability’ of their output was considered constraining by multiple

interviewees. The HR advisor of the department commented as follows on the employees' experience of the MC as 'constraining':

"Some of the tools that we [the HR department] offered just went berserk [...] Sometimes they led to even more frustration on the part of the users, instead of helping them. This is, for instance, the case with the yearly appraisal conversations and the appointments that have to be documented there. [...] They force you, for instance, to provide information that is totally irrelevant, which keeps you from the work that you actually should be doing. That's a bit sad of course." (HR ADVISOR SD)

In addition to the greater focus on results, the removal of a managerial layer also affected the MC in the department. Before this removal, four team leaders had their own relatively independent teams, with which they held appraisal interviews on a yearly basis. After the reorganization, these tasks were assigned to the department head, whose 'span of control' now consisted of about 35 employees. However, as mentioned before, simultaneously there was also a greater emphasis on more facilitating types of MC, such as a 'facilitating' culture:

"It is important that we continue to invest in the culture that we have, in particular because things have just started. The pressure is increasing; we have to make budget cuts. More difficult tasks have to be done with less people." (DEPARTMENT HEAD SD)

Introducing and disseminating the TNO program with its new styles of working were mainly achieved through MC elements that can be regarded as facilitating. Such MC elements were, for example, voluntary training, online blogs, booklets that were issued and coaching sessions. Although all these facilitating MC elements had originated at the organizational (i.e. municipal) level, they were adapted by the individuals and teams within each department. For example, the employees and teams in the SD department were coached by HR professionals to facilitate them in accomplishing their day-to-day tasks in line with the new TNO program. Several interviewees were positive about this.

“My coaching trajectory really helped me to develop my ‘self-management’ abilities. The fun thing is that in the past six months I have actually seen myself improving in some respects. Then I realize: ‘Wow, I am actually doing that self-management thing!’” (Senior Policy Advisor 2 SD)

In addition, during the yearly appraisal interviews the department heads encouraged the employees to receive certain training, which would help them in their day-to-day activities. And although some employees could have perceived such ‘encouragements’ as constraining, our research did not explicitly show that this was the case.

Overall, the effects of the MC changes in this department appeared to be quite diverse. Some of the employees regretted, for instance, the removal of the managerial layer. Because of the increased ‘span of control’ of the department head, in combination with the greater focus on results, they felt that they had lost some of the ‘personal attention’ of their superior. According to others, the department head’s approach consisted of both types of MC elements, because he was aware that his subordinates could engage in two types of behavior;

“Sometimes it [the MC used by the department head] is very constraining, whereas at other times it gives a lot of freedom and autonomy.” (ALDERMAN 1 SD)

So in sum, it was claimed that when faced with hard times, people in supervisory positions often ‘fall back’ on constraining MC elements (despite the use of facilitating ones):

“When things go wrong we panic and respond by imposing more constraining forms of management control [...] Maybe we [i.e., the municipality’s top level civil servants and politicians] haven’t found a good mix yet. At the moment it’s like this: letting go until things go wrong, then exercising powerful and constraining control measures which make people start to feel tense so that it becomes more difficult for them to re-find their roles again. They then ask themselves: ‘Am I autonomous or am I not?’” (ALDERMAN 2 SD)

Other interviewees indicated that there were differences in the way MC originating from different organizational (hierarchical) levels was experienced by them:

“At the departmental level I experience it [MC] as facilitating [...], however, at the organizational level a large number of things are imposed on us by force.”
(POLICY ADVISOR 1 SD)

So, although newly initiated projects, such as the TNO project, could be adapted at the department level, the interviewees still felt a difference between MC elements adapted or initiated at the department level – which were often experienced as facilitating – and those exerted at the organizational level – which were experienced as more constraining.

3.4.5 Case 4: Buildings and Installations

The department of Buildings and Installations (BI) in Bluetown is responsible for the maintenance of municipal property, such as libraries and municipal buildings, as well as installations like traffic lights, bridges and water pumps. The tasks within the department are both routinized (e.g. the maintenance of buildings) and non-routinized (e.g. dealing with malfunctioning bridges). In general terms, the department’s aim is to *“make sure that the installations and buildings in the city function well, and that the clients, inhabitants and users are satisfied with the services provided”* (DEPARTMENT HEAD BI). The interviewees generally called their department’s culture ‘informal’ and ‘friendly’, and indicated that there was a ‘strong feeling of community’. The austerity measures embedded in the municipality-wide TNO program, affected the BI department in several ways. The general idea of the TNO program was to make the employees more ‘self-managed’.

“What we see is a shrinking government; people have to do more themselves, and we have to cut costs. This situation demands a different kind of employees, a different approach and a different type of management control. That’s why we developed the TNO program.” (HR ADVISOR 1 BI)

Alongside this program, other austerity measures were also introduced. During our data collection in 2013, a new reorganization was announced, aimed at organizing processes more efficiently. For the BI department this measure only meant a relatively small change in the configuration of the department: only four employees had to join another department on a different floor.

Recent austerity-related changes in MC in this department could be considered as a simultaneous emphasis on both constraining and facilitating types of MC. Although the BI employees recognized the renewed emphasis on results (e.g. during their appraisal interviews and departmental meetings), as advocated by the TNO program, the impact on their daily work practices remained limited:

“Well, things have changed of course since we have been subjected to the economic crisis and had to economize as a municipality. So, we see things change, but that doesn’t necessarily affect our daily practice. I still do my job in the same way as four and a half years ago, when I started. It’s still the same people, the same tools.” (SERVICE EMPLOYEE 6 BI)

One element which, however, clearly changed in the staff members’ daily work practices, was an ever increasing emphasis on a (timely) reporting of the work results, i.e. finished jobs, which sometimes led to conflicts and was thus experienced as ‘constraining’:

“In SuperSys [fictional name for performance measurement system] they [i.e. the supervisors] can see that I completed only 80% of my tasks in time. However, I also need time to report all the things I did! They want us to record everything digitally directly after solving a problem, but if there are twelve other breakdowns urgently waiting for me, I’ll just continue working [without reporting the completed ones], because I want to have them all solved at the end of the day.” (SERVICE EMPLOYEE 2 BI)

One of the other service employees explained his experiences in more detail, especially with respect to the reporting of his tasks.

“It’s really only for the people ‘inside’ [i.e. the supervisors and planners] that we provide information about the things we do. But...those administrative things are not relevant at all for my main task: making sure that things work ‘outside’ [i.e. bridges, water pumps]. I am a technician, so I want the technical part of my job to be well executed. Of course, I understand that we’ve got to do some administration, but it shouldn’t drive me crazy. For example, I have to record my hours in two or three separate IT systems. That really doesn’t help, and it actually drives me crazy sometimes.” (SERVICE EMPLOYEE 2 BI)

Still, along with the reporting tasks (i.e. constraining MC elements) also more facilitating types of MC were introduced. For instance, coaches became available to support the

Greentown		
	Case 1 Spatial Policy	Case 2 Public Administration
<i>Increases of constraining MC elements</i>	<ul style="list-style-type: none"> • Advisors' output in terms of timeliness of advices was stressed • Compliance with deadlines was stressed • Activities of employees had to be reported in timesheets 	<ul style="list-style-type: none"> • Employees' output, such as number and types of clients served, used to assess performance • Output played a larger role in appraisal interviews • Output information also visible to other employees • Stricter procedures/protocols, limited possibilities to deviate
<i>Decreases of constraining MC elements</i>	NA	NA
<i>Increases of facilitating MC elements</i>	NA	NA
<i>Decreases of facilitating MC elements</i>	<ul style="list-style-type: none"> • Education and training received less attention and were organized only on a very 'ad hoc' basis 	<ul style="list-style-type: none"> • Introductory training for new employees cut in half • Budgets for education and training shrank
<i>Effects and/or problems</i>	<ul style="list-style-type: none"> • Filling out the timesheets was not taken seriously • Some measures led to more 'distance' toward top management • Employees innovativeness was recognized to be undermined by stricter types of MC 	<ul style="list-style-type: none"> • Employees started to strategically pick 'easy' clients • Less time for customer friendliness because of pressure on output • Employee motivation was lowered • Employees increasingly feared to lose their job

Table 3.2 – Description of the variability of the finding

Bluetown	
<i>Case 3 Social Development</i>	<i>Case 4 Buildings & Install.</i>
<ul style="list-style-type: none"> • Employees' output had to be recorded • Output had to be compared to targets for a given period • Targets and self-evaluations were discussed in job appraisal interviews 	<ul style="list-style-type: none"> • Employees' output was measured via SuperSys • Output information was discussed during appraisal interviews • Timely reporting of activities
NA	NA
<ul style="list-style-type: none"> • Coaching became available to support advisors in working as 'New Officials' • Voluntary training in the municipality's values were offered and used • Individual employees were encouraged by dept. head to (consider) attending training • Self-management was emphasized 	<ul style="list-style-type: none"> • Coaching trajectories were offered and used by both teams and individuals • Training in content of the tasks • Training in self-management • Training in linking the municipality's values to the work activities
NA	NA
<ul style="list-style-type: none"> • Less 'personal attention' for employees because of larger span of control • Finding the right 'mix' remained difficult • Measuring output proved to be difficult • Differences organizational & departmental MC 	<ul style="list-style-type: none"> • Some employees were skeptical about the reliability of the output measures • Urgent work sometimes got in the way of reporting the finished tasks • Managers used constraining MC to 'balance' the current emphasis on facilitating MC elements

individual employees as well as the teams. On top of that, several training programs were provided to help the employees perform their tasks, which were related to both the content of their activities and the way in which they were expected to carry out the self-management-related values of the TNO program.

“I really experience personal coaching as a supportive tool [...] Personal coaching has helped me to manage my team and to get all my team members to look in the same direction. It [my individual coaching] worked, absolutely! The uncertainties I had became much clearer to me, and that’s also because I asked a lot of questions [to my coach].” (PLANNER BI)

Regarding the increased focus on result-oriented MC elements, some of the employees were skeptical about their reliability. They argued that the standards for these output measures, such as the time required to repair a malfunctioning bridge, were highly speculative and did not sufficiently account for the actual complexity of these tasks. In addition, other – more urgent – work sometimes got in the way of the reporting of finished tasks, which also distorted the reliability of the self-reported output measures. Finally, some managers were also critical toward some of the facilitating MC elements, such as coaching, training and the more ‘facilitating culture’. In their opinion, too much focus was sometimes placed on the ‘facilitating’ MC elements. For example, although the importance of facilitating types of MC was acknowledged by the Director of BI, she also stressed the need to complement the ‘facilitating management fad’ with more direct and constraining types of MC: “They [the members of staff in the BI department] sometimes simply need a fist on the table; that’s definitely necessary from time to time.” (DIRECTOR BI)

3.4.6 Description of the variability of the findings

In order to present our key findings from the four cases, we developed table 3.2. The table shows some of the variety among the cases and highlights the changes in constraining and facilitating types of MC, and the effects or problems in which these changes resulted. For both the constraining and facilitating types of MC, we denoted those instances where an MC element was ‘emphasized’ (i.e., increased in use or importance) or ‘de-emphasized’ (i.e. decreased in use or importance) in the relevant

cells. We chose to display these dimensions in a table in order to highlight and describe some aspects of the important variability between the four cases in a comprehensive manner. Yet, we acknowledge that such a table does not fully reflect the richness and complexity of the case information gathered.

3.5 Discussion

In this section we will discuss how MC within governmental departments is used in times of austerity, and how insights from both agency theory and stewardship theory can enhance our understanding of this matter. The section contains cross case analyses based on the findings section (summarized in table 3.2), connects the findings to the extant literature and ends with some concluding remarks.

The four departments studied were all facing the challenges of austerity, and in each case an increased emphasis on constraining MC elements was the response. In so far as we found that organizations use tighter budget control in times of financial turbulence, our findings are in line with Johansson and Siverbo (2014). However, our findings also point to other interventions than changes in the budgeting instruments, such as coaching possibilities, self-management and culture (as suggested by Van der Stede, 2011). Our findings indicate that output measures received renewed attention and that employees' accountability for their own performance was also strengthened. These issues were regularly discussed in the yearly appraisal interviews, and used as both monitoring and incentivizing systems (cf. Jensen and Meckling, 1976). In all four cases, the increased use of constraining MC elements was related to the current austerity challenges, which were a consequence of the financial and economic crises that started in 2008. This finding suggests that, as a first reaction to the budgetary stress, the government organizations studied considered their employees as 'agents'. Although this finding is consistent with the view of human behavior that underlies NPM (see e.g. Gruening, 2001), there are also some important differences between NPM ideas and austerity measures. Measures in times of austerity are more obviously driven by a need for short-term cost reductions than NPM ideas, which are traditionally focused on making the public sector more 'businesslike' and improving the service quality. So NPM clearly has a longer-term orientation (Hood, 1995; Pollitt and Bouckaert, 2011). The

potential dysfunctional consequences of emphasizing constraining MC elements may therefore be more severe when austerity measures are taken than in the case of implementation of NPM ideas. In times of austerity, there is certainly a risk that cost reduction programs are introduced without much further focus on the conditions necessary to make the programs' ideas work out well in the longer term. This is especially important since the effects of emphasizing constraining MC elements were not the same in each of the cases. This finding can possibly be explained by the various degrees to which facilitating MC elements were simultaneously emphasized, which indicates the relevance of recognizing the connectivity between notions of agency and stewardship theory in understanding MC in times of austerity.

When comparing the cases situated in Greentown (cases 1 and 2) with those in Bluetown (cases 3 and 4), we see that the latter emphasized facilitating MC elements whereas the former de-emphasized facilitating MC elements. Whereas Bluetown retained training and coaching opportunities for its teams and individuals, these facilities started to be abandoned in Greentown. When looking at the effects of the enhanced use of constraining MC elements, we see different responses in the two 'operational' departments (cases 2 and 4). Whereas in both departments the employees were critical of the validity and completeness of the performance measures, in case 2 the increased emphasis on performance resulted in actions such as 'strategically picking' clients to manipulate the individual measures. The employees in case 4, however, reacted by prioritizing their usual tasks for the department and municipality (e.g. solving malfunctioning bridges and dealing with machine breakdowns) over 'reporting' their (individual) performance. These responses may be explained by the notion of 'reinforcing cycles' (cf. Segal and Lehrer, 2012). An overemphasis on constraining MC elements may invoke opportunistic (agent-like) behavior (for example picking 'easy' clients), such as in case 2, whereas the relatively stronger focus on facilitating MC elements in case 4 induced more organizational-serving (steward-like) behavior (i.e. caring more about the organization's goals than about one's own individual performance measures). Following this line of reasoning, enhanced education and training opportunities which help to make employees more autonomous could, to some extent, 'compensate' for the increased uses of constraining MC elements in times of

austerity, and mitigate their negative effects. This would suggest that the aforementioned negative effects of an overemphasis on constraining MC elements (the crowding-out effect or the performativity effect) are likely to be stronger in situations where the increase in constraining MC elements coincides with a decrease in facilitating MC elements (e.g. cases 1 and 2), than in situations where the MC package is better able to deal with human ambivalence (cf. Segal and Lehrer, 2012). This would then be an MC package that includes both facilitating and constraining MC elements without overemphasizing one of the two types. This argument is consistent with Hernandez' (2012; 2008) interpretation of the effects of using stewardship-informed MC.

When juxtaposing the two 'policy' departments (cases 1 and 3), we see that the SP department (case 1) had more difficulty in dealing with the increase in result-oriented control. A potential explanation for this finding may relate to the decreased emphasis on facilitating MC elements, such as education and training, in case 1. The two simultaneous changes, i.e. the increased focus on outputs and the reduced training possibilities, limited the motivation and innovativeness of the employees and led to a less inspiring and challenging work environment. This is consistent with Pollitt (2010, p. 23), who stated that "during a period of austerity, the conditions for meaningful innovation will deteriorate". Within the SD department (case 3), however, the interviewees often stressed the dual roles of MC: on the one hand there was an increasing emphasis on individual performance and its assessment, but on the other hand there was still enough room for personal development and self-management, facilitated by training and coaching possibilities. So, even though some of the task characteristics (i.e. task contractibility) of these two cases were very similar, there were considerable differences in the effects of the changes in MC between them.

Comparing the 'high' (operational) and 'low' contractibility (policy) departments yields some additional insights. The four departments researched all emphasized the use of constraining MC elements as a response to austerity challenges. In particular the use of output measures increased in all four departments. Based on previous literature (e.g., Ouchi, 1979), output control may be seen as more suitable in the 'operational' departments than in the 'policy' departments. The differences in the use of output measures are, however, less clear than the variation in contractibility between the two

types of departments would suggest. The case studies revealed that both the operational and the policy departments were critical about the possibility of measuring their outputs and that they questioned the reliability of the output measures used for MC. Also in the operational departments, it became clear that measuring output was not an easy undertaking. In case 2, the output measurement did not adjust for the different types of clients (more or less time-consuming). In case 4, parts of the tasks were not routinized (e.g. repair work related to malfunctioning equipment), which led to questions about the usefulness of the output measures. One important difference between the two types of departments is, however, that the operational departments' output measures were more oriented toward cost-cutting and efficiency improvement, while the policy departments' output measures were more focused on compliance with deadlines and accountability for performance. The output measures in the operational departments were clearly experienced as constraining, while this was less obvious in the policy departments. It may be concluded that the different levels of contractibility may have initiated less variation in MC than expected. However, due to several other factors both at the department level and the organizational level, the variation in the MC packages in the four departments researched was in fact quite considerable. This finding allowed us to explore the variety in MC use in the four different case settings.

3.6 Conclusions

In this chapter, we explored how MC is used within governmental departments in times of austerity, and how insights from agency and stewardship theory can contribute to our understanding of this matter. This chapter has two main contributions to the extant literature. First, it illustrates the dangers of relying predominantly on constraining MC elements or presuming a pre-dominance of agency-like thinking. In our study we found that an overemphasis on constraining types of MC has several negative consequences, such as lower employee motivation and more opportunistic behavior. Yet, when facilitating and constraining MC elements are emphasized simultaneously, some of these negative effects are mitigated. Although we used task contractibility to select different types of cases, this has led to less variation in the changes of constraining and facilitating MC than we initially expected. Both types of departments (i.e. high and low task

contractibility) strongly increased their emphasis on constraining types of MC, mostly in the form of individual output or performance measures. We also argued that the use of either constraining or facilitating MC elements alone yields an MC package that does not allow for human ambivalence. We acknowledged employees' choice and fluctuation between agent-like and steward-like behaviors, and responded to the call to further explore the dual role of MC (Segal and Lehrer, 2012; Tessier and Otley, 2012).

Second, this chapter contemplates alternative strategic managerial responses to austerity in a public sector context. The study shows that in order to deal with the challenges of economically difficult times, municipalities and departments adopt a variety of changes in their uses of MC. Despite the fact that some of these changes (e.g. savings in educational or training budgets) may lead to short-term financial stability, our study suggests that they may have detrimental effects in the longer term (although we did not 'measure' these effects in this study). These effects will occur when austerity-related changes lead to an overemphasis on constraining types of MC without sufficient encouragement of stewardship behavior through facilitating types of MC.

The findings of this study should be considered in the light of the limitations of the research method used. We therefore suggest the following avenues for further research. As explained earlier, we used four case studies to explore the effects of austerity on public sector MC, because this method allowed us to increase our understanding of the complex issues of austerity and MC in their natural context. In order to generalize our findings to other organizations, we would suggest using the effects identified by our study as the starting point for further research on the relations between austerity and MC. As we focused on the effects of austerity on different types of MC, we did not elaborate on the interplay between these different types of MC. However, we do recognize that this issue is an important avenue for further research, since it can help us understand why some combinations of constraining and facilitating MC elements work better in certain settings than in other ones. Ferreira and Otley (2009) also suggested to explicitly consider the links between the various individual MC elements and the effects they have when combined. Case-based research methods could play an important role in developing these concepts, since they are probably more suitable than other approaches for capturing the complexity of the interactions between MC elements

(cf. Grabner and Moers, 2013; Malmi and Brown, 2008). Furthermore, there are many different variations within the 'constraining' and 'facilitating' MC elements. It could, for instance, be interesting to explore in future studies in which particular situations MC elements are experienced as constraining or facilitating. Apart from this, the chapter indicates that constraining and facilitating MC elements relate to agency and stewardship ways of thinking, respectively. This suggests that in practice 'hybrid' packages of MC elements are used, i.e. packages that include both types of MC that relate to different theoretical backgrounds. Future research could further elaborate on the extent to which the different theoretical backgrounds and their diverging views of human behavior are considered and balanced in practice.

In our findings, we already indicated that the four cases responded differently to the budgetary challenges they faced. This observation suggests that there was little learning across the cases studied, which may be caused by a number of reasons. One possible explanation refers to the short-term orientation of most austerity measures. Perhaps, the limited time frame to realize the budget reductions withheld municipal departments to learn from each other's approaches. This suggestion is supported by our findings, in which we illustrate that many budget reductions were 'decentralized', first from the central government to municipalities, and subsequently from the municipal level to the departments. Furthermore, managers may differ in the choices they make with regard to the use of constraining and facilitating MC elements. However, besides managerial intentions, there could also be other factors that affect the perception of MC elements as facilitating or constraining. For instance, Merchant and Van der Stede (2007) pointed out that MC elements can be initiated at different organizational levels. Exploring whether 'hierarchical origin' of an MC element has an effect on how it is perceived may yield interesting insights. Furthermore, Tessier and Otley (2012) briefly touched upon the issue of 'quick fixes'. They suggest that when a change in an MC element follows from the need to fix a problem quickly, this may influence the effectiveness of the change. The element is then likely to be changed without taking the current MC package into account, which may lead to an overreliance on either constraining or facilitating MC elements.

Finally, the acknowledgment that individuals can actually choose whether to

engage in either agent-like or steward-like behavior alters the question “*Are my subordinates agents or stewards?*” into “*Will my subordinates act as agents or as stewards in a specific situation?*” Because the choice between the two different behaviors is a recurring one, a subordinate may make different choices at different times or places, which may be affected by multiple factors. The factors that affect agent- and steward-like behaviors may therefore form fruitful soil for further research. Studies such as Tosi et al. (2003) – who used an experimental design to examine whether different types of MC evoke different types of behavior – may help to increase our understanding of human behavior. However, field research in which human actors can be studied in their natural settings remains crucial, since the ‘real world’ context will allow a more in-depth analysis of the complicated issues related to MC.

We conclude this chapter by sketching the practical implications of our study on the use of facilitating and constraining MC elements. Austerity measures may improve an organization’s financial position in the short term. However, a sole emphasis on constraining MC elements, such as stricter performance measurement, together with a de-emphasis of the facilitating elements, such as education, training opportunities and self-management, can have severe negative effects in the long term. Overly relying on constraining MC elements may lead to lower employee motivation and to opportunistic behavior. In addition, it may stifle the initiatives of individuals within departments. Especially in periods of austerity, when it is important to find creative solutions to help improve the organization’s financial situation in both the short and the longer run, ‘steward-like’ behavior could be highly desirable. In order to accommodate both agent- *and* steward-like behaviors, it is important that constraining and facilitating MC elements are employed simultaneously, even though their simultaneous use may seem somewhat ‘paradoxical’. This recommendation is very similar to the balanced approach to ‘positive’ and ‘negative’ controls as suggested by Simons (1995) in controlling empowered and creative employees, which was further developed by Tessier and Otley (2012). However, our study clearly adds to Simons’ work by revealing that a balanced approach does not necessarily deny that an increase in constraining MC elements may be essential in some situations, for instance to avoid short-term financial distress. Furthermore, this study adds to Simons’ notion of a balanced approach by presenting

the idea that when an organization has to be very strict in terms of its budgets, and therefore adopts detailed spending rules and procedures, it is useful to examine whether it still has sufficient facilitating MC elements in place to support and reinforce steward-like behavior.

Our study suggests, however, that an increased emphasis on constraining MC elements may be an initial and 'automatic' response of organizations to austerity-related challenges, while an increased use of facilitating MC elements requires a more conscious and integrative approach.

Appendix 3.A – Information about interviewees

<i>Job title</i> ¹⁸	<i>Quantity</i>
Spatial Policy	
<i>Department head</i>	1
<i>Municipal topmanager</i>	1
<i>Team leaders</i>	2
<i>Alderman</i>	1
Policy advisors	5
Program leaders	2
Public Administration	
<i>Department head</i>	1
<i>Team leaders</i>	3
<i>Planner</i>	1
<i>Advisor</i>	1
<i>Alderman</i>	1
<i>Director</i>	1
Other employees	6
Social Development	
<i>Department head</i>	1
<i>Director</i>	1
<i>Aldermen</i>	2
<i>Controller</i>	1
<i>HR Advisor</i>	1
Senior policy advisors	2
Policy advisors	3
Buildings & Install.	
<i>Department head</i>	1
<i>Mandator</i>	1
<i>Team lead. Service Team</i>	1
<i>HR Advisors</i>	2
<i>Controller</i>	1
<i>Director</i>	1
<i>Alderman</i>	1
Service employees	4
Planners	2
Total	51

¹⁸ Those in a supervising, advisory or client relation to the department are referred to in *Italics*.

Appendix 3.B – Detailed description of the interviews

Our interviews consisted of five sections, which we will discuss in more detail below.

First, we asked the respondents to tell us about their background (e.g. their prior work experience and educational level) and their current function and motivation for it (e.g. “What motivates you to work in your current job?”).

Second, we asked them to describe the MC elements employed in their department, following Merchant and Van der Stede’s (2007) categorizations of *personnel controls* (e.g. “Is it ensured that the subordinates are capable to perform their tasks?”), *cultural controls* (e.g. “Do members of staff mutually monitor each other?”), *action controls* (e.g. “Are your activities logged somewhere by yourself or someone else?”) and *results controls* (“Are any rewards and/or punishments connected to reaching the targets that were set, if there were any?”)¹⁹. These initial questions were followed by an “If so, how?” question to allow the respondent to reflect on it.

Third, we asked the interviewees to reflect on the antecedents that had led to the different types of MC and differences or changes in emphasis on specific MC elements (these often turned out to be related to austerity). In this section we also discussed the relations between the MC elements (e.g. “Which type of management control is dominant, according to you?”) (cf. Abernethy and Chua, 1996; Malmi and Brown, 2008). After that, we briefly introduced the topic of “views of human behavior” (via a standard text, which we read to each interviewee), but only to those who had a supervisory, advisory or client relationship with the department (i.e., those denoted in italics in appendix 3.A). We then invited these interviewees to reflect on the model of man that they employed with respect to the members of the departmental staff (e.g. “What model of man do you employ with respect to the members of staff in this department?”).

Fourth, we briefly introduced the topic of constraining and facilitating MC elements, also via a standard text. Next, we asked the interviewees to reflect on how the MC within the department was experienced (e.g. “How are management control

¹⁹ In the interviews we addressed multiple topics, as described in the main text. We did not use all sections of the interviews extensively in the current chapter. For instance, although we followed Merchant and Van der Stede’s (2007) categorization of MC elements in the second section of our interviews, in the current chapter we do not explicitly draw on their framework, since we focused on austerity and the facilitating/constraining types of MC, which were mainly addressed in the third and fourth sections of the interviews.

elements experienced within your department, mainly as constraining or as facilitating?”, “Can you provide us with examples?”).

Fifth, we asked the interviewees to reflect on the contractibility of the tasks within their department (e.g. “To what extent is the output of this department measurable?”). Just before the interview ended, we gave each interviewee the opportunity to comment further on the topics discussed. Furthermore, we asked them whether they could provide us with the documents that they had referred to during the interview, if applicable.

Appendix 3.C – Summarized information about consulted documents²⁰

<i>Type of documents</i>	<i>Quantity</i>
Departmental plans, policies and budgets	38
Departmental procedures	11
Departmental meetings – minutes	10
Municipal budget and planning documents	7
Municipal policy documents	16
<hr/>	
<i>Totals</i>	
Documents	82
Pages	2651
Average number of pages	32

²⁰ In general, the consulted documents were equally distributed over the departments and municipalities. However, most departmental procedure documents stem from the operational departments (Public Administration and Buildings & Installations, respectively cases 2 and 4).

4

Management Control and Motivation

This chapter explores the relations among four types of management control (MC) elements, and examines their relations with different types of motivation and performance. We draw on self-determination theory to hypothesize that intrinsic motivation and extrinsic motivation can be reinforced by different types of MC. We test our predictions using survey responses from employees with non-managerial tasks in 105 similar departments. We operationalized Merchant and Van der Stede's (2007) object-of-control framework, and we analyzed our data using structural equation modeling. We find that the use of personnel and cultural MC positively associates with employees' intrinsic motivation, and that the use of results controls positively associates with employees' extrinsic motivation. Both intrinsic motivation and extrinsic motivation are positively associated with performance, and we also found a positive direct relation between action controls and performance.

Earlier versions of this chapter have been presented at the *EAA Talent Workshop in Madrid* (2015), and at research seminars at the *University of Groningen* (2015), *Católica Lisbon School of Business and Economics* (2015), *Alliance Manchester Business School* (2016), *IE Business School Madrid* (2016) and *Erasmus University Rotterdam* (2016).

4.1 Introduction

Although the extant literature acknowledges that management control (MC) is primarily aimed at influencing motivation in such a way that the employees behave in line with organizational goals (Zimmerman, 2000), the relation between different types of MC and employee motivation is largely unexplored. Recently, however, this relation received increased attention in the literature. For instance, Frey et al. (2013) studied pay-for-performance mechanisms in the public sector, and suggested that a good selection of 'fitting' MC elements is of paramount importance for aligning employee motivation and organizational goals. Christ et al. (2012) examined the effect of formal controls on performance and motivation in an experimental setting. They found, amongst other things, that preventive controls limited intrinsic motivation of the participants in the experiment. This chapter extends research in this area by exploring relations among multiple types of MC and employee motivation in a survey study of employees in 105 departments with similar tasks.

Prior studies in this area often relied on responses from managers (e.g. de Baerdemaeker and Bruggeman, 2015) or students in experimental settings (e.g. Christ et al., 2012) to enhance our understanding of the relation between MC and motivation. However, Tessier and Otley (2012) argue that superiors, i.e. the 'users' of MC, and subordinates, i.e. those subjected to MC, can perceive MC differently. It follows that, in order to deepen our knowledge about MC and employee motivation, attention should (also) be paid to subordinates' perceptions of MC and the relation to their motivation.

We employ the object-of-control framework (Merchant and van der Stede, 2007) to identify categories of MC elements, and we draw on self-determination theory (SDT) to hypothesize relations among MC and employee motivation. We use responses from a survey of employees with non-managerial tasks working in 105 public administration departments in the Netherlands to test our hypotheses. The responses are analyzed using structural equation modeling and we find that the uses of personnel and cultural controls are positively associated with intrinsic motivation and that results controls are positively related to extrinsic motivation. Furthermore, we find that both intrinsic motivation and extrinsic motivation are positively associated with performance, and our

data also suggests that action controls have a strong and direct positive relation with performance.

Our contribution to the literature is twofold. First, we contribute to the MC literature by exploring the relation between MC and employee motivation. We show that personnel and cultural control particularly engender intrinsic motivation, whereas results controls foster extrinsic motivation. Second, we examine responses from employees without managerial tasks, i.e. those *subjected* to MC instead of the ones *using* MC. We thus provide evidence on employee perceptions of MC in real organizational settings, and connect these findings to employee motivation and the performance of the department in which they operate. We thus add the employee perspective to the MC literature and examine the association between MC and employee motivation.

In the next section, we present the theoretical background of our study and develop the hypotheses. In section three we convey our research methods and section four presents our findings. Section five discusses our findings in the light of the extant literature and presents our conclusions.

4.2 Literature and hypotheses

4.2.1 Management control and motivation

MC regards all efforts by management to assure that employees' motivation is aligned with the organizational goals (Flamholtz et al., 1985). For instance, workflows, yearly appraisal interviews, pay-for-performance systems and monitoring can be considered to be MC elements, but also 'soft' instruments such as the exemplary behavior of managers, the work climate of an organization and its 'tone-at-the-top' can be MC elements (although they have received considerably less attention in the extant MC literature, see van der Stede, 2011).

Scholars proposed several taxonomies for classifying MC elements, relying on different criteria. For instance, Merchant and Van der Stede (2007) in their object-of-control (OOC) framework focused on the objects to which MC was directed to classify MC elements, and Simons (1995) in his levers-of-control (LOC) framework particularly paid attention to the way in which MC elements were used to create 'dynamic tensions'

(cf. Mundy, 2010). Although such classifications differ significantly from each other, they all seem to agree on the idea that MC elements should be studied 'as a package'. Malmi and Brown (2008) suggest two avenues for studying MC 'as a package'. First, studies could focus on configurations of MC elements used, or, second, it could mean that the effect of one MC element should not be studied in isolation, but that other, present, MC elements should also be taken into account, for instance as control variables or interaction variables. In the current study, we employ the second approach.

Despite the calls for empirical studies that consider multiple MC elements simultaneously (Grabner and Moers, 2013; Malmi and Brown, 2008), research on 'MC packages' is still limited (Malmi, 2013), but recently it has received more attention. Some studies in the growing body of literature are, for instance, Bedford and Malmi (2015) and Bedford and Sandelin (2015), who used qualitative research methods to study MC package configurations. Friis et al. (2015) focused on the interplay between different MC elements, also using a qualitative study. Complementary to these qualitative research methods, some scholars also examined the interplay between MC elements using quantitative methods; especially Simons' (1995) LOC framework received major attention in the extant literature (see e.g. de Baerdemaeker and Bruggeman, 2015; Widener, 2007). The OOC-framework from Merchant and Van der Stede's (2007) textbook, which was considered the most influential one in the MC literature (Strauss and Zecher, 2013), has, however, been operationalized by a surprisingly small amount of quantitative studies.

The strength of the OOC-framework probably lies in its clear distinctions between four different 'types' of MC elements. The OOC-framework distinguishes action, personnel, cultural and results controls. *Action controls* aim to control the behavior of subordinates. Examples of action controls are pre-action reviews, activity monitoring and protocols regarding work processes. *Personnel controls* focus on making sure that the employees are capable and equipped to do their jobs. Some examples of personnel controls are educational programs, training and selection processes for new employees. *Cultural controls* are used to influence the culture in an organization or department in such a way, that the organizational goals are attained. Examples of cultural controls are an organization's mission statements and core values, but also feedback mechanisms

among employees can be viewed as cultural controls. *Results controls* focus on the control of specific targets, set at the individual, department or organizational levels, which may be related to incentives. Examples of results controls are pay-for-performance practices and budgets.

Although the relation between results controls and motivation was the subject of various studies (see e.g. Frey et al., 2013), a very limited number of studies have focused on other types of controls. One of those ‘other’ studies is, for example, Widener (2004), in which personnel controls and results controls were scrutinized in order to explore their relations with strategic human capital. In the current study, we explore the relations among the four types of MC elements (action, personnel, cultural and results controls), and examine their relations with different types of motivation and performance.

MC elements are used to motivate employees. Motivation refers to being “moved to do something” (Ryan and Deci, 2000a, p. 54), and researchers agree that not only the ‘level’ of motivation may vary per person, but also the direction of the motivation, i.e. its ‘orientation’ may differ (Kunz and Pfaff, 2002). Someone’s motivation can for instance be directed at oneself or at others, and some authors even talk about specific motivations for activities, such as work (Gagné et al., 2010) or sports (Pelletier et al., 1995).

In the motivation literature, the most basic distinction is between intrinsic and extrinsic motivation. Intrinsic motivation regards to the fun or joy experienced when engaged in an activity, whereas extrinsic motivation is more instrumental, and linked to (desired) outcomes of an activity. In our study, we rely on definitions by Gagné and Deci (2005) when referring to intrinsic and extrinsic motivation:

“Intrinsic motivation involves people doing an activity because they find it interesting and derive spontaneous satisfaction from the activity itself. Extrinsic motivation, in contrast, requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads.” (Gagné and Deci, 2005, p. 331)

Although some authors challenged the measurability and the very existence of (intrinsic) motivation (see discussions by Kunz and Pfaff, 2002) prior studies have provided us with valuable insights regarding its relevance, drivers and effects, using robust empirical and conceptual methods (see overviews by e.g. Birnberg et al., 2007; Deci et al., 1999; Luft and Shields, 2003), demonstrating the strength of the concept. Motivation is central to theories in the field of psychology, and one specific theory was developed to theorize about different types of motivation in various settings: self-determination theory (SDT).

4.2.2 Self-Determination Theory

We develop our main hypotheses regarding MC and motivation by relying on SDT, which is considered a powerful theory to theorize about contingencies that facilitate human motivation. SDT is often applied to work contexts, and proposes that the satisfaction of three basic human needs – competence, autonomy and relatedness – is of particular importance for facilitating intrinsic motivation (Ryan and Deci, 2000b). Furthermore, it proposes that the use of extrinsic rewards or external control may limit intrinsic motivation and enhance extrinsic motivation; sometimes referred to as the ‘crowding-out effect’ (Deci et al., 1999).

SDT was developed as a more specific theory to theorize about motivation in the workplace, following more general findings from cognitive evaluation theory (CET), which were often derived from experiments in laboratory settings (Gagné and Deci, 2005). SDT stands in a line of psychological theories that assume that every person has basic needs, which can be, for instance, physiological (eating, drinking), social (relations with others) or psychological (self-esteem) (see e.g. the seminal work by Maslow, 1943). Central to SDT are the needs for competence (e.g. possibilities for self-development and actualization), autonomy (e.g. the freedom to make an independent choice) and relatedness (e.g. a relation with the organizational goals). These three needs are described by Gagné and Deci (2005) as

“universal necessities, as the nutrients that are essential for optimal human development and integrity [...] [T]he needs for competence, autonomy, and

relatedness are considered important for all individuals, so SDT research focuses not on the consequences of the strength of those needs for different individuals, but rather on the consequences of the extent to which individuals are able to satisfy the needs within social environments.” (Gagné and Deci, 2005, p. 337).

Using SDT, it is thus possible to study the extent to which contexts facilitate the enhancement of employees’ intrinsic motivation. In the following section we will develop our main hypotheses using SDT.

4.2.3 Main hypotheses

Personnel controls aim to ensure that those who conduct a task are equipped to do so. In essence, three distinct types of personnel controls can be distinguished: 1) selection of new, capable employees, 2) the training and coaching of current employees and, finally, 3) job design and letting the ‘well-equipped’ employees manage their own tasks: ‘self-management’ (Merchant and van der Stede, 2007, p. 83-85). In other words, personnel controls are aimed at enhancing the capabilities and resources in such a way that employees can better perform their jobs. From an SDT point of view, personnel controls appeal especially to the needs of competence and autonomy. Training may evoke ‘feelings of competence’ by teaching employees how to ‘master’ their jobs. In addition, a ‘sense of autonomy’ may be enhanced when an organization emphasizes personnel controls over different types of controls, such as action controls. Subsequently, competence and autonomy ‘catalyze’ higher levels of intrinsic motivation at the employee level (Ryan and Deci, 2000a, p. 58).

Cultural controls aim to control the organizational culture by encouraging ‘mutual monitoring’ and facilitating the internalization of the organization’s core values. Important examples of cultural controls are an organization’s tone-at-the-top, organizational norms and values and feedback mechanisms (Merchant and van der Stede, 2007, p. 85-91). In SDT, it is argued that employees have a need for ‘relatedness’, which, when it is satisfied, facilitates the employees’ intrinsic motivation (Ryan and Deci, 2000a, p. 64). This ‘need for relatedness’ can be satisfied when a person relates to others in the organization, i.e. cares for and is feeling cared by others. Cultural controls specifically aim to engender the feeling of ‘relatedness’ of employees, by enhancing

“emotional ties” to others and to the organization (Merchant and van der Stede, 2007, p. 85). These ties can be attached to colleagues, but also to the overarching values and norms of the organization. Cultural controls thus aim to enhance the feeling of relatedness, which catalyzes higher levels of intrinsic motivation of employees.

So, we expect a positive relation between personnel controls and intrinsic motivation because we expect personnel controls to foster feelings of competence and autonomy. We also hypothesize a positive relation between cultural controls and intrinsic motivation because the expected facilitation of relatedness by the cultural controls. This leads to the following two hypotheses:

- H1: Personnel controls are positively related to intrinsic motivation
- H2: Cultural controls are positively related to intrinsic motivation

We do not hypothesize relations between personnel and cultural controls and extrinsic motivation, because SDT does not give reasons to expect such a relation.

Action controls are MC elements that aim to ‘control’ the behavior of employees. This can be done via, for instance, ‘ex ante’ or ‘ex post’ controls, i.e. preventive controls (such as work protocols) or detective controls (such as monitoring the activities of employees). By imposing action controls on employees, their ‘autonomy’ can be endangered. Prior studies have found that action controls, such as electronic monitoring systems, may increase employee stress (Aiello, 1993) and limit the feelings of autonomy and empowerment at employee level (Christ et al., 2012; Merchant and van der Stede, 2007, p. 123). So, action controls have the potential to limit autonomy and thus undermine an employee’s intrinsic motivation, following SDT. Some research, however, has also pointed to the ‘facilitating’ qualities of some action controls. For instance, Ahrens and Chapman (2004) examined situations in which action controls such as rules and procedures ‘enabled’ and ‘supported’ employees to conduct their tasks more effectively:

“Enabling formalization, in contrast, designs organizational rules that reckon with the intelligence of workers so that formal procedures need not be designed to make the work process foolproof. Instead they can be designed to enable employees to deal more effectively with inevitable contingencies. Organizations

attempt to design and operate formal systems that support users.” (Ahrens and Chapman, 2004, p. 279)

In line with this quote, some action controls can also have the potential to support employees and contribute to feelings of competence, which would suggest a positive relation with intrinsic motivation, following SDT. However, we expect that the extent to which action controls limit the autonomy of employees is larger than the aforementioned effect of some action controls on feelings of competence. So, overall, we expect a negative relation between action controls and intrinsic motivation.

A central notion of action controls is also ‘action accountability’, which includes ideas about “rewarding good actions or punishing actions that deviate from the acceptable” (Merchant and van der Stede, 2007, p. 78). When action controls are used to enhance action accountability, this may lead to an increase of extrinsic motivation on the part of the subordinates. The motivation literature increasingly points to the limitations of using rewards to motivate employees. SDT even argues that offering extrinsic rewards may endanger the intrinsic motivation of employees. Frey and Jegen (2001) called this the ‘crowding-out effect’, which describes the replacement of intrinsic motivation with (less) extrinsic motivation, as a result of (overly) using extrinsic rewards, which leads to an overall drop in motivation of employees²¹.

Results controls are used to keep track of results attained by (groups of) employees. The literature describes that the implementation of results controls requires the identification of relevant performance dimensions, measuring the performance, setting targets and providing rewards (Merchant and van der Stede, 2007, p. 29). The aforementioned crowding-out effect from the SDT literature hypothesizes a positive relation between results controls and extrinsic motivation, but also points at the simultaneous negative relation with intrinsic motivation (Bertelli, 2006; Frey and Jegen, 2001).

So, we follow SDT in the development of our hypotheses, which leads to the expectation that action and results controls have a negative relation with intrinsic

²¹ Although one could also argue that, in line with SDT, being rewarded for good behavior or good results may increase the feeling of ‘competence’ of the employees, the opposite may also be true, i.e. ‘bad’ results lead to a decrease in the feeling of competence. It therefore may be dependent on the individual performance whether a results control ‘catalyzes’ intrinsic motivation or not. In general, however, the extant literature seems to suggest that the use of rewards ‘crowds out’ intrinsic motivation and fosters extrinsic motivation.

motivation, because of the expected crowding-out effect, and a positive relation with extrinsic motivation. Our hypotheses can be formulated as follows:

- H3a: Action controls are negatively related to intrinsic motivation
- H3b: Action controls are positively related to extrinsic motivation
- H4a: Results controls are negatively related to intrinsic motivation
- H4b: Results controls are positively related to extrinsic motivation

4.2.4 Performance-related hypotheses and summary of hypothesized relations

In order to study MC in its context and to strengthen the relevance of our findings, we also examine the relation between motivation and performance, and how MC relates to performance.

Motivation and performance are central concepts in the broader field of organizational behavior (van Knippenberg, 2000). Within the discipline of accounting, this relation is also examined in a number of ways, using various (psychological) theories, such as goal-setting theory, expectancy theory, attribution theory and cognitive dissonance theory (see for a concise overview of psychology theories in management accounting Birnberg et al., 2007). In line with SDT, we hypothesize that intrinsic motivation relates positively to performance (Cerasoli and Ford, 2014). We also hypothesize a positive association between extrinsic motivation and performance, following prior research (Kominis and Emmanuel, 2007). When employees are motivated to do their jobs, this will lead to higher organizational performance. This leads to the following two hypotheses.

- H5: Intrinsic motivation is positively related to performance
- H6: Extrinsic motivation is positively related to performance

Various accounting scholars have argued that the use and usability of MC elements is context dependent. This has resulted in a vast literature that considered environmental contingencies and the usability of certain MC elements, which ultimately would affect organizational performance (see reviews by e.g. Chenhall, 2003; Luft and Shields, 2003). Influential in this respect is a paper by Ouchi (1979), in which he posed that the usability of the types of MC depends on two task characteristics: the measurability of the output

and the knowledge of the transformation process. A good fit between the used MC elements and the environment results, according to Ouchi (1979) in better control and thus better performance. When applied to our research, this means that departments with high measurability of the output and a perfect knowledge of the transformation process are better off when they make more use of action controls and results controls, because these types of MC suit the departments' task characteristics (Ouchi, 1979). Because Ouchi (1979) recommended the use of 'clan' control (which closely resembles our cultural and personnel controls) specifically in other circumstances, we do not hypothesize that these types of control have any direct effect on performance.

So, when the tasks of a department are highly repetitive (i.e. when there is a 'perfect' knowledge of the transformation process) and the output is highly measurable, we expect the following:

H7a: Action controls are positively related to performance

H7b: Results controls are positively related to performance

In figure 1, we summarized the hypothesized relations between the key elements of the current study. On the left, the four categories of MC elements are depicted, which, according to our hypotheses, have both positive and negative effects on intrinsic and extrinsic motivation, which in turn have positive effects on performance. We also hypothesize a direct positive effect of action and results controls on performance.

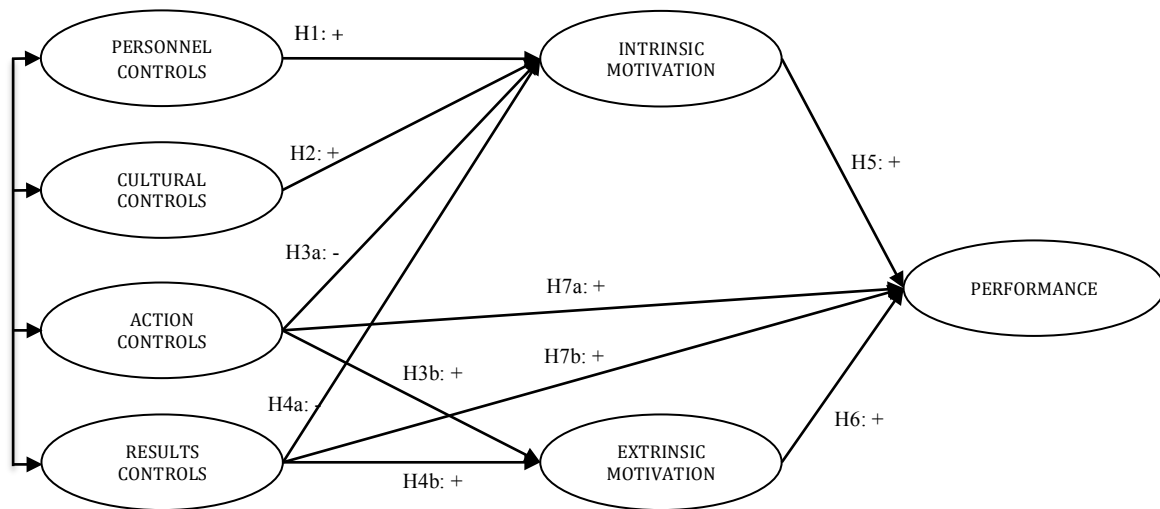


Figure 4.1 – Summary of hypothesized relations

4.3 Methods

4.3.1 Main measures

To investigate the relation between the used types of MC, employees' motivation and the effects on performance, we conducted a survey study. We extensively reviewed the extant literature and we used previously validated constructs whenever possible, following Van der Stede et al. (2007). We did not find a survey instrument capturing the four types of MC as distinguished in the Object-Of-Control framework, which urged us to develop such an instrument. We reviewed the extant literature and we developed an instrument that captured the four categories – results controls (RES), action controls (ACT), cultural controls (CUL) and personnel controls (PRS) – of the OOC framework, using twenty items; five per category. The scales for each of these categories of MC are so-called 'formative constructs', meaning that the theory dictates that they together form one category of MC elements (as opposed to reflective constructs, see next sections). To strengthen the robustness of our measures and the reliability of our findings, we included one reverse-coded question in each of the constructs of MC elements. To minimize potential sequencing effects, we randomized the order of

appearance of the items within each of the main constructs (the four types of MC, the two types of motivation and performance).

To identify intrinsic and extrinsic motivation, we relied on the constructs developed by Gagné et al. (2010). Intrinsic motivation (INTM) consists of three items and extrinsic motivation (EXTM) also consists of three items. We added one item to the two-item construct of extrinsic motivation of Gagné et al. (2010), because we found that other external factors (i.e. those that are not monetary, such as status) were not sufficiently reflected in the two-item construct.

Van de Ven and Ferry (1980) developed a comprehensive measure to capture performance, which is adopted and validated in several empirical studies (see e.g. Speklé and Verbeeten, 2014; Verbeeten, 2008). It regards both ‘qualitative’ and ‘quantitative’ performance of an organization and defines performance as the extent to which one organization (or department) under- or outperforms relative to its peers in several dimensions. This construct was specifically developed to capture performance in the public sector. The construct (PERF) includes seven performance dimensions, which are all included in Appendix 4.A. We pre-tested the full survey on three accounting professors and two experienced Public Administration officers for issues such as face validity, clarity and understandability, and made minor revisions after we received their responses (see Appendix 4.A for the abbreviated survey).

4.3.2 Research setting and sample

The setting of our study is departments of public administration (PA) in Dutch municipalities. Local governments (i.e. municipalities and provinces) in the Netherlands²² have received considerable attention in the accounting literature, especially with respect to their (partial) adoption of business-like practices (Budding, 2004; Groot and Budding, 2004; ter Bogt, 2008; van Helden, 2000; van Hengel et al.,

²² The Dutch government consists, generally speaking, of three levels: 1) the central government, which is located in The Hague, 2) the province level, consisting of 12 regions with each their own council and executive committee, and 3) about 400 municipal organizations. The number of municipalities is decreasing year by year, mainly because municipalities are ‘merging’ in order to be better able to deal with new tasks that are decentralized to municipalities and the (presumed) ‘economies of scale’. To illustrate this decline in the number of municipalities: in the year 1910 there were 1,121 municipalities, in the year 2000 the number had decreased to 537 and in the year 2010 there were only 431 municipalities. These numbers were retrieved from the Dutch Central Bureau for Statistics, <http://www.cbs.nl/>, on 23 July 2015.

2014). Although this movement is highly similar to the broader movement of 'New Public Management', NPM (Hood, 1991), Dutch researchers and practitioners have remained critical of what this movement could achieve and have criticized overly simplistic implementations of business-like practices, in line with critical accounting scholars elsewhere in Western Europe (Cristofoli et al., 2010; Humphrey et al., 1993; Lapsley, 2009). Prior studies, however, have also pointed to differences between Dutch public sector reforms and the 'general' NPM movement (ter Bogt et al., 2015b; van Helden and Jansen, 2003)

Municipalities in the Netherlands are to a large extent funded by the central government. Funding of municipalities is not dependent on their performance, and the central government does not explicitly demand specific performance targets from departments of public administration. Central funding of municipalities is mostly based on the number of inhabitants, and additional funding for municipal activities is achieved by collecting local taxes and fees that have to be paid for some of services (new passports, drivers licenses and building permits). Although municipalities have a high degree of freedom as to how they want to organize themselves, studies of Dutch municipalities demonstrate that in practice the management structures of municipalities are highly comparable (van der Kolk et al., 2015a; van Helden, 2000; van Hengel et al., 2014).

We controlled for organizational context by specifically targeting one type of department in municipalities: PA departments. These departments are all endowed with the same types of tasks, i.e., issuing official documents such as passports and drivers licenses, and recording life events of its inhabitants, such as birth, marriage and death. The PA department is often referred to as the 'front office' of the municipality, because of its visibility and importance to inhabitants.

By conducting the study in these departments, we control for so-called contractibility. This means that the degree to which the following three conditions are met does not differ greatly: 1) ex ante unambiguous goal specification, 2) the ability to select undistorted performance measures and 3) employees' ability to predict likely outcomes of their courses of action (Speklé and Verbeeten, 2014, p. 134). We also

controlled for national culture effects by only sending the survey to employees working in Dutch organizations.

In June 2015, after the pre-test, we sent an online survey to members of the Dutch Association for Public Administration (DAPA)²³ and to subscribers of their weekly newsletter. The survey was sent to 2,918 officially validated e-mail addresses from municipalities²⁴. As an additional incentive to fill out the survey, we promised to report our findings to DAPA. Two and three weeks after our first invitation, we included a reminder to take the survey in DAPA's newsletter. All e-mails regarding the survey were sent by DAPA's communication department and were signed by DAPA's director and vice-president, and by the authors, in order to increase the respondents' confidentiality in the research project. After exactly one month, we closed the online survey and counted 351 responses (response rate: 12%)²⁵. After removing surveys that lacked important data or that included suspicious data, we were left with 268 useful responses. Since, for the purposes of this study, our main variable, motivation, should be measured at the 'employee' level, we were primarily interested in responses from employees without any managerial responsibilities. In total, useful responses from 142 employees were used in this study. These respondents were located in 105 different Dutch municipalities. When more than one employee in a municipality filled out the survey, we used their average scores for the main variables in our analysis. In our descriptive statistics of the sample (table 4.1), we report all individual responses (n=142) and in the remainder of the analyses we use the averaged cases per municipality (n=105).

²³ In Dutch: Nederlandse Vereniging Voor Burgerzaken (NVVB), www.nvvb.nl.

²⁴ 2,918 were official municipal e-mailaccounts, other emailaddresses (846) were 'unofficial' Hotmail or Gmail addresses, or were even linked to other, non-municipal organizations such as consulting firms, who were also subscribed to DAPA's online newsletter.

²⁵ Although the Qualtrics Software indicated that 642 people 'opened' the survey, only 351 persons filled out the introductory questions, which is the reason we excluded 291 cases from the response rate. $351 / 2,918 = 0,12$.

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
AGE RESPONDENTS (n=142)		
20-30 years	5	4%
31-40 years	17	12%
41-50 years	43	30%
51+ years	77	54%
GENDER RESPONDENTS (n=142)		
Female	97	68%
Male	45	32%
EXPERIENCE IN CURRENT FUNCTION (n=142)		
0-10 years	60	42%
11-20 years	43	30%
21-30 years	25	18%
40+ years	14	10%
EXPERIENCE IN CURRENT ORGANIZATION (n=142)		
0-10 years	45	32%
11-20 years	52	36%
21-30 years	24	17%
40+ years	21	15%
DEPARTMENT SIZE* (n=105)		
0-15 employees	33	31%
15-35 employees	45	43%
36-55 employees	17	16%
56+ employees	10	10%
MUNICIPALITY SIZE (INHABITANTS) (n=105)		
0-30,000 inhabitants	39	37%
30,001-60,000 inhabitants	36	34%
60,001-100,000 inhabitants	13	13%
100,000+ inhabitants	17	16%

Table 4.1 – Descriptive statistics sample

** Department size including employment agency workers.*

We investigated early and late respondents and found no significant differences in their scores for our main constructs of interest (see table 4.2).

<i>Construct</i>	<i>Early respondents</i>	<i>Late respondents</i>
PERSONNEL CONTROLS	4.17	4.27
CULTURAL CONTROLS	4.95	4.97
RESULTS CONTROLS	3.53	3.74
ACTION CONTROLS	5.56	5.10
INTRINSIC MOTIVATION	6.07	5.72
EXTRINSIC MOTIVATION	4.13	3.81
PERFORMANCE	4.67	4.43

Table 4.2 – Early (n=30) vs. late (n=30) respondents

** The sample was divided into early, middle and late respondents, based on the starting date and time of the survey. None of the means and variances were significantly different at p-value <0.05.*

We also conducted an independent sample t-test to compare the sizes of the 105 municipalities from which we received one or more responses and the 290 municipalities that did not respond. We found a significant difference (p-value <0.01) between the average size of the respondents and the non-respondents (see table 4.3). This can be explained by the fact that in larger municipalities more employees are a member of DAPA or receive their weekly newsletter, which increases the likelihood that one of them responds to the invitation to fill out the survey, whereas in smaller municipalities, this number is lower.

<i>Variable</i>	<i>Respondents (n=105)</i>	<i>Non-respondents (n=290)</i>
SIZE (INHABITANTS)	68,358	33,988

Table 4.3 – Respondents vs. non-respondents

** We compared the means and variances of included municipalities (respondents) and excluded municipalities (non-respondents). The difference was significantly different at p-value <0.01.*

In order to test for common method bias, we ran a Harman's single-factor test on the 33 items used in the current study. The first extracted factor, with an eigenvalue of 8.19, explained only 25% of the total variance, which can be seen as a reliable absence of a common method bias (Podsakoff and Organ, 1986). In addition, we examined the standard deviation per case for all the relevant items, i.e. the extent to which respondents filled out the same values for multiple items, in order to check for

'suspicious' cases. We visually inspected the 10 cases with the lowest standard deviations, ranging from 0.868 to 1,055, and found no reason to exclude these cases from our analysis.

4.3.3 Data analyses

We tested the univariate normality of all the constructs included in our analysis, and found that all constructs were at acceptable values, i.e. the maximum Kurtosis value (1.3) did not exceed the accepted values (between -7 and 7), and the most extreme value for skewness (0.92) was also acceptable (between -2 and 2). We also conducted analyses to check for multicollinearity and none of the values for the Variance Inflation Factor (VIF) exceeded 2.0, which is well below the maximum acceptable score of 10.0 (Kline, 2011, pp. 53-54). We had no missing data in the 148 cases or in the 105 departments, because we let the survey software automatically check whether the respondents filled out all the items of our main constructs; if they were not completed yet, the respondent could not progress to the next page of the survey and he or she received a warning message.

The measurement model specifies the relations between the observed items and the seven constructs (PRS, CUL, ACT, RES, INTM, EXTM, PERF). Multiple-item constructs "are preferred because they allow the most unambiguous assignment of meaning to the estimated constructs" (Anderson and Gerbing, 1988, p. 415). PRS, CUL, ACT and RES are so-called 'formative' constructs, this means that the measured items together 'cause' the construct (Hair et al., 2006, p. 771). The individual items should be added up or averaged in order to be able to examine the construct, and it is therefore theoretically not possible to remove items from the construct. INTM, EXTM and PERF, however, are 'latent' constructs, which means that they cannot be measured directly and that they have to be represented and measured by one or more different variables. Good scores for unidimensionality of latent constructs is of importance, because that demonstrates how accurate the combined measure is. Low values for unidimensionality of the formative constructs, however, can still be acceptable for theoretical reasons. It might, for instance, very well be the case that the use of different types of action controls does not strongly correlate. Furthermore, removing one or more items from the constructs

that measure MC (PRS, CUL, ACT, RES) would directly contradict the necessity of approaching MC 'as a package' (Grabner and Moers, 2013; Malmi and Brown, 2008).

In order to test the unidimensionality of the multiple-item constructs, we ran a measurement model including all constructs and items, yielding standardized factor loadings, which are reported in appendix 4.C. We also provide Cronbach's alpha and average variance explained (AVE) scores for the reflective constructs. Although the model cannot be used because of the Chi-square values (Chi-square = 741.351, $p < 0.01$)²⁶, the fit indices of the measurement model show acceptable values (RMSEA = $0.075 < 0.08$; CMIN DF = $1.589 < 3$). All loadings of the individual items on the factors are significant at $p < 0.01$, except PRS_(b), which is not significant, and RES_(e), which is significant at $p < 0.1$, however, given that these are formative constructs, these findings do not affect their validity (see appendix 4.C). All reflective constructs have a Cronbach's alpha close to or above the score of 0.70, suggesting that the reliability of the constructs is acceptable (Hair et al., 2006). Table 4.4 presents the descriptive statistics of the main items and constructs.

Given the theoretical constraints that we adopt in our study, the measurement model indicates adequate construct validity for the constructs used in our analysis. Because the size of our sample is 105 observations, we treat the constructs as so-called 'manifest variables', using the summated scores of all the relevant items discussed above. This way, we limit the number of parameters that will be estimated, which is advised to accommodate for smaller samples.

²⁶ This value for the Chi-square test is not surprising given our sample size, see Hair et al. (2006, p. 753).

<i>Constructs and items*</i>	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
PERSONNEL CONTROLS (PRS)									
a) Opportunities for education	4.81	1.49	3%	6%	12%	13%	26%	32%	8%
b) No possibilities self-manag. (RC)	3.67	1.48	6%	23%	15%	24%	20%	12%	0%
c) Training for new hires	3.97	1.66	4%	20%	19%	18%	17%	15%	7%
d) Strong selection process new hires	3.8	1.5	8%	16%	13%	27%	27%	7%	3%
e) Use of job and task descriptions	4.42	1.56	5%	8%	14%	22%	25%	19%	8%
CULTURAL CONTROLS (CUL)									
a) Providing feedback	5.31	1.27	1%	4%	7%	7%	25%	48%	10%
b) Norms seldom communicated (RC)	3.5	1.68	9%	30%	11%	20%	13%	13%	3%
c) Culture clarifies expectations	5.23	1.37	2%	4%	8%	9%	23%	45%	10%
d) Employees check each other's work	5.27	1.45	1%	4%	9%	16%	15%	35%	20%
e) Exemplary behavior superiors	4.23	1.56	1%	2%	3%	4%	5%	6%	7%
RESULTS CONTROLS (RES)									
a) Performance targets	4.11	1.68	9%	12%	13%	18%	26%	16%	6%
b) Measurement of results	3.87	1.73	10%	16%	13%	22%	18%	14%	6%
c) Rewards for good results	3.29	1.67	20%	16%	19%	15%	20%	9%	1%
d) Sanctions for bad results	3.33	1.43	10%	23%	20%	30%	10%	6%	2%
e) Results not communicated (RC)	4.06	1.42	4%	12%	18%	22%	30%	10%	3%
ACTION CONTROLS (ACT)									
a) Complying rules important	6.51	0.9	1%	0%	1%	1%	5%	27%	66%
b) Employees seldom alerted (RC)	3.34	1.74	12%	31%	13%	13%	15%	10%	4%
c) Activity monitoring	5.3	1.45	2%	4%	7%	13%	17%	39%	18%
d) Use of work plans	4.91	1.49	2%	7%	10%	14%	22%	35%	10%
e) Activity responsibility	5.7	1.12	0%	2%	3%	9%	20%	44%	23%
INTRINSIC MOTIVATION (INTM)									
a) Enjoying work	6.01	0.88	0%	0%	1%	6%	15%	48%	30%
b) Have fun doing the job	6.19	0.81	0%	0%	0%	5%	10%	46%	39%
c) Job brings moments of pleasure	5.78	1.17	0%	2%	5%	7%	13%	47%	27%
EXTRINSIC MOTIVATION (EXTM)									
a) Retain standard of living	4.42	1.47	2%	10%	15%	24%	24%	19%	7%
b) Making much money	3.3	1.54	10%	25%	27%	12%	13%	12%	0%
c) Job brings status	4.91	1.57	7%	2%	10%	8%	30%	33%	10%
PERFORMANCE (PERF)									
a) Amount of work	5.12	1.12	0%	2%	4%	23%	33%	28%	10%
b) Accuracy of work	5.02	1.19	1%	2%	8%	19%	31%	32%	7%
c) Number of innovations	4.25	1.08	2%	3%	12%	49%	22%	10%	2%
d) Reputation of excellence	4.9	1.21	2%	2%	4%	28%	35%	21%	9%
e) Attainment of goals	4.77	1.2	1%	3%	8%	29%	33%	20%	7%
f) Efficiency of operations	4.55	1.13	2%	2%	10%	34%	32%	18%	2%
g) Morale of unit personnel	4.81	1.17	1%	4%	4%	30%	34%	22%	6%

4.4 Findings

We used structural equation modeling (SEM) to examine the relations between MC, motivation and performance. We chose to adopt this method because it allows the simultaneous estimation of multiple dependent variables, and the possibility to define a model to explain the full set of relationships examined (Hair et al., 2006, p. 711). This method was recommended and used in a number of accounting studies (see e.g. de Baerdemaeker and Bruggeman, 2015; Maas and Matejka, 2009; Widener, 2007). We used SPSS 23.0 and SPSS AMOS 23.0 software to conduct all analyses that are reported in this chapter.

Our analysis consists of three steps, following Widener (2007). First, we estimate the theoretical model, which was depicted in figure 4.1. Subsequently, we trim the model for insignificant paths. We do this in order to derive a parsimonious 'base' model. Second, we use the base model to examine and discuss the hypotheses. Third, we generate three alternative models for comparison with the base model, and we conduct an additional analysis to make our findings more robust.

4.4.1 Estimating the structural model

We will use multiple indicators for model fit: the Chi-square, Chi-square divided by the model degrees of freedom (CMINDF), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). A good fit is reached when the Chi-square is insignificant, the CMINDF is less than 3, the CFI is on or above .95 and when the RMSEA is less than .08 (Schreiber et al., 2006, p. 330).

The theoretical model examines the relations between the constructs in a path diagram. We estimated the theoretical model as the 'base model' (see table 4.5). Trimming the insignificant paths one by one (ACT → INTM, RES → INTM, RES → EXTM and RES → PERF) resulted in the trimmed base model (model 2 in table 4.5), which has a very good fit with the data (X^2 is insignificant ($p=.311$), CMINDF = 1.168, CFI = .992 and RMSE = .040). The chi-square difference test showed no significant difference between the base model and the trimmed base model, which indicates that the model has not been trimmed too much (Kline, 2011).

<i>Relation</i>	Model 1	Model 2	<i>Hypothesis</i>	<i>Support?</i>
	(Base model)	(Trim. base model)		
	<i>Coeffic. (p)</i>	<i>Coeffic. (p)</i>		
PRS → INTM	.216* (.085)	.206* (.067)	H1	Accepted
CUL → INTM	.250* (.059)	.209* (.063)	H2	Accepted
ACT → INTM	-.065 (.594)	-	H3a	Rejected
RES → INTM	-.017 (.883)	-	H4a	Rejected
ACT → EXTM	-.109 (.313)	-	H3b	Rejected
RES → EXTM	.210* (.052)	.161* (.097)	H4b	Accepted
EXTM → PERF	.160** (.047)	.173** (.028)	H5	Accepted
INTM → PERF	.154* (.055)	.162** (.043)	H6	Accepted
ACT → PERF	.476*** (.000)	.509*** (.000)	H7a	Accepted
RES → PERF	.089 (.325)	-	H7b	Rejected
Model fit				
X ²	8.152	10.510		
p-value	.148	.311		
Df	5	9		
CMINDF	1.630	1.168		
CFI	.984	.992		
RMSEA	.078	.040		
X² diff. test				
X ² difference (df)		2.358 (4)		
p-value		Ns		

Table 4.5 – Base model, trimmed base model and hypotheses

*In this table we present the findings of our structural equation models. Model 1 is the base model, which includes all relations we hypothesized in our theory section. Model 2 is the trimmed base model. We removed insignificant paths, ACT → INTM, RES → INTM, ACT → EXTM and RES → PERF, which were hypothesized in respectively H3a, H4a, H3b and H7b. *, ** and *** indicates respectively significance at p<0.1, p<0.05 and p<0.01.*

4.4.2 Hypotheses testing

In table 4.5, we also included our hypotheses about each of the relations in the structural equation model, which can be tested by analyzing the coefficients and their p-values.

Hypotheses 1 and 2 are supported, given the significant ($p < 0.10$) positive coefficients of PRS → INTM and CUL → INTM. So, both personnel and cultural controls are positively associated with intrinsic motivation of the employees surveyed. Hypotheses 3a and 4a are not supported, because the path coefficients for ACT → INTM and RES → INTM are insignificant. The findings suggest that there is no significant relation between action

controls, results controls and intrinsic motivation. Action controls and extrinsic motivation show no significant relation, which leads to the rejection of H3b. There is, however, a positive association between results controls and extrinsic motivation, so H4b is supported ($p < 0.10$). The hypothesized crowding-out effect (underlying hypotheses 3a, 3b, 4a and 4b) is therefore not supported by our findings: we only find a positive association in the relation $RES \rightarrow EXTM$.

The relations $INTM \rightarrow PERF$ and $EXTM \rightarrow PERF$ are supported given the significant ($p < 0.05$) coefficients. This means that higher intrinsic (H5) and extrinsic motivation (H6) of employees is positively associated with performance. Hypothesis 7a and 7b dealt with the direct effects of action controls and results controls on performance. H7a can be accepted ($p < 0.01$) whereas H5b has to be rejected. This means that ACT has a strong and direct connection with performance. The trimmed model and the significant paths that reflect the accepted hypotheses are depicted in Figure 4.2.

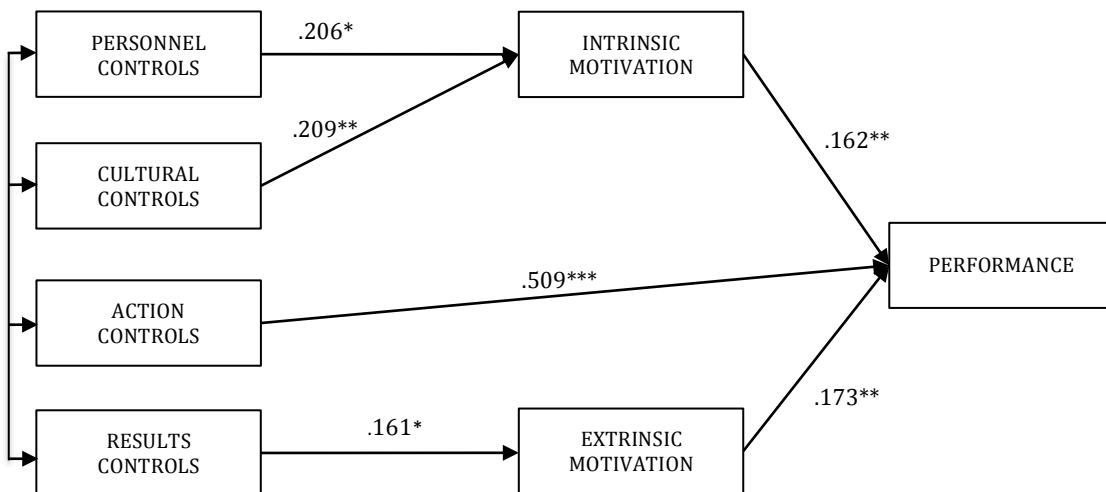


Figure 4.2: Trimmed base model with standardized regression weights.
*, ** and *** indicates respectively significance at $p < 0.1$, $p < 0.05$ and $p < 0.01$.

4.4.3 Robustness and alternative models

Although the presented (trimmed) base model fits well with our data, this does not mean that it is the only possible model to fit the data (Kline, 2011, pp. 189-190). There may be near-equivalent, alternative models with similar fit statistics. A Chi-square difference test may indicate whether another model better explains the data than the

base model (Kline, 2011). We built three alternative models with the same constructs, which are all reported in Appendix 4.D. Alternative model 1 adds direct relations between PRS and PERF and between CUL and PERF to the base model. However, the Chi square and RMSEA values suggest that the model cannot be interpreted (the model is significant at $p < .10$ and the RMSEA is well above the threshold; $RMSEA = .110$). We did not hypothesize about the relations between INTM and EXTM, and we implicitly assumed in our model that they were independent of each other. In alternative models 2 and 3, we include respectively the effects $EXTM \rightarrow INTM$ and $INTM \rightarrow EXTM$, both of which show to be insignificant. The other relations in alternative model 2 and 3 still hold, and both alternative models show good fit statistics.

None of the alternative models yields a significant Chi-square difference, indicating that they do not fit the data better than our trimmed base model. Most of the accepted hypotheses also hold for the alternative models. However, because of the constraints that our theory places on the relations within the models, we keep the trimmed base model as our main model of analysis.

The scale we used for 'performance' can be divided into two different types of performance: quantitative and qualitative performance (see also Verbeeten, 2008). An exploratory factor analysis, however, indicated that only one factor with an eigenvalue greater than 1 could be extracted, suggesting the unidimensionality of the construct performance. We also ran our base model once again (not displayed in any table), but now we replaced PERF with the two separate constructs QLPERF (average score for the items relating to qualitative performance) and QNPERF (average score for the items relating to quantitative performance). The Chi-square test and most fit indices show that the fit of this model is poor (Chi-square = 12.117, $df = 7$ and $p < 0.10$, $CMINDF = 1.731$, $CFI = .983$ and $RMSEA = .084$). There are only very small differences between the associations of other variables and QLPERF and QNPERF. The relation between intrinsic motivation and the two types of performance is, however, a bit different: $INTM \rightarrow QLPERF$ has a coefficient of .186 and is significant at $p < 0.05$ ($p\text{-value} = .030$), whereas $INTM \rightarrow QNPERF$ has a smaller coefficient (.146) and is only significant at $p < 0.10$ ($p\text{-value} = .097$). This suggests that employees' intrinsic motivation has a stronger effect on qualitative performance than on quantitative performance.

4.5 Discussion and conclusions

We examined the relation between different types of MC and intrinsic and extrinsic motivation, and their associations with performance. We draw on a sample of employees from 105 different departments of public administration in the Dutch public sector, and we found support for our expectation that different types of MC affected intrinsic motivation and extrinsic motivation, which in turn positively related to performance. The results show that personnel and cultural controls are positively associated with *intrinsic* motivation, which is in line with our expectations based on self-determination theory (SDT). SDT proposed that these types of MC would lead to feelings of competence and autonomy, which would in turn lead to higher intrinsic motivation of employees. The results of our study also reveal that the use of results controls has a positive effect on *extrinsic* motivation, as hypothesized on the basis of SDT. The negative effect of using results controls on intrinsic motivation, as hypothesized based on theory about the so-called ‘crowding-out’ effect (Frey and Jegen, 2001) was, however, not found in our analyses. Possibly, the strength of the crowding-out effect is dependent on the context in which it is studied, which would be in line with Deci et al. (1999, p. 659), who state that “there are conditions under which tangible rewards do not necessarily undermine intrinsic motivation”. This study also shows that both intrinsic and extrinsic motivation are positively related to performance, highlighting the importance of enhancing employee motivation for attaining organizational achievements.

Our findings suggest that action controls have a strong direct relation with performance, not mediated by any sort of motivation. A possible explanation for this direct effect may be that our research took place in departments of public administration. In these departments, employees have highly standardized tasks and the use of rules and procedures is paramount for organizational performance: if passports are not issued in accordance with the prevailing rules (which are in turn affected by national and international law), the employees and departments would run into great difficulty. However, we also showed that personnel and cultural controls play a significant role in departments with high measurability of output and ‘perfect’ knowledge of the transformation process. This challenges, to some extent, Ouchi’s (1979) framework, which primarily predicts the use of action and results controls in such

circumstances.

Surveying employees who work in similar departments has strong advantages, for instance because we could control for various variables related to environment and tasks. However, this sample is at the same time also a limitation, given the fact that the variability of some of the items, e.g. in the construct of action controls, was low, which decreases the transferability of some of the findings to departments with less 'contractible' tasks.

Our findings suggest that the 'package' of MC that is used in a department of public administration may affect employee motivation. Departments that pay less attention to personnel or cultural controls show lower levels of employees' intrinsic motivation and, eventually, lower performance. This finding is consistent with findings in a recent study by Van der Kolk et al. (2015a)²⁷, who stated that an underemphasis of 'facilitating' MC elements – personnel controls such as education possibilities and cultural controls such as departmental feedback mechanisms – would lead to lower intrinsic motivation at the employee level.

Besides replications in different settings of the current study, extensions of our research in several directions are also desirable. We suggest that a more in-depth study of the interrelations of the elements within each of the categories could enhance our understanding of possible complementary relations of MC elements. Furthermore, the relation between different types of motivation and the two types of performance can also be scrutinized in future studies, perhaps by including various types of departments with different task and environmental characteristics. Future research may benefit from the research instrument we developed to capture the four types of MC from Merchant and Van der Stede's (2007) object-of-control framework.

In this study, we examined the relations among MC, motivation and performance. We found partial support for the hypotheses we developed on the basis of SDT, indicating that different types of MC catalyze different types of motivation. Future research may benefit from the developed survey instrument to examine an organization's configuration of MC elements, and build further on the paths we identified in the current study. More specifically, future research may examine whether

²⁷ This publication is included in this thesis as chapter 3.

the effect of controls also depends on the way these controls are used. The effect of results controls on extrinsic motivation may, for instance, depend on the way in which the results controls are being *used*. Prior studies distinguished different uses of control, such as enabling or coercive (Ahrens and Chapman, 2004), decision-influencing or decision-facilitating (van Veen-Dirks, 2010), and enabling or controlling (Mundy, 2010; and see also Tessier and Otley, 2012). Future research could extend this stream of research into the dual roles of control by exploring the effects of different uses of, for instance, results control on employee motivation.

Appendix 4.A – Constructs & Survey Items

PERSONNEL CONTROLS ²⁸

Please rate the extent to which you agree or disagree with the following statements (1 = strongly disagree, 7 = strongly agree):

- a) Many opportunities for training and education are being offered
- b) Employees do not receive possibilities to become more self-managed (RC)
- c) New hires receive elaborate training and learning time
- d) New employees are being selected by a strong selection process
- e) Job and task descriptions are being used to provide employees with clarity about their tasks

CULTURAL CONTROLS

Please rate the extent to which you agree or disagree with the following statements (1 = strongly disagree, 7 = strongly agree):

- a) Employees provide each other with solicited and unsolicited feedback
- b) Norms and values are seldom communicated to employees (RC)
- c) Employees know what is expected from them from the prevailing culture
- d) Employees check each other's activities regularly
- e) Employees know what is expected from them from the exemplary behavior of superiors

RESULTS CONTROLS

Please rate the extent to which you agree or disagree with the following statements (1 = strongly disagree, 7 = strongly agree):

- a) Performance targets are created for every employee
- b) The obtained results per employee are being measured
- c) Employees are being rewarded for good results
- d) Employees are being sanctioned for bad results
- e) Achieved results are seldom being communicated to employees (RC)

ACTION CONTROLS

Please rate the extent to which you agree or disagree with the following statements (1 = strongly disagree, 7 = strongly agree):

- a) Complying with rules and procedures is very important for tasks at our department
- b) Employees are seldom alerted at complying to rules and procedures (RC)

²⁸ Within each of the constructs in the survey we randomized the order of the appearance of the questions. (RC) means that questions were reverse-coded. We developed the constructs ACTION CONTROLS, CULTURAL CONTROLS, PERSONNEL CONTROLS and RESULTS CONTROLS for the purposes of the current study. Items that we added to existing constructs are marked with a (+).

- c) Activities of employees are registered and/or monitored
- d) Work plans and division of labor schemes are used to control employees
- e) Employees are being kept responsible for the activities they carried out

INTRINSIC MOTIVATION (Gagné et al., 2010)

Please rate the extent to which you agree or disagree with the following statements (1 = strongly disagree, 7 = strongly agree).

I do this job...

- a) because I enjoy this work very much
- b) because I have fun doing my job
- c) for the moments of pleasure that this job brings me

EXTRINSIC MOTIVATION (Gagné et al., 2010)

Please rate the extent to which you agree or disagree with the following statements (1 = strongly disagree, 7 = strongly agree).

I do this job...

- a) because this job affords me a certain standard of living
- b) because it allows me to make a lot of money
- c) for the status it provides me (+)

PERFORMANCE (van de Ven and Ferry, 1980)

How do you rate the performance of your unit relative to other, comparable units (in the public, but perhaps also in the private sector) on each of the following dimensions? (1 = far below average, 7 = far above average)

- a) The amount of work and/or the number of products produced in your unit
- b) The accuracy of work produced in your unit and/or the quality of the goods delivered
- c) The number of innovations, process improvements, or new ideas implemented by your unit
- d) The reputation for work excellence of your unit
- e) The attainment of production or service level goals of your unit
- f) The efficiency of operations within your unit
- g) The morale of unit personnel

Appendix 4.B – Correlation Table

	α	M	SD	(1)	(2)	(3)	(4)	(5)	(6)
(1) PERSONNEL CONTR.	NA	4.25	1.06						
(2) CULTURAL CONTR.	NA	4.88	0.97	.567**					
(3) RESULTS CONTR.	NA	3.66	1.06	.535**	.372**				
(4) ACTION CONTR.	NA	5.38	0.81	.343**	.601**	.417**			
(5) INTR. MOTIVATION	0.82	5.94	0.82	.341**	.339**	0.191	0.187		
(6) EXTR. MOTIVATION	0.67	4.17	1.18	0.065	0.161	0.124	-0.055	-0.04	
(7) PERFORMANCE	0.90	4.72	0.91	.342**	.466**	.335**	.536**	.245*	0.157

***. Correlation is significant at the 0.01 level (2-tailed).* **. Correlation is significant at the 0.05 level (2-tailed).* N=105.

Appendix 4.C – Measurement Model

<i>Constructs and items</i>	<i>Stand. factor loading</i>	<i>Av. variance explained</i>
PERSONNEL CONTROLS		NA
a) Opportunities for education	0.559	
b) No possibilities self-management (RC)	0.187	
c) Training for new hires	0.707	
d) Strong selection process new hires	0.767	
e) Use of job and task descriptions	0.754	
CULTURAL CONTROLS		NA
a) Providing feedback	0.528	
b) Norms seldom communicated (RC)	0.458	
c) Culture clarifies expectations	0.549	
d) Employees check each other's work	0.569	
e) Exemplary behavior superiors	0.625	
RESULTS CONTROLS		NA
a) Performance targets	0.856	
b) Measurement of results	0.952	
c) Rewards for good results	0.341	
d) Sanctions for bad results	0.501	
e) Results not communicated (RC)	0.178	
ACTION CONTROLS		NA
a) Complying rules important	0.215	
b) Employees seldom alerted (RC)	0.227	
c) Activity monitoring	0.594	
d) Use of work plans	0.675	
e) Activity responsibility	0.707	
INTRINSIC MOTIVATION ($\alpha = 0.82$)		0.76
a) Enjoying work	0.872	
b) Have fun doing the job	0.916	
c) Job brings moments of pleasure	0.617	
EXTRINSIC MOTIVATION ($\alpha = 0.67$)		0.60
a) Retain standard of living	0.613	
b) Making much money	0.542	
c) Job brings status	0.759	
PERFORMANCE ($\alpha = 0.90$)		0.63
a) Amount of work	0.605	
b) Accuracy of work	0.847	
c) Number of innovations	0.539	
d) Reputation of excellence	0.858	
e) Attainment of goals	0.843	
f) Efficiency of operations	0.703	
g) Morale of unit personnel	0.840	

N=105. Items in this table are abbreviated. The full items can be found in appendix 4.A.

Appendix 4.D – Alternative Models

	Trim. base model	Alt. model 1	Alt. model 2	Alt. model 3
Relation	Coeffic. (p)	Coeffic. (p)	Coeffic. (p)	Coeffic. (p)
PRS → INTM	.206* (.067)	.216* (.085)	.203* (.069)	.206* (.067)
CUL → INTM	.209* (.063)	.250* (.059)	.226** (.042)	.209* (.063)
ACT → INTM	-	-.065 (.594)	-	-
RES → INTM	-	-.017 (.883)	-	-
ACT → EXTM	-	-.109 (.313)	-	-
RES → EXTM	.161* (.097)	.210* (.052)	.161* (.097)	.173* (.079)
EXTM → PERF	.173** (.028)	.143* (.073)	.173** (.028)	.173** (.028)
INTM → PERF	.162** (.043)	.121 (.153)	.163** (.043)	.163** (.043)
ACT → PERF	.509*** (.000)	.420*** (.000)	.510*** (.000)	.510*** (.000)
RES → PERF	-	.055 (.589)	-	-
PRS → PERF	-	.057 (.600)	-	-
CUL → PERF	-	.091 (.435)	-	-
EXTM → INTM	-	-	-.097 (.287)	-
INTM → EXTM	-	-	-	-.071 (.468)

Model fit

X ²	10.510	6.745	9.406	9.981
p-value	.311	.081	.309	.266
Df	9	3	8	8
CMINDF	1.168	2.248	1.176	1.248
CFI	.992	.981	.993	.990
RMSEA	.040	.110	.041	.049

X² diff. test

X ² diff. (df)		3.765 (6)	1.104 (1)	0.529 (1)
p-value		Ns	Ns	Ns

*In this table we compare the trimmed base model to three alternative models. In alternative model 1, the direct relations between PRS → PERF and CUL → PERF are added. Alternative model 2 and 3 include respectively the following effects: EXTM → INTM and INTM → EXTM. *, ** and *** indicates respectively significance at p<0.1, p<0.05 and p<0.01.*

5

Conclusions

This thesis addresses the question how MC packages are configured in public sector organizations and how they are related to employee motivation. The three studies in this thesis each answer this question from a different theoretical or methodological angle, and together they form a response to earlier calls to study MC ‘as a package’, instead of viewing them as isolated practices (Malmi and Brown, 2008). This thesis provides evidence on how MC packages are configured and assessed its effects on employee motivation by observing, interviewing and surveying employees working in the public sector. This final chapter reiterates the main findings from the studies presented in chapters 2, 3 and 4, presents some overarching conclusions and ends with two main implications for practice.

5.1 Main findings per chapter

The first study (chapter 2) contributed by empirically studying MC packages in four cases in the Dutch public sector, and by focusing on conflicting relations within these MC packages. The MC packages that were used deviated from the archetypal configurations that could be expected on the basis of prior research (Merchant and van der Stede, 2007; Ouchi, 1979). In addition, the notion of ‘conflicting’ MC elements was developed in the chapter, i.e. elements that are simultaneously present in an organization, hinder each other’s usability as tools to direct employee behavior and do not substitute each other. Various instances of such conflicting MC elements were discussed, which form an additional reason to study MC ‘as a package’. Furthermore, historical and hierarchical triggers were identified that led to such conflicting relations between MC elements, which enhances the understanding of the interplay and antecedents of MC elements in an MC package. These findings stress the idea that managers who want to implement new MC elements should be familiar with already existing MC elements (imposed on their subordinates by other organizational levels or by their predecessors), in order to lower possibilities to have conflicting MC elements in an MC package or to mitigate their negative effects.

The second study (chapter 3) examined the effect that austerity measures have on the use of constraining and facilitating MC. These two types of MC (constraining and facilitating) were distinguished on the basis of their underlying assumptions regarding human behavior: constraining MC assumes agent-like behavior while facilitating MC assumes steward-like behavior. The findings suggest that managers increasingly use constraining types of MC when they are in a situation of financial distress. An overemphasis on constraining MC was shown to have negative effects on the motivation and behavior of subordinates. However, the study also suggests that the emphasis on facilitating types – simultaneously with the constraining types of MC – has the potential to mitigate some of these effects.

The third study (chapter 4) focused on the relations among MC, motivation and performance. It contributed by empirically examining the effects of different types of MC on intrinsic and extrinsic motivation, finding that personnel and cultural controls are positively associated with intrinsic motivation, and that results controls are positively

associated with extrinsic motivation. The findings suggest that both intrinsic motivation and extrinsic motivation are positively associated with performance, and that there is a strong association between action controls and performance.

5.2 Overarching conclusions

The studies presented in this thesis enable the identification of three overarching contributions. First, this thesis contributes to the MC literature by demonstrating how MC elements can interact with each other, by providing empirical evidence and theoretical lenses, which together enhance our understanding of interrelations between MC elements. The notion of conflicting relations between MC elements, which was developed in this thesis, is one example of this contribution. A conflicting relation is in place when two or more MC elements hinder each other's use as instruments to direct employee behavior, but do not substitute each other. In such a situation, the whole is less than the sum of its parts (chapter 2). Another example of this contribution is the mitigating role that facilitating MC elements have on the negative effects of constraining MC elements. We found that the overemphasis of one type of MC has adverse effects on human motivation and behavior, however, these effects can be lowered by simultaneously emphasizing facilitating types of MC (chapter 3).

Second, this thesis contributes to the New Public Management (NPM) literature, which promotes a more results-oriented and business-like public sector (Hood, 1995). This thesis demonstrates that some types of MC, such as results control, have their limitations in a public sector context in which measurement of the results is typically difficult (see also ter Bogt et al., 2015b). Our contribution lies in the detailed account we provide of the results control practices in two sorts of departments with different task characteristics (in terms of measurability and knowledge of the transformation process). Our conclusion is that in both types of departments the results controls are not working as well as expected in the NPM literature, which points to the limits of these MC elements. The departments studied, however, emphasized rather than deemphasized their use of results controls, triggered by the financial crises (chapter 3).

Third, this research contributes to the MC literature by demonstrating how theories from other fields, i.e. sociology (stewardship theory) and psychology (Self-

Determination Theory, SDT) can be used to examine the relation between MC and motivation. Applications of these theories in other fields, such as organization studies and marketing research, demonstrate the possibility to transfer such theories to the field of accounting. This thesis thus answers calls by accounting scholars to look over the boundaries of our own discipline to further advance the field of management accounting and control (cf. Merchant et al., 2003; O'Dwyer and Unerman, 2014). This thesis demonstrated how agency theory and stewardship theory simultaneously can explain MC choices and human behavior, and how they complement each other in terms of the types of MC they advocate, i.e. constraining and facilitating. Furthermore, SDT was operationalized to examine the relation between different types of MC and employee motivation, which was often implicitly assumed but largely unexplored. Prior research often surveyed managers in organizations, although it was acknowledged that this would result in different outcomes, since there is a difference between managerial intention and subordinates' perception. This thesis points at the role of motivation in the relation between MC and performance, and particularly contributes by focusing on survey responses from those affected by MC, i.e. the subordinates, instead of the users of it, i.e. the managers (Tessier and Otley, 2012). The thesis provided insight into how SDT can be helpful in hypothesizing about possible relations between MC and motivation.

5.3 Practical implications

The studies included in this thesis examined MC packages in public sector organizations. Two main practical implications of the studies presented in this thesis can be identified, which will be described below.

First, this thesis reiterates the importance of aligning MC elements with their context. For instance, the case studies presented in chapters 2 and 3 identified a renewed reliance on results-oriented MC elements, probably inspired by NPM-like ideas, even though the tasks of some of the departments studied were hardly measurable. This resulted in some stress at the employee level and conflicts with other MC elements, which could be prevented. Based on these findings, it is recommended for practitioners to be aware of the limitations of results-oriented MC elements and their limited applicability in the public sector, especially within policy departments. Furthermore,

managers who want to implement a new MC element should be aware of the possibility that it could ‘conflict’ with MC elements that are already present in the organization. Such managers are advised to first explore possible conflicts with extant MC elements by, for instance, mapping the extant MC package, using, for instance, the survey questions presented in chapter 4, or the open ended questions presented in chapter 2 (for a Dutch translation of the questions see van der Kolk, 2015).

The second practical implication regards the effect of MC choices on employee motivation. Although results and action controls can be useful in certain environments with highly measurable output and repetitive tasks, other types of MC, such as personnel controls and cultural controls, should not be underemphasized. Chapter 4 found that especially the latter two types of MC have a strong positive association with intrinsic motivation of employees, which, in turn has a positive association with departmental performance. To some extent, this point relates to findings from chapter 3, which showed that overly relying on constraining types of MC (monitoring and incentivizing subordinates) has adverse effects on the motivation and behavior of employees. Even in times of austerity, organizations (read: managers) should not forget to ‘facilitate’ employees by, for instance, providing them with possibilities to develop themselves.

I hope this thesis has contributed to enhancing our understanding of MC, and it is my wish that the findings presented in this thesis will be used to improve the use of MC in the public sector. Furthermore, I hope that this thesis may ‘facilitate’ and ‘motivate’ other researchers and students to also study MC packages in different organizational settings and examine their effects on employee motivation.

A

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Berend van der Kolk

B

Nederlandse samenvatting

In deze appendix staan de belangrijkste bevindingen en ideeën uit het promotieonderzoek zoals die gepresenteerd zijn in de hoofdstukken 1 tot en met 5. De hoofdvraag van dit promotieonderzoek luidt: hoe zijn management control (MC) packages geconfigureerd in publieke sector organisaties en welke effecten kan MC hebben op de motivatie van medewerkers. In het kader van dit promotieonderzoek zijn drie studies uitgevoerd die gepresenteerd zijn in hoofdstukken 2, 3 en 4. De drie studies vullen elkaar aan: ze schijnen elk een iets ander licht op de centrale onderzoeksvraag en maken gebruik van verschillende theorieën en onderzoeksmethoden om de vraag te beantwoorden.

De tekst opgenomen in dit hoofdstuk is voor een groot deel gepubliceerd in twee artikelen, te weten: “Management Control Packages: Een Inleiding en Onderzoeksinstrument” in *Maandblad voor Accountancy en Bedrijfseconomie* (van der Kolk, 2015) en “Management Control: Beperken en/of Faciliteren?” in *Holland Management Review* (van der Kolk et al., 2015b).

Management Control Packages in Publieke Sector Organisaties

Management control (MC) gaat over alle inspanningen van het management die erop gericht zijn om medewerkers te motiveren en te laten handelen in lijn met de organisatiedoelen (Abernethy and Chua, 1996; Malmi and Brown, 2008). Bekende voorbeelden van MC-elementen zijn budgetten en prestatiebeloningen, maar ook 'softere' zaken als organisatiecultuur of een training voor medewerkers behoren ertoe. De verzameling van alle MC-elementen in een organisatie of afdeling wordt ook wel het 'MC-package' genoemd. Het MC-package wordt niet altijd bewust 'ontworpen' als totaal, maar is eerder een optelsom van de gebruikte MC-elementen in een bepaalde organisatie of afdeling. In het verleden zijn, mede door bijvoorbeeld de populariteit van de contingentietheorie, veel onderzoeken gedaan die individuele MC-elementen bestudeerden (Chenhall, 2003). Hoewel deze literatuurstroming wel nieuwe inzichten bood in de werking van die individuele MC-elementen, werd de relatie tussen verschillende MC-elementen en de samenstelling van de totale MC-package juist onderbelicht. In de literatuur wordt gesteld dat dit heeft geleid tot een gefragmenteerd of soms zelfs foutief beeld van de werkelijkheid (Malmi and Brown, 2008). Daarom klinkt er een steeds sterkere roep naar een bredere benadering en bestudering van MC, wat een juister en vollediger beeld van de werkelijkheid zou moeten geven (Abernethy and Chua, 1996; Malmi and Brown, 2008). Ondanks deze oproepen is dergelijk empirisch onderzoek nog erg schaars (Malmi, 2013).

Veel vragen over het gebruik van MC zijn nog slechts gedeeltelijk beantwoord door de huidige literatuur, zoals: "Hoe kunnen verschillende MC-elementen interactie hebben met elkaar?", "Wat zijn de antecedenten verschillende MC-package configuraties?" en "Welk effect heeft het gebruik van verschillende typen van MC op de motivatie en het gedrag van medewerkers?" In deze dissertatie wordt ingegaan op deze vragen, met als overkoepelende hoofdvraag: hoe zijn MC-packages geconfigureerd in publieke sector organisaties en welke effecten kan MC hebben op de motivatie van medewerkers. Deze vragen worden besproken in de context van de MC-package waarin de verschillende MC elementen werkzaam zijn. In deze samenvatting wordt eerst een kleine geschiedenis van MC-package onderzoek geschetst, waarna de drie studies kort

worden samengevat. De samenvatting sluit af met de belangrijkste contributies van deze dissertatie.

Een Kleine Geschiedenis van Management Control Package onderzoek

Sinds de publicatie van het special issue van *Management Accounting Research* in 2008 over “*Management Control Systems as a Package*” staat dit onderwerp volop in de belangstelling (Kennedy and Widener, 2008; Malmi and Brown, 2008; Sandelin, 2008; van der Meer-Kooistra and Scapens, 2008). Hoewel Malmi en Brown (2008) het onderwerp van MC-packages weer op de kaart hebben gezet, zijn ze zeker niet de eersten die dit onderwerp aanstippen. Deze paragraaf bespreekt een ‘kleine geschiedenis’ van het denken over MC-packages, waarna de samenvattingen van de drie studies zullen worden gepresenteerd.

Al in 1976, het jaar van de oprichting van het tijdschrift *Accounting, Organizations and Society (AOS)*, schreef de oprichter en editor Anthony Hopwood over het gevaar van een ‘fragmentarisch begrip’ van de wereld om ons heen: “*Eén van de meest schadelijke tekorten van de Westerse intellectuele traditie is waarschijnlijk de versplintering van onze perceptie en ons begrip van de wereld om ons heen.*” (Hopwood, 1976b, p. 287). De oprichting van AOS kan, zoals de naam al suggereert, gezien worden als een poging om accountingpraktijken (weer) in een breder daglicht te zien, dat is: in connectie met de omliggende context en de overige accountingpraktijken (zie bijvoorbeeld ook Hopwood, 1983). Otley (1980) haakte in zekere zin aan bij het idee dat accounting niet te fragmentarisch bestudeerd zou moeten worden, en stelde dat de elementen in een ‘MC-package’ niet afzonderlijk bestudeerd zouden moeten worden.

Hoewel er in de eerder genoemde artikelen, en ook in andere teksten (bijvoorbeeld Horngren, 1972), oproepen werden gedaan om naar het ‘MC-package’ te kijken in plaats van naar afzonderlijke elementen, bleven studies die hier gehoor aan gaven grotendeels uit, op een enkele uitzondering na (zie bijvoorbeeld Macintosh and Daft, 1987). De redenen voor het uitblijven van studies die naar het totale MC-package kijken in plaats van naar afzonderlijke elementen zijn divers. Enerzijds is het lastig om in een tijdschriftartikel een compleet pakket van MC-elementen te bespreken, en anderzijds was een duidelijk classificatiesysteem van elementen (nog) niet voorhanden.

Ondanks de oproepen voor meer ‘totale’ benaderingen van MC werd er in de accountingliteratuur in de jaren negentig toch vooral onderzoek gedaan naar een beperkt aantal MC-elementen tegelijk. Chenhall (2003) ziet de opkomst van de contingentietheorie als belangrijkste ‘veroorzaker’ van deze stroming in het accountingonderzoek. In dit type onderzoek worden vaak met behulp van statistische methoden meerdere organisaties of afdelingen geanalyseerd, om bijvoorbeeld het effect van het gebruik van een MC-element op de output te bestuderen. Problematisch aan dit type onderzoek is, volgens onder anderen Chenhall (2003) en Malmi en Brown (2008), dat de overige MC-elementen binnen de ‘package’ goeddeels genegeerd worden. Het weglaten van elementen die van invloed (kunnen) zijn beperkt de betrouwbaarheid van een methode – en dus het onderzoek – aanzienlijk (Hartmann and Moers, 1999).

Recentelijk is er een aantal studies verschenen die verder zijn gegaan met het idee van MC-packages. Cristofoli et al. (2010), bijvoorbeeld, hanteren MC-packages om te kijken naar verschillende vormen waarop verschillende organisaties in de publieke sector afspraken maken met elkaar. Grabner en Moers (2013) werken het idee van MC-packages verder conceptueel uit en beschrijven in ‘formele termen’ wat het inhoudt om te spreken van een MC-package. Hoewel in de Nederlandse literatuur soms wel verwezen wordt naar samenhang tussen verschillende MC-elementen is empirisch onderzoek hiernaar nog erg schaars (Kruis, 2008).

Drie Studies over Management Control bij Publieke Sector Organisaties

Deze dissertatie bevat drie gerelateerde studies die tezamen een antwoord geven op de hoofdvraag: “Hoe zijn management control (MC) packages geconfigureerd in publieke sector organisaties en welke effecten kan MC hebben op de motivatie van medewerkers”. In de volgende paragrafen worden de drie studies kort besproken en de belangrijkste bevindingen samengevat.

Studie 1: Wanneer het geheel minder is dan de som der delen

In de eerste studie (hoofdstuk 2) zijn vier afdelingen van Nederlandse gemeenten onderzocht en zijn de door hen gebruikte MC-elementen in kaart gebracht. De gevonden configuraties van de MC-packages weken op sommige plekken af van de verwachtingen op basis van de bestaande literatuur (Merchant and van der Stede, 2007; Ouchi, 1979). Bij beleidsafdelingen bijvoorbeeld – waar de resultaten van werkzaamheden moeilijk te meten zijn – wilde men, zo bleek, toch graag gebruik maken van resultaatmetingen voor de aansturing van medewerkers, ook al zijn die verre van perfect. Ook bespreekt dit hoofdstuk interacties tussen MC-elementen. Eerdere literatuur besteedde al wel aandacht aan twee typen relaties tussen MC-elementen (die van complementen en substituten), maar in deze dissertatie wordt gesteld dat ook aandacht dient besteed te worden aan MC-elementen die ‘conflicteren’ met elkaar.

Een conflicterende relatie tussen MC-elementen wil zeggen dat de MC-elementen tegelijk aanwezig zijn in de organisatie – en dus elkaar niet substitueren – en elkaars bruikbaarheid als middelen om medewerkers aan te sturen verstoren waardoor er sprake is van een soort ‘negatieve complementariteit’. Zulke conflicterende relaties verlagen de effectiviteit van de werking van een MC-package. In de onderzochte organisaties werden diverse gevallen van conflicterende MC-elementen gevonden.

Twee hoofdoorzaken voor het bestaan van dergelijke relaties konden worden geïdentificeerd: hiërarchische en historische oorzaken. Van een hiërarchische oorzaak is sprake wanneer verschillende managementlagen een MC-element invoeren dat wordt opgelegd aan een medewerker elders in de organisatie, zonder dat deze managementlagen daarover verder goed contact met elkaar hebben. Dat kan er bijvoorbeeld toe leiden dat een ‘hogere managementlaag’ iets van een medewerker verwacht, wat door een ‘lagere managementlaag’ wordt tegengesproken. Van een historische oorzaak is sprake wanneer MC-elementen uit het verleden conflicteren met recenter ingevoerde MC-elementen. Bijvoorbeeld wanneer een leidinggevende tien jaar geleden een bepaalde informele en joviale cultuur creëerde, kan dit tien jaar later op deze afdeling nog steeds zijn sporen nalaten, waardoor ‘strakkere’ of meer resultaatgerichte typen van management minder goed aarden in een dergelijke omgeving.

Studie 2: Management Control in Tijden van Bezuinigingen

De tweede studie (hoofdstuk 3) richtte zich op het effect van bezuinigingen op het gebruik van MC-elementen. In dit hoofdstuk worden ‘beperkende’ en ‘faciliterende’ typen van MC onderscheiden, op basis van de onderliggende aannames met betrekking tot mensbeelden (van der Kolk et al., 2015b).

Het mensbeeld dat een medewerker een agent is, oftewel een ‘homo economicus’, gaat ervan uit dat hij/zij zich egoïstisch en opportunistisch gedraagt. Met andere woorden, dit mensbeeld veronderstelt dat medewerkers opportunistisch en egoïstisch zijn en zich ‘willen drukken’, waardoor ze constant gemonitord en ‘geprikkeld’ moeten worden om er tóch voor te zorgen dat ze meewerken aan de organisatiedoelen. Verschillende economische theorieën, zoals bijvoorbeeld de agentschapstheorie, leunen op dit mensbeeld. Het type MC dat vooral past bij dit ‘economische mensbeeld’ wordt in deze studie *beperkend* genoemd, omdat het er vanuit gaat dat medewerkers ‘geprikkeld’ moeten worden of ‘in de gaten’ gehouden moeten worden, omdat – als dit niet gebeurt – de medewerkers waarschijnlijk niet zullen handelen in lijn met de organisatiedoelen. Medewerkers worden dan dus niet vrijgelaten, maar juist beperkt. Voorbeelden van dergelijke aansturingen zijn bonussystemen die medewerkers prikkelen om harder te werken (de onderliggende aanname is dat als er geen bonussysteem was, de medewerkers minder hard zouden werken, en dat ze dus niet intrinsiek gemotiveerd zijn), maar ook monitoringsystemen die de activiteiten van medewerkers van minuut tot minuut in de gaten houden vallen in deze categorie (de aanname daarvan is vaak dat als de medewerkers niet in de gaten worden gehouden, ze ‘de kantjes er vanaf lopen’).

Daarnaast is er een vorm van MC die gebaseerd is op een ‘positiever’ mensbeeld: de steward. Dit mensbeeld, dat de basis vormt voor de stewardshiptheorie, gaat er vanuit gaat dat medewerkers intrinsiek gemotiveerd zijn en zich graag inzetten voor de organisatie – *ook* als de leidinggevende even niet kijkt! Als de medewerker een keuze moet maken tussen ‘egoïstisch’ handelen of de organisatie dienen, zal deze volgens het mensbeeld van de ‘steward’ altijd de organisatie dienen. Het soort aansturing dat bij dit type mensbeeld past is *faciliterend*. Faciliterende typen van aansturing hebben tot doel om de medewerker vooral te ondersteunen in zijn of haar taken. Faciliterende MC kan bijvoorbeeld bestaan uit het aanbieden van vrijwillige trainingen en cursussen aan

medewerkers, maar ook coaching en zelfsturing kunnen worden gezien als een ‘faciliterende’ manier van aansturing. Onder al deze faciliterende typen van MC ligt de aanname dat de medewerker *zelf* al de organisatiedoelen wil dienen, en hiertoe niet hoeft te worden gedwongen. De functie van dit type MC is dan ook om de medewerker goed te faciliteren.

In de studie wordt gesteld dat medewerkers een terugkerende keuze hebben tussen agent-gedrag en steward-gedrag, en dat er dus behoefte is aan een gebalanceerde aansturing met behulp van zowel beperkende als faciliterende MC. In tijden van bezuinigingen, echter, bleek in onze studie dat managers een zeer grote nadruk leggen op de beperkende soort MC (door bijvoorbeeld de afhandeltijd per cliënt te meten en ‘langzame’ medewerkers hierop aan te spreken), terwijl soms de faciliterende typen van MC worden verminderd (door bijvoorbeeld opleidingsbudgetten te verminderen). Dit kan nadelige effecten hebben op het functioneren van medewerkers, zoals minder motivatie voor het vervullen van de hen opgedragen taken of een cultuur van ‘de kantjes eraf lopen’. Deze nadelige effecten kunnen worden verminderd wanneer, samen met de nadruk op beperkende typen van MC, tegelijk ook faciliterende typen van MC worden versterkt, door bijvoorbeeld het beschikbaar stellen van trainingen en opleidingsmogelijkheden, of door medewerkers meer ruimte te geven voor zelf management.

Studie 3: Management Control en Motivatie

De derde studie (hoofdstuk 4) gaat over de relatie tussen MC en motivatie van medewerkers. Medewerkers vertonen een bepaald soort gedrag op basis van hun motivatie of overtuiging en de belangrijkste hypothese in deze studie luidt dat MC de motivatie van medewerkers kan beïnvloeden. Om deze hypothese te onderbouwen leunt deze studie op ‘Self-Determination Theory’ (SDT). SDT is een psychologische theorie die stelt dat er bepaalde randvoorwaarden zijn voor het bevorderen van intrinsieke motivatie van mensen, en staat in een lange lijn van zogenaamde ‘behoefte theorieën’. SDT stelt dat intrinsieke motivatie wordt bevorderd door drie factoren: 1) ervaren autonomie, 2) een gevoel van competentie en 3) verbondenheid met de organisatie. Ook stelt SDT dat er bij de aansturing van medewerkers soms sprake kan zijn van een

'crowding-out' effect. Dit effect gaat over de verdrijving van intrinsieke motivatie door een nadruk op extrinsieke beloningen. Toegepast op dit onderzoek, betekent dit dat een toename van activiteiten- en resultaatenaansturing zou kunnen leiden tot een verlaging van intrinsieke motivatie en een verhoging van extrinsieke motivatie.

In de studie wordt, op basis van SDT, verwacht dat personeelsaansturing (bijv. training) autonomie en competentie bevordert en dat cultuuraansturing (bijv. gedeelde normen en waarden) het gevoel van verbondenheid met de organisatie kan bevorderen, waardoor intrinsieke motivatie wordt verhoogd. Tegelijk wordt verondersteld dat activiteiten-aansturing, door middel van regels en procedures, autonomie juist verlaagt, waardoor intrinsieke motivatie ook verlaagd wordt. Ook wordt verondersteld dat activiteiten-aansturing en resultaatenaansturing een negatief effect hebben op intrinsieke motivatie (door het 'crowding-out' effect) en een positieve invloed op extrinsieke motivatie. Tot slot wordt ook verondersteld dat intrinsieke en extrinsieke motivatie van medewerkers een positief effect hebben op de prestaties van de afdeling waarin de medewerkers werken.

De hypothesen worden getest door de resultaten van een enquête onder medewerkers van 105 verschillende afdelingen publieks- en burgerzaken van Nederlandse gemeenten te analyseren. De bevindingen suggereren dat verschillende typen van MC een ander effect hebben op motivatie. Bijvoorbeeld, personeelsaansturing en cultuuraansturing hebben een positieve relatie met intrinsieke motivatie, terwijl resultaataansturing voornamelijk een positieve relatie met extrinsieke motivatie heeft. Intrinsieke en extrinsieke motivatie zijn op hun beurt positief gerelateerd aan de prestaties van een afdeling, en activiteiten-aansturing heeft een sterke directe relatie met de afdelingsprestaties. In het onderzoek vinden we geen duidelijke ondersteuning van het 'crowding-out' effect, wat kan wijzen op een beperkte aanwezigheid van dit effect in de onderzochte data. We laten zien in deze studie hoe SDT gebruikt kan worden om relaties tussen MC en motivatie te onderzoeken, en hoe MC en motivatie zich verhouden tot de prestaties van een afdeling.

Conclusies

In dit promotieonderzoek zijn MC-packages onderzocht in de publieke sector, samen met enkele antecedenten en effecten. De drie studies in dit promotieonderzoek zijn een respons op eerdere verzoeken om MC-elementen 'als een package' te onderzoeken, in plaats van ze als 'geïsoleerde' praktijken te beschouwen (Malmi and Brown, 2008; Malmi, 2013). Dit promotieonderzoek onderstreept het belang van een integrale benadering van MC in organisaties door te wijzen op de samenhang van de diverse MC-elementen. De contributie van dit promotieonderzoek is drievoudig.

Ten eerste, het onderzoek draagt bij aan de MC literatuur door te laten zien dat de effectiviteit van sommige MC-elementen afhankelijk is van de aan- of afwezigheid van andere MC-elementen en de nadruk die die krijgen, zoals beschreven in hoofdstuk 2 en 3. Het idee van 'conflicterende' relaties tussen MC-elementen, met als principe dat het 'geheel minder is dan de som der delen' is hiervan een voorbeeld (hoofdstuk 2), maar ook de werking van faciliterende typen van MC naast beperkende typen van MC in tijden van bezuinigingen illustreert het belang van een benadering van MC 'als een package' (hoofdstuk 3).

Ten tweede draagt dit onderzoek bij aan de literatuur over de beweging die stelt dat de publieke sector zich 'resultaatgericht' en 'bedrijfsmatiger' moet organiseren, genaamd 'New Public Management' (NPM). Dit promotieonderzoek laat zien dat de werking van sommige typen van MC, zoals bijvoorbeeld resultaatsaansturing, zijn beperkingen heeft in een publieke sector omgeving, en vormt daardoor een kritiek op NPM. Bijvoorbeeld, op de onderzochte beleidsafdelingen was de 'output' van individuele medewerkers vaak erg lastig te meten, waardoor het gebruik van resultaatsaansturing sterk bemoeilijkt werd. Aangevuurd door bezuinigingen werd in de door ons onderzochte afdelingen echter wel steeds meer nadruk gelegd op dergelijke resultaatsaansturing, wat leidde tot averechtse effecten, zoals met name beschreven in hoofdstuk 3.

Ten derde draagt dit onderzoek bij aan de MC literatuur door te laten zien hoe 'Self-Determination Theory' (SDT) toegepast kan worden om de relatie tussen MC en werknemersmotivatie te begrijpen. De drie voorwaarden die SDT stelt aan de bevordering van intrinsieke motivatie (de behoefte aan autonomie, competentie en

verbondenheid) kunnen worden gebruikt om verwachtingen op te stellen over de relatie tussen MC en werknemersmotivatie. Het onderzoek in dit proefschrift complementeert eerdere studies door werknemers zonder managementtaken te enquêteren – zij die ‘onderworpen’ worden aan MC – terwijl eerder kwantitatief onderzoek zich voornamelijk richtte op de meningen van managers over MC. De werkwijze van dit proefschrift maakt het mogelijk de relatie tussen MC en werknemersmotivatie beter te begrijpen en leidt tot andere resultaten dan wanneer slechts gezichtspunten van managers zouden worden onderzocht (Tessier and Otley, 2012).

Afsluitend hoop ik dat dit proefschrift, naast het theoretisch inzicht dat het verschaft, daadwerkelijk een bijdrage kan leveren aan een betere werking van MC in de publieke sector. Ook hoop ik dat het onderzoek dat gepresenteerd is in dit proefschrift andere onderzoekers en studenten ‘faciliteert’ en ‘motiveert’ om verder te bouwen aan onze kennis over ‘packages’ van MC-elementen en hun effecten op medewerkers.

C

References

- Abdolmohammadi, M., Read, W. and Scarbrough, D.P. (2003), "Does Selection-Socialization Help to Explain Accountants' Weak Ethical Reasoning?", *Journal of Business Ethics*, Vol. 42 No. 1, pp. 71-81.
- Abernethy, M.A., Dekker, H.C. and Schulz, A.K.D. (2015), "Are Employee Selection and Incentive Contracts Complements or Substitutes?", *Journal of Accounting Research*, Vol. 53 No. 4, pp. 633-668.
- Abernethy, M.A. and Chua, W.F. (1996), "A Field Study of Control System "Redesign": The Impact of Institutional Processes on Strategic Choice", *Contemporary Accounting Research*, Vol. 13 No. 2, pp. 569-606.
- Adler, P.S. and Chen, C.X. (2011), "Combining creativity and control: Understanding individual motivation in large-scale collaborative creativity", *Accounting, Organizations and Society*, Vol. 36 No. 2, pp. 63-85.
- Ahrens, T. and Chapman, T.S. (2004), "Accounting for Flexibility and Efficiency: A Field Study of Management Control Systems in a Restaurant Chain", *Contemporary Accounting Research*, Vol. 21 No. 2, pp. 271-301.
- Ahrens, T. and Chapman, C.S. (2007), "Management accounting as practice", *Accounting, Organizations and Society*, Vol. 32 No. 1-2, pp. 1-27.
- Ahrens, T. and Dent, J.F. (1998), "Accounting and Organizations: Realizing the Richness of Field Research", *Journal of Management Accounting Research*, Vol. 10 , pp. 1-39.
- Aiello, J.R. (1993), "Computer-Based Work Monitoring: Electronic Surveillance and Its Effects", *Journal of Applied Social Psychology*, Vol. 23 No. 7, pp. 499-507.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Anthony, R.N. and Govindarajan V. (1998), *Management Control Systems*, McGraw-Hill, Boston.

- Aral, S., Brynjolfsson, E. and Wu, L. (2012), "Three-Way Complementarities: Performance Pay, Human Resource Analytics, and Information Technology", *Management Science*, Vol. 58 No. 5, pp. 913-931.
- Bedford, D.S. and Malmi, T. (2015), "Configurations of control: An exploratory analysis", *Management Accounting Research*, Vol. 27 No. 0, pp. 2-26.
- Bedford, D. and Sandelin, M. (2015), "Investigating management control configurations using qualitative comparative analysis: an overview and guidelines for application", *Journal of Management Control*, Vol. 26 No. 1, pp. 5-26.
- Bentham, J. (reissued in 1988), *The Principles of Morals and Legislation*, Prometheus Books, New York.
- Bertelli, A.M. (2006), "Motivation Crowding and the Federal Civil Servant: Evidence from the U.S. Internal Revenue Service", *International Public Management Journal*, Vol. 9 No. 1, pp. 3-23.
- Birnberg J.G., Luft J. and Shields M.D. (2007) "Psychology Theory in Management Accounting Research" in: Chapman, C.S., Hopwood, A.G. and Shields, M.D. (eds.), *Handbook of Management Accounting Research*. Oxford: Elsevier, pp. 113-135.
- Boden, R., Gummett, P., Cox, D. and Barker, K. (1998), "Men in white coats ... men in grey suits: New public management and the funding of science and technology services to the UK Government", *Accounting, Auditing and Accountability Journal*, Vol. 11 No. 3, pp. 267-291.
- Borooah, V.K. (2014), *Europe in an Age of Austerity*, Palgrave Macmillan, New York.
- Bracci, E. and Llewellyn, S. (2012), "Accounting and accountability in an Italian social care provider", *Accounting, Auditing and Accountability Journal*, Vol. 25 No. 5, pp. 806-834.
- Bracci, E., Humphrey, C., Moll, J. and Steccolini, I. (2015), "Public sector accounting, accountability and austerity: more than balancing the books?", *Accounting, Auditing and Accountability Journal*, Vol. 28 No. 6, pp. 878-908.
- Broadbent, J. and Guthrie, J. (1992), "Changes in the Public Sector: A Review of Recent "Alternative" Accounting Research", *Accounting, Auditing and Accountability Journal*, Vol. 5 No. 2, pp. 3-31.
- Broadbent, J. and Guthrie, J. (2008), "Public sector to public services: 20 years of "contextual" accounting research", *Accounting, Auditing and Accountability Journal*, Vol. 21 No. 2, pp. 129-169.
- Budding, T. (2004), "Accountability, environmental uncertainty and government performance: evidence from Dutch municipalities", *Management Accounting Research*, Vol. 15 No. 3, pp. 285-304.
- Cerasoli, C.P. and Ford, M.T. (2014), "Intrinsic Motivation, Performance, and the Mediating Role of Mastery Goal Orientation: A Test of Self-Determination Theory", *Journal of Psychology*, Vol. 148 No. 3, pp. 267-286.

- Chenhall, R.H. (2003), "Management control systems design within its organizational context: findings from contingency-based research and directions for the future", *Accounting, Organizations and Society*, Vol. 28 No. 2-3, pp. 127-168.
- Christ, M.H., Emmett, S.A., Summers, S.L. and Wood, D.A. (2012), "The Effects of Preventive and Detective Controls on Employee Performance and Motivation", *Contemporary Accounting Research*, Vol. 29 No. 2, pp. 432-452.
- Cristofoli, D., Ditillo, A., Liguori, M., Sicilia, M. and Steccolini, I. (2010), "Do environmental and task characteristics matter in the control of externalized local public services?: Unveiling the relevance of party characteristics and citizens' offstage voice", *Accounting, Auditing and Accountability Journal*, Vol. 23 No. 3, pp. 350-372.
- Davis, J.H., Schoorman, F.D. and Donaldson, L. (1997), "Toward a Stewardship Theory of Management", *Academy of Management Review*, Vol. 22 No. 1, pp. 20-47.
- de Baerdemaeker, J. and Bruggeman, W. (2015), "The impact of participation in strategic planning on managers' creation of budgetary slack: The mediating role of autonomous motivation and affective organisational commitment", *Management Accounting Research*, Vol. 29, pp. 1-12.
- de Jong, J. and van der Kolk, B. (2013), "Prestatiebeloning in het onderwijs: een geslaagd idee?", *Finance & Control*, Vol. 12 No. 6, pp. 48-52.
- Deci, E.L., Koestner, R. and Ryan, R.M. (1999), "A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation", *Psychological Bulletin*, Vol. 125 No. 6, pp. 627-668.
- Diefenbach, T. (2009), "New Public Management in Public Sector Organizations: The Dark Sides of Managerialistic Enlightenment", *Public Administration*, Vol. 87 No. 4, pp. 892-909.
- Eisenhardt, K.M. (1989), "Building Theories from Case Study Research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-550.
- Ferreira, A. and Otley, D. (2009), "The design and use of performance management systems: An extended framework for analysis", *Management Accounting Research*, Vol. 20 No. 4, pp. 263-282.
- Fisher, J. (1995), "Contingency-Based Research on Management Control Systems", *Journal of Accounting Literature*, Vol. 14, pp. 24-53.
- Fisher, J.G. (1998), "Contingency Theory, Management Control Systems and Firm Outcomes: Past Results and Future Directions", *Behavioral Research in Accounting*, Vol. 10, pp. 47.
- Flamholtz, E.G., Das, T.K. and Tsui, A.S. (1985), "Toward an integrative framework of organizational control", *Accounting, Organizations and Society*, Vol. 10 No. 1, pp. 35-50.
- Flick, U. (2009), *An Introduction to Qualitative Research*, Sage Publications Inc., London.
- Fogarty, T., Magnan, M.L., Markarian, G. and Bohdjalian, S. (2009), "Inside Agency: The Rise and Fall of Nortel", *Journal of Business Ethics*, Vol. 84 No. 2, pp. 165-187.

- Frey, B.S. and Jegen, R. (2001), "Motivation Crowding Theory", *Journal of Economic Surveys*, Vol. 15 No. 5, pp. 589-611.
- Frey, B.S., Homberg, F. and Osterloh, M. (2013), "Organizational Control Systems and Pay-for-Performance in the Public Service", *Organization Studies*, Vol. 34 No. 7, pp. 949-972.
- Friis, I., Hansen, A. and Vamosi, T. (2015), "On the Effectiveness of Incentive Pay: Exploring Complementarities and Substitution between Management Control System Elements in a Manufacturing Firm", *European Accounting Review*, Vol. 24 No. 2, pp. 241-276.
- Gagné, M. and Deci, E.L. (2005), "Self-determination theory and work motivation", *Journal of Organizational Behavior*, Vol. 26 No. 4, pp. 331-362.
- Gagné, M., Forest, J., Gilbert, M., Aubé, C., Morin, E. and Malorni, A. (2010), "The Motivation at Work Scale: Validation Evidence in Two Languages", *Educational and Psychological Measurement*, Vol. 70 No. 4, pp. 628-646.
- Gerdin, J. and Greve, J. (2004), "Forms of contingency fit in management accounting research—a critical review", *Accounting, Organizations and Society*, Vol. 29 No. 3–4, pp. 303-326.
- Gordon Murray, J., Erridge, A. and Rimmer, N. (2012), "International lessons on austerity strategy", *International Journal of Public Sector Management*, Vol. 25 No. 4, pp. 248-259.
- Grabner, I. and Moers, F. (2013), "Management control as a system or a package? Conceptual and empirical issues", *Accounting, Organizations and Society*, Vol. 38 No. 6–7, pp. 407-419.
- Groot, T. and Budding, T. (2004), "The Influence of New Public Management Practices on Product Costing and Service Pricing Decisions in Dutch Municipalities", *Financial Accountability & Management*, Vol. 20 No. 4, pp. 421-443.
- Gruening, G. (2001), "Origin and theoretical basis of new public management", *International Public Management Journal*, Vol. 4 No. 1, pp. 1-25.
- Hair, J.F., Black W.C., Babin B.J., Anderson R.E. and Tatham R.L. (2006), *Multivariate Data Analysis*, Prentice Hall, Upper Saddle River, New Jersey.
- Hartmann, F.G.H. and Moers, F. (1999), "Testing contingency hypotheses in budgetary research: an evaluation of the use of moderated regression analysis", *Accounting, Organizations and Society*, Vol. 24 No. 4, pp. 291-315.
- Hernandez, M. (2012), "Toward an Understanding of the Psychology of Stewardship", *Academy of Management Review*, Vol. 37 No. 2, pp. 172-193.
- Hernandez, M. (2008), "Promoting Stewardship Behavior in Organizations: A Leadership Model", *Journal of Business Ethics*, Vol. 80 No. 1, pp. 121-128.
- Hood, C. (1995), "The "new public management" in the 1980s: Variations on a theme", *Accounting, Organizations and Society*, Vol. 20 No. 2-3, pp. 93-109.
- Hood, C. (1991), "A Public Management for all Seasons?", *Public Administration*, Vol. 69 No. 1, pp. 3-19.

- Hopwood, A.G. (1976a), "Editorial", *Accounting, Organizations and Society*, Vol. 1 No. 1, pp. 1-4.
- Hopwood, A.G. (1987), "The archeology of accounting systems", *Accounting, Organizations and Society*, Vol. 12 No. 3, pp. 207-234.
- Hopwood, A.G. (1983), "On trying to study accounting in the contexts in which it operates", *Accounting, Organizations and Society*, Vol. 8 No. 2-3, pp. 287-305.
- Hopwood, A.G. (1976b), "Editorial", *Accounting, Organizations and Society*, Vol. 1 No. 4, pp. 287-288.
- Horngren, C.T. (1972), *Cost Accounting: A Managerial Emphasis*, Prentice-Hall, Upper Saddle River.
- Horton J., Macve R. and Struyven G. (2004) Qualitative Research: Experiences in Using Semi-Structured Interviews. In: Humphrey C and Lee B (eds) *The Real Life Guide to Accounting Research: A Behind-the-Scenes View of using Qualitative Research Methods*. Oxford: Elsevier, 339-357.
- Humphrey, C. (1994), "Reflecting on attempts to develop a financial management information system for the probation service in England and Wales: Some observations on the relationship between the claims of accounting and its practice", *Accounting, Organizations and Society*, Vol. 19 No. 2, pp. 147-178.
- Humphrey, C. and Miller, P. (2012), "Rethinking impact and redefining responsibility: The parameters and coordinates of accounting and public management reforms", *Accounting, Auditing and Accountability Journal*, Vol. 25 No. 2, pp. 295-327.
- Humphrey, C. and Scapens, R.W. (1996), "Methodological themes", *Accounting, Auditing and Accountability Journal*, Vol. 9 No. 4, pp. 86-106.
- Humphrey, C., Miller, P. and Scapens, R.W. (1993), "Accountability and Accountable Management in the UK Public Sector", *Accounting, Auditing and Accountability Journal*, Vol. 6 No. 3, pp. 7-29.
- Jensen, M.C. and Meckling, W.H. (1994), "The Nature of Man", *Journal of Applied Corporate Finance*, Vol. 7 No. 2, pp. 4-19.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.
- Jick, T.D. and Murray, V.V. (1982), "The Management of Hard Times: Budget Cutbacks in Public Sector Organizations", *Organization Studies*, Vol. 3 No. 2, pp. 141-169.
- Johansson, T. and Siverbo, S. (2014), "The appropriateness of tight budget control in public sector organizations facing budget turbulence", *Management Accounting Research*, Vol. 25 No. 4, pp. 271-283.
- Kennedy, F.A. and Widener, S.K. (2008), "A control framework: Insights from evidence on lean accounting", *Management Accounting Research*, Vol. 19 No. 4, pp. 301-323.
- Kickert, W. (2012), "How the Dutch government responded to financial, economic and fiscal crisis", *Public Money & Management*, Vol. 32 No. 6, pp. 439-443.

- Kline, R.B. (2011), *Principles and Practice of Structural Equation Modeling*, The Guilford Press, New York.
- Kominis, G. and Emmanuel, C.R. (2007), "The expectancy–valence theory revisited: Developing an extended model of managerial motivation", *Management Accounting Research*, Vol. 18 No. 1, pp. 49-75.
- Kruis, A. (2008), "De Som der Delen: Management-Control-Systemen", *Management Control & Accounting*, Vol. 6 No. 5, pp. 14-20.
- Kunz, A.H. and Pfaff, D. (2002), "Agency theory, performance evaluation, and the hypothetical construct of intrinsic motivation", *Accounting, Organizations and Society*, Vol. 27 No. 3, pp. 275-295.
- Lane, P.R. (2012), "The European Sovereign Debt Crisis", *Journal of Economic Perspectives*, Vol. 26 No. 3, pp. 49-68.
- Langfield-Smith, K. (2008), "The relations between transactional characteristics, trust and risk in the start-up phase of a collaborative alliance", *Management Accounting Research*, Vol. 19 No. 4, pp. 344-364.
- Lapsley, I. (2009), "New Public Management: The Cruellest Invention of the Human Spirit?", *Abacus*, Vol. 45 No. 1, pp. 1-21.
- Leeuw, F.L. (1996), "Performance auditing, new public management and performance improvement: questions and answers", *Accounting, Auditing and Accountability Journal*, Vol. 9 No. 2, pp. 92-102.
- Libby, T. (1999), "The influence of voice and explanation on performance in a participative budgeting setting", *Accounting, Organizations and Society*, Vol. 24 No. 2, pp. 125-137.
- Liguori, M. and Steccolini, I. (2012), "Accounting change: explaining the outcomes, interpreting the process", *Accounting, Auditing and Accountability Journal*, Vol. 25 No. 1, pp. 27-70.
- Lodge, M. and Hood, C. (2012), "Into an Age of Multiple Austerities? Public Management and Public Service Bargains across OECD Countries", *Governance*, Vol. 25 No. 1, pp. 79-101.
- Luft, J. and Shields, M.D. (2003), "Mapping management accounting: graphics and guidelines for theory-consistent empirical research", *Accounting, Organizations and Society*, Vol. 28 No. 2–3, pp. 169-249.
- Maas, V.S. and Matejka, M. (2009), "Balancing the Dual Responsibilities of Business Unit Controllers: Field and Survey Evidence", *Accounting Review*, Vol. 84 No. 4, pp. 1233-1253.
- Macintosh, N.B. and Daft, R.L. (1987), "Management control systems and departmental interdependencies: An empirical study", *Accounting, Organizations and Society*, Vol. 12 No. 1, pp. 49-61.
- Malmi, T. (2013), "Management control as a package: The need for international research", *Journal of Management Control*, Vol. 23 No. 4, pp. 229-231.

- Malmi, T. and Granlund, M. (2009), "In Search of Management Accounting Theory", *European Accounting Review*, Vol. 18 No. 3, pp. 597-620.
- Malmi, T. and Brown, D.A. (2008), "Management control systems as a package - Opportunities, challenges and research directions", *Management Accounting Research*, Vol. 19 No. 4, pp. 287-300.
- Martynov, A. (2009), "Agents or Stewards? Linking Managerial Behavior and Moral Development", *Journal of Business Ethics*, Vol. 90 No. 2, pp. 239.
- Maslow, A.H. (1943), "A theory of human motivation", *Psychological Review*, Vol. 50 No. 4, pp. 370-396.
- Merchant, K.A. and van der Stede W.A. (2007), *Management Control Systems*, Pearson Education Limited, Edinburgh Gate, England.
- Merchant, K.A., Van der Stede, W.A. and Zheng, L. (2003), "Disciplinary constraints on the advancement of knowledge: the case of organizational incentive systems", *Accounting, Organizations and Society*, Vol. 28 No. 2-3, pp. 251-286.
- Miles, M.B., Huberman A.M. and Saldaña J. (2014), *Qualitative Data Analysis: A Methods Sourcebook*, Sage Publications Inc, California.
- Milgrom, P. and Roberts, J. (1995), "Complementarities and fit strategy, structure, and organizational change in manufacturing", *Journal of Accounting and Economics*, Vol. 19 No. 2-3, pp. 179-208.
- Modell, S. (2009), "In defence of triangulation: A critical realist approach to mixed methods research in management accounting", *Management Accounting Research*, Vol. 20 No. 3, pp. 208-221.
- Mundy, J. (2010), "Creating dynamic tensions through a balanced use of management control systems", *Accounting, Organizations and Society*, Vol. 35 No. 5, pp. 499-523.
- Nikias, A.D., Schwartz, S. and Young, R.A. (2005), "Optimal Performance Measures with Task Complementarity", *Journal of Management Accounting Research*, Vol. 17 , pp. 53-73.
- O'Dwyer, B. and Unerman, J. (2014), "Realizing the potential of interdisciplinarity in accounting research", *Accounting, Auditing and Accountability Journal*, Vol. 27 No. 8, pp. 1227-1232.
- Osborne, D. and Gaebler T. (1993), *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, Addison-Wesley Publishing Company, Inc., Reading, Massachusetts.
- Otley, D.T. (1980), "The contingency theory of management accounting: Achievement and prognosis", *Accounting, Organizations and Society*, Vol. 5 No. 4, pp. 413-428.
- Otley, D.T. and Berry, A.J. (1994), "Case study research in management accounting and control", *Management Accounting Research*, Vol. 5 No. 1, pp. 45-65.
- Ouchi, W.G. (1979), "A Conceptual Framework for the Design of Organizational Control Mechanisms", *Management Science*, Vol. 25 No. 9, pp. 833-848.
- Pelletier, L.G., Fortier, M.S., Vallerand, R.J., Tuson, K.M., Brière, N.M. and Blais, M.R. (1995), "Toward a New Measure of Intrinsic Motivation, Extrinsic Motivation, and

- Amotivation in Sports: The Sport Motivation Scale (SMS)", *Journal of Sport & Exercise Psychology*, Vol. 17 , pp. 35-53.
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-Reports in Organizational Research: Problems and Prospects", *Journal of Management*, Vol. 12 No. 4, pp. 531-544.
- Pollitt, C. and Bouckaert G. (2011), *Public Management Reform - A Comparative Analysis*, Oxford University Press, Oxford.
- Pollitt, C. (2010), "Cuts and Reforms - Public Services as we move into a New Era", *Society and Economy*, Vol. 32 No. 1, pp. 17-31.
- Ponemon, L.A. (1992), "Ethical reasoning and selection-socialization in accounting", *Accounting, Organizations and Society*, Vol. 17 No. 3-4, pp. 239-258.
- Power, M. (1994), *The Audit Explosion*, Demos, London.
- Power, M. (1996), "Making things auditable", *Accounting, Organizations and Society*, Vol. 21 No. 2-3, pp. 289-315.
- Quattrone, P. and Hopper, T. (2005), "A 'time-space odyssey': management control systems in two multinational organisations", *Accounting, Organizations and Society*, Vol. 30 No. 7-8, pp. 735-764.
- Rand, A. and Branden N. (1998), *The Virtue of Selfishness: A New Concept of Egoism*, Penguin books, New York.
- Ryan, R.M. and Deci, E.L. (2000a), "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions", *Contemporary Educational Psychology*, Vol. 25 No. 1, pp. 54-67.
- Ryan, R.M. and Deci, E.L. (2000b), "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being", *American Psychologist*, Vol. 55 No. 1, pp. 68-78.
- Sandelin, M. (2008), "Operation of management control practices as a package—A case study on control system variety in a growth firm context", *Management Accounting Research*, Vol. 19 No. 4, pp. 324-343.
- Scapens R.W. (2004), "Doing Case Study Research" in: Humphrew C and Lee B (eds) *The Real Life Guide to Accounting Research: A Behind-the-Scenes View of using Qualitative Research Methods*. Oxford: Elsevier, pp. 257-279.
- Schreiber, J.B., Nora, A., Stage, F.K., Barlow, E.A. and King, J. (2006), "Reporting Structural Equation Modeling and Confirmatory Factor Analysis Results: A Review", *The Journal of Educational Research*, Vol. 99 No. 6, pp. 323-337.
- Segal, L. and Lehrer, M. (2012), "The Institutionalization of Stewardship: Theory, Propositions, and Insights from Change in the Edmonton Public Schools", *Organization Studies*, Vol. 33 No. 2, pp. 169-201.
- Simons, R. (1995), "Control in an Age of Empowerment", *Harvard Business Review*, Vol. 73 No. 2, pp. 80-88.
- Speklé, R.F. (2001), "Explaining management control structure variety: a transaction cost economics perspective", *Accounting, Organizations and Society*, Vol. 26 No. 4-5, pp. 419-441.

- Speklé, R.F. and Verbeeten, F.H.M. (2014), "The use of performance measurement systems in the public sector: Effects on performance", *Management Accounting Research*, Vol. 25 No. 2, pp. 131-146.
- Strauss, E. and Zecher, C. (2013), "Management control systems: a review", *Journal of Management Control*, Vol. 23 No. 4, pp. 233-268.
- ter Bogt, H.J. (2008), "Management accounting change and New Public Management in local government: a reassessment of ambitions and results? An institutionalist approach to accounting change in the Dutch public sector", *Financial Accountability & Management*, Vol. 24 No. 3, pp. 209-241.
- ter Bogt, H.J., van Helden, G.J. and van der Kolk, B. (2015a), "Maatwerk bij de Programmabegroting", *Tijdschrift Voor Public Governance, Audit & Control*, .
- ter Bogt, H.J., van Helden, G.J. and van der Kolk, B. (2015b), "Challenging the NPM Ideas About Performance Management - Selectivity and Differentiation in Outcome-Oriented Performance Budgeting", *Financial Accountability & Management*, Vol. 31 No. 3, pp. 287-315.
- ter Bogt, H.J., van Helden, G.J. and van der Kolk, B. (2012), "Haagse bluf bij ambities over programmabegroting", *Tijdschrift Voor Public Governance, Audit & Control*, Vol. 10 No. 1, pp. 4-9.
- ter Bogt, H.J. and van Helden, G.J. (2000), "Accounting change in Dutch government: Exploring the gap between expectations and realizations", *Management Accounting Research*, Vol. 11 No. 2, pp. 263-279.
- Tessier, S. and Otley, D. (2012), "A conceptual development of Simons' Levers of Control framework", *Management Accounting Research*, Vol. 23 No. 3, pp. 171-185.
- Tosi, H.L., Brownlee, A.L., Silva, P. and Katz, J.P. (2003), "An Empirical Exploration of Decision-making Under Agency Controls and Stewardship Structure", *Journal of Management Studies*, Vol. 40 No. 8, pp. 2053-2071.
- Vaivio, J. and Sirén, A. (2010), "Insights into method triangulation and "paradigms" in interpretive management accounting research", *Management Accounting Research*, Vol. 21 No. 2, pp. 130-141.
- van de Ven, A.H. and Ferry D.I. (1980), *Measuring and Assessing Organizations*, Wiley, New York.
- van der Kolk, B. (2011), "De accountant en het grijze gebied. Empirisch onderzoek naar factoren die van invloed zijn op het ethisch redeneren van accountants en accountancystudenten", *Maandblad Voor Accountancy En Bedrijfseconomie*, Vol. 85 No. 4, pp. 186-197.
- van der Kolk, B. (2013), "Bonussen: Kunnen we zonder?", *Maandblad Voor Accountancy En Bedrijfseconomie*, Vol. 87 No. 3, pp. 83-89.
- van der Kolk, B. (2015), "Management Control Packages: Een Inleiding en Onderzoeksinstrument", *Maandblad Voor Accountancy En Bedrijfseconomie*, Vol. 89 No. 3, pp. 174-180.

- van der Kolk, B. and Schokker, T. (2016), "Hierarchical Couplings in a Management Control Package: An Explorative Case Study", *Journal of Management Control*, forthcoming.
- van der Kolk, B., ter Bogt, H.J. and van Veen-Dirks, P.M.G. (2015a), "Constraining and Facilitating Management Control in Times of Austerity: Case Studies in Four Municipal Departments", *Accounting, Auditing and Accountability Journal*, Vol. 28 No. 6, pp. 934-965.
- van der Kolk, B., ter Bogt, H.J. and van Veen-Dirks, P.M.G. (2015b), "Management Control: Beperken en/of Faciliteren?", *Holland Management Review*, Vol. 164 , pp. 48-51.
- van der Meer-Kooistra, J. and Scapens, R.W. (2008), "The governance of lateral relations between and within organisations", *Management Accounting Research*, Vol. 19 No. 4, pp. 365-384.
- van der Stede, W.A. (2011), "Management Accounting Research in the Wake of the Crisis: Some Reflections", *European Accounting Review*, Vol. 20 No. 4, pp. 605-623.
- van der Stede W.A., Young S.M. and Chen C.X. (2007), "Doing Management Accounting Survey Research" in: Chapman C.S., Hopwood, A.G. and Shields, M.D. (eds.) *Handbook of Management Accounting Research*. Elsevier, Amsterdam, The Netherlands: Elsevier Ltd., pp. 445-478.
- van der Stede, W.A. (2000), "The relationship between two consequences of budgetary controls: budgetary slack creation and managerial short-term orientation", *Accounting, Organizations and Society*, Vol. 25 No. 6, pp. 609-622.
- van Helden, G.J. and Jansen, E.P. (2003), "New Public Management in Dutch Local Government", *Local Government Studies*, Vol. 29 No. 2, pp. 68-88.
- van Helden, G.J. (2000), "Is Financial Stress an Incentive for the Adoption of Businesslike Planning and Control in Local Government? A Comparative Study of Eight Dutch Municipalities", *Financial Accountability & Management*, Vol. 16 No. 1, pp. 83-100.
- van Helden, G.J. (1998), "A Review of the Policy and Management Instruments Project for Municipalities in the Netherlands", *Financial Accountability & Management*, Vol. 14 No. 2, pp. 85-104.
- van Hengel, H., Budding, T. and Groot, T. (2014), "Loosely Coupled Results Control in Dutch Municipalities", *Financial Accountability & Management*, Vol. 30 No. 1, pp. 49-74.
- van Knippenberg, D. (2000), "Work Motivation and Performance: A Social Identity Perspective", *Applied Psychology*, Vol. 49 No. 3, pp. 357-371.
- van Veen-Dirks, P.M.G. (2006), "Complementary choices and management control: Field research in a flexible production environment", *Management Accounting Research*, Vol. 17 No. 1, pp. 72-105.
- van Veen-Dirks, P.M.G. (2010), "Different uses of performance measures: The evaluation versus reward of production managers", *Accounting, Organizations and Society*, Vol. 35 No. 2, pp. 141-164.

- van Veen-Dirks, P.M.G. (2012), *Management Accounting Informatie: Een Kwestie Van Balans?* Inaugural Lecture - University of Groningen, Groningen.
- Verbeeten, F.H.M. (2008), "Performance management practices in public sector organizations", *Accounting, Auditing and Accountability Journal*, Vol. 21 No. 3, pp. 427-454.
- Vosselman, E. (2012), "Approaching control in interfirm transactional relationships: Contrasting and connecting a transaction cost economics perspective with an actor-network theory perspective.", *Qualitative Research in Accounting & Management*, Vol. 9 No. 1, pp. 4-20.
- Vosselman, E. and van der Meer-Kooistra, J. (2009), "Accounting for control and trust building in interfirm transactional relationships", *Accounting, Organizations and Society*, Vol. 34 No. 2, pp. 267-283.
- Widener, S.K. (2004), "An empirical investigation of the relation between the use of strategic human capital and the design of the management control system", *Accounting, Organizations and Society*, Vol. 29 No. 3-4, pp. 377-399.
- Widener, S.K. (2007), "An empirical analysis of the levers of control framework", *Accounting, Organizations and Society*, Vol. 32 No. 7-8, pp. 757-788.
- Widener, S.K., Shackell, M.B. and Demers, E.D. (2008), "The Juxtaposition of Social Surveillance Controls with Traditional Organizational Design Components", *Contemporary Accounting Research*, Vol. 25 No. 2, pp. 605-638.
- Yin, R.K. (2014), *Case Study Research*, Sage Publications Inc., London.
- Zimmerman, J.L. (2000), *Accounting for Decision Making and Control*, McGraw-Hill, Singapore.