Tightness of Management Control Systems
– Case Studies of the German Insurance Industry

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Table of Contents

List of figures

A. Framework

1. Motivation

In the 1976 cult classic movie "The Twelve Tasks of Asterix", the two Gauls Asterix and Obelix are challenged by Julius Caesar to complete twelve labors in order to secure independence from the Roman Empire for their village. Many of these tasks do not pose a challenge due to their famous magic potion. However, the potion is of no help in completing the eighth task and the two heroes almost fail. The task appears easy enough: getting permit document A 38. However, battling vast amounts of strict, complicated, nonsensical procedures, protocols, and rules, the two Gauls develop an understanding of why this is called "the place that sends you mad". Since then, "permit document A 38" has become a colloquial term used throughout Europe to describe excessive bureaucracy, rules and procedures. Particularly in Germany, a tendency towards excessive rules, procedures and laws prompted The Economist to complain of "permit document A 38" and caution that "*Germany is becoming an expert in defeating itself – Bureaucracy and strategic blunders are starting to pile up*" (The Economist, 17 August 2023). The Cambridge online dictionary defines bureaucracy in a broader sense which is not limited to governments as: (1) "*a system for controlling or managing a country, company, or organization that is operated by officials who are employed to follow rules carefully*"[1]. Particularly in the context of workplaces, the Cambridge online dictionary defines bureaucracy as (2) "*complicated rules, processes, and written work that make it hard to get something done*"[2]. Similarly, since the 1960s, researchers have cautioned that bureaucracy in companies (defined as "*extensive formal procedures*", Adler and Borys, 1996, p. 61) hinder in dealing effectively with innovation, change and environmental complexity (Burns and Stalker, 1961; Thompson, 1965; Bennis, 1966).

Nevertheless, as Flamholtz (1996, p.597) argued: "*Organizations require control because they consist of people with different interests, different tasks, and different perspectives. The efforts of people require integration and direction and this, in turn, creates the need for control.*" Miller similarly emphasized: "*the tension between individual self-interest and group efficiency [creates] [...] a "social dilemma" [which] is the heart of the managerial problem.*" (Miller, 1992, p. 35). Hence, companies must implement control measures to align employee behavior with company goals, because they do not necessarily naturally overlap - be they economic, strategic, environmental, etc. Systems which ensure congruence between the organization and its

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[1] https://dictionary.cambridge.org/dictionary/english/bureaucracy (last access March 20, 2024).
[2] https://dictionary.cambridge.org/dictionary/english/bureaucracy (last access March 20, 2024).

employees in objectives and strategies are called Management Control Systems (MCS) (Strauß and Zechner, 2013, p.245). As Flamholtz (1996) emphasized, the greater the number of people within an organization, the greater the need for Management Control Systems in order to: (1) motivate people to make decisions and take actions that are aligned with organizational goals, (2) integrate different parts of an organization, (3) provide information about the performance of people and the organization, and lastly, (4) facilitate the implementation of strategic plans. Similarly, Brand *et al.* (2023) pointed out that these kinds of routines and controls aide organizations in achieving economic goals, improving processes through standardization, increasing quality, and achieving external acknowledgment. Oates (2015) further added that *"while MCS are designed within the organization, these systems are set up for compliance reasons as well as to enhance organizational performance"*, hence stressing the importance of MCS for complying with laws and regulations, as well as its significance as a signal to external parties.

Even though all organizations face the need to steer employee behavior to meet their objectives, some industries reveal a particularly large need for control. Industries like infrastructure, pharma, and financial services, face a strict regulatory environment that highly constrain their actions. For instance, the regulatory environment of the insurance industry in Germany and Europe, first and foremost aims at protecting consumers (European Insurance and Occupational Pensions Authority (EIOPA) (2023), "Missions and Tasks")[3], and therefore imposes strict regulations on German insurers. Reasons for this are for one, the high economic relevance of insurance (Haiss and Sümegi, 2008). Secondly, the high level of insecurity due to the reversed production process of insurance, which leaves consumers particularly vulnerable. The customer pays his insurance premiums up front, but must trust the insurer to provide its services fairly and honestly years - sometimes even decades – later (Rees *et al.*, 1999). Third, the *"imbalance of power, information and resources"* (Lester, 2009, p.1) is very pronounced in insurance, which creates the need for a stronger protection of consumers as a counterbalance. This overall aim of consumer protection is supported by a vast body of insurance regulation, which was harmonized throughout the European Union with the introduction of the Solvency II regime in 2016 (Pradier and Chneiweiss, 2016). The Solvency II regime consists of three pillars, which holistically regulate the entire value chain of insurance.[4] Pillar 1 governs quantitative requirements with a focus on the calculation and provision of assets necessary to secure long and short-term solvency. Pillar 2, governance and risk management, focuses on the quality of management and governance in order

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[3] European Insurance and Occupational Pensions Authority (EIOPA) (2023), "Missions and Tasks", https://www.eiopa.europa.eu/about/mission-and-tasks_en (last accessed March 20, 2024).
[4] Solvency II regime
 https://www.eiopa.europa.eu/browse/regulation-and-policy/solvency-ii_en (last accessed March 20, 2024).

to prevent companies from short-term strategies and human error. Pillar 3 sets out disclosure and transparency requirements which leads to increasingly comprehensive reporting. These three pillars together tightly regulate all actions of an insurer – from sales, to staffing, production, investment, and reporting. Furthermore, these regulations were implemented under a "comply or explain" dogma, which generally forces insurers to adhere strictly to these laws. Non-compliance with these rules and regulations can lead to severe disciplinary measures, varying from a simple notice or fine, to the worst-case-scenario of a closedown. Hence, insurers must implement strict Management Control Systems not only to encourage their employees to work towards their economic goals, but also to comply with the comprehensive regulation, in order to avoid punishment or closure. Furthermore, non-compliance with regulatory requirements can also affect the insurer's sales negatively. Consumer protection organizations and the public also place a strong focus on insurer compliance. Therefore, non-compliance with regulation might not only lead to punishment by regulatory authorities, but to a loss of reputation as well. Indeed, insurers rely heavily on their reputation to create customer trust, since this is a necessity for customer acquisition and a good customer relationship (Darby and Karni, 1973). Accordingly, insurers must take all necessary steps to protect this reputation (Guénin-Paracini *et al.*, 2014). Overall, implementing Management Control Systems that safeguard the strict implementation of company goals and regulatory requirements, as well as that support a positive company reputation by signaling favorably to external parties, are of the utmost importance to German insurers.

Management Control Systems which consistently and rigorously ensure that organizations meet their objectives are described as tight: "*This can be called the <u>amount of control achieved</u> or the <u>degree of certainty provided</u> by a control system, and it can be described in terms of how tight or loose the system is.*" (Merchant, 1985, p.58). Hence, implementing a tight Management Control System ought to safeguard complete target fulfillment. However, setting the appropriate level of control tightness is one of the most crucial decisions practitioners must take when introducing MCS (Merchant, 1985, p.57; Flamholtz, 1996). For one thing, tighter controls not only lead to a higher likelihood of meeting company objectives, but also increase the internal costs of control. Increasing the quantity or rigidity of controls leads to an increase in human and financial resources devoted to implementing, adhering to, documenting, and revising these controls. Secondly, tight controls directly affect employee behavior (Tannenbaum, 1968, p. 240). As Merchant and Van der Stede (2017, pp.174-178) caution, excessively tight controls can lead to "indirect costs", caused by dysfunctional behavior, like behavioral displacement (i.e. the control does not lead to the desired actions), gamesmanship (i.e. improving performance indicators without improving performance), operating delays, and negative attitudes.

Hence, implementing controls that are too tight might result in employee behavior which impairs company objectives, instead of supporting them. Third, very tight controls might lead to bureaucracy as described above, which hinders companies in terms of innovation, change and dealing with environmental complexity (Thompson, 1965; Bennis, 1966; Burns and Stalker, 1966; Adler and Borys, 1996). Consequently, practitioners must strike a delicate balance between tight controls to ascertain company objectives, compliance with regulations, and retaining a good reputation on the one hand, and looser controls to decrease costs, avoid dysfunctional employee behavior, and deal effectively with change and innovation on the other hand.

Hence, given the importance of tight controls and the negative side-effects of too tight controls, the overarching research question of this dissertation is:

What constitutes tightness of management control (systems) and what role does regulation play?

In order to answer this question, this dissertation is divided into three papers. The first paper aims to answer the first sub-question:

Q1: What constitutes individual tight management controls?

As described above, Merchant and Van der Stede (2017) define this term without a negative connotation, and stress its importance as the main success factor for the efficacy of MCS. Even though other researchers use the terms tightness and looseness as well, the only detailed and operationalized definition goes back to Van der Stede (2001). Limited to tight budgetary controls, Van der Stede (2001, p.121) lists five characteristics of control tightness: (1) emphasis on meeting the budget should be high, (2) allowance for budget revisions during the year should be low (for which he finds little empirical support), (3) amount of budgetary control detail should be high, (4) tolerance for interim budget deviations should be low, and lastly, (5) intensity of budget-related communication should be high. However, as these characteristics are limited to only one type of control, Van der Stede (2001) calls for further research to define and operationalize control tightness, which is the aim of Paper 1

Since Management Control Systems do not consist of a single control but a multitude, defining tightness of control at the level of individual controls can only be the first step in gaining a deeper insight into control tightness. Hence, Paper 2 of this dissertation aims to answer the second research sub-question:

Q2: How is control tightness affected by the interaction of individual tight management controls?

Merchant (1985, p. 57) stated: "*It is apparent in the collection of practitioner-oriented articles that mention control systems tightness that tight control can be accomplished by using any, or at least most, of the types of controls, alone or in combination with other types of controls.*" When trying to define control tightness, it is therefore necessary to gain deeper insight into how multiple controls interact with each other and how this affects tightness. This also touches on another string of MCS research, where MCS are defined either as a system (a willfully constructed and coordinated structure), or a package (a less structured and sometimes overlapping or inconsistent arrangement of various management controls) (Bedford and Malmi, 2008). Here, too, researchers call for more research that focuses on the interaction between multiple controls (Malmi and Brown, 2008).

Lastly, given the importance of the regulatory environment in implementing tight Management Control Systems, the third paper aims to answer the third research sub-question:

Q3: When, and which dynamics lead to stricter and/or more regulation and how does this correlate with higher control tightness?

As described above, tightness of Management Control Systems is not only implemented to ensure economic goals, but also compliance with regulatory requirements, and to retain or enhance the organization's reputation. Both of these factors play a significant role for German insurers due to the nature of the business (Darby and Karni, 1973; Walsh *et al.* 2009; Raithel and Schwaiger 2015; Burke *et al.* 2018;). In general, regulation imposes costly restrictions on firm behavior, which usually leads firms to attempt to avoid the direct and indirect costs of regulatory activities, e.g. fees, taxes and behavioral restrictions (Darby and Karni, 1973; Gino *et al.*, 2013). However, quite to the contrary, the German insurance industry reveals some cases where insurers actively called for more regulation in order to protect the reputation of the industry as a whole – almost using regulation as a management control in itself. As these increases in regulatory intensity in turn directly affect control tightness, it is important to understand in which cases, why and how a dynamic develops that leads German insurers to demand stricter regulation.

The overall aim of this dissertation is to broaden our understanding of control tightness in various aspects, by studying cases from the German insurance industry, as an environment which forces companies to implement tight Management Control Systems. Starting with an overview of current literature (see 2. Research Background), the dissertation aims to answer this question using case study methods (see 3. Research Method) in three papers (see chapters B, C, and D). First, the dissertation addresses Question 1 regarding how to define the tightness of individual management controls (Paper 1, chapter B) by testing the applicability of Van der

Stede's (2001) definition for different types of management controls – including a re-test for tight budgetary controls. Paper 1 also identifies other characteristics which describe tight controls. Second, this dissertation addresses Question 2 and thus provides deeper insight into how individual controls interact with each other, as a system or as a package, and how this interaction affects the overall tightness of the Management Control System (Paper 2, chapter C). To this end, I conducted a case study in the German insurance industry, providing a common database for Paper 1 and Paper 2. Applying the definition from Van der Stede (2001), the interviews I conducted provided insight into how the phenomenon of control tightness presented itself in a real-life setting, and how tightness was perceived by practitioners. This real-life setting also enhances our understanding of the positive effects control tightness can have, and elements that led to a very positive perception of control tightness. These observations provide practitioners with valuable insights and starting points for their own MCS design. Lastly, this dissertation further addresses Question 3 and demonstrates the interplay between tight controls and regulatory intensity, by providing insight into why, in some cases, German insurers actively called for more regulation, which in turn led to tighter controls (Paper 3, chapter D). This dissertation focuses on a real-life case in the German insurance industry. By combining economic and sociological theories, Paper 3 explains why German insurance companies demanded regulation to limit dysfunctional behavior, why these changes in regulation can be described as part of reputational risk management, and why firms choose regulation instead of implementing less costly internal controls. Overall, this dissertation contributes to a deeper and well-rounded understanding of control tightness at the level of individual controls (Paper 1), groups of controls (Paper 2), and in terms of their interaction with the regulatory environment (Paper 3).

2.   Research Background

Particularly Papers 1 and 2 rely heavily on MCS research. Research on Management Control Systems dates back to Anthony (1965) who first coined the term. Given the predominance of manufacturing industries at the time, his first definition of MCS focused on the efficient distribution of physical resources so as to ensure company objectives. Since then, the economic environment has developed towards a predominance of service-focused industries, and our understanding of MCS has shifted accordingly to focus more on behavioral aspects of MCS (Hared *et al.*, 2013; Strauß and Zechner, 2013; Hanzlick, 2015; Oates, 2015). Today, MCS researchers emphasize that organizations must introduce control systems to steer employee behavior so that it aligns with company goals, as they do not align naturally (e.g. Flamholtz, 1996; Strauß and Zechner, 2013). For example, Miller (1992, p. 35) called this the "*social dilemma [… which] is*

the heart of the managerial problem". Hence, the currently prevailing definition of Management Control Systems defines them as systems which ensure an alignment of employee behavior with company objectives (Strauß and Zechner, 2013, p. 245).

One of the most dominant MCS conceptualizations, which is the basis of Papers 1 and 2, is the MCS framework of Merchant and Van der Stede (2017), as depicted in Figure 1. They emphasized: "*The primary <u>function</u> of management control is to influence behaviors in desirable ways.*" (Merchant and Van der Stede, 2017, p. 8), and defined four distinct types of Management Controls: 1. results controls, 2. action controls, 3. personnel controls, and lastly 4. cultural controls. 1. Results controls "*influence actions or decisions because they cause employees to be concerned about the <u>consequences</u> of their actions or decisions*" (Merchant and Van der Stede, 2017, p. 34) and focus on measurable results, like budgets, sales targets, etc. to influence employee behavior (often with pay-for-performance schemes). 2. Action controls "*ensure that employees act in the organization's best interest by making their actions themselves the focus of control*" (Merchant and Van der Stede, 2017, p. 86). They consist of behavioral constraints (which hinder employees physically and/or administratively from engaging in undesired actions), preaction reviews (scrutiny of proposed actions prior to the action), action accountability (holding employees accountable through work rules, policies, and procedures), and redundancy (providing backup employees, equipment, etc.). 3. Personnel controls "*build on employee's natural tendencies to control or motivate themselves*" (Merchant and Van der Stede, 2017, p. 95), and are divided into selection and placement, training, job design, and the provision of necessary resources. Lastly, 4. cultural controls "*are designed to encourage mutual monitoring*" to influence employee behavior favorably (Merchant and Van der Stede, 2017, p. 97). They consist of codes of conduct, group rewards, and other management controls (e.g. tone at the top, intra-organizational transfers, employee rotation, physical arrangements) (Merchant and Van der Stede, 2017, p. 97).

Figure 1 depicts the framework from Merchant and Van der Stede (2017). Furthermore, the figure demonstrates the focus of Paper 1 on one example of each type of Management Control defined by Merchant and Van der Stede (2017), i.e. budgetary controls as a form of results controls, behavioral constraints as a form of action controls, personnel selection and placement as an example of personnel controls, and lastly, codes of conducts as a type of cultural control – all highlighted in grey. Furthermore, highlighted with black frames, Figure 1 shows the focus of Paper 2 on all types of action controls as defined by Merchant and Van der Stede (2017): behavioral constraints, preaction reviews, action accountability, and redundancy.

Figure 1: Management Control Systems framework from Merchant and Van der Stede (2017)
Highlighted in grey: Focus areas of Paper 1
Highlighted in black frame: Focus areas of Paper 2

As described above, many researchers have emphasized that Management Control Systems can be implemented tightly or loosely (e.g. Anthony, 1965; Flamholtz, 1996), although these researchers did warn of implementing tight controls or fear of bureaucracy. For example, Flamholtz (1996, p. 597) cautions that *"(…) control systems must be designed with care in order to achieve the optimal degree of control; one which is neither too loose (which may lead to chaos), or too tight (which may lead to stifling bureaucracy)"*. However, neither Flamholtz (1996) nor other researchers provided a detailed definition of tightness, but rather left the term open to interpretation and the readers instinct. Merchant (1985, p. 58), as well as later, Merchant and Van der Stede (2017, p. 128), consistently defined tight controls as less precarious, as a characteristic of a MCS which guarantees a high level of control, and or increases the likelihood of achieving organizational objectives: "*This benefit can be described in terms of MCS tightness (or looseness). Tighter MCSs should provide greater assurance that employees will act in the organization's best interest.*" (Merchant and Van der Stede, 2017, p. 128). Nevertheless, Merchant and Van der Stede (2017) did not offer a more detailed definition or operationalization of control tightness, and research on control tightness remains limited today. An overview by Bedford and Speklé (2018) yields only two articles on tight control (Chow *et al.*, 1996; Bedford and Malmi, 2015). Similar to Flamholtz (1996), both used rather vague and interpretable definitions of control tightness. Chow *et al.* (1996, p. 349) referred to tightness of control as "*the amount of internal structuring in the organization*"; whereas Bedford and Malmi (2015, p. 7) defined control tightness as "*Individual accountability for meeting pre-established performance targets (Merchant, 1985; Van der Stede, 2001)*". However, these definitions are only of limited

value to practitioners, as they leave room for subjective interpretation and do not offer objective pointers for the implementation of effective MCS with the optimal level of tightness. The most detailed definition of control tightness is limited to tight budgetary controls (Van der Stede, 2001) and listed five attributes:

(1) emphasis on meeting the budget should be high

(2) allowance for budget revisions during the year should be low (for which Van der Stede found little empirical evidence)

(3) amount of budgetary control detail should be high

(4) tolerance for interim budget deviations should be low

(5) intensity of budget-related communication should be high (Van der Stede, 2001, p. 121).

This definition by Van der Stede (2001) was also used and reproduced by Conboy (2010), Johansson and Siverbo (2014), and partly by Ylinen and Gullkvist (2014). Nevertheless, the definition remains limited only to budgetary controls, and does not provide insight as to whether these attributes could also be used to describe other types of tight controls. Furthermore, it does not address the issue that control tightness might be increased by the interplay of multiple controls (Merchant, 1985, p. 57). Hence, current MCS research neither offers detailed definitions of control tightness for other types of controls, nor does it offer insight into how controls tightness is affected by their interaction. Accordingly, Van der Stede called for more research on control tightness: "*In sum, the concept of tight control is not exactly a clear picture in terms of its definition, its scope, and its operationalization*", an issue this dissertation aims to address at the level of individual types of management controls (Paper 1), and in the interplay of various management controls (Paper 2).

Particularly the second main question, how control tightness is affected by the interplay of multiple controls (Paper 2), touches on another important MCS research stream. The discussion of whether MCS in practice constitute a system (where controls were "*designed and coordinated intentionally*", Malmi and Brown, 2008, p. 291), or a package (a non-cohesive picture, where "*different systems are often introduced by different interest groups at different times*", Malmi and Brown, 2008, p. 291), has been an important debate (Otley, 1980; Chenhall, 2003; Bedford and Malmi, 2015). This was again emphasized by Ahrens (2018), who found that some controls could anchor others and hence create a prioritization among controls. As Malmi and Brown (2008, p. 288) pointed out: "*Gaining a broader understanding of MCS as a package may facilitate the development of a better theory of how to design a range of controls to support organizational objectives, control activities, and drive organizational performance.*" (Malmi

and Brown, 2008, p. 288). Accordingly, they called for more research on the interaction of multiple controls in order to offer practitioners a deeper understanding which could act as a reference point for implementing effective MCS.

For Paper 2, this dissertation focuses on action controls to address another research gap as well. Both MCS research in general, as well as research focused on MCS as a system vs. a package, call for more research on action controls. The discipline of general MCS research contains comparatively little research on action controls, particularly compared, for example, to results controls. Feichter and Grabner (2020) suggest that this might be due to limited abilities to study action controls in detail and the difficulty of deducting general conclusions. However, recent research has shown increased interest in action controls – not least due to the Covid 19 pandemic and the renewed importance of action controls for practitioners (Delfino and Van der Kolk, 2021; Flassak *et al.*, 2022). Similarly, researchers in the discipline of MCS as a system vs. a package call for more research on action controls and their interactions as well: "*While much management accounting research has studied accounting-based controls and this is typically focused on formal systems, there is still limited understanding of the impact of other types of control (such as administrative or cultural) and whether/how they complement or substitute for each other in different contexts.*" (Malmi and Brown, 2008, p. 288). Hence, this dissertation, particularly in Paper 2, adds to the literature on action controls and provides detailed insight into their implementation in a real-life case.

Whereas Papers 1 and 2 are based on traditional MCS research and consider tight MCS frameworks and their settings in depths, Paper 3 focuses on the signaling effect of tight MCS on the external public. Focusing on cases where insurers have encountered substantial public scrutiny in the form of reputational scandals, Paper 3 addresses the greater question of how tightness of control is affected by increasing regulation, through the analysis of the dynamics in these cases which led to stricter and/or more regulation. To this effect, Paper 3 is based on a broader strand of research.

In order to focus on the importance of MCS as an external signal to the general public, Paper 3 is based largely on reputation research. A substantial stream of research demonstrates the positive effects of good reputation on customers in generating purchase intention (Yoon *et al.*,1993), reducing price-sensitivity, and increasing willingness to pay (Graham and Bansal, 2007; Walsh *et al.*, 2009; Raithel and Schwaiger, 2015; Burke *et al.*, 2018), as well as to attract investors (Milgrom and Roberts, 1986). Researchers agree that a good corporate reputation can function as a strategic asset that sets a company apart from its competitors. This assessment of reputation as an asset is further emphasized by Belva (2005), who demonstrated the significant

financial consequences of reputational risks. In addition, Fombrun and Van Riel (2004) established that the financial impact of reputational damages can be mitigated by how organizations manage reputational risks during a crisis.

As described above, a good reputation plays a particularly significant role in insurance, due to its nature as a credence good (Darby and Karni, 1973) and the pronounced information asymmetry. This is also emphasized by the fact that the Solvency II regime addresses reputational risks as a separate risk category to be managed by insurers (Gatzert and Kolb, 2013). For one thing, in insurance, reputational scandals of one insurer have considerable potential to spill over to the industry as a whole (Nienaber *et al.*, 2014), which makes the management of reputational risks at each insurer an important issue for the insurance industry as a whole. Second, even though reputation plays an important economic role, it is difficult to incorporate it into traditional aspects of MCS (Merchant and Van der Stede, 2017), and hence difficult to control tightly. Third, a good reputation is particularly at risk of being sacrificed for the sake of short-term goals (Mizik and Jacobson, 2007), making it an organizational Archilles heel, particularly for insurers. Overall, even though reputation plays a significant role for insurers, it is very vulnerable and very difficult to control through traditional Management Control Systems.

Furthermore, Paper 3 focuses on the relationship between MCS and regulatory environments. However, until today, there remains only limited research on the role external regulation plays within a firm's MCS system or package (Grabner and Moers 2013, p. 408). This might be due to the view of traditional political economy, going as far back as Pigou (1938), with respect to regulation: as an externally inflicted measure to mitigate conflicts between corporate insiders and outsiders. For example, whereas Power (2002) emphasized the decreasing role played by external regulation compared to internal controls, Modell (2012), as well as Ahrens and Khalifa (2015), pointed out that external regulation only acts as a trigger for the development of internal control systems. However, new approaches view regulation as an instrument in itself. For example, Stigler (1971) found that relatively small economic groups, e.g., industries, benefited from actively seeking regulation which restricted their activities, while Hail *et al.* (2018) emphasized the role regulatory self-interest can play. As described above, insurers already face a very tight regulatory regime imposing restrictive internal structures (Liedtke, 2011), and practitioners caution that reputational scandals could lead to an even tighter regulation for the industry, making internal organization costlier still (Forstmoser and Herger, 2006; Schanz, 2006; Zboron, 2006; Nienaber *et al.*, 2014). Overall, the aim of this dissertation is also to enable a deeper understanding of the role regulation plays for control tightness, particularly in situations of reputational scandals where insurers heavily rely on the signaling effect of tight MCS.

3.   Research Method

As described above, the aim of this dissertation is to provide a deeper and broader understanding of control tightness. Even though research in this field is limited, all researchers agree that MCS can be implemented either tightly or loosely, not least due to practitioner accounts (Merchant, 1985, p. 57). Hence, in order to gain a better understanding of this real-life phenomenon, it is necessary to study this phenomenon in its real-life setting. Qualitative research design allows researchers to study "*behaviour, values, beliefs, and so on in terms of the context in which the research is conducted*" (Bryman and Bell, 2011, p. 411). Hence, for various reasons, I have chosen to conduct this dissertation and all three papers it consists of, as qualitative research. First, even though the definition of control tightness from Van der Stede (2001), which is the theoretical basis for Papers 1 and 2, was deducted from an empirical study, I have chosen not to follow the same path, as this has been done previously by Conboy (2010), Johansson and Siverbo (2014), and, in a broader sense, by Ylinen and Gullkvist (2014). Hence an empirical re-testing would not yield any new insights for Papers 1 or 2. Second, all three papers touch on very delicate and emotional issues that might yield highly biased answers in a survey. Lastly and most importantly, an empirical study does not offer sufficient flexibility and openness to gain a deeper understanding of the social phenomenon of tightness of control, how it presents itself, what attitudes employees develop around it, what factors influence it positively or negatively, or how and which mechanisms develop that lead to higher tightness and stricter regulation. Qualitative research, on the other hand, leaves room for serendipitous new discoveries (Akerström, 2013) which allows researchers to identify new insights and provides practitioners with useful aid. This approach is also in line with Drnevich *et al.*'s (2020) criticism of current strategic management research: "*Strategic management research has strayed from its primary focus on efficient and effective management practice. We suggest a re-focusing of strategic management research, based on the logic of discovery of real-world phenomena and strategic problems, with the goals of better enabling scholars to refine existing and develop new management theories.*" (Drnevich *et al.*, 2020, p. 35).

All three papers were conducted as case studies, which as Yin (2018) explained present "*an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between the phenomenon and context may not be clearly evident*" (Yin, 2018, p. 14). Case studies not only enable researchers to gain deeper insight into the studied phenomenon and its multiple facets (Baxter and Jack, 2008; Rashid *et al.*, 2019), but, as Eisenhardt (1989; similarly Patton and Applebaum, 2003; Blatter and Haverland, 2012) stressed, are a useful method for testing existing, or developing new theory,

due to their iterative and data-based approaches. "*This research approach is especially appropri-ate in new topic areas. The resultant theory is often novel, testable, and empirically valid.*" (Ei-senhardt, 1989, p. 532). Simarly, Malmi and Brown (2008) specifically call for more case study research within the field of MCS research: "*With more refined conceptual and analytical ap-proaches, case studies could be conducted in a range of theoretically different contexts, and this could provide inductively developed theory as a basis for larger cross-sectional studies. [...] However, it may be necessary to use interviews to collect large datasets, rather than question-naire surveys, in order to guarantee data quality.*" (Malmi and Brown, 2008, p. 298).

As Mishra (2021), referring to Yin (2018), pointed out, in order to yield results, it is im-portant to choose a critical and fundamental case that enables the researcher to study the phenom-enon in question. Hence, for the case studies of this dissertation and all three papers it comprises, I have chosen to study cases in the German insurance industry. As described above, the regulatory environment requires German insurers to implement very tight controls to comply with all laws and regulations, achieve their economic goals, and project the desired reputation to the public. Therefore, it is assumed that German insurers have all implemented tight MCS and are ideal research settings for studying control tightness. However, if case studies aim to provide insights beyond the studied case itself, and offer broader insight into the phenomena, the chosen case should be commonplace enough to "*capture the circumstances and conditions of an everyday situation*" (Yin, 2018, p. 51). Therefore, we have chosen an average German insurer to conduct our cases. As Yin (2018) points out, the choice of a commonplace case also addresses the main criticism of case study research, namely generalizability beyond the studied case.

Both Papers 1 and 2 are based on a common database that was developed through 15 semi-structured, problem-centered interviews that offered structure, but also the freedom to yield findings beyond preconceived expectations (Atkinson and Silverman, 1997; Miller *et al.*, 1997; Rowley, 2012; Ruslin *et al.*, 2022). The questionnaires were developed from Van der Stede's (2001) definition of tight budgetary controls (Bryman and Bell, 2011; Patton, 2015; Misoch, 2019). Interviewees were sampled by convenience to ensure trust and familiarity with the interviewer (see for example Galloway, 2005; Baxter *et al.*, 2015), and only given rudimen-tary information to minimize bias (Albert *et al.*, 2010). All interviews were later transcribed and anonymized to ensure confidentiality, resulting in 240 pages of transcripts.

To analyze these transcripts, I used the hybrid approach of Fereday and Muir-Cochrane (2006) (see similarly Swain, 2018; Roberts *et al.*, 2019), as a sub-method of thematic analysis (Boyatzis, 1998; Braun and Clarke, 2006). This approach was chosen as it provides the oppor-tunity to do both: first, to test existing theory and second, to identify and address new aspects

in order to develop new theory. To achieve this goal, this hybrid method from Fereday and Muir-Cochrane (2006) combines steps with deductive coding (applying a priori theoretical propositions), and inductive coding (a posteriori findings in the field) to the transcripts. The last stages of the process emphasize an iterative process of connecting all codes to produce themes and corroborate findings (see also Crabtree and Miller, 1999). For Paper 1, this approach enabled the author to answer the research questions as to whether Van der Stede's (2001) current definition is still applicable to budgetary controls, and if it can be used to describe other types of tight controls, through testing existing theory (in this case Van der Stede's (2001) five attributes) on results controls, action controls, personnel controls, and cultural controls. Simultaneously, it facilitated the identification of new attributes and aspects, which answered this Paper 1's third research question, namely whether there are other attributes that can describe control tightness. For Paper 2, Fereday and Muir-Cochrane's (2006) hybrid method enabled us to answer this paper's first research question by testing if the studied case had indeed implemented tight action controls, through testing Van der Stede's (2001) identified attributes on all types of action controls (behavioral constraints, preaction reviews, action accountability and redundancy). At the same time, it provided deeper insight into how these tight controls interacted as a package or a system, and how this affects overall tightness, hence answering this paper's second research question.

However, due to the nature of this dissertation's last research question, how tightness of control and regulation interact, the approach used for Papers 1 and 2, which focuses only on interviews and their analysis, would not have been sufficient to answer this research question. For a start, the nature of the question per se requires a deeper look at a real-life reputational scandal, which has led to changes in the regulatory environment. This prerequisite, together with the highly sensitive nature of reputational topics, severely limits the number of possible interviewees, leading to a limited database. Secondly, to understand the complex interplay of reputational scandals, industry behavior, regulation and tightness, interviews can be a useful source, but should be enriched by various other resources. Hence, for Paper 3, we chose a case study of a reputational scandal, the MEG scandal, which peaked in 2012, and resulted in considerable changes to existing regulation, and the introduction of additional insurance regulation in Germany. This case was well documented by the German media and even the focus of two documentary films. To identify and understand the mechanisms that developed during this case, we chose the method of causal process tracing (short: CPT), which Blatter and Haverland (2014, p. 60) described as a "*within-case method of analysis that concentrates on the processes and/or mechanisms that link the causes and the effects within specific cases.*" CPT is particularly useful for developing a better

understanding of social mechanisms and understanding how multiple factors interact to cause certain effects (Blatter and Haverland, 2012), or as Collier (2011, p. 824) described it: "*a tool for drawing descriptive and causal inferences from diagnostic pieces of evidence – often understood as part of a temporal sequence of events or phenomena.*" Hence, CPT was used for Paper 3 to help us develop an understanding of how and why a reputational scandal like MEG has led to insurers themselves asking for stricter insurance regulation. Beach and Pederson (2013, p. 11) named three types of CPT methods: theory-testing process-tracing, theory-building process-tracing and explaining outcome process tracing. As "*we know both X and Y and we either have existing conjectures about a plausible mechanism or are able to use logical reasoning to formulate a causal mechanism from existing theory*" (Beach and Pederson, 2013, p. 14), we chose the method of theory-testing process tracing. The aim of Paper 3 is to specify theories and variables that can best explain causality between the witnessed phenomena (Kay and Baker, 2015), in this case the reputational scandal and the insurers' call for more regulation. To this end, Paper 3 first describes in detail the MEG scandal and its development, based on the broad media coverage of this case. In the second step, we draw theories from the field of economics, sociology, and organizational learning to understand why the MEG scandal developed the way it did, and which factors led to a stricter regulation.

Overall, the qualitative research design of this dissertation is based on case studies in all three Papers. Hence, the most prominent limitation of this dissertation lies in the generalizability of its findings beyond the studies cases. However, the findings not only act as valuable starting points for future research to broaden and re-test the findings, but also offer valuable insights to practitioners, as: "*Such a research approach both develops new theoretical contributions and bridges the theory-practice gap by addressing real-world problems (and thereby creating economic value).*" (Drnevich *et al.*, 2020, p. 35).

4.   Overview of Papers

As described above, this dissertation consists of three original standalone papers that each answer a specific research question and offers its own contribution. Nevertheless, all three papers aim at holistically deepening our understanding of management control tightness by focusing on different aspects of this phenomenon. Whereas Paper 1 focuses on tightness of individual management controls, Paper 2 aims at highlighting control tightness when multiple management controls are implemented at the same time. Lastly, Paper 3 focuses on the relationship between internal controls and regulation, hence providing insight into overriding mechanisms that influence internal control tightness.

These papers are as follows:

Paper 1: A tight leash or a tight spot? A case study of tightness of management controls in the German insurance industry

Paper 2: Lights, Camera, Action! Tightness of action controls and their interaction as a package or system

Paper 3: How regulatory changes are driven by a need for control in reputational scandals: A case study in the German insurance industry

Figure 2 provides an overview of each paper, its research question, the research method used and highlights its specific contribution.

	Paper 1	**Paper 2**	**Paper 3**
Title	A tight leash or a tight spot? A case study of tightness of management controls in the German insurance industry	Lights, Camera, Action! Tightness of action controls and their interaction as a package or system	How regulatory changes are driven by a need for control in reputational scandals: A case study in the German insurance industry
Authors	Amra Tica Barbara E. Weißenberger	Amra Tica Barbara E. Weißenberger	Amra Tica Barbara E. Weißenberger
Research Method and Data Base	• Case Study • 15 self-conducted semi-structured, problem-centered interviews (common database for Paper 1 and Paper 2) • Thematic analysis (hybrid approach of deductive and inductive coding by Fereday and Muir-Cochrane, 2006)	• Case Study • 15 self-conducted semi-structured, problem-centered interviews (common database for Paper 1 and Paper 2) • Thematic analysis (hybrid approach of deductive and inductive coding by Fereday and Muir-Cochrane, 2006)	• Case Study • Causal Process Tracing, (CPT, Blatter and Haverland, 2014) • Use of extensive media-coverage, as well as three self-conducted problem-centered interviews with industry leaders
Research Focus	Individual management controls	Systems or packages of multiple management controls	Relationship between regulation and internal controls
Research Questions	• Can Van der Stede's (2001) definition still be used to describe tight budgetary controls? • Can Van der Stede's (2001) definition be used to describe tight action controls, personnel controls, and cultural controls? • What other attributes can be used to describe control tightness?	• Are the implemented action controls tight? • Do these action controls interact as a system or a package? • How does the interaction of multiple action controls affect overall control tightness?	• Are regulatory activities used as a costly, external behavioral control mechanism (third-loop learning) to terminate a reputational scandal that cannot be stopped by internal controls at a firm level (first-loop and second-loop learning) anymore? • And if so, how?

	Paper 1	Paper 2	Paper 3
Contribution	• Provides an unprecedentedly comprehensive view of the overall MCS of a company, including in-depth analysis of each type of management control. • Offers a deeper understanding of tightness of individual management controls rooted in a real-life setting. • Explores additional aspects which describe control tightness.	• Presents an unprecedentedly comprehensive study of all types of action controls and their interaction as a system or package. • Adds to a more comprehensive understanding of tightness of control and how tightness is affected by the interaction and design of multiple action controls. • Identifies crucial factors which lead to positive perceptions of a tight management control system by employees.	• Emphasizes the link between regulation and MCS. • Presents a direct causal link between corporate scandals, loss of reputation and regulatory changes within the insurance industry. • Highlights the importance of a tight and effective MCS to prevent a further tightening through regulatory requirements. • Combines economic theories with organizational theories to understand real-life phenomena.
State of Publication	Submitted to *Management Accounting Research*	Submitted to *Accounting, Associations and Society*	Published in: *Journal of Accounting and Organizational Change*, Vol. 18, No. 1, 2022, pp. 57-76.

Figure 2: Overview of Research Papers

4.1 PAPER 1:
A tight leash or a tight spot? A case study of tightness of management controls in the German insurance industry

As described above, the first paper of this dissertation focuses on gathering greater insight into control tightness at the level of individual management controls. Even though researchers agree that such measures can be implemented tightly or loosely, and that both extremes demonstrate considerable advantages and disadvantages for the organization and its employees, MCS research provides limited insight into what actually makes management controls tight (Flamholtz, 1996). Hence, this dissertation commences by defining control tightness of individual management controls. Using the most detailed definition of control tightness from Van der Stede (2001), Paper 1 re-tests whether this definition still stands valid for budgetary controls today, and whether it can be used to describe other types of controls as well, like action controls, personnel controls, and cultural controls. Furthermore, this paper explores whether there are other characteristics which can describe management control tightness.

Adopting a qualitative research design, this paper uses a case study set in the German insurance industry. This case draws on 15 semi-structured interviews, conducted at an average German insurer. Using a hybrid approach of thematical analysis by Fereday and Muir-Cochrane

(2006) (see also Swain, 2018; and Roberts *et al*., 2019), encompassing inductive and deductive coding, the interviews are analyzed to test theory (Van der Stede's, 2001 attributes) on results controls, action controls, personnel controls, and cultural controls (Merchant and Van der Stede, 2017), and to develop theory (identifying new characteristics of tight controls).

This paper finds that Van der Stede's (2001) attributes of tight budgetary control could not be used to describe tight budgetary controls in this case, even though employees attested to their tightness. However, the paper reveals that three of Van der Stede's (2001) identified attributes can be used to describe tightness of action controls, personnel controls, and cultural controls: 1. a high emphasis on meeting the goal, 2. a low tolerance for deviation, and 3. communication (however, in an altered and more complex sense than Van der Stede (2001) described). Furthermore, this paper also suggests four additional attributes that could broaden our current definition of control tightness: lack of transparency, lack of plausibility, lack of fit, and competing controls. Moreover, this paper offers valuable insights to both researchers and practitioners. The first paper of this dissertation offers helpful observations from a real-life setting into how control tightness is perceived by employees, and which factors are necessary for employees to perceive tightness without negative emotions, hence enabling practitioners to increase the certainty of achieving their company objectives by implementing tight controls, without resulting in dysfunctional employee behavior.

This first paper of the dissertation contributes to MCS research by first providing an unprecedentedly comprehensive view of the overall management control system of a company, including an in-depth analysis of each type of management control. Second, the paper contributes to MCS research by offering a deeper understanding of tightness of individual management controls based on a real-life setting, and thirdly, by developing suggestions on how to define this term for different types of controls.

4.2   PAPER 2:
Lights, Camera, Action! Tightness of action controls and their interaction as a package or system

Paper 2 continues with this dissertation's aim of gaining deeper insight into tightness of control. After focusing on tightness of individual controls in Paper 1, the second Paper broadens our understanding of tightness of management controls by focusing on effects of the interaction of multiple controls on tightness. Control tightness cannot only be achieved through individual controls, but also through their interaction as a package or system. Using the example of action controls, Paper 2 aims first to assess the tightness of individual controls, and in a second step,

to analyze how these tight action controls interact and how this interaction affects overall control tightness, hence broadening our understanding of tightness.

Paper 2 is also based on a case study from the German insurance industry, which, due to the strict regulatory environment, has to implement tight management control systems to meet their economic objectives and ensure compliance with this extensive regulation. The author conducted 15 semi-structured interviews at an average German insurer, which form the basis for this case study. Using a hybrid approach of thematical analysis which draws on deductive and inductive coding, the interviews are analyzed to test whether the individual controls can be defined as tight, using Van der Stede's (2001) attributes of budgetary control tightness, and to consider how these controls interact with each other, using theories from the MCS as a system or package literature (e.g. Malmi and Brown, 2008).

The second paper of this dissertation finds firstly that the action control of redundancy did not play a role at the insurer in this case study. Second, Van der Stede's (2001) attributes of tight budgetary control could be used to define tight behavioral constraints, preaction reviews, and action accountability – except for the attribute of high communication intensity, which interviewees found to be unnecessary for these management controls (reiterating the finding of the first paper of this dissertation). Third, Paper 3 finds that these tight individual controls acted as a cohesive management control system, increasing the certainty of meeting company objectives, but severely restricting employee behavior and hence, increasing overall control tightness. Lastly, this paper finds that in this case study, these tight controls were generally perceived positively by the insurer's employees.

The second paper of this dissertation aims to develop a better understanding of control tightness by observations from a real-life case. For a start, Paper 2 offers some insight into how control tightness manifests itself in action controls and which factors influence this tightness. Second, this paper also emphasizes the role that the MCS design, as a cohesive system or a package, plays in the overall tightness of controls and their emotional perception by employees. Overall, this paper offers valuable insights for MCS researchers and practitioners alike.

This second part of the dissertation firstly contributes with a particularly comprehensive study of all types of action controls and their interaction, adding to the MCS literature and to the discussion of MCS packages vs. systems. Second, based on a real-life setting, this paper develops a comprehensive understanding of tightness of control and how tightness is affected by the interaction and design of multiple action controls. Lastly, this paper contributes by identifying crucial factors which lead to positive perceptions of a tight management control system by employees.

4.3   PAPER 3:
How regulatory changes are driven by a need for control in reputational scandals: A case study in the German insurance industry

The last part of this dissertation adopts are more overarching perspective by emphasizing the relationship between regulation and control tightness, hence broadening our understanding of control tightness at a higher level. Paper 3 focuses on the signaling effect of tight MCS to external parties, particularly in a situation where the companies are at risk of losing reputation. To this end, Paper 3 contributes to our understanding of the mechanisms that evolve during reputational scandals and lead to changes in industry regulation. It explores the processes by which a demand for external industry regulation evolves, also addressing the consequences of firms' competitive behaviors which lead to substantial misbehavior and the destruction of reputational capital. Furthermore, this paper also addresses whether and how regulatory activities – in the case analyzed here, changes in insurance regulation regarding sales commissions for insurance brokers – are used as a costly, external behavioral control mechanism (third-loop learning) to terminate a reputational scandal that cannot be stopped by internal controls at the firm level (first-loop and second-loop learning) anymore.

The third Paper of this dissertation explores a real-life case in the German insurance industry that peaked in 2012 and has been well documented by broad media coverage, complemented by interviews with leading industry representatives. Using causal process-tracing, this paper studies the factors in the case that led to an industry level scandal, and why the insurance firms involved were not able to limit the scandal's impact by internally controlling their behaviors, but had to call for external regulation. To identify the mechanisms underlying this result, theories from the fields of economics (game theory) and sociology (vicious cycle of bureaucracies), as well as organizational learning theory, are employed.

Paper 3 reveals that individual rationality does not suffice to prevent insurance firms from scandalous business practices, e.g., via implementing appropriate internal behavioral control measures within their organizations. If, as a result, misbehavior leads to reputational scandals, and the destruction of reputational capital spills over to the whole industry, a vicious cycle is set in motion which can only be terminated by regulation as an externally enforced control mechanism, hence increasing the overall tightness of the insurance industry. This part of the dissertation also shows that if firms want to avoid increasing regulation, they must implement strong reputational risk management to counteract short-term profit pressure and to avoid restrictive regulation being imposed on the industry as a whole. Furthermore, it sheds light on the relevance of spillover effects for reputational risk management, as not only employee behavior

within an organization might lead to the destruction of reputational capital, but also that from other firms, e.g., from elsewhere within an industry.

The third part of this dissertation contributes to our understanding of tightness of control by emphasizing the link between regulation and the management controls implemented at insurers. This paper demonstrates a direct causal link between corporate scandals, loss of reputation and regulatory change within the insurance industry, hence stressing the importance of a tight and effective MCS to prevent further tightening through regulatory requirements. Furthermore, this paper combines economic theories with organizational ones to understand real-life phenomena more comprehensively.

4.4   General conclusion

Overall, this dissertation provides deeper and well-rounded insight into the real-life phenomenon of tightness of control. It contributes to the MCS literature by taking a closer look at the characteristics which define tightness at the level of individual controls (Paper 1), groups of controls (Paper 2), and the complex and multifaceted relationship between tightness and regulation (Paper 3). Multiple case studies are used to study this phenomenon in real-life settings and gather a holistic and more in-depth picture.

The results of the first paper provide characteristics which can be used to objectively define the tightness of individual controls. Even though Van der Stede's (2001) definition was not able to adequately describe tight budgetary controls in this case, this case study showed that a high emphasis on meeting the goal was the only attribute that applied to results controls, action controls, personnel controls, and cultural controls alike. Secondly, except for budgetary controls, a low tolerance for deviations was the attribute that applied to most controls. Thirdly, the last attribute of Van der Stede (2001) that applied to almost all controls was a high intensity of communication. However, this dissertation (Papers 1 and 2) demonstrates that the definition of this attribute as "a high frequency of communication" is not sufficient to produce tight controls. Instead, the definition should be broadened to make room for a more complex relationship between communication and tightness of control. For instance, tightness of control is in some cases demonstrated by a complete lack of communication which keeps employees in the dark and tightly steers their behavior (particularly in the case of budgetary controls and personnel selection and placement, see Paper 1). However, this case study also demonstrates that some controls, like action controls, show no need for communication, as employees view them as a given (which is corroborated by the findings in Paper 2). In the case of cultural controls, this case study demonstrates the importance of the quality of communication rather than the

quantity, which even led to a strong sense of self-commitment (Paper 1). Hence, this dissertation calls for a broadening of Van der Stede's (2001) attribute of intensity of communication to reflect this complex relationship.

Furthermore, this dissertation provides additional characteristics that employees used to describe tight controls. Particularly a lack of transparency of procedures, lack of plausibility, lack of fit to their everyday business, and competing controls are factors that employees perceived as crucial to tighten controls. Lastly, the case study in Papers 1 and 2 demonstrates that high control tightness does not necessarily lead to negative employee perceptions. If controls had been implemented due to legal regulations, employees perceived them favorably as an assurance of "doing the right thing". Similarly, if controls were used to minimize personal vulnerability, give direction to employees, and create boundaries within and to other departments, tight controls were viewed very favorably and sometimes even introduced as a form of self-induced control.

In terms of the applicability of Van der Stede's definition of tight controls, Paper 2 of this dissertation corroborates the findings of the first paper. Furthermore, the second paper demonstrates the significance of the overall MCS design for creating tightness. Hence, implementing a comprehensive and cohesive system of management controls can help to raise overall control tightness, decrease MCS costs and increase employee satisfaction. Overall, both Papers 1 and 2 offer researchers and practitioners valuable insight into factors that lead to tight controls and how this tightness can be implemented in a way that employees find valuable.

Lastly, Paper 3 contributes by demonstrating the multifaceted relationship between tightness of controls and the regulatory environment. If reputational scandals develop which threaten the entire insurance industry due to their spillover effect, insurers might need themselves to call on regulators to introduce more regulation as a signal to the public. Hence, even though regulation is the most common impetus to introduce tight controls, in some cases the regulation itself can become a form of management control.

Overall, the results of this dissertation not only reiterate the significance of tightness of controls for practitioners, but offer important pointers to practitioners and valuable starting points for future research.

5.   Outlook: The dichotomy of Control Tightness and Innovation

As described above, the question of tightness of management controls already plays an important role for insurers. However, the challenges that insurers (and many other types of organizations) are facing today, further increase the importance and relevance of this topic. The insurance

industry, like other service industries, is currently facing significant challenges: the age of digitalization not only impacts all parts of everyday life, but also leads to lasting changes in the behavior and mindsets of insurance consumers. Furthermore, new competitors have entered the market: namely insurtechs (i.e. start-ups focused on insurance). In Germany, the number of insurtechs has almost tripled from 50 in 2016 to 134 active insurtechs in 2019 (Statista). Their innovations vary from new products, and new services, to the digitalization and simplification of existing products, procedures and platforms. However, insurtechs are not the only new market player. According to a survey conducted by Capgemini (2019), insurers greatly fear competition by non-insurance companies like Amazon, other tech companies, car manufacturers, retailers, Alphabet and Apple. All of these developments are putting a new and unparalleled level of pressure on insurers. The business model of insurance (Schröder and Lohse, 2018), internal costs from large internal administrations and distribution channels for insurance (Gerwald, 2019), are being criticized and challenged. Insurers are facing pressure to evolve, innovate and adapt to a changing environment (Miles and Snow, 1978). But how can insurers be creative and innovative, given their strict regulatory environment and their tight management control systems?

First, researchers define creativity as the driving force of innovation on a personal level (Hlavacek and Thompson, 1973; Amabile *et al.*, 1996; Hirst *et al.*, 2011; Speckbacher, 2017; Grabner *et al.*, 2018), whereas innovation refers more to an organizational level (Thompson, 1965; Van de Ven, 1986; Cardinal, 2001; Adams *et al.*, 2006; Jansen *et al.*, 2006; Büschgens *et al.*, 2013; Haustein *et al.*, 2014; Ylinen and Gullkvist, 2014). Current research contains a vast variety of definitions used to describe novelty in organizations. Nevertheless, Schumpeter's original broad definition (Schumpeter, 1928, p.483) includes all methods, procedures, techniques, etc. that are perceived to be novel in a given organizational context, and seems better applicable to insurance, where innovation can only be incremental.

However, the relationship between Management Control Systems and innovation is very complex. As organizations target a certain level of innovativeness, MCS are a useful tool for achieving this goal. Chenhall *et al.* (2011) point out that if innovation is included in organizational strategy, management control systems need to encourage employees to be creative and innovative. "*This is best achieved if there are few barriers to communication, there is sharing of ideas, and management is supportive and tolerant of mistakes.*" (Chenhall *et al.*, 2011, p.103). Further research also emphasizes how MCS can aid innovation by targeting the largest challenges associated with innovation: 1. generation of ideas by pointing out areas that would benefit from innovation (Heidmann *et al.*, 2008; Speckbacher, 2017); 2. managing the process by coordinating multiple entities within the organization (Van de Ven, 1986; Dougherty, 1992;

Bartel and Garud, 2009); 3. ensuring the success of innovations by providing up to date information (Van de Ven, 1986). Hence, MCS are an important instrument for implementing and steering innovation efforts within an organization. However, how does control effect innovation and the organization's ability to innovate?

Irrespective of the scientific field, most researchers initially hypothesize that controls negatively affect innovation (Ouchi, 1977; Damanpour, 1991; Speklé, *et al.*, 2017). They argue that MCS create an organizational environment which is hostile to innovation, as it does not provide enough slack, flexibility (Jorgensen and Messner, 2009; Poskela and Martinsuo, 2009), or the "error culture" necessary to inspire employees to be innovative (Bonner *et al.*, 2002; Zhou and George, 2003). Nevertheless, few studies have been able to corroborate a negative link. Bisbe and Otley (2004) found that the use of MCS instruments contributed to reducing the level of innovation in high-innovation firms. A survey conducted by Bonner *et al.* (2002, p.241) was able to provide evidence that too many controls led to "*delays, cost overruns, lower product performance, and lower team performance*" in new product development projects. Hertenstein and Platt (2000) conducted various interviews with project managers responsible for new product development, who displayed high dissatisfaction with the prevailing performance measurements. In general, Cardinal (2001, p. 22) criticized that "(…) *our field has adopted a bias against control, especially as it pertains to innovation.*"

Nevertheless, a substantial stream of research has found some positive correlation between controls and innovation. This research confirms that controls can facilitate innovation or support innovation. Within this field, one stream categorizes MCS as a facilitator and hence a help to create innovation (March and Simon, 1985; Thornton, 1999; Cardinal, 2001; Chenhall *et al.*, 2011; Büschgens *et al.*, 2013; Bredmar, 2017; Speklé *et al.*, 2017; Grabner *et al.*, 2018). Another field of research categorizes MCS as a supporting factor and emphasizes their use to steer and manage innovation efforts (Van der Ven, 1986; Bstieler, 2005; Li *et al.*, 2005; Sim *et al.*, 2007; Jorgensen and Messner, 2009; Poskela and Martinsuo, 2009; Mundy, 2010; Chenhall *et al.*, 2011, Grabner *et al.*, 2018). Overall, as discussed above, most of the research shows a surprisingly positive correlation between management controls and innovation.

Therefore, many researchers have started to wonder about these inconsistent results and have hypothesized how to reconcile these research results with the theoretical assumptions. The first stream stresses that the relationship between innovation and control depends on environmental factors. These contingency theories stipulate that there is no one right way to manage an organization, but the environmental context of the organization has to be considered (Moores and Yuen, 2001; Haustein *et al.*, 2014). Hence, this research stream argues that environmental

or contextual factors can play an important role in terms of whether MCS are perceived as a positive or negative influence on organizational innovation (Ouchi, 1977; Rockness and Shields, 1984; Haustein *et al.*, 2014). Another stream of research argues that the assessment of control as a positive or negative influence on innovation depends on the phase of the organizational life cycle (Miller and Friesen, 1984; Romano and Ratnatunga, 1994; Baron *et al.*, 1996; Baron *et al.*, 1999; Thornton, 1999; Freeman and Engel, 2007; Sandino, 2007; Davila *et al.*, 2009, Davila *et al.*, 2010; Hatane *et al.*, 2019).

The third research stream confirms the importance of this dissertation, since it argues that the perception of controls in the context of innovation depends on the tightness of control. Even though the research cited below does not use the term tightness, nor does it provide an operationalized definition of tightness, it can still be categorized as tightness of control. Tatikonda and Rosenthal (2009), for example, advocate a concept of "*flexibility within a structure, i.e., firmness in the sense of having a predetermined structure, and flexibility in the nature of work within that structure.*" (Tatikonda and Rosenthal, 2009, p.417), which is also reiterated in the concept of tight-loose controls in this dissertation (Paper 1). Brown and Eisenhardt (1997) argue similarly and call for "*semi-structures*", while Chenhall *et al.* (2011) use the term "*organic innovative culture*" to designate tight-loose controls. Khazanchi *et al.* (2007, and similarly Davila *et al.*, 2009) highlight the importance of implementing explicit controls for most decision-making, but still offering the flexibility to depart from standard procedures, hence stressing the attribute this dissertation refers to as tolerance for deviation (Paper 1 and Paper 2). Bonner *et al.* (2002) obtain similar findings in their study and point out that product development teams are most successful if they can work flexibly, but are nonetheless provided with a broad strategic direction. They conclude that the nature of the relationship between controls and innovation depends on the degree of control (or what this dissertation refers to as tightness). Nohria and Gulaty (1996) also argue that the assessment of controls as good or bad for innovation depends on the tightness of controls. However, they use the term "*strength*" instead of tightness and find that "[…] *the strength of an organization's internal control system [has] a positive but curvilinear effect on its innovativeness.*"(Nohria and Gulaty, 1996, p. 1254). In their paper, they use slack (i.e. all types of excess resources above the level that is strictly necessary) as a proxy for tightness (the more slack, the less tight the controls). Nohria and Gulaty (1996) argue that excess slack is necessary for innovation, as it gives employees and organizations resources to experiment with and be creative. However, they point out that if innovation projects are managed with loose controls, they create considerable waste, as they rarely lead to successful innovation projects. Therefore, they

conclude: "*Thus, the right question to ask is not whether slack is uniformly good or bad for innovation, but rather, what amount of slack is optimal*?" (Nohria and Gulaty, 1996, p. 1260).

For this dissertation, we rephrase this question raised by Nohria and Gulaty (1996): The right question to ask is not whether tightness is uniformly good or bad, but rather: what amount of tightness is optimal? This dissertation provides a first step in defining what tightness is, how it develops, and which characteristics define it, enabling future researchers and practitioners to deliberately influence the level of tightness with these insights, instead of leaving this to intuition. The dissertation demonstrates the important role tightness of control plays for the success of a company, by ensuring the achievement of its economic goals, regulatory compliance, signaling a positive image to the public, and avoiding dysfunctional employee behavior. However, the above discussion about the dichotomy between management control and innovation demonstrates that tightness of control remains an important topic in future research. Hence, I hope that this dissertation helps to initiate and open up a broader discussion of tightness of control.

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B. A tight leash or a tight spot? A case study of tightness of management controls in the German insurance industry

Abstract

Starting from the definition of tight budgetary controls by Van der Stede (2001), this paper aims to re-test if this definition still stands valid for budgetary controls today, and if it can be used to describe other types of controls as well, like action controls, personnel controls, and cultural controls. Furthermore, this paper aims to explore if there are other characteristics which could be used to describe management control tightness, and provides a detailed insight into employee perception of tight Management Control Systems. Adopting a qualitative research design, this paper uses a case study set in the German insurance industry and draws on 15 semi-structured interviews. Using a hybrid approach of thematical analysis, encompassing inductive and deductive coding (Fereday and Muir-Cochrane, 2006), this paper finds that Van der Stede's (20001) attributes of tight budgetary control could not be used to describe tight budgetary controls in this case, even though employees attested to their high tightness. However, this paper demonstrates that three of Van der Stede's (2001) identified attributes can be used to describe tightness of action controls, personnel controls, and cultural controls: 1. a high emphasis on meeting the goal, 2. a low tolerance for deviation, and 3. communication (however, in an altered and broader sense than Van der Stede (2001) described. Furthermore, this paper also suggests four additional attributes that could broaden the current definition of control tightness.

Keywords

A tight leash or a tight spot? A case study of tightness of management controls in the German insurance industry

> *"People want guidance not rhetoric. They need to know what the plan of action is and how it will be implemented. They want to be given responsibility to help solve the problem and the authority to act on it." – Howard Schultz, Starbucks*[5]

1.   Introduction

In a post-Covid world, "quiet quitting" has become an increasingly common and hotly debated phenomenon. Gallup estimates the costs of low employee engagement at almost $9 trillion annually (Gallup, 21 June 2023). Another Gallup article warned "*Half of your employees are looking to leave*" (Gallup, 27 July 2023) and gives tips on what companies can do to make their employees happy and stay. Hence, many companies are starting to focus more on employee satisfaction than they have done in the past. One Article in the Harvard Business Review (Harvard Business Review, 10 September 2018) goes as far as recommending the organizational set-up of a "liberated company" to increase employee engagement. Based on Getz' (2009) definition, the authors define: "*A liberated company allows employees complete freedom and responsibility to take actions that they — not their managers — decide are best for their company's vision*" (Harvard Business Review, 10 September 2018). They indicate the swan song of traditional management: "*Human beings have certain universal psychological needs: The need to be treated as intrinsically equal, the need for personal growth, and to exercise self-direction. Each of these needs is frequently and systematically denied by traditional command-and-control managerial hierarchies.* "

Nevertheless, organizations must direct their employees' behavior towards the organization's goals and objectives, to ensure the organization's continuance and avoid potential drawbacks (e.g., financial losses, reputational damages, etc.). Hence, organizations implement management control systems (short: MCS) to "*ensure [that] the behaviors and decisions of their employees are consistent with the organization's objectives and strategies*" (Merchant and Van der Stede, 2017, p.8). Starting with Anthony's (1965) first definition of management controls (see Carenys, 2012), MCS are now a vastly researched field. Research has established that the design of these MCS not only influences employee job satisfaction, it can significantly improve it, depending on the specific design (Crawford and Nonis, 1996; Carbonell and

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[5] Schultz, Howard, Put your heart into it – How STARBUCKS built a company one cup at a time, 1997.

Rodriguez-Escudero, 2013). However, in relation to employee engagement and satisfaction, it is not only important what kind of management controls are implemented at the company, but also how strong they are – hence, how tightly these controls are implemented. Merchant (1985) stressed even then, the importance of tightness of controls for practitioners and declared this issue to be "(…) *indeed a second major control-related decision that must be made (after the choice of controls)*" (Merchant, 1985, p.57). Increasing tightness of control enables a higher level of control for the company. Routines and standardizations offer many benefits to organizations, like process improvement, safeguarding quality standards, and achieving economic goals (Brand *et. al.*, 2023). Furthermore, they also offer advantages to employees, such as decreasing required effort and giving them more guidance (Kesting, 2023). However, the implementation and oversight of these controls pose a large cost factor for organizations, so that the amount of controls, as well as their tightness, thus need to be considered carefully. Furthermore, Tannenbaum has argued that the amount of control exercised, both over and by an individual is an important factor for employee performance and job satisfaction (Tannenbaum, 1968, p. 240). Thus, Merchant (1985, pp.71-787) warned that excessively tight controls can lead to a multitude of negative consequences, not least negative attitudes and dysfunctional employee behavior, e.g. opportunistic or fraudulent behavior, or a refusal to work towards organizational goals (in a similar vein to quiet quitting). Therefore, finding the right amount of control tightness is of vital importance for every organization, so that it can achieve a balance between maximum control, employee satisfaction and costs of controls.

However, for some industries, a high level of control tightness is per se necessary, not only in order to attain their company goals, but also to ensure that external requirements from customers, law makers and the general public are met. This is particularly the case in industries in which consumer health or livelihoods are concerned, like food and beverages, pharma and financial industries (Haiss and Sümegi, 2008). For example, the German insurance industry must abide by a multitude of national and European laws, norms and regulations under close supervision by the Federal Financial Supervisory Authority in Germany, as well as the European Insurance and Occupational Pensions Authority. If German insurers do not abide by these or fail to take appropriate measures to firmly implement all necessary mechanisms, they run the risk of fines, penalties or in the worst case, even losing their operating license and having to close down. Therefore, it is of fundamental importance for a German insurer to comply with all regulations to secure the continued existence of the company. This environment requires each insurance company to have an extensive and well-functioning management control system.

Hence, German insurers must implement a tighter management control system than many other industries, so as to adhere to external requirements.

Despite the vital importance of setting MCS to the right level of tightness, it is surprising that this field still reveals comparatively little research. At present, there is only one detailed definition and measurement system of budgetary control tightness (Van der Stede, 2001), that substantiates which attributes of controls lead to high tightness. However, as this definition is more than 20 years old, and the latest re-test was conducted 10 years ago, it is unclear whether this definition has withstood the test of time. Therefore, this paper's research questions were: 1. Is Van der Stede's (2001) definition still valid today to measure the tightness of budgetary controls? 2. Can Van der Stede's (2001) attributes be used to define the tightness of other types of managements controls? And lastly 3. What other attributes define control tightness?

In order to study the phenomenon of tightness of control, the authors conducted a case study at a German insurance company, where tightness of control is assumed to be very high. Starting with Van der Stede's (2001) definition and measurement system, we developed a questionnaire and conducted semi-structured problem-centered interviews with 15 employees of this insurer. The interviews were then transcribed and later analyzed using a thematic analysis (Braun and Clarke, 2006; Braun and Clarke, 2013; Braun *et al*. 2016). Following the methodology set out by Fereday and Muir-Cochrane (2006), we chose a hybrid process of deductive coding (with an a priori coding system developed from the literature, i.e. Van der Stede's 2001 definition and measurements) and inductive coding, where emerging themes were identified from the interviews.

Hence, this study contributes to the discussion on control tightness in three ways. First, by reproducing the definition and attributes that Van der Stede (2001) uses to define tightness of budgetary controls, and re-evaluating its validity today in the field. Second, by testing whether these defined attributes of tight budgetary controls also apply to other types of management controls, as conceptualized by Merchant and Van der Stede (2017): action controls, personnel controls, and cultural controls. In this respect, the present research takes an unprecedentedly comprehensive view of the overall management control system of a company, as opposed to focusing only on a single type of management control. Third, by conducting a case study and using an interview-based approach, this study adds to the definition of Van der Stede (2001), by offering further insights into employee perspectives on tight MCS overall, as well as identifying additional factors that define and influence tightness.

This paper is organized as follows: in the second section, we provide a brief literature review on tightness of control and the definition as it stands today. Section 3 describes the

research method and how the authors analyzed the data of this case study. Section 4 gives a brief summary of the case study. Section 5 directly addresses the three research questions and analyses the interviews we conducted in order to: 1. validate Van der Stede's (2001) definition, 2. apply this definition to other types of controls and 3. broaden Van der Stede's (2001) definition by identifying common themes in the interviews. Section 6 concludes.

2.   Literature Review

Irrespective of the various definitions of MCS, many scholars implicitly or explicitly point out the importance of considering the level of tightness of controls when implementing MCS. Flamholtz, for example, cautions that *"(…) control systems must be designed with care in order to achieve the optimal degree of control; one which is neither too loose (which may lead to chaos), or too tight (which may lead to stifling bureaucracy)"* (Flamholtz, 1996, p.597).

Given the significance of control tightness for practitioners and as a determinant of the success of MCS, it is surprising that the literature focusing on this issue is still so scarce. An overview by Bedford and Speklé (2018) on areas of research within the field of MCS shows only two articles on the topic of tight control (Bedford and Malmi, 2015; and Chow *et al.*, 1996). More research focuses on tight budgetary control, as this area is addressed in three articles (Van der Stede, 2001; Johansson and Siverbo, 2014; and Ylinen and Gullkvist, 2014). Using alternative terms for tightness, such as (1) rigidity, only yields one article on rigid versus flexible evaluations (Wiersma, 2009), whereas the term (2) bureaucracy only yields one article on bureaucratic MCS (Auzair and Langfield-Smith, 2005). The term bureaucracy is itself a major field of research that is not the focus of this paper. However, when it comes to bureaucracy in the context of MCS research, even the foundational work of Mitchell (1979), does not provide a systematic MCS framework and therefore does not offer significant insight into our understanding of MCS tightness.

As a result of this lack of research, the definition of tightness of control is still rather vague and has not evolved much over time. Starting from a semantic perspective, the Cambridge online dictionary[6] defines the term tightness in general as uncomfortable, firmness, closeness or a lack of something, as well specifically in relation to specific terms like performance, bends, races and rules. A tightness of controls and rules is defined as "the quality of severely limiting what can happen". However, given the additional explanations of the term, tightness of controls leaves the reader with a slight negative connotation. Beginning in 1985 with a first version, Merchant

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[6] https://dictionary.cambridge.org/de/worterbuch/englisch/tightness (last access March 20, 2024).

defined tightness and Merchant and Van der Stede (2017, p.128) subsequently redefined it: "*The benefit of any management control system (MCS) is derived from the increase in the likelihood that the organizational objectives will be achieved relative to what could be expected if the MCS were not in place. This benefit can be described in terms of MCS <u>tightness</u> (or <u>looseness</u>). Tighter MCS should provide greater assurance that employees will act in the organization's best interest.*". Therefore, Merchant and Van der Stede (2017) not only define tightness as the main success factor for the efficacy of MCS, but also in emotionally neutral terms. Nevertheless, they do concede that a loosening of controls is sensible in cases where "*an inappropriate use of controls causes harmful side effects, such as operating delays or employee frustration and demotivation. These side effects cause many to have negative feelings when they hear the mere mention of tight control.*" (Merchant and Van der Stede, 2017, p.140). In contrast to Merchant and Van der Stede, Bedford and Malmi (2015) do not offer an explicit definition of tightness, but rather mention in their control category "measurement" an "*Individual accountability for meeting pre-established performance targets*" (Bedford and Malmi, 2015, p. 45). Similarly, Chow *et al.* only allude to "*the number of different controls used and their stringency*" (Chow *et al.*, 1996, p.177) without giving an explicit definition of tightness of control.

The most detailed definition of tight controls to date derives from Van der Stede (2001). Based on Anthony and Govindarajan's (1998, pp. 436-437) definition that overall tight control systems derive primarily from a focus on continuously meeting budgetary targets, Van der Stede (2001, p. 121) defines and measures tight budgetary control with five attributes:

(1) emphasis on meeting the budget should be high
(2) allowance for budget revisions during the year should be low (for which Van der Stede cannot find sufficient support)
(3) amount of budgetary control detail should be high
(4) tolerance for interim budget deviations should be low
(5) intensity of budget-related communication should be high

Later research from Conboy (2010), as well as Johansson and Siverbo (2014) use the same construct, whereas Ylinen and Gullkvist (2014) focus only on certain aspects of Van der Stede's (2001) construct. Nevertheless, Van der Stede concludes, "*In sum, the concept of tight control is not exactly a clear picture in terms of its definition, its scope, and its operationalization*" (Van der Stede, 2001, p. 120) and therefore calls for further research in this field.

Overall, this study follows the call and adds to the body of literature by reviewing and expanding Van der Stede's (2001) definition a) in terms of tight budgetary controls, b) in terms of tightness of other controls and c) in terms of the overall management control system.

3.   Research Method

Even though Van der Stede's (2001) study, which resulted in a definition and measurement system for tight budgetary controls, was conducted via an empirical study, we have chosen not to follow the same path for two main reasons. First, empirical testing and verifications of Van der Stede's (2001) construct have already been conducted by Conboy (2010), as well as Johansson and Siverbo (2014) (and, in a broader sense, by Ylinen and Gullkvist, 2014). Empirically re-testing Van der Stede's (2001) construct would therefore not offer any additional insight into verifying and broadening the definition of tightness of controls. Secondly and more importantly, in order to gain more insight into the social phenomenon of tightness of controls, how it is manifest in management control systems, what attitudes employees develop about it and what other factors contribute positively or negatively to tightness for all types of management controls, an empirical study does not offer sufficient flexibility and openness, whereas qualitative research leaves room for serendipitous new discoveries (Akerström, 2013).

Therefore, we have chosen a qualitative research design, in particular a case study, as it presents "*an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between the phenomenon and context may not be clearly evident*" (Yin, 2018, p. 14). As Baxter and Jack (2008) pointed out, case studies offer the opportunity to gather a better and deeper understanding of the phenomenon, not least, as Rashid *et al.* put it, through "*the exploration through a variety of lenses in order to reveal multiple facets of the phenomenon*" (Rashid *et al.*, 2019, p. 2). Furthermore, Eisenhardt (1989) underlined how case study research is "*highly iterative and tightly linked to data*" (Eisenhardt, 1989, p.532) and therefore a very useful tool for testing theory and developing theory.

Since existing research and our current understanding of tightness of MCS are still limited, the authors chose to take a deep and holistic view of a single case as a starting point for further scientific discussion and research, by beginning with a more sophisticated comprehension of the phenomenon in real life. Given that Van der Stede (2001) and Merchant and Van der Stede (2017, pp. 229-230) do not describe tightness of control as a binary property of an MCS and/or single controls, but rather a characteristic on a continuous scale, we believe it is important to place this research in a setting that most likely results in a high tightness of controls

– hence on one side of the scale – to gather a better fundamental understanding of control tightness. As Mishra (2021, para. 9) points out, referring to Yin (2018): "*One is studying a critical case wherein the case chosen is critical for the theoretical proposition.*" Therefore, the authors selected a critical industry, which in our view shows a high likelihood of a high level of tightness of controls. The German insurance industry, as a financial industry, is highly regulated and is not only subject to general German and European laws, but also to specified insurance laws (e.g., Versicherungsvertragsgesetz (VVG)). Furthermore, German insurers are also strictly supervised by a specified regulatory authority, the Bundesanstalt für Finanzdienstleistungsaufsicht –Federal Financial Supervisory Authority in Germany, as well as the European Insurance and Occupational Pensions Authority at a European level. In addition, German insurers also face considerable pressure from their "costumers", consumer protection organizations, as well as from their stakeholders. Furthermore, these requirements are complemented by the insurers' internal requirements in terms of profits and other company goals that all need to be reflected in their MCS. Overall, I believe that the German insurance industry can be seen as a challenging environment which causes insurers to implement tight controls, and hence presents an ideal setting for studying tightness of controls.

However, addressing one of the most prominent criticisms of case study research, the generalizability of the findings beyond the studied case, the authors chose a commonplace setting for the study within this critical industry. As Yin points out, the focus on a common case enables us to "*capture the circumstances and conditions of an everyday situation*" (Yin, 2018, p. 51) and in fact goes beyond the studied case in providing general insights into phenomena. Hence, setting this study at a medium to large insurance company in this market, in our view constitutes a fruitful setting for a single-case case study that offers valuable insights into tightness of control beyond the studied case.

This case study was conducted as a part of a larger case study, using semi-structured, problem-centered interviews (Ruslin *et al.*, 2022). As Atkinson and Silverman (1997, p.304) point out: "*For survey researchers, the interview can be a reliable instrument giving valid data on facts and attitudes.*" Therefore, interviews with employees of an insurer offer the opportunity to pierce the veil and gather an understanding of how employees perceive an environment with high tightness of control and which factors influence their perceptions and experiences and in what ways. Further, this method enabled the authors to include Yin's (2018) and Eisenhardt's (1989) suggestions to base the research on theoretical propositions, i.e. previous research.

Following the methodology described by Misoch (2019, p. 75), the authors developed a questionnaire to structure the interviews and achieve comparability between the interviews (for

the full questionnaire, see Appendix I). All interview questions were open questions. The questionnaire consisted of five parts: one general part on the MCS, as well as one part for each type of management control. First, to encompass the entire MCS, we chose one example for each type of management control, as defined by Merchant and Van der Stede (2017), that were implemented and known at the insurer.

(1) Results controls: budgetary controls

(2) Personnel controls: personnel selection and placement

(3) Cultural controls: code of conduct

(4) Action controls: behavioral constraints

The importance of each management control will be discussed further in Section 5. Case analysis. The questions for each part began with a general assessment by the interviewee of how content they were with each type of control. This starting question was followed by questions that were modeled on the five attributes of tightness of budgetary controls, as defined by Van der Stede (2001) and adapted to each control: (1) emphasis on meeting the control, (2) allowance for control revisions during the year, (3) amount of control detail, (4) tolerance for interim deviations and (5) intensity of control-related communication. As described, even though Van der Stede (2001) could not find sufficient support that (2) the allowance for control revisions during the year should be low to constitute a high tightness, this paper includes this attribute for the sake of a holistic approach. The last part of the questionnaire was made up of general questions related to tight management controls and the overall MCS (for the full questionnaire, see Appendix I). However, depending on the interviewee and their experiences and preferences, the order of the questions was changed to encourage a continuous flow of the interview. Furthermore, additional questions were added to address the statements of the interviewees. The pre-test of the interview took place on 17 November 2021 and did not lead to any changes of the questionnaire. Therefore, the data of the pre-test were included in the overall interview data collected (Kaiser, 2014, p.70).

Due to the delicate nature of the topic, all interviewees were convenience sampled to ensure a high level of trust and openness with the researcher. For the same reason, all interviews were conducted in person. The conversations were audio recorded with the explicit permission of the interviewees and later transcribed word-for-word (about 1/3 was manually transcribed by the researcher, 2/3 were manually transcribed by an external transcription service, but thoroughly checked and corrected by the researchers). Afterwards, the interviews were rendered anonymous (e.g. in terms of names or examples that were too specific) to comply with data

protection and the confidentiality that interviewees were promised. Albeit using a convenience sample, the interviewees and their experience represent a wide cross-section of the insurer in terms of jobs, responsibilities and experience, and interviews were terminated after achieving theoretical saturation.

The transcripts of the interviews were later analyzed using the hybrid approach of inductive and deductive coding and theme development, as described by Fereday and Muir-Cochrane (2006) (see similarly Swain, 2018 and Roberts *et al.*, 2019). This is a sub-method of thematic analysis, which is a qualitative method "*for identifying, analyzing, and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail. However, it also often goes further than this, and interprets various aspects of the research topic (Boyatzis, 1998).*" (Braun and Clarke, 2006, p. 78). Fereday and Muir-Cochrane (2006) describe their method as "*a hybrid approach of qualitative methods of thematic analysis, and it incorporated both the data-driven inductive approach of Boyatzis (1998) and the deductive a priori template of codes approach outlined by Crabtree and Miller (1999).*" (Fereday and Muir-Cochrane, 2006, pp. 82-83). This method combines the methods of deductive coding, i.e. commencing the analysis with a theoretical framework to test theory, and inductive coding, i.e. developing and broadening our understanding of the studied phenomena by identifying and addressing new categories and themes and hence offering the opportunity to develop theory. Therefore, this method offers a strong interplay between a priori theoretical propositions for theory testing and a posteriori findings in the field for theory development. Furthermore, this approach places substantial emphasis on an iterative process that allows researchers to apply the findings in one step, so as to circle back to a previous step to make improvements.
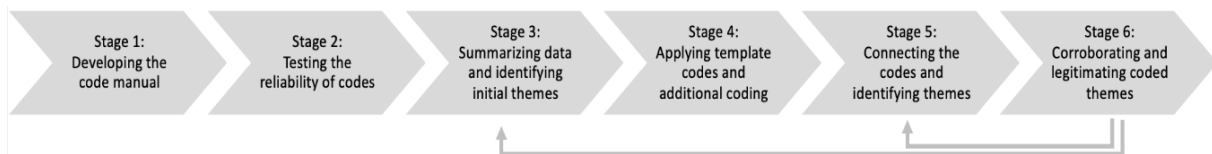
Figure 3:   The hybrid approach of inductive and deductive coding and theme development, adapted from Fereday and Muir-Cochrane (2006).

The authors followed the steps described by Fereday and Muir-Cochrane (2006) (see Figure 3) as follows. Stage 1, an a priori template was created. This template was based on the research questions and reflected our theoretical propositions. At this stage, each code was defined and described on the basis of theoretical propositions from the literature review. At stage 2, we tested the reliability of the code and added our own definition of the code based on the terminology the interviewees used, as well as adding coding examples of the transcripts to the coding

manual. The deductive codes in this template are briefly described below in the case summary (the detailed code descriptions are in the coding manual). Within steps 1 and 2, the authors coded all interview transcripts using the deductive codes. Hence, this first round of coding acted as a structuring step and structured all interview transcripts according to the questionnaire and the underlying theoretical propositions the authors had when commencing the interviews. At Stage 3, we began the inductive coding, i.e. developing our own codes, that already came up as repeated or important themes during the interview and transcriptions. At Stage 4, these initial inductive codes were used to code the transcripts, and additional codes were developed while reading and coding each transcript. Stage 5, "*Connecting codes is the process of discovering themes and patterns in the data (Crabtree & Miller, 1999)."* (Fereday and Muir-Cochrane, 2006, p. 89). Particularly Stage 5 consisted of a highly iterative process, that identified and refined new themes by comparing all interview transcripts. Hence, especially Stages 3, 4 and 5 were undertaken in various rounds of coding, where inductive codes were developed, defined, refined or collapsed by combining them with other inductive codes. The aim of this process was an inductive code system, that reflected how interviewees described management controls, how they felt about them or what they thought about them. Hence, inductive codes accurately reflected the content of the interviews. The inductive codes developed during Stages 3, 4 and 5 were defined and described in the same manner as the deductive codes. A brief description of the inductive codes will be provided in the case summary. Stage 6, "*the previous stages were closely scrutinized to ensure that the clustered themes were representative of the initial data analysis and assigned codes.*" (Fereday and Muir-Cochrane, 2006, p. 90). Hence, at this stage, the analysis and interpretation of the coded themes and their interaction took place by analyzing the relationships between the codes (deductive and inductive) to understand what interviewees talked about (deductive codes) and how they talked about these topics (inductive codes).

In this study, the researchers used MAXQDA and went through repeated rounds of coding, within-interview coding as well as cross-interview coding to ensure intra-coder reliability of the coding system. A coded part of the interview was always chosen as the smallest sense-making unit of the interview and can vary between a few words to whole blocks of text. The overview of all codes and how often they were used can be found in Appendix II.

4. Case Summary

The insurer at which this study took place, originated in Germany, and was founded in the 19th century. Today, it has around 40,000 employees worldwide, but its strongest presence is still in Germany. It offers all types of insurance (health, property and casualty, life) and employs a large sales force of tied agents.

As part of a larger case study, we conducted 15 interviews at this insurer, that took place from 17th November 2021 until 1st of March 2022. Even though this period was characterized by Corona-induced lockdowns, all interviews were conducted in person. The interviewees were informed that they were participating in a scientific study, but only received a broad description of the direction of this study, as being about Management Control Systems (which were broadly described as "all measures a company can undertake to align employee behavior with company goals") so as not to generate any bias. On average, interviews took around 1.5 hours each, with the shortest lasting 38 minutes and the longest 2 hours and 53 minutes. In sum, these 15 interviews resulted in 240 pages of transcripts.

Participant	Gender	Function	Management Position	Overall contentment with MCS	Estimated Number of Controls	Estimated Effort For Controls
#1	female	central functions	no	content	300	20%
#2	female	operations	yes	very content	80	75%
#3	female	central functions	yes	very content	162	50%
#4	male	underwriting	yes	very content	35	80%
#5	male	underwriting	yes	very content	>50	100%
#6	male	underwriting	yes	very content	30	70%
#7	male	operations	yes	content	200	30%
#8	male	central functions	yes	very content	1.000	80%
#9	female	central functions	yes	very content	1.000	30%
#10	female	operations	yes	very content	48	20%
#11	female	central functions	no	content	40	50%
#12	male	underwriting	yes	content	20	20%
#13	female	underwriting	yes	content	150	70%
#14	male	central functions	no	very content	10.000	5%
#15	male	operations	yes	very content	10.000	20%

Figure 4: Overview of Interviewees

Figure 4 represents the diversity of the interviewees in various respects. For one, interviewees represented a broad cross-section of central functions, underwriting departments, and operations departments of the insurer, and each interviewee works in a different department. 2 of 15 participants were from departments that are involved in designing and overseeing the insurer's MCS (interviewee #3 and #8). 12 of 15 held some form of management position (ranging from lowest-rank management positions to high-ranking positions), therefore being in the position

of having to comply with the MCS set by the company, but also being able to influence how these MCS are applied day-to-day within their departments. In order to gauge the interviewees general opinion of, and attitudes toward the MCS and individual controls, the interviewers asked how they content they were with the MCS and each management control at the company. Questions differed in the context of each interview (e.g. how free or how controlled do you feel? What is your opinion of the MCS? How would you rate the MCS on a scale?). Interviewees were able to choose from a scale of 1-6 (1- happy, 2 – very content, 3 – content, 4 – not content, 5 – very unhappy, 6 – despondent). In terms of the overall MCS, attitudes ranged between very content and content, hence in a good to medium range. This shows that the interviewees showed neither an extremely positive nor a negative tenor towards MCS. When interviewees were asked to guess how many controls the insurer's MCS consisted of, answers varied widely from 20 to 10,000 controls. In order to obtain more reflective answers (as opposed to very spontaneous answers), this question was usually asked towards the end of the interview, after the discussion of different types of controls that had already taken place. Nevertheless, all but one interviewee demonstrated a high level of uncertainty in answering this question. This large variance of estimated controls reveals the wide range of interviewees' definitions and perceptions of controls. However, the estimated numbers of controls do not show any correlation with how content and satisfied interviewees felt with the MCS. Similarly, we asked interviewees how much of their working hours they spent dealing with management controls (e.g. implementing, updating, communicating, adhering to them). Here again, answers varied widely from 5% to 100%. Furthermore, again, the estimation of how much effort the overall MCS causes interviewees is not correlated with their general perceptions of controls. Hence, interviewees demonstrated neutral to positive attitudes towards the company's MCS, irrespective of the estimated numbers of controls and the effort cause by the MCS.

Following the methodology of Fereday and Muir-Cochrane (2006) described above, in the first and second Stages of coding the interview transcripts, the authors developed and defined a deductive code system. This system was developed from the literature review and based on the definition of Van der Stede (2001), that guided the interview questionnaire. These stages structured the transcripts regarding the subject matters (what control is talked about; what attribute of the control does the interviewee talk about). At Stages 3 and 4, we developed an inductive code system from the content of the statements (what does the interviewee say about the control or the control interview). This inductive code system will be explained below.

4.1   Deductive Codes

As a first step of coding, we developed the deductive code system from the literature (Fereday and Muir-Cochrane, 2006). This part of the process aims at testing theory, and hence the codes used here were directly derived from previous literature, in this case, the five attributes of Van der Stede (2001) used to describe the tightness of all management controls. This theoretical proposition was the basis of the questionnaire, and the questions asked in the interviews therefore directly targeted these attributes. For the deductive code system, the authors adapted the five attributes of Van der Stede (2001) to each type of control as discussed in Section 2 and left room for general remarks about each type of control as well. This left the authors with 24 codes for the deductive code system (Figure 5).

Type of Management Control	Attributes					
	Overall	1 Emphasis on meeting the goal	2 Degree of Commitment	3 Amount of Detail	4 Tolerance for Deviations	5 Intensity of Communication
Results Controls - Budget Controls (RC)	RC	RC - 1	RC - 2	RC - 3	RC - 4	RC - 5
Action Controls - Behavioral Constraints (BC)	BC	BC - 1	BC - 2	BC - 3	BC - 4	BC - 5
Personnel Controls - Personal Selection and Placement (PC)	PC	PC - 1	PC - 2	PC - 3	PC - 4	PC - 5
Cultural Controls - Code of Conduct (CC)	CC	CC - 1	CC - 2	CC - 3	CC - 4	CC - 5

Figure 5:   Deductive Code System

In Stages 1 and 2, each code was strictly defined in the coding manual and included the type of code, definition of the particular management control in the literature, the adaption of the attribute from Van der Stede (2001) to this particular control, the corresponding questions in the questionnaire, our own definition of this code that was used to code the transcripts and corresponding examples from this case study for this code. Figure 6 shows an extract of the definition of deductive codes.

Label	AC - BC - 1 - Emphasis on Meeting the Goal
Type of Code	**Deductive Code**
Source	Adaptation of measures used for measuring tightness of budgetary controls to Action Controls: **Behavioral Constraints** (Van der Stede, Measuring Tight Budgetary Controls, 2001)
Own definition:	Emphasis on and importance of adhering to behavioral constraints like internally appointed authorities, system releases and rights, cross checks and controls, access to information and data (Vollmachten, Systemfreigaben und Rechte, Zweitfreigaben und Kontrollen, Zugang zu Akten) and the consequences as a reflection of own performance, career, reputation, etc. of the employee. Furthermore, it also entails the importance it has for the company, one's superior, the whole department etc. Main goal of this dimension is the importance of adhering to these behavioral constraints for the company and its employees, ***NOT*** *Tolerance for Deviations (*what happens to employees who do not adhere to these constraints) and ***NOT*** *Degree of Commitment* (how fixed/stable are behavioral constraints).
Questions in the interview questionnaire:	▪ How important is it that you comply with these guidelines? ▪ How important are these guidelines for you (and your team)? ▪ What role do they play in regular decision making? ▪ Do they provide security? ▪ Does the fear of non-compliance cause insecurity?
Examples in this case study:	*We team leaders decide how much authority employees have. Or rather, there are guidelines from the [company] which state that a team leader may not have more than [X] euros in our case. Department managers, I think [Y or Z€], something like that. After that comes the board of directors and we stick to that [general guideline]. Senior account managers are not allowed to have more than [A€] and junior account managers not more than [B€]. And the margin between [B€] and zero, that's up to us as managers, how much we think we can justify that the employee is performing so well by now, that he knows what he's doing and handles the money prudently. (#10, Pos. 92)----* *My position is defined by law. And the function that I perform is clearly specified, that I have to have that information and nobody else. (#8, Pos. 146)----* *In [underwriting] it is governed rather basically, [there] are fixed powers. You know that if your authority [...] is exceeded, then you are excluded from the process. (#5, Pos. 16)*

Figure 6:   Example of coding manual - deductive code AC - BC - 1 - Emphasis on Meeting the Goal

After defining these deductive codes, all interview transcripts were coded with these codes. This structured all transcripts according to the studied management controls and to the five attributes from Van der Stede (2001). Figure 7 contains an overview of these deductive codes in all transcripts, and shows how many statements referred to certain management controls and attributes (size of the square is proportional to the number of coded statements). This overview reveals that in general, personnel controls and results controls were talked about less than action controls and that, for example interviewees #1, #11, and #14 said only little or nothing about personnel controls, whereas #2 and #10 said only little or nothing about results controls. Hence, this overview shows that interview partners represented a cross-section of the company, with differing amounts of experience regarding individual controls.
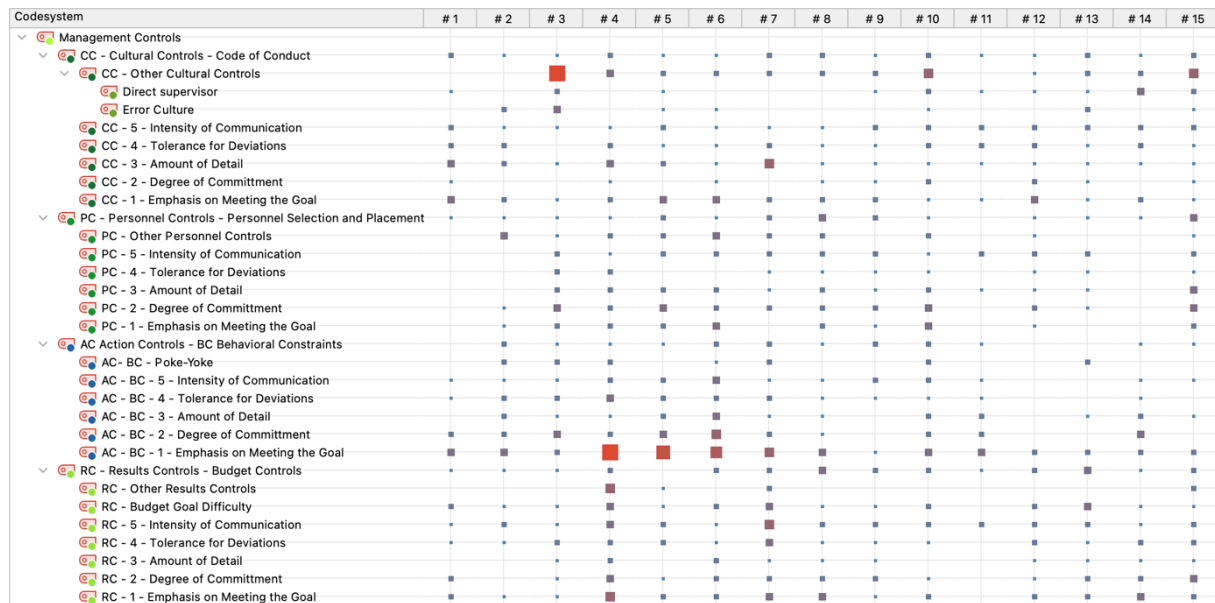
Codesystem	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	# 14	# 15
Management Controls															
CC - Cultural Controls – Code of Conduct															
CC - Other Cultural Controls															
Direct supervisor															
Error Culture															
CC – 5 - Intensity of Communication															
CC – 4 - Tolerance for Deviations															
CC – 3 - Amount of Detail															
CC – 2 - Degree of Committment															
CC – 1 - Emphasis on Meeting the Goal															
PC - Personnel Controls – Personnel Selection and Placement															
PC - Other Personnel Controls															
PC – 5 - Intensity of Communication															
PC – 4 - Tolerance for Deviations															
PC – 3 - Amount of Detail															
PC – 2 - Degree of Committment															
PC – 1 - Emphasis on Meeting the Goal															
AC Action Controls – BC Behavioral Constraints															
AC– BC – Poke-Yoke															
AC – BC – 5 - Intensity of Communication															
AC – BC – 4 - Tolerance for Deviations															
AC – BC – 3 - Amount of Detail															
AC – BC – 2 - Degree of Committment															
AC – BC – 1 - Emphasis on Meeting the Goal															
RC – Results Controls – Budget Controls															
RC - Other Results Controls															
RC - Budget Goal Difficulty															
RC – 5 - Intensity of Communication															
RC – 4 - Tolerance for Deviations															
RC – 3 - Amount of Detail															
RC – 2 - Degree of Committment															
RC – 1 - Emphasis on Meeting the Goal															

Figure 7: Number of deductively coded statements per deductive code and per interview

However, as described above, the deductive coding process in Stages 1 and 2 only gave an overview as to what and how often interviewees talked about certain management controls. It does not provide a deeper insight into how interviewees talked about these controls or what they thought and felt. Hence, in the next step, the inductive coding addressed this need for deeper insight.

4.2   Inductive Codes

Whereas the first step of deductive coding structured the transcripts according to the theoretical assumptions and interview questions, the inductive coding in Stages 3 and 4 identified new themes and topics addressed by the interviewees. Using the method described by Fereday and Muir-Cochrane (2006) for building new categories inductively via open coding, themes and categories are taken directly from the analyzed texts and the interviewee statements. This method is in contrast to recapping deductive categories or using predetermined patterns to derive new categories (as is commonly used in Grounded Theory, e.g. Glaser & Strauss, 1998). This step was particularly important in order to extract how interviewees talked about management controls, how they felt about them, what experiences they had encountered with these controls. Since this study aims to broaden the existing definition of tightness of controls by also identifying new or previously unaddressed aspects that influence the perceived tightness of MCS, these stages were particularly important.

In this study, the authors first developed inductive codes per interview by qualifying what interviewees said about codes or attributes of codes. Next, all segments with a newly identified

inductive codes were compared between all interviews. This process was conducted in multiple rounds. During Stage 5, all newly developed inductive codes were again revised and broadened, compared, divided, collapsed and re-structured in multiple rounds. The goal of this process was to arrive at disjunct codes, that are clearly separate (e.g. no similar codes or no double-coding of first and second-order sub-codes). However, due to the complexity of the interviewee descriptions, many passages are coded with more than one code. Like the deductive codes, each inductive code was defined in the coding manual. Finally, the inductive code system consists of 6 main code categories:

1. **Oversight**

   Oversight refers to all measures the company or individual employees or business divisions undertake to ensure proper implementation and adherence to the company's management control system (as a whole or individual management controls). This code is divided further into the codes of oversight by technology, oversight by outsiders and audits (which is further divided into emphasis on achieving the goal, degree of commitment, amount of detail, tolerance for deviations, intensity of communication).

2. **Perceptions**

   Perceptions encompass all types that interviewees mention. This code is further divided as follows:

   - Amount of time: Interviewees refer to how much or how little time management control systems take, or e.g. how time-consuming, fast, slow or critical they are in terms of timeliness, or what effect they have in completing tasks in a timely manner.

   - Contentment: Employees were asked in the interview how free they felt or how content they were with management controls. Therefore "contentment" describes how comfortable or happy interviewees are with individual controls or the MCS overall. This contentment is categorized by the grading system used in German schools. However, for ease of interpretation, these were coded as following: 1 (very good) – happy, 2 (good) - very content, 3 (satisfactory) – content, 4 (sufficient) - not content, 5 (deficient) - very unhappy.

   - Support of entrepreneurial acting: To what extent do employees feel encouraged or supported by the MCS to act in the company's best interest and further its goals? This code is further sub-divided into the sub-codes of positive support, low support/no support and hindering entrepreneurial actions.

- Degree of Freedom: The degree to which employees feel that they can choose their actions vs. how restricted they are in their actions by individual management controls or the management control system as a whole. This code is further sub-divided into the second-order codes of high degree of freedom, low degree of freedom - strict corset and tight-loose (freedom within clearly set parameters).

- Emotional perception: How management controls impact on employees and what emotions employees develop in regard to these management controls. Further, this code is divided into self-commitment (management controls that employees adhere to on their own accord, because they find them self-evident, have adopted them completely or see a personal advantage for themselves or for the company), acceptance (refers to statements from interviewees that suggest they have made their peace with (certain) management control measures, that they accept these measures, but not necessarily that they understand them or see a benefit in them), negative emotions (e.g. fear, annoyance, rage, dislike, etc. and descriptions like unnecessary, finger-pointing, hindrance, etc.) and positive emotions (e.g. security, safety, liking, fairness, sense of direction etc.)

- Effort involved: The amount of work that is associated with management control systems in general (e.g. for the implementation of management control system measures, adaptation, adherence, documentation, etc.). This code is sub-divided into low effort and lots of effort.

- Degree of influence: The degree to which employees perceive that they had and have any form of influence in the set-up of rules that govern their tasks. This can be at any stage of the set-up of rules, at inception, ongoing, in terms of changes or abolishing rules that apply to their tasks. This code is sub-divided into high influence and low influence.

3. Effects – E

Effects describes the intentional or unintentional consequences/results (positive and negative) of individual controls or the control system as a whole, that interviewees describe. This code is further divided as follows:

- E - support company targets: The 1st-order sub-code applies if management controls indirectly support company targets (other than quality control), but were not introduced with the primary goal of ensuring these company targets. The 2nd-order sub-code " E - quality control" applies if management controls lead to better quality procedures and outputs, but were not introduced specifically with this goal in mind.

- E – risk aversion: The 1st-order sub-code "E - risk aversion" describes the risks that the company is exposed to that result from missing or insufficient management controls. This code is further divided into E – vulnerability (the concern interviewees show that management controls might get the employees themselves into trouble) and E - labor sanctions (interviewees refer to consequences of not adhering (sufficiently) to management controls that are prescribed under German labor law, e.g. disciplinary measures, warning, written warning, notice, termination).

- E – external effects: The 1st-order sub-code "E - external effects" describes the effect management controls have on external parties, e.g. competitors, clients, potential employees, public, etc.

- E – internal effects: The code E – internal effects is divided into: E – acceptable illegalities (i.e. breaking of internal rules, that are not braking laws, e.g. shortcuts) to what extent employees adhere strictly to management controls. To what extent do they look for and come up with shortcuts or find detours to achieve their goal?), E – documentation (interviewees refer to putting anything related to management controls in writing, e.g. the control measures themselves, adherence to or deviance from the guidelines, etc.), E – direction (interviewees value management controls as an expression of the company's expectations of employees on what should be done and perceive it as a helpful guideline as to what should be done in what way, on a more or less granular level), E – hindrance (when employees feel that management controls result in further burdens and obstacles, even though that is not the aim of the controls), E – reward (when a change of management controls i.e. an increase in the degree of freedom and influence that employees experience) is described by the interviewees as a motivation, a reward or a signal of a high level of trust that the company has in the employee), E – persuasion (employees describe the possibility of using management controls to explain the reasoning behind implementing controls, and convince employees of the value of these controls instead of just ordering them to act in a certain prescribed way), E – boundaries (describes how management controls result in boundaries to the employees' tasks, responsibilities of divisions, etc. and how much of a certain task is the job of a particular employee, department etc.), E – rules of the game (employees talk about management controls as rules of the game that are just part of their job and that ensure fairness and equality among employees of the company).

4. Drivers – D

This code describes reasons that interviewees mention for implementing and changing management controls. Even though the subcodes are similar to those of "Effects", driver sub-codes are coded when interviewees emphasized that certain motivations, were the reasons for implementing/changing a management control, as opposed to effects, that describe the results or impact of a control which might be intentional or unintentional. Hence, drivers describe the input that goes into designing controls, whereas effects describe the output of management controls. The code "Drivers – D" is divided as follows:

- D – support company goals: The code of "D - support of company goals" applies if interviewees mention that management controls were introduced in order to achieve a company objective (i.e. in terms of numbers or non-measurable goals). This code is further subdivided into D - cost targets (management controls were introduced in order to fulfil or support the fulfilment of cost-related targets of the company), D – reputation (management controls were implemented in order to establish or support a good reputation of the company with clients and business partners), D - fraud prevention (management controls were implemented in order to prevent fraudulent acts by employees of the company or by insurance sales agents (i.e. paying out funds without a legitimate reason) that would harm the company), and D - quality control (management controls were introduced to improve the quality of the actions and work produced by the company).

- D – risk aversion: "D - risk aversion" is divided into "D - past experiences" (interviewees mention past experiences - either first-hand from their own experience, or in a broader sense, experiences within the company/industry - with management controls, e.g. with the whole procedure of checking these controls, or known deviations from management controls and their consequences for employees/company/industry, etc.) and "D - negative consequences" (interviewees mention that possible negative consequences might be the reason for introducing, adhering to or changing management controls, e.g. words like "risks", "risk-appetite", "safety", "security", "liability" etc.).

- D – external drivers: "D - external drivers" is further divided into D - market requirements (external market forces being the reason for implementing or adapting internal management controls, i.e. market demand, behavior of competitors, recommendations from market organizations) and D - legal requirements (legal requirements on a German or European level as the drivers for implementing or adapting management controls).

- D – internal drivers: "D - internal drivers" is further divided into D - autotelic controls (interviewees suspect that controls are used to justify the existence of a business division as a raison d'être), D – boundaries (describe how management controls describe who is responsible for what task and to mark boundaries between other employees or even departments), D – direction (interviewees express their view that management controls are used as a way of expressing the company's expectations of employees in terms of what should be done and how - on a more or less granular level), D - formal agreement (the importance of management controls being written down), and D - self-induced (the call for new, additional and/or more detailed management controls comes from the employees themselves).

5. **Features of good controls**

This code is used when interviewees describe features and aspects that lead to a positive perception of control measures and the management control system of the company. This code is divided as follows:

- Plausibility: This sub-code refers to accounts of interviewees that suggest they understand why management control measures are implemented and recognize their value (e.g. for themselves or the company). However, the interviewee might nevertheless retain a positive, negative, or neutral stance to them. Interviewees might use words like "understand, sense, value, important, right, necessary", which is usually in conjunction with an explanation of the value of this management control or an example. Therefore, it is a higher development step than a simple "acceptance" of controls.

- Transparency: This sub-code refers to how much knowledge employees have about control measures or the management control system as a whole. Do they know the procedures, the people responsible, the goals, or where and how to find these regulations, etc.?

- Fit: In the sub-code of "fit", interviewees refer to how well or how badly management control systems fit/reflect the necessities of their business model, the daily business or how relevant they are to them.

- Good communication: this sub-code refers to accounts of interviewees that emphasise the importance of communicating management controls (especially during the introduction of or change in existing management controls). Interviewees might use words like "communication, information" etc.

6. Management Control System as a whole

This code is used, when interviewees express their opinions about the Management Control System as a whole, as opposed to individual control measures. This code is divided up as follows:

- System or package: The code "system or package" describes how individual management controls interact and affect each other. The code is divided by the effect that results from more than one management control of an interaction: competition (how individual management controls collide or compete with each other, if more than one type or subtype of control apply to the same action or in general), interplay: cohesion (how individual management controls complement each other and lead to a cohesive picture and a cohesive management control system), and layering: stacking (more than one type or subtype of control that are *combined* or *stacked* on top of each other to control the same action).

- Number of controls: The general or specific amount of individual management controls implemented in the company and/or division.

- Changes: How stable/fixed do employees perceive the control measures or control system as a whole? Do they perceive changes over the past few years? This code is subdivided into frequency of changes (the number of changes or how often management controls change), unwillingness to change (interviewees mention the resistance they have seen or experienced when trying to change existing management controls), more complexity (interviewees refer to management controls that have become more complicated and/or intricate), less freedom (interviewees describe a decrease in their perceived level of freedom), more freedom (interviewees describe an increase in their perceived level of freedom), fewer controls (interviewee perceptions of a decrease in the number of management controls), more controls (interviewee perceptions of an increase in the number of management controls).

- Familiarity: How much experience do employees have with control measures or the management control system as a whole? How familiar are they with them? How do they behave in situations where they are not certain what rules apply?

Overall, all interview transcripts were coded in several rounds with deductive and inductive codes (an overview of all codes and how often they were used can be found in Appendix II). The deductive code displays what management control or attribute of a management control interviewees talked about, and the inductive codes provide information on how they talk about it.

This method gave us the opportunity to analyze in Stage 6, how interviewees talk about each management control, how they feel about them and what other factors influence tightness of control. This was done by analyzing the correlations of each deductive code (i.e. per attribute of each type of control) with inductive codes. Hence, the authors evaluated with which inductive codes each deductive code correlated. Starting with the most substantial correlation, all statements that were coded with both codes were evaluated, and these statements and the interaction of these codes was interpreted. The findings of this analysis are detailed below.

5.   Case Analysis

We divided the analysis of the case into three parts, addressing each of the research questions. The first part addresses the first research question as to whether Van der Stede's (2001) definition and measurements of tight budgetary controls is still valid today. In this part we discuss and analyze what the interviewees stated about their budgetary controls and whether the measurements of Van der Stede (2001) apply to their budgetary controls. The second part addresses the second research question whether Van der Stede's (2001) five attributes can be used to define tightness of other types of action controls. Here, we analyze and discuss what the interviewees said about action controls, personnel controls and cultural controls and whether the Van der Stede's (2001) attributes can be applied to describe the tightness of these types of controls as well. Part I and Part II will consider each type of control individually. In order to conduct this analysis in a thorough and comparative manner, we first focus on overall factors for each type of control, that reflect the interviewee perceptions of the control (e.g. Contentment, Degree of Freedom, Emotional perception, Effort involved and Degree of Influence), as well as additional factors that were mentioned for this type of control. Following this introduction to each type of management control with an overview, we discuss each of the five Van der Stede (2001) attributes separately for each control type and summarize whether these attributes apply to each type of control.

The third part of the analysis addresses the third research question as to what other attributes define tightness of controls, by summarizing and emphasizing additional factors that influence the interviewee perceptions of the insurer's MCS tightness. This also includes overall factors that resulted from the interviews and might be included to broaden the definition of tightness of MCS.

5.1 Part I: Tight Budgetary Controls

For results controls, for several reasons, the authors chose to take a closer look at budgetary controls. First, the first research question was directed at the reproduction of Van der Stede's (2001) study. For this purpose, insurance companies represent a very useful study object, because budgetary controls play a significant role in insurance companies. For one thing, most insurers have economic goals they must accomplish, in which case tight budgetary controls are necessary. Currently, 6 of the 40 biggest blue-chip companies in Germany (DAX 40) are insurers. Furthermore, in the insurance industry, cost ratios (i.e. the percentage of premium income which insurers have to pay for their costs) play an important role in the insurers' value chain and are commonly used to counteract claims ratios (i.e. the percentage of premium income insurers pay out as claims) to manage the economic success of the insurer. One interviewee reiterated the importance of tight budgetary controls: "*I think you always have to bear in mind that this is the customer's money and that every penny should be spent appropriately - every euro, every cent. We have a **responsibility** for this budget which is available to us. And that only works if you are conscious about it and [for example] renegotiate [contracts] to make sure that you are saving money*." (#1, Pos. 46), hence, additionally stressing the signaling function tight budgetary controls have for insurance companies.

In this part, we will take an in-depth look into all references that interviewees made to results controls (and especially budgetary controls) implemented at the insurer.

Overall observations

Nine interviewees described that they were content or not content with budgetary controls, whereas five interviewees were happy or very content with them. However, contrasting this mixed perception, neither the degree of freedom, particular emotions, nor the effort involved, played a significant role in the interviews. However, the lack of influence was a main topic of conversation with the interviewees. "*So this year it's the first time, I think, that we're submitting approximately what we expect the cost to be. But in the last few years, that [budget] was predetermined for me.*" (#3, Pos. 312), one interviewee said and explained how little influence employees and managers had in setting budgetary targets. Another important factor that was mentioned vehemently was a lack of transparency (see below, 5) and intensity of communication).

When talking about budgetary controls, interviewees also mentioned budget goal difficulty (see below, 2), degree of commitment) and other results controls. The latter were split into two items: results controls related to the profitability of insurance business, and results controls in terms of HR (e.g. headcount budgets for employees, etc.). Therefore, other results

controls were often layered with other management controls, especially with personnel controls and action controls. However, interviewees explained that other results controls would compete or conflict with other management controls, especially if these other management controls had been implemented to support the company's cost targets.

1. **Emphasis on meeting the goal**

Overall, the company's emphasis on meeting budgetary goals was perceived as very high. Interviewees perceived budgetary controls to be stacked with other forms of control, and that budgetary goals usually superseded other forms of controls or influenced other types of control, e.g. personnel controls. One employee described the influence budgetary controls had on personnel controls: "*Let's now move onto **the topic** of external hiring. And let's actually consider the statement [by the board that we have implemented a] "**cost cap**" and the explanations that go along with it. Then I think it's **fairly easy** [...] to understand why we also have these processes, in order to emphasize the importance of such external [personnel] recruitment. So, from **that perspective**, it is fair to say that this [personnel procedure] is sensible, because there are a few stumbling blocks built into [the hiring process] that prevent the whole thing from being an **everyday** occurrence. So, with that in mind, I can **fully** understand [the process]. Of course, from my perspective, it **hinders** me in **achieving my goals**.*" (#5, Pos. 142). However, the strong emphasis on meeting budgetary targets was not only demonstrated from the organization through MCS design, but also from the employee attitudes. Interviewees repeatedly displayed a high level of self-commitment to budgetary targets and found them plausible. "*I have a budget that is assigned to my name. I am responsible for this budget, [to ensure] that it is used sensibly, purposefully.*" (#14, Pos. 22), said one interviewee.

Overall, Van der Stede's (2001) identified attribute of a high emphasis on meeting the budget could be verified in this study, as all interviewees emphasized the importance of meeting budget goals.

2. **Degree of commitment**

In this case study, the degree of commitment, as defined by Van der Stede (2001) was not high. Interviewees described many instances in which budgets were revised during the year, e.g. budget cuts without any prior notice, or applications for higher budgets using business cases. In this context, interviewees explained that they in general had a very low influence on setting the budget targets, but did not take issue with that. Budget Goal Difficulty (Van der Stede, 2001) played a vital role within the attribute of degree of

commitment, but in this case study, it was considered very low: "*So far, we have **always** had a generous budget. In fact, we've always had a generous budget, and even when we once [exceeded our budget] - I think just once, phew – we somehow found a way to manage, because [some other funds] were reallocated. So that also worked out.*" (# 1, Pos. 42).

Therefore, overall, we saw a relatively low commitment to budget goals, that in this study went hand in hand with a very relaxed attitude from the interviewees regarding this aspect. However, the degree of commitment was also the only attribute of budgetary control tightness, for which Van der Stede (2001) was also not able to find support. This case study arrives at the same result, and hence, we were also not able to verify a high degree of commitment as an attribute of budgetary control tightness.

3. Amount of Detail

In this case study, interviewees reported very low amounts of budgetary details in the company. Regarding the budgets in their departments, they were free to shuffle individual budget items around within their overall budgets, but also with other departments' budgets, as long as the top line budget was adhered to. The interview partners mentioned very few instances where budgets were very detailed (e.g. specific budgets for hotels, etc.).

Overall, Van der Stede's (2001) identified attribute of a highly detailed budget could not be verified in this study.

4. Tolerance for Deviations

None of the interview partners had any experience with tolerance for deviations and what might happen if they could not meet their budget targets. They attributed this to two main factors. First, as discussed above, Budget Goal Difficulty was perceived to be very low in this setting. Therefore, they had not experienced a situation in which they might have exceeded their budget. Second, all interviewees showed a high level of self-commitment to set budget goals: "*because I have been trained to stick to budgets. And [I] used to be a controller myself in the distant past. But I always had superiors who said quite clearly: there is to be no budget over-shoot.*" (#12, Pos. 92).

Overall, Van der Stede's (2001) identified attribute of a low tolerance for deviations could not be verified in this study, but also not disproven.

5. Intensity of Communication

Van der Stede (2001) described a high level of budgetary tightness when budget-related topics are intensively discussed. In this case study, the participants, however, explained

that there was very little or even no communication about budgets. One interviewee described the situation as "fishing in muddy waters": "*I have no idea, none at all. So, if there's budget [available] for our department, then it's really just: can I afford to send my employee to a training, yes or no? But for me, it's **fishing in muddy waters**. I know what's available [in terms of detailed budget overviews] –but only from my old job. And so I know – unless that's been changed – that my department manager also receives [a detailed report] every month.*" (# 2, Pos. 260). On the other hand, this low level of communication led to a reverse effect to what Van der Stede (2001) assumed. This example shows clearly: "fishing in muddy waters", as interviewee #2 called it, also leads to a very high tightness of controls, because employees do not know how far they can go in their actions and therefore, have to gain approval instead of being able to decide for themselves. This was reflected in almost all interviews, and this lack of transparency was severely criticized by the interviewees.

Hence, Van der Stede's (2001) identified attribute of a high intensity of budget-related communication could not be verified in this case study. On the contrary, this case study showed that an extremely low level of communication can (also) lead to a high level of control tightness.

Overall, we would argue that the tightness of budgetary controls in this case study was very high. All interviewees strongly emphasized that exceeding the budget would be an unthinkable scenario for them, and that they would take appropriate measures not to exceed the budgets. However, in this case study, we were not able to verify Van der Stede's (2001) attributes of tight budgetary controls, except for (1) emphasis of meeting budgetary targets, and (2) the degree of commitment, which Van der Stede (2001) was also not able to corroborate. This is a surprising finding, considering the high level of tightness of budgetary controls here. However, we found that, as opposed to Van der Stede's (2001) definition, that a high tightness of budgetary controls is defined by (5) a high intensity of communication, the opposite is in fact the case. No or very little communication can lead to employees "fishing in muddy waters" and a high level of tightness, because they are not able to navigate further actions on their own. Hence, the answer to the first research question as to whether Van der Stede's (2001) definition and measurements of tight budgetary controls is still valid today, is that the definition does not apply to this case, even though a high level of tightness prevails.

5.2   Part II: Tight MCS

The second aim of this study was to test whether the five attributes defined by Van der Stede (2001) can be used to describe tightness of all types of management controls (following Merchant and Van der Stede's 2017 MCS definition). For this analysis, we will discuss each management control separately.

5.2.1   Tight Action Controls

As an example of action controls, we chose to focus on behavioral constraints. Merchant and Van der Stede define behavioral constraints as "*a "negative" or, as the word suggests, a "constraining" form of action control. They make it impossible, or at least more difficult, for employees to do things that they should not do. The constraints can be applied physically or administratively.*" (Merchant and Van der Stede, 2017, p.86). In this case study, most interviewees stated that their jobs were governed by behavioral constraints in the form of authorities, e.g. for making decisions or making payments, and the importance of these constraints. For example, for the claims department, one interviewee explained: "*Of course, with claims [handling], you have people who can spend their employer's money* **very directly**." (#2, Pos. 67-68). This stresses the importance of limiting how much employees can pay out per claim, so as to prevent the insurer from paying out too much. Similarly, in underwriting, limiting how much employees can underwrite also plays an important role, as one interviewee explained: "*So the underwriters have certain levels [of underwriting authority]. There's the junior underwriter, then the experienced underwriter, and the senior underwriter. And they are limited in the volume they can underwrite.*" (#4, Pos. 70), hence limiting the risks the insurer takes. In some cases, behavioral constraints at insurance companies are also defined by law. One interviewee of a central function explained: "*My position is defined by law. And the function that I perform is clearly specified, that I have to have that information and nobody else.*" (#8, Pos. 146). Hence, behavioral constraints at insurance companies play a significant role, because they not only prevent the company from economic harm, which could be caused by paying out too much or underwriting undesirable risks, but are also in part a legal requirement. Therefore, for this case study we chose to focus on behavioral constraints as one form of action controls.

Overall observations

Ten of the interviewees said that they were happy or very content with their behavioral constraints, demonstrating a strong positive perception of this type of action control. Nevertheless, they experienced them as restricting, and often mentioned that these behavioral constraints were

also implemented in the insurer's IT system in a fool-proof way that could not be circumvented (Merchant and Van der Stede define these types of foolproof controls as "Poke Yoke", 2017, p.89). However, they found the extent of these constraints to be sufficient for their day-to-day tasks, and reported that they could often directly or indirectly influence them. Surprisingly, interviewees often saw behavioral constraints as a form of reward. Especially when receiving greater authority (i.e. a widening of the behavioral constraints), they described this change as a motivating factor and perceived it as a signal of respect and trust from the company towards the employee. This, of course, is routed in high tightness of behavioral constraints, as any widening of constraints or increase in decision-making-authority must be earned by doing a good job, and is hence perceived as a reward.

1.   Emphasis on meeting the goal

In this case study, interviewees placed a high level of emphasis and importance on adhering to behavioral constraints. This was demonstrated on the one hand by the implementation of most behavioral constraints as fool-proof Poke Yoke, which led to a very low degree of perceived freedom. On the other hand, behavioral constraints always playing a prominent role in internal and external audits also emphasized their significance for the interviewees. Even though behavioral constraints were perceived as decreasing the employees' level of freedom, many interviewees referred to them more in a form of tight-loose controls, i.e. that they offered a framework that created boundaries for the employees' actions, but at the same time offered high looseness i.e. freedom within these boundaries: "*In my opinion, they give us very, very broad freedom to make decisions. Because in underwriting, it was confirmed to me on several occasions that, **by and large**, we get by with the authorities and that the threshold values are set correctly. So the employees can do exactly what I said at the beginning, work autonomously and also use their competence very, very well.*" (#5, Pos. 70). The high emphasis on adhering to behavioral constraints was furthermore underlined by interviewee understanding of why the insurer had implemented these constraints. In these cases, interviewees explained that behavioral constraints had been implemented to ensure that the insurer complied with legal requirements and avoided negative consequences for the company. In addition, interviewees also saw benefits in adhering to behavioral constraints, mainly to give employees direction (therefore addressing what Merchant and Van der Stede refer to as "lack of direction", 2017, p.12), ensure the quality of service the insurer delivers, and offers a sense of security to employees that they have done the right thing and acted in accordance with the company's preferences and goals.

Overall, Van der Stede's (2001) identified attribute of a high emphasis on meeting the goal can be used to describe tightness of behavioral constraints in this study.

2. Degree of Commitment

In general, the degree of commitment was perceived as low, since most interviewees described being able to adjust these behavioral constraints from time to time either to: 1. reward employees for their good work or 2. to update them to current circumstances and make sure that employees have a sufficient amount of decision-making authority to handle their day-to-day business.

Therefore, Van der Stede's (2001) identified attribute of a high degree of commitment could not be used to describe tightness of behavioral constraints in this study either.

3. Amount of Detail

In this case study, most behavioral constraints that interviewees discussed were regarding decision-making authorities and authorities to pay out money on behalf of the insurer. Therefore, interviewees gave accounts of very detailed behavioral constraints: "*It's actually an Excel spreadsheet that we then have to pass on to the accounting department, which is signed by the department manager and me. The exact level [of authority] is stated there.*" (#10, Pos. 100).

Hence, Van der Stede's (2001) identified attribute of a high amount of detail can be used to describe tightness of behavioral constraints in this study.

4. Tolerance for Deviations

Interviewees described a very low tolerance for deviations from behavioral constraints in this case study. One reason they gave for this low tolerance referred to the reasons why these behavioral constraints had been implemented in the first place, namely, past negative experiences the company had encountered, as well as compliance with legal requirements. Another reason interviewees gave were the possible ramifications for themselves. Even though they had little or no personal experience with this scenario, most interviewees expected severe consequences for deviating from behavioral constraints, e.g. measures that are legally defined as labor sanctions (e.g. disciplinary measures, warning, written warning, notice, termination).

Therefore, Van der Stede's (2001) identified attribute of a low tolerance for deviations can be used to describe tightness of behavioral constraints in this study.

5. **Intensity of Communication**

In this case study, interviewees described a low intensity of communication regarding behavioral constraints. Usually, they were perceived as a given, and only discussed if employees were unsatisfied with the amount of authority they had, or if there were any changes to existing authorities. Therefore, interviewees also did not see a need for a high intensity of communication. However, interviewees stressed that a high level of transparency of behavioral constraints was more important than the intensity of communication.

Hence, Van der Stede's (2001) identified attribute of a high intensity of communication could not be used to describe tightness of behavioral constraints in this study.

Overall, in this case study, interviewees described behavioral constraints as very tight. Reasons for that were especially the foolproof implementation of these behavioral constraints within the insurer's IT infrastructure (with no possibility of circumventing these constraints), the role they played in audits, the amount of detail, and the fact that a widening of these constraints was perceived as a reward. However, in this case study, only some of Van der Stede's (2001) identified attributes of tight budgetary controls were able to describe a tightness of behavioral constraints. (1) High emphasis on meeting the goal, (3) high level of detail and (4) low tolerance for deviations were also able to describe tight behavioral constraints. However, (2) high degree of commitment and (5) high communication intensity were not able to describe tight behavioral constraints.

5.2.2 Tight Personnel Controls

"*Personnel controls build on employees' natural tendencies to control or motivate themselves. Personnel controls serve three purposes. First, some personnel controls help clarify expectations. They help ensure that each employee understands what the organization wants. Second, some personnel controls help ensure that each employee is able to do a good job; that they have all the capabilities (e.g. experience, intelligence) and resources (e.g. information and time) needed to do the job. Third, some personnel controls increase the likelihood that each employee will engage in self-monitoring. Self-monitoring is an innate force that pushes most employees to want to do a good job, to be naturally committed.*" (Merchant and Van der Stede, 2017, p.95). They define three types of personnel controls, of which this paper focuses on "Personnel selection and placement". Staffing procedures and finding the right people for the right jobs is a very important topic in the German insurance industry, not least due to the high average age of German insurance employees, which was addressed in a study by Oliver Wyman in 2020. A

spokesperson for the German insurer Gothaer said: "*We see the two aspects of Oliver Wyman's report on demographics - aging of the customer base and aging of our own staff - as very important for our strategy over the next five years*." (Versicherungswirtschaft Heute, 22 April 2020). Similarly, one of the interviewees stressed: "*It is also a permanent topic here, that is of great importance at the Board of Management level. Because in the department in which **I** work, the demographic development is frightening. That means we have a very high average age here and therefore, it is an ongoing topic of discussion, in which there are also initiatives as to how we want to position ourselves in the future, how we want to respond. And of course, if you have such a situation in the entire department, or rather in our area, in my department, then you must make this a topic of discussion, because you have to solve the issue.*" (#5, Pos. 164). Hence, personnel selection and placement currently play an important role in the German insurance industry, and this study therefore focuses on this type of control.

However, other forms of personnel controls were also mentioned by the interviewees, especially training. In this regard, interviewees referred to their personal developments and careers, and that they perceived a higher degree of freedom and influence, the more experience they had gathered (see behavioral constraints above). In general, at the studied insurer, the HR department is responsible for designing the procedures for personnel selection and placement. However, the processes themselves are conducted by the individual departments in cooperation with HR.

Overall observations

In general, personnel selection and placement were considered a tight spot – pun intended – for all interviewees. Most interviewees displayed substantial dissatisfaction with this control and its implementation at the insurer. Seven interview partners said they were content with personnel selection and placement, three were not content, and another three were very unhappy. These ratings concurred with the interviewee perceptions of a low degree of freedom and strong accounts of negative emotions and a high amount of effort necessary for these controls. Furthermore, interviewees generally had a low level of experience and familiarity with the current personnel selection and placement procedures.

1. **Emphasis on meeting the goal**

    Adherence to the personnel selection and placement procedures was very high in this case study. Interviewees unanimously perceived a low degree of freedom and often spoke about it with strongly negative emotions: "*[That] is the issue we have had as well. We have grown our business and yet we're not getting [funding for additional] people. Even if we're*

profitable, we're not getting people. We have additional tasks, but no new people. So that should be considered as well." (# 6, Pos. 288). Interviewees criticized that these personnel controls were subject to the company's cost targets and proved to have no or only a poor fit with the needs of the interviewees' departments: "*So the issue is more about: how can we [add new people] within our given budget? That is the biggest problem. Because, as I understand it, if one department is allocated a vacancy, someone has to be taken from another department. That is the whole problem.*" (#8, Pos. 72)

Overall, Van der Stede's (2001) identified attribute of a high emphasis on meeting the goal can be used to describe tightness of personnel selection and placement in this study.

2.   Degree of Commitment

Generally, interviewees described the degree of commitment to personnel selection and placement procedures as very high. Reasons for this were mainly that interviewees had a very low degree of freedom, and the process was overseen or even driven by the HR department (i.e. an external party to the departments of the interview partners). "*There [it's] very black and white. Of course, you can't generalize. There are also enough situations where you would say: Here you also have a second or third option. But in this case [of personnel selection procedures], it is really black or white.*" (#5, Pos. 154), one interviewee stated, when asked about possible changes or shortcuts to these controls.

Overall, Van der Stede's (2001) suggested attribute of a high degree of commitment can be used to describe tightness of personnel selection and placement in this study.

3.   Amount of Detail

In this case study, personnel selection and placement procedures showed a high level of detail, but also a low level of transparency and communication (see below). As one interviewee put it: "*I would say, in the HR department [the process] is very detailed. Not known to the outside world in such detail [though]. I think people are aware that there are certain deadlines, certain steps that must be taken, [for example] the workers' council must be consulted. That kind of thing is well known. However, **I** am not personally familiar with the details of the [other] procedures involved.*" (#10, Pos. 54). Interviewees also criticized the unclear requirements and the substantial effort involved in these procedures: "*Yes, I got this template from someone somewhere and then I tried to fill it in. But it was always too long. They wanted it more concise and even more concise and still more concise. [One point for example was] appropriate reasoning. Well, sometimes I can't use enough of my*

imagination. I approach it more from a business perspective. [The HR department] has a completely different perspective on it." (#6, Pos. 280)

Overall, Van der Stede's (2001) identified attribute of a high level of detail can be used to describe tightness of personnel selection and placement in this study.

4. Tolerance for Deviations

Interviewees perceived the tolerance for deviations to be very low or even non-existent. More detailed accounts explained that interviewees would fear personal consequences to their own career, like labor sanction measures, if they were to deviate from set personnel selection and placement procedures: "*If we had decided to ignore the procedure, I'm sure this would have had consequences for my job, or even for my supervisor's job.*" (# 7, Pos. 180).

Overall, Van der Stede's (2001) identified attribute of a low tolerance of deviations can be used to describe tightness of personnel selection and placement in this study.

5. Intensity of Communication

In this case study, the interviewees described a low level of communication relating to personnel selection and placement. In general, interviewees criticized the controls as highly lacking in transparency: "*However, I have never seen a guideline on it. I learned it while [doing] it. Every once in a while, there's an email: "Do this now. Or do that." But I haven't seen the whole process broken down yet.*" (#3, Pos. 186). This account and others paint a picture of the interviewees stumbling around in the dark and being on a tight leash, similarly to what was described above as "fishing in muddy waters" (see budget controls, intensity of communication). Furthermore, interviewees felt that current personnel selection and placement procedures did not meet their needs. The intensity of communication in this case was limited more to the employees' frustration with these controls: "*So we talk about that **a lot**, because we have this lack of resources. And that's not just the case with lawyers, it's the case everywhere. There are also fewer and fewer skilled workers. The shortage of skilled workers also affects our department.*" (#3, Pos. 188).

Overall, Van der Stede's (2001) identified attribute of a high intensity of communication could not be used to describe tightness of personnel selection and placement in this study. In this case, we found the opposite to be true, that a complete lack of communication contributes to a high tightness of personnel selection and placement.

Overall, in this case study, interviewees described personnel selection and placement as a very tight management control. This was especially underpinned by the lack of freedom they described, the lack of transparency of "fishing in muddy waters", and no possible deviations from this process. Furthermore, we found that almost all five attributes that Van der Stede (2001) uses to describe tight budgetary controls can be used to describe tight personnel selection and placement. This finding is very surprising, considering that this paper was not able to replicate Van der Stede's (2001) original study when it came to the insurer's budgetary controls. Furthermore, surprisingly, (2) degree of commitment, which could neither be supported by Van der Stede (2001), nor by the re-test above, was able to describe tight personnel controls. However, similarly to the findings regarding tight budgetary controls, this study also found that a high tightness of personnel selection and placement is defined by (5) a low intensity of communication and a significant lack of transparency.

5.2.3   Tight Cultural Controls

Merchant and Van der Stede define cultural controls as "*mutual monitoring; a powerful form of group pressure on individuals who deviate from group norms and values*" (Merchant and Van der Stede, 2017, 97). Group rewards, as one form of cultural controls, is not practiced at the insurer where this case is set. Therefore, as an example of cultural controls, we chose to focus on codes of conduct, which are the most tangible form of cultural controls at the studied insurer. "*These formal, written documents provide broad, general statements of organizational values, commitments to stakeholders, and the ways in which management would like the organization to function.*" (Merchant and Van der Stede, 2017, p.98). Codes of conduct are tools that help organizations to align employee behavior and convey a certain picture to the outside world about the company's values. In that respect, they play an important role in forming the reputation of a company. For insurance companies, a good reputation is significant, because it plays a large role in buying decisions of consumers, as insurance policies are credence goods (Darby and Karni, 1973). Hence, a tight code of conduct influences the economic success of an insurer by signaling virtues and attracting customers. Furthermore, in recent history, several reputational scandals have enveloped the German insurance industry and resulted in a tightening of legal requirements, hence creating an even tighter environment for German insurers (Tica and Weißenberger, 2022). Therefore, steering employee behavior in a way that represents the company's ethics and values is also crucial for preventing reputational scandals that might lead to a tighter legal environment. Asked about the importance of codes of conduct, interviewees answered similarly: "*The external impact, reputation. That's what makes **us** [stand out], and I*

*want us to project a positive image. There's **so** much riding on it, [for example] that people also want to join a company or work for a company that projects a **positive** image to society. I believe [the code of conduct] contributes to the fact that the image which is portrayed to the outside world will be shaped in such a way that it will be attractive and good, and will have a positive connotation.*" (#1, Pos. 248-250). This further emphasizes the importance of codes of conduct and a good reputation, also from the employee perspective. Overall, codes of conduct influence the insurer's image, employees, economic success and regulatory environment in many aspects and play a vital role for insurers. Hence, this paper focuses on codes of conduct in this case study.

However, even though the focus of this study was on the code of conduct, interviewees also often mentioned other forms of cultural controls, mainly: tone from the top, direct supervisor, and error culture. First, interviewees often referred to the tone from the top, which is defined by Merchant and Van der Stede: "*Managers serve as role models and [...] are a determining factor in creating a culture of integrity in their organizations.*" (Merchant and Van der Stede, 2017, pp.100-101). Hence, statements from the interviewees demonstrate the significant role the tone from the top plays for the MCS as a whole. In general, interviewees perceived the tone from the top as a positive concept. However, many interviewees criticized the tone at the top at the time. One main criticism was the perceived distance of management from the implications of the set controls. One interviewee described the introduction of new management controls: "*And that's why it's not really an accusation. I understand this approach, but it always leads to problems further down the line, or to a lack of understanding, because [these rule-makers] are perhaps too far removed from the people, from the streets. Things are decided somewhere upstairs. But at the top, they don't have to debate with people, and they don't have to solve these problems.*" (#4, Pos. 218). Another strong point of criticism was that interviewees perceived upper management as not themselves adhering to the rules they had set: "*So I'm a firm believer in: **Walk the Talk**. People need to **see** that. We can't write emails that put out Covid guidelines which say, "Cancel your Christmas parties, don't go on any necessary business trips," and then employees hear that [the board members] are [out of the country] this week [on a business trip]. So why don't the policies apply to them?*" (#3, Pos. 344). Furthermore, management itself was often perceived to be the driver of implementing new, or strengthening existing controls, with peaks when a change in management occurred. Interviewees assumed that the avoidance of negative consequences for the company, and also for the managers themselves, were the strongest drivers behind that. Overall, many interviewees perceived the tone from the top negatively at that time.

Next, interviewees stressed the importance of the role played by their direct supervisor for the tightness of controls. As one interviewee put it: "*I think that it very much depends on the manager. [As a manager] you can play it in different ways, of course. You may want to intervene in every decision, or you can just do a sound check.*" (#3, Pos. 49-50). Hence, in some cases, the direct supervisor might also function as a driver for implementing additional controls, making the MCS as a whole tighter. Therefore, depending on the background and character of the supervisor, as well as the relationship between employee and direct supervisor, the management system as a whole might be perceived as tight or loose. Interviewees especially pointed out the link between the direct supervisor, error culture, results controls and behavioral constraints.

Another factor stressed by interviewees is what is currently being discussed as "error culture". This refers to how the company deals with mistakes their employees make and whether or how it creates an environment that allows employees to make mistakes and learn from them, or (merely) punishes them. In this case study, interviewees used terms like error culture, tolerance for mistakes, etc. to describe this phenomenon. The interview partners stressed the importance of this issue when it came to the efficiency of the management system as a whole and employee understanding of and adherence to controls: "*You can't make an omelet without breaking eggs. That's just the way it is. I think you also have to allow for a certain error culture [meaning the manner in which errors are dealt with]. That's also part of daily business, part of learning, of the **learning process**. For me, it's important to learn from them, so that when mistakes are made, they do not happen again in the same form in the future.*" (#5, Pos. 38). Another interviewee underlined the importance of a good error culture by describing the downside of a bad one: "*If employees have the feeling that they can go to the manager at any time and say, "I did something wrong there. Can we find a solution?", then they don't **cover up**, they don't start looking for 'solutions' that make things even **worse**.*" (#3, Pos. 72). Hence, error culture was described as a very emotional topic for the interviewees, because a poor error culture puts employees at risk and leads to a feeling of vulnerability. Error culture was also often mentioned in connection with the tolerance for deviations in audits. Furthermore, interviewees stressed the important role that the direct supervisor played in error culture (also see quotes above).

Overall observations

In general, the code of conduct was viewed favorably at the studied insurer. Ten interviewees were very content with it, three content. Even though some interviewees mentioned the low level of influence they had on the code of conduct, they did not express any problem with this.

Interviewees described the code of conduct as a rule of the game and expressed a high level of self-commitment in complying with it. This was also underpinned by accounts that interviewees found the code of conduct very plausible, and understood that its introduction was driven by legal requirements. Many interview partners stated being very familiar with the code of conduct, but often it was at a high level, so that they could not go into the details of the code.

1. Emphasis on meeting the goal

In general, as indicated above, interviewees described a very high emphasis on adhering to the code of conduct as "rules of the game". All interviewees expressed a strong sense of self-commitment to the code, as opposed to an externally forced adherence. This self-commitment was further supported by a majority of accounts expressing positive emotions in connection with the code. Furthermore, interviewees described many other positive effects they ascribed to the code of conduct, such as decreasing their own vulnerability and giving a positive signal to the outside world.

Overall, Van der Stede's (2001) identified attribute of a high emphasis on meeting the goal can be used to describe tightness of the code of conduct in this study.

2. Degree of Commitment

In this case study interviewees described a high level of commitment to the code of conduct and expressed little need for change and little to no desire to deviate from the code.

Hence, Van der Stede's (2001) suggested attribute of a high degree of commitment can be used to describe tightness of the code of conduct in this study.

3. Amount of Detail

All interviewees found the code of conduct to be more on the generic side, but they valued this, because it provided them with the chance to fit the code of conduct to their daily business and provided them with a higher level of freedom. Nevertheless, many interviewees still valued the code of conduct as a guideline that gave them direction. However, this finding is not surprising, considering the definition of codes of conduct: "*The codes are designed to help employees understand what behaviors are expected even in the absence of a specific rule; that is, they are to some extent principle-based rather than merely rule-based.*" (Merchant and Van der Stede, 2017, p.98).

Accordingly, Van der Stede's (2001) identified attribute of a high amount of detail could not be used to describe tightness of code of the conduct in this study.

4.   Tolerance for Deviations

Interviewees in this case study described a low level of tolerance for deviations from the code of conduct. Most interviewees did not have any first-hand experience with this scenario, but expressed a strong feeling of vulnerability and fear of sanctions when deviating from the code.

Hence, Van der Stede's (2001) identified attribute of a low tolerance for deviations can be used to describe tightness of the code of conduct in this study.

5.   Intensity of Communication

In this case, interviewees explained that the insurer placed a high emphasis on communicating the code of conduct and that employees had to undergo annual training that always included a written test. Nevertheless, many interviewees described a lower level of familiarity with the details of the code. However, as one interviewee put it: "*Well, we have to do our training on the code regularly, which I think is also updated on a regular basis, and there are always new guidelines. And at the end of the day, you actually have to hand in a certificate to your supervisor proving that you have completed the training and achieved a sufficient score, and that you understand it. And if you understand it, you can implement it. I think it's good that we do it that way*." (#1, Pos. 256). Therefore, the focus of code-related communication in this case study was not on frequency, but on understanding the guidelines and being able to apply them in day-to-day business. This was also supported by interviewees stating that they found the code plausible and had a strong self-commitment to it.

Hence, Van der Stede's (2001) identified attribute of a high intensity of communication could not be used to describe tightness of the code of conduct in this study. It would require a more complex definition of this attribute that includes the quality of communication.

Overall, in this case study interviewees described a high tightness of codes of conduct. This was particularly supported by accounts of high self-commitment to the code, no desire to deviate from it, and the severe punishments expected for deviations. However, Van der Stede's (2001) identified attribute of a high intensity of communication, which is directed more at the frequency of communication, could not be used to describe tightness of code of conduct in this study. However, communication played a large role in the tightness of the code of conduct in this study, in the sense that it helped employees understand how to apply the code in daily business. Furthermore, similar to tight personnel controls, (2) degree

of commitment was able to describe tightness of cultural controls, even though it was not able to describe tightness of results and action controls.

Mainly, in this case study, this paper found that interviewees referred to all types of management controls – budgetary controls, behavioral constraints, personnel selection and placement, as well as the code of conduct – to be very tight. However, we found that only three of the five attributes that Van der Stede (2001) uses to describe tight budgetary controls can be used to describe tight code of conducts reasonably reliably: (1) emphasis on meeting the goal, (2), high degree of commitment and (4) low tolerance for deviations. Nonetheless, (3) a high number of details generally was not applicable to the nature of codes of conduct, because they focus on guidelines that provide direction in lieu of concrete rules. Furthermore, we did find that (5) communication was a very important factor for implementing the code of conduct successfully. However, it was less the frequency of the communication that played an important part, but more the strong focus on sense-making. Overall, the following table (Figure 8) gives a short overview of the findings for Part I and II:

Type of Management Control	Attributes				
	1 Emphasis on meeting the goal	2 Degree of Commitment	3 Amount of Detail	4 Tolerance for Deviations	5 Intensity of Communication
Results Controls - Budget Controls (RC)	RC - 1	RC - 2	RC - 3	RC - 4	RC - 5
Action Controls - Behavioral Constraints (BC)	BC - 1	BC - 2	BC - 3	BC - 4	BC - 5
Personnel Controls - Personal Selection and Placement (PC)	PC - 1	PC - 2	PC - 3	PC - 4	PC - 5
Cultural Controls - Code of Conduct (CC)	CC - 1	CC - 2	CC - 3	CC - 4	CC - 5

Figure 8:   Verification of Deductive Codes.
Green: verified
Yellow: verified with alterations
Red: not verified
White: not applicable

In general, the only attribute from Van der Stede (2001) that was able to define tightness in all types of control, was (1) the emphasis on meeting the goal. (4) Tolerance for deviations was able to define tightness in all types of control, except for budgetary controls. Similarly, (5) communication was an important factor in defining tightness of control, but not in the form originally defined by Van der Stede (2001), who places emphasis on communicating often. In this case, the exact opposite was the case. The interviewees perceived a very high level of tightness of control in cases where there was very little/no communication and little/no transparency. Hence, Van der Stede's (2001) definition would have to be broadened to include a very high

frequency of communication, as well as a very low frequency/no communication, as a determining factor for tightness of control, or pivot to a stronger emphasis on transparency. Furthermore, as with the code of conduct in this case, the significance of communication for tightness of control not only lies in the frequency, but also in the type and quality. A type of communication that influences employees to not only accept controls, but to develop a strong sense of understanding and self-commitment, also led to tight controls.

Hence, the second research question, of whether Van der Stede's (2001) five attributes can be used to define tightness of other types of action controls, this case study reveals that (1) a high emphasis on meeting the goal, (4) low tolerance for deviations and (5) communication (in an altered, broader sense) have proven themselves as general indicators of high tightness of all types of control.

5.3 Part III: Tightness of the overall MCS – other influencing factors

The third contribution of this study is to give further insights into employee perspectives on tight MCS in general, and to identify additional factors that might broaden the definition of control tightness.

Above, we explained that we chose a sample company within the insurance sector, which we believed to be an industry with a high tightness of control. Considering the results of the case study, we find our assumption confirmed, because interviewees described all discussed management controls as tight. In general, the interviewees discussed various individual controls and the MCS as a whole. Controls that the interviewees considered to show a high level of tightness, were usually perceived in the middle of the scale (interviewees described themselves as content, or worse) and also went hand in hand with negative emotional expressions. Unsurprisingly, the interview partners often mentioned the high level of effort these tight controls brought with them. However, in this case study, this effort was caused specifically by a strong emphasis on documentation.

Codesystem	high degree of freedom	low degree of freedom - strict corset	tight-loose
OVERSIGHT	0	0	0
oversight by technology	0	3	0
oversight by outsiders	0	5	0
audits	0	0	0
Intensity of Communication	0	1	0
Tolerance for Deviations	0	2	1
Amount of Detail	0	1	0
Degree of Committment	1	5	0
Emphasis on Meeting the Goal	1	5	2
PERCEPTIONS	0	0	0
Amount of time	1	1	2
school grades	0	0	0
1 - very good	1	1	1
2 - good	6	2	10
3 - satisfactory	1	6	2
4 - sufficient	0	1	1
5 - deficient	0	1	0
6 - insufficient	0	0	0
Emotional perception	1	2	3
self-commitment	0	1	1
acceptance	0	0	0
negative emotions	5	31	4
positive emotions	7	13	13
Effort involved	0	0	0
low effort	0	0	0
lots of effort	0	5	3
Degree of Influence	0	0	0
high influence	5	6	0
low influence	0	4	2
EFFECTS- E	0	0	0
E - support company targets	1	0	0
E - quality control	0	0	0
E - risk aversion	0	0	1
E - vulnerability	2	4	2
E - labour sanctions	0	0	0
E - external effects	0	0	1
E - internal effects	0	0	0
E - legal illegalities	2	5	0
E - documentation	2	2	3
E - direction	1	3	5
E - hindrance	1	4	2
E - reward	5	0	2
E - persuasion	1	0	0
E - boundaries	0	0	1
E - rules of the game	0	0	3
DRIVERS - D	0	3	0
D - support company goals	0	1	0
D - cost targets	1	3	0
D - reputation	0	2	0
D - fraud prevention	0	0	0
D - quality control	0	1	0
D - risk aversion	0	0	0
D - past experiences	1	1	1
D - negative consequences	1	1	0
D - external drivers	0	0	0
D - market requirements	1	0	0
D - legal requirements	2	7	1
D - internal drivers	0	0	0
D - autotelic controls	0	0	0
D - boundaries	0	0	1
D - direction	0	2	0
D - formal agreement	0	1	0
D - self-induced	0	6	1
FEATURES OF GOOD CONTROLS	0	1	4
plausibility	1	2	3
transparency	1	8	1
fit	3	3	2
good communication	1	0	0
MANAGEMENT CONTROL SYSTEMS AS A WHOLE	31	34	35
System or package	0	0	0
interaction - competition	0	3	0
interplay - cohesion	0	0	0
layering - stacking	1	6	9
Number of controls	3	2	0
Familiarity	3	2	0

Figure 9:   Coding overlap for Degree of Freedom (top 10% highest numbers of correlations are high-lighted)

Figure 9 shows how descriptions of various degrees of freedom (high degree, low degree – strict corset, and tight-loose) correlate with other attributes of controls and the MCS as a whole. This overview demonstrates the most important drivers of tight controls: legal requirements and self-induced controls. As argued above, our assumption that an industry with a high density of legal regulations shows tight controls and MCS, has been re-affirmed in this case study. Many interviewees mentioned that legal regulations drove the implementation of new or stricter controls. However, controls implemented due to legal requirements were considered favorably by the interviewees, because they minimized the vulnerability that interviewees felt, and gave them a sense of security in "doing the right thing". The second largest driver of tight controls in this case study were self-induced controls. Even though they were seen more critically and were associated with positive and negative emotional perceptions, the interviewees reported that they were introduced to minimize the personal sense of vulnerability (i.e. making sure that mandatory controls were cross-checked – which also led to a stacking of multiple controls), give direction to employees (in which case even a high tightness of control was perceived with positive emotions), and create boundaries within the department and towards other departments.

Other attributes that characterized tight controls were:

1. **Lack of transparency**

   As discussed above, interviewees perceived a high level of tightness if they had little to no information on the controls, goals and procedures. They felt like they were fishing in muddy waters and highly dependent on guidance from the business owner (in these examples, HR or direct supervisor) and therefore on a tight leash.

2. **Lack of fit**

   Interviewees often criticized controls that did not fit or conform to their day-to-day business, because they were perceived as an added burden without added value. However, interviewees felt that if they had a high degree of influence, they were able to turn these company guidelines into controls that do fit their daily jobs. Hence, the degree of influence directly determines the fit of controls and indirectly regulates control tightness. The importance of fit and influence of MCS was also emphasized by Toldbod and Dumay (2023).

3. **Lack of plausibility**

   This case study demonstrated that if employees found controls plausible and convincing (i.e. they understood why management control measures had been implemented and recognized their value for themselves or the company), they perceived those controls as less

tight, even if they in fact were very tight (see above, code of conduct). Therefore, if controls were not seen as plausible and employees were not able to make sense of them or see any benefit to them, they were perceived as tighter. Similarly, Reinking and Resch (2023) found plausibility to be a crucial factor for the successful adoption of MCS in small and midsized enterprises.

4. Competing controls

In this case study, employees complained of higher tightness of control if controls were competing, especially when the insurer's budgetary controls superseded others (e.g. personnel controls).

Furthermore, this paper offers a few additional observations from this case study. First, high tightness of control is not viewed negatively if it provides a clear sense of direction. Some interviewees particularly stressed how important very tight action controls were, because they provided employees with a step-by-step manual that helped them, especially if they lacked experience, but also ensured quality of service.

Second, the same sentiment also applied to high tightness in combination with self-commitment. Even if controls were very tight, they were not perceived negatively if employees had developed self-commitment to these controls. However, plausibility and good communication are essential in developing this sense of self-commitment.

Third, in an environment with a very high level of tightness, loosening of controls can be utilized as a reward. Interviewees in operational units reported that, for example, employees experienced higher levels of authority as a motivation and saw it as a sign of trust and respect from the company. Furthermore, employees experienced a sense of pride in their authority levels and sometimes considered them a badge of honor.

Lastly, many interviewees portrayed this tightly controlled environment as a tight-loose environment. Merchant and Van der Stede define tight-loose controls as follows: "*They observed that the MCSs used in these companies can be considered loose in that they allow, and even encourage, autonomy, entrepreneurship, and innovation. But these same control systems can also be called tight because the people in the company share a set of rigid values (such as costumer needs)*." (Merchant and Van der Stede, 2017, p. 230). Similarly, Tatikonda and Rosenthal (2000) advocate a concept of "*flexibility within a structure, i.e., firmness in the sense of having a predetermined structure, and flexibility in the nature of work within that structure*." (Tatikonda and Rosenthal, 2000, p. 417). Similarly, many of the interviewees expressed that they did feel strong boundaries that restricted their freedom, but at the same time, they felt free to act within these

boundaries as they saw fit. This perception of a tight-loose environment led to high overall contentment with the management controls and the MCS overall. Furthermore, they were accompanied by much more positive emotions than an environment or control measures that felt tight.

In conclusion, in answer to the third research question, what other attributes define tightness of controls, this case study suggests that Van der Stede's (2001) definition of tight controls could be broadened by including the following attributes: 1. lack of transparency, 2. lack of fit, 3. lack of plausibility and 4. competing management controls.

However, since these are the results of just one case study and therefore limited in their generalizability, we believe these newly identified attributes of tight management controls are a valuable starting point for further research.

6.   Conclusions

The aim of this study was to acquire a deeper understanding of tightness of control in real life settings and to broaden our understanding and current definition of tightness of controls.

Using a case study in the German insurance industry, we conducted 15 semi-structured problem-centered interviews with employees of this insurer, who represented a broad cross-section of the company. Transcripts of these interviews were analyzed using the Hybrid Approach of Inductive and Deductive Coding and Theme Development by Fereday and Muir-Cichrane (2006). This enabled these authors to compare this real-life case with the theoretical propositions in the deductive coding stages, while also giving room to gather new insights that could be utilized to broaden our understanding in the inductive coding stages. As the theoretical proposition, we used the current definition of tightness of budgetary controls from Van der Stede (2001), which described five attributes: (1) high emphasis on adhering to the control, (2) low allowance for control revisions during the year, (3) high amount of control detail, (4) low tolerance for interim deviations and (5) high intensity of control-related communication. Since interviewees of this case study described all prevailing management controls to be very tight, this setting proved very valuable for testing the existing theory on tight controls and developing new ones.

Surprisingly, the first conclusion this study arrived at was that the current definition of tight budgetary controls from Van der Stede (2001) could not be confirmed in this case. Even though employees in this case perceived budgetary controls to be very tight and offered insights into this tightness, only one of Van der Stede's (2001) attributes applied: (1) emphasis on achieving the goal. No other attributes applied, even though the budgetary goals of this study were very tight, and the interviewees would never exceed these goals.

Similarly, the second conclusion was that these five attributes were also not applicable to defining other types of controls that Merchant and Van der Stede (2017) define as action controls, personnel controls, and cultural controls, even though interviewees described all of these as very tight in this case. For behavioral controls, as an example of action controls, the attributes of (2) degree of commitment and (5) intensity of communication were not applicable. However, interviewees reported that the tightness of controls was very high, and many fool-proof Poke Yoke controls in place. However, the degree of commitment was intentionally low to give departments the freedom to react to current issues, and communication was perceived as a non-issue, because behavioral constraints were only discussed when issues arose. Otherwise, they were accepted as rules of the game. Tightness of personnel selection and placement, as one example of personnel controls, can be defined using almost all of Van der Stede's (2001) attributes, except for (5) intensity of communication. Whereas Van der Stede (2001) regarded a high frequency of control-related communication as an attribute of tight controls, in this case, the opposite was the case. Similar to budget controls, interviewees described an almost complete lack in communication and feeling like fishing in muddy waters. Hence, they felt they were on a very tight leash, because they needed advice and permission for every step. For the code of conduct as one form of cultural controls, almost all attributes of Van der Stede (2001) applied. (3) a high amount of detail was not applicable to this type of management control, because a high level of detail does not concur with the nature of these types of cultural controls. However, in terms of (5) intensity of communication, this paper demonstrated the limitation of Van der Stede's (2001) definition, because of its emphasis on frequency of communication. Therefore, this paper recommends broadening the definition of (5) communication to also allow for the quality of communication and a stronger focus on transparency. Overall, this paper contributes to the literature on tightness of control by verifying that 3 of 5 attributes defined by Van der Stede (2001) - (1) high emphasis on meeting the goal, (4) low tolerance for deviations and (5) communication (in a broader sense) - are applicable to all types of control.

The third aim of this study was to identify further attributes that might be applicable to defining tightness of control. This case study suggests that Van der Stede's (2001) definition of tight controls might be usefully broadened by including the attributes 1. lack of transparency, 2. lack of fit, 3. lack of plausibility and 4. competing management controls.

Nevertheless, this case study is subject to a few limitations, especially the question of whether the results of case studies are generalizable. This case is set in an extreme environment, assuming that the German insurance industry would be a very challenging environment that requires insurers to implement high control tightness. This assumption was confirmed by the

accounts of the interviewees, who identified legal requirements as the main driver of tight controls at the insurer. Using such an extreme setting is therefore, of course not necessarily representative. However, the main aim of this study was to take an intensive look at the scale of tightness and focus on high tightness of control, which would not have been able in a more moderate case setting. Hence, we believe that this case study offers valuable insights into tightness of controls, and what additionally characterizes high tightness of control. Nevertheless, we are aware that this list of attributes is not exhaustive, and believe that future research should test the new attributes this paper identified in other settings and add to them.

Overall, we believe that this paper not only contributes to the body of literature on tightness of controls, but is also useful for practitioners. Management control systems are vitally important to companies in terms of achieving their objectives, be they economic, environmental, cultural, or other. Hence, setting the right level of tightness is very important for MCS efficacy and efficiency. However, in this case study, we found that a high tightness of controls does not necessarily go hand in hand with dissatisfied employees. It may be quite the opposite: in some contexts, tight controls enable motivating and rewarding employees. In other cases, very tight controls are perceived positively if employees understand the reasoning behind them, recognize their positive effects and develop a sense of self-commitment. Hence, even if organizations find themselves in a tight spot and must implement tight MCS, they do not have to put their employees on a tight leash.

7.   References

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8. Appendix I: Questionnaire

Interviewleitfaden für "Tightness of MCS"

- **Einstiegsfragen:**
  - Wenn Sie eine Schulnote vergeben müssten, von 1 (sehr gut) bis 6 (ungenügend), wie frei sind Sie in der Ausübung und Gestaltung Ihrer Tätigkeiten?
  - Welche Art von Maßnahmen und Vorgaben erleben Sie bei der Ausübung Ihrer Tätigkeiten?

- **Budget Controls**
  - Welche Schulnote von 1 bis 6 würden Sie den Budgetvorgaben geben und warum?
  - Inwieweit werden Sie bei der Erstellung Ihrer Budgetvorgaben mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Vorgabe angepasst auf Aufgabe und Umfeld oder „One size fits all"?
  - Welche Bedeutung spielt es, dass Sie Ihre Budgetvorgaben einhalten?
    (Was passiert, wenn Sie das Budget einhalten oder nicht einhalten?)
    - Konsequenzen für die Wahrnehmung der Leistung?
    - Auswirkungen auf Karriere?
    - Betonung der Bedeutung durch Vorgesetzte? Durch das Unternehmen?
  - Inwieweit sind Änderungen der Budgetvorgaben unterjährig möglich bzw. üblich?
  - Wie detailliert sind die Budgetvorgaben und die Prüfung deren Einhaltung?
  - Was passiert, wenn die Budgetvorgaben unterjährig überschritten werden?
    - Reaktion des Vorgesetzten?
    - Maßnahmen notwendig?
  - Inwiefern sind Budgetvorgaben ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

- **Behavioral constraints**
  - Inwieweit umfassen diese Vorgaben und Arbeitsanweisungen auch Regelungen zu z.B.
    - Vollmachten (z.B. für Zahlungen und Unterschriften)
    - Systemfreigaben und Rechte
    - Zweitfreigaben und Kontrollen
    - Zugang zu Akten (abschließbare Büros, Akten) oder Stockwerken?
  - Welche Schulnote von 1 bis 6 würden Sie diesen internen Vorgaben geben und warum?
  - Inwieweit werden Sie (oder Kollegen von Ihnen) bei der Erstellung dieser Vorgaben mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Vorgabe angepasst auf Aufgabe und Umfeld oder „One size fits all"?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass Sie diese Vorgaben einhalten?
    - Wie wichtig sind diese Vorgaben für die Sie (und Ihr Team)?
    - Welche Rolle spielen diese in der regelmäßigen Entscheidungsfindung?
    - Geben Sie Sicherheit?
    - Verursacht die Angst vor Verstößen Unsicherheit?
  - Inwieweit werden diese Vorgaben (Zugänge, Vollmachten) aktualisiert bzw. aktuellen Gegebenheiten angepasst?
  - Wie detailliert sind diese Vorgaben und die Prüfung deren Einhaltung?
    - Dokumentationspflichten?
  - Was passiert, wenn von den Vorgaben abgewichen wird?
    - Konsequenzen? Revision, Rechtfertigung, etc.
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
    - Vereinbarung von Maßnahmen?
  - Inwiefern sind diese Vorgaben (z.B. Zugänge, 4-Augen-Kontrollen) ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

- **Personnel Selection and Placement**
  - Können Sie mir etwas erzählen zum Prozess der Personaleinstellung und -auswahl?
    - Prozess?
    - Wer entscheidet was?
    - Welche Kriterien entscheiden über Einstellung von Personal?
    - Welche Rolle spielt persönliche Eignung/cultural fit?
    - Welche Rolle spielt fachliche Eignung?
  - Welche Schulnote von 1 bis 6 würden Sie diesen Prozessen zur Personaleinstellung und -auswahl geben und warum?
  - Inwieweit werden Sie bei der Erstellung oder Beurteilung dieser Prozesse mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Prozesse/Vorgaben angepasst auf Aufgabe und Umfeld oder „One size fits all"?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass diese Prozesse eingehalten werden?
    - Was passiert, wenn sich die Mitarbeiter (z.B. als ausschreibende Einheit) nicht darauf einlassen?
  - Inwieweit gibt es die Möglichkeit diese Prozesse und Vorgaben im Einzelfall zu ändern?
    - Änderung des Prozesses i.S.v. „Abkürzungen"?
    - Änderungen i.S.v. Abänderung der Vorgaben?
    - Werden für bestimmte Kandidaten Ausnahmen gemacht?
    - Werden für bestimmte Auftraggeber (einstellende Einheit) Ausnahmen gemacht?
  - Wie detailliert sind die Prozesse und Vorgaben und wie detailliert wird deren Einhaltung geprüft?
    - Dokumentationspflichten?
    - Welche Daten werden für Prozess benötigt?
  - Was passiert, wenn von den Prozessen und Vorgaben abgewichen wird?
    - Konsequenzen?
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
  - Inwiefern sind Prozesse und Vorgabe zur Personalausschreibung und -besetzung ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

- **Codes of conduct**
  - Können Sie mir etwas erzählen zum Verhaltenskodex Ihres Unternehmens und weiteren allgemeingültigen Richtlinien?
  - Welche Schulnote von 1 bis 6 würden Sie dem Verhaltenskodex und den allgemeingültigen Richtlinien in Ihrem Unternehmen geben und warum?
  - Inwieweit werden Sie oder andere Mitarbeiter bei der Erstellung dieser Kodizes und allgemeinen Richtlinien mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Prozesse/Vorgaben angepasst auf Aufgabe und Umfeld oder „One size fits all"?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass diese Kodizes und Richtlinien eingehalten werden?
    - Was passiert, wenn sich die Mitarbeiter dagegen verwehren würden?
    - Außenwirkung wichtiger Faktor?
  - Inwieweit gibt es die Möglichkeit von diesen Kodizes und Richtlinien im Einzelfall abzuweichen?
    - Änderung des Prozesses i.S.v. „Abkürzungen"?
    - Änderungen i.S.v. Abänderung der Vorgaben?
    - Werden für bestimmte Personen Ausnahmen/Änderungen gemacht/gestattet?
  - Wie detailliert sind die Kodizes und Richtlinien und wie detailliert wird deren Einhaltung geprüft?
    - Dokumentationspflichten?
    - Aufwand?
  - Was passiert, wenn von den Kodizes und Richtlinien abgewichen wird?
    - Konsequenzen?
    - Bedeutung für Karriere? Bedeutung für Anstellungsverhältnis?
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
    - Betonung der Bedeutung durch das Unternehmen? Z.B. Intranet, Schulungen, etc.
  - Inwiefern sind diese Kodizes und Richtlinien ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

- **Allgemein:**
  - Wie vertraut sind Sie mit all den Maßnahmen und Vorgaben?
    - Gelesen?
    - Wissen, wo diese zu finden sind?
    - Bereits bei Unsicherheit nachgeschlagen?
  - Was würden Sie schätzen, wie viele Richtlinien und Anweisungen Sie bei Ihren Tätigkeiten berücksichtigen müssen?
  - Wie viel Aufwand bereiten Ihnen all diese Maßnahmen und Vorgaben? Z.B. als % Ihrer Tätigkeiten?
  - Wie empfinden Sie all diese Vorgaben und Regelungen und wie gehen Sie damit um?
  - Inwieweit empfinden Sie all diese Vorgaben und Maßnahmen als sinnvoll bzw. notwendig? Hilft sie Ihnen bei der Ausübung Ihrer Tätigkeiten?
  - Inwiefern empfinden Sie diese Vorgaben und Regelungen hilfreich als Orientierungshilfe und richtunggebend?
  - Inwiefern unterstützen Sie all diese Vorgaben und Regelungen dabei unternehmerisch zu handeln?
  - Was würden Sie sagen, woran es liegt, dass Sie manche Richtlinien als Hilfestellung empfinden und andere als störend?
  - Würden Sie sagen, dass die Gesamtheit der Maßnahmen und Vorgaben im Unternehmen ein schlüssiges Gesamtbild geben?
  - Aus Ihrer Erfahrung und Beobachtung: wie streng wird die Einhaltung all der Vorgaben gelebt?
    - Legal Illegalities
    - Shortcuts aufgrund von Ressourcenmangel?
- **Änderungsfaktoren**
  - Sie hatten Ihren Freiheitsgrad zu Beginn mit *XY* geschätzt. Hat sich dieser in Ihrer Zeit in dieser Organisation geändert? Inwiefern und was waren die Auslöser?
  - Inwieweit würden Sie sagen, dass die Vorgaben im Unternehmen stabil sind oder sich wandeln?
  - Inwieweit haben Sie die Möglichkeit flexibel auf Chancen zu reagieren, die sich dem Unternehmen eröffnen?
- **Abschlussfrage:**
  - Möchten Sie dem bereits besprochenen noch etwas hinzufügen?

9.   Appendix II: Quantitative Overview of Codes

1 Inductive Codes	0
1.1 Oversight	0
1.1.1 oversight by technology	24
1.1.2 oversight by outsiders	51
1.1.3 audits	25
1.1.3.1 Audit - Intensity of Communication	17
1.1.3.2 Audit - Tolerance for Deviations	39
1.1.3.3 Audit - Amount of Detail	20
1.1.3.4 Audit - Degree of Committment	12
1.1.3.5 Audit - Emphasis on Meeting the Goal	76
1.2 Perceptions	0
1.2.1 Amount of time	34
1.2.2 contentment	0
1.2.2.1 1 - happy	16
1.2.2.2 2 - very content	37
1.2.2.3 3 - content	23
1.2.2.4 4 - not content	14
1.2.2.5 5 - very unhappy	3
1.2.3 Support of entrepreneurial acting	4
1.2.3.1 positive support	21
1.2.3.2 low support/no support	18
1.2.3.3 hindering entrepreneurial actions	44
1.2.4 Degree of Freedom	4
1.2.4.1 high degree of freedom	46
1.2.4.2 low degree of freedom - strict corset	99
1.2.4.3 tight-loose	68
1.2.5 Emotional perception	15
1.2.5.1 self-commitment	74
1.2.5.2 acceptance	11
1.2.5.3 negative emotions	173
1.2.5.4 positive emotions	102

1.2.6 Effort involved	28
1.2.6.1 low effort	4
1.2.6.2 lots of effort	66
1.2.7 Degree of Influence	6
1.2.7.1 high influence	33
1.2.7.2 low influence	74
1.3 Effects - E	10
1.3.1 E - support company targets	10
1.3.1.1 E - quality control	12
1.3.2 E - risk aversion	6
1.3.2.1 E - vulnerability	76
1.3.2.2 E - labour sanctions	34
1.3.3 E - external effects	17
1.3.4 E - internal effects	5
1.3.4.1 E - acceptable illegalities	71
1.3.4.2 E - documentation	23
1.3.4.3 E - direction	19
1.3.4.4 E - hindrance	11
1.3.4.5 E - reward	29
1.3.4.6 E - persuasion	4
1.3.4.7 E - boundaries	11
1.3.4.8 E - rules of the game	49
1.4 Drivers - D	19
1.4.1 D - support company goals	5
1.4.1.1 D - cost targets	16
1.4.1.2 D - reputation	11
1.4.1.3 D - fraud prevention	6
1.4.1.4 D - quality control	7
1.4.2 D - risk aversion	0
1.4.2.1 D - past experiences	23
1.4.2.2 D - negative consequences	28
1.4.3 D - external drivers	0
1.4.3.1 D - market requirements	5
1.4.3.2 D - legal requirements	39

1.4.4 D - internal drivers	1
1.4.4.1 D - autotelic controls	6
1.4.4.2 D - boundaries	9
1.4.4.3 D - direction	7
1.4.4.4 D - formal agreement	3
1.4.4.5 D - self-induced	27
1.5 Features of good controls	7
1.5.1 plausibility	70
1.5.2 transparency	125
1.5.3 fit	69
1.5.4 good communication	23
2 Management Control System as a whole	532
2.1 System or package	0
2.1.1 interaction - competition	57
2.1.2 interplay - cohesion	55
2.1.3 layering - stacking	50
2.2 Number of controls	53
2.3 Changes	23
2.3.1 frequency of changes	23
2.3.2 unwillingness to change	5
2.3.3 more complexity	2
2.3.4 less freedom	25
2.3.5 more freedom	9
2.3.6 fewer controls	5
2.3.7 more controls	35
2.4 Familiarity	102
3 Management Controls	0
3.1 CC - Cultural Controls - Code of Conduct	39
3.1.1 CC - Other Cultural Controls	87
3.1.1.1 Direct supervisor	32
3.1.1.2 Error Culture	22
3.1.2 CC - 5 - Intensity of Communication	41
3.1.3 CC - 4 - Tolerance for Deviations	38
3.1.4 CC - 3 - Amount of Detail	51
3.1.5 CC - 2 - Degree of Committment	17

C. Lights, Camera, Action! Tightness of action controls and their interaction as a package or system

Highlights

- Control tightness for action controls can be defined by high emphasis on meeting the goal, high amounts of details, and a low tolerance for deviation.
- Various types of action controls (behavioral constraints, preaction reviews, action accountability) are implemented as an intentional overall construct and form a cohesive management control system.
- A cohesive management control system of individually tight controls increases the overall control tightness without leading to negative employee perception or increasing control costs.

Abstract

The main aim of this paper is to broaden our understanding of tightness of management controls by focusing on the effects interaction of controls has on tightness. Control tightness cannot only be achieved by the tightness of individual controls, but also by their interaction as a package or system. Using the example of action controls, this paper aims to first assess the tightness of individual controls, and in a second step, to analyze how these tight action controls interact as a system or a package, and how this affects the overall control tightness. This paper is based on a case study set in the German insurance industry, where we conducted 15 semi-structured interviews. This paper finds that Van der Stede's (2001) attributes of tight budgetary control could be used to define tight behavioral constraints, preaction reviews, and action accountability – except for the attribute of high communication intensity, which interviewees found to be unnecessary for these management controls. Second, this paper finds that these tight individual controls acted as a cohesive management control system, increasing certainty of meeting company objectives, severely restricting employee behavior and hence, increasing overall control tightness. Lastly, this paper finds that in this case study these tight controls were generally perceived positively by the insurer's employees.

Keywords

Management Control Systems (MCS), tightness of control, action controls, behavioral constraints, preaction reviews, action accountability, redundancy, MCS package, insurance industry, case study, thematical analysis, inductive coding, deductive coding

Lights, Camera, Action! Tightness of action controls and their interaction as a package or system

> *"You do not lead by hitting people over the head -- that's assault, not leadership."*   *- Dwight Eisenhower*

> *"It doesn't make sense to hire smart people and then tell them what to do; we hire smart people so they can tell us what to do."- Steve Jobs (His own words and wisdom)*

1.   Introduction

In November 2022, Forbes published an article entitled "*Workers are less productive working remotely (at least that's what their bosses think)*" (Forbes, 3 November 2022). During the Covid 19 pandemic, most companies had to close their physical offices, and employees had to work from home. During this period, the discrepancy between employees and employers grew, as Forbes describes. While some employees even reported an increase in their productivity (29%), 85% of the surveyed employers reported struggling with remote work and were not sure that their employees were very productive. 49% of employers further admitted not entirely trusting their remote employees. This lack of confidence led to the introduction of new or additional controls. Forbes reports that 48% of the surveyed business leaders installed monitoring software to check on their employees.

 This development was echoed by statements from employees. In a survey conducted by the Harvard Business Review in July 2020, 34% of employees perceived a lack of confidence from their superiors when working remotely, and 21% felt that their supervisor constantly monitored their performance (Harvard Business Review, 30 July 2020). BBC titled "*Micromanagement has always existed. But remote work has birthed a new swathe of helicopter bosses, and workers are suffering*." (BBC, 1 December 2022), hence claiming that micromanagement[7] has reached an unprecedented high – to the detriment of employees. This claim was accompanied by several examples employees presented, of newly introduced controls that they perceived as micromanagement: mandatory video meetings, check-ins every morning to update on the state of long and ongoing tasks, supervisors monitoring the online status of employees (in Microsoft Teams, Zoom, Skype or similar tools) and verifying the status with "test tasks", as well as the

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[7] According to the Cambridge Online Dictionary micromanagement is "*the act of controlling every part of a situation, including small details*".
 https://dictionary.cambridge.org/dictionary/english/micromanagement (last access, March 20, 2024).

introduction or broader use of surveillance software to monitor employees' actions in detail. However, according to the famous quote from President Eisenhower, a high level of micromanagement does not constitute leadership, but assault. Similarly, employees reported feeling pressured by these tight controls and looking for ways to escape them, which for example led to an "*explosive market for devices that help you evade corporate productivity trackers*" (Slate, 03 December 2021).

These accounts by practitioners echo the following statement from Merchant: "*It is apparent in the collection of practitioner-oriented articles that mention control systems tightness that tight control can be accomplished by using any, or at least most, of the types of controls, alone or in combinations with other types of controls.*" (Merchant, 1985, p. 57). Strauß and Zechner (2013) define Management Control Systems (MCS) as those that align the company's goals with employees' goals. By measuring, controlling, and guiding human behavior in congruence with organizational goals, MCS play a vital part in the fulfillment of organizational goals and therefore the success of a company (Carenys, 2012; Hanzlick, 2015, p. 177). Even though researchers of MCS mention the importance of control tightness, there is still a lack of research in this area (Van der Stede, 2001). Yet, the significant role that tightness of controls play for practitioners is beyond question. As the example above demonstrates, tightness of controls plays an important role for employees, because it directly affects the way they work. Organizations depend on tightness of MCS to overcome the social dilemma, i.e., that organizations and its employees per se attempt to achieve different (or even opposing) objectives (Miller, 1992). Hence, tightness of control ensures the achievement of many objectives that are beneficial to the organization. Routines and controls aide organizations in achieving economic goals, improving processes through standardization, increasing quality, and achieving external acknowledgment (Brand *et al*., 2023). The reduction of effort and complexity, as well as an increase in certainty, are positive effects of tight controls that benefit employees as well (Kesting, 2023). However, control measures that are implemented too tightly conjure up the picture that Weber describes as an "iron cage" – a high level of efficiency, rationalization, and control (Weber, 2016 (1904/1905, p.171). Merchant (1985, pp.71-87) cautions that employees might engage in undesirable behaviors that might hinder the company in reaching its goals– as the above example also demonstrates. Furthermore, introducing and monitoring more and tighter controls also produces costs for the organization, and should therefore be leveraged to an optimal level. Hence, setting a company's MCS to the right level of tightness is not only important for companies in order to reduce costs, but also deters employees from acting in undesirable ways.

Many of the measures that employees described as having been tightened or newly introduced during the Covid 19 pandemic fall under the category of behavioral controls or action controls. These types of controls target the actions and tasks employees perform so as to prevent them from engaging in harmful behaviors and guide them towards beneficial ones (Merchant and Van der Stede, 2017, p.86). Even though the importance of action controls increased significantly in recent years, there still is little research on this issue (Feichter and Grabner, 2020).

In order to develop a better understanding of tightness of controls, especially with regard to action controls, we conducted a case study in the German insurance industry. A large number of legal requirements at a European and German level require German insurers to have tight controls in place to safeguard compliance, making it an ideal surrounding in which to study tightness. In order to gain deeper insights into control tightness, we conducted interviews with employees of a German insurance company. These interviews reflected the attributes Van der Stede (2001) had used to describe tight budgetary controls.

Overall, the aim of this paper is to contribute to the literature on MCS in several ways. Firstly, by analyzing the implemented action controls we test whether they are tight and how this tightness is defined. To this end, we use the attributes defined by Van der Stede (2001) and consider whether they can be applied to individual action controls. Secondly, beyond the analysis of each action control individually, this paper analyzes how the implemented action controls interact with each other and how this interaction affects the tightness of control. Hence, the second question also adds to the literature on MCS as a system vs. a package.

This paper is organized as follows: in Section 2, the authors provide a brief review of the literature on tightness of control, action controls and MCS as a system vs. a package. Section 3 describes the research method and the stages of analysis that we applied to the case study. Section 4 gives a brief summary of the case study. Section 5 directly addresses both research questions and analyses the interviews we conducted to: 1. determine the tightness of individual action controls in general and by applying Van der Stede's (2001) definition, and 2. examine how individual action controls interact with each other as a package or system and how this interaction affects tightness of control. Section 6 concludes this paper.

2.   Literature Review

The term Management Controls was coined by Anthony in 1965 (p. 17) and defined as "*the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives*". This conceptualization strongly reflected the predominantly manufacturing economic environment at the time, and had a strong

focus on routines and controls to support rationalization and standardization, which Weber (2016 (1904/05), p.171) referred to as the "*iron cage*". Since then, this conceptualization has met a lot of criticism - not only due to the decrease in applicability caused by the economic shift from the production of goods to production of services, but also due to a stronger focus on behavioral aspects of management controls (see Hared *et al.*, 2013; Strauß and Zechner, 2013; Hanzlick, 2015; Oates, 2015). Miller emphasized: "*the tension between individual self-interest and group efficiency [creates] [...] a "social dilemma" [which] is the heart of the managerial problem.*" (Miller, 1992, p. 35). Similarly, Flamholtz (1996) reiterated the significance of MCS, "*Organizations require control because they consist of people with different interests, different tasks, and different perspectives. The efforts of people require integration and direction and this, in turn, creates the need for control.*" (Flamholtz, 1996, p. 597). Today, as Strauß and Zechner (2013, p. 245) summarized, MCS are defined in a broader sense: "*Consequently, systems that ensure congruence between the organization and its employees in objectives and strategies are called Management Control Systems (MCS).*". Hence, implementing effective MCS is crucial for organizations if they are to achieve their economic, environmental, and other objectives by managing employee behavior.

Given recent practitioner claims of high tightness of controls and the negative effects of a tightening of controls on employees working from home during the Covid 19 pandemic, it is surprising that there has been little research on this issue. Merchant defined tightness of controls as meaning "*a high degree of assurance that the organization will accomplish its true goals.*" (Merchant, 1985, p. 59). Kesting (2023) pointed out the positive effects routines can have for employees, e.g. reduction of effort and complexity, increase in efficiency especially for routine actions, and decrease in uncertainty. Brand *et al.* (2023) furthermore emphasized the positive effects in terms of standardization and a resulting accreditation: increased quality, meeting economic goals, improvement of processes, external acknowledgement. Nevertheless, all researchers have emphasized the negative side effects of a high tightness of MCS, leading to "*stifling bureaucracy*" (Flamholtz, 1996, p.597), high control costs, as well as the severe side effects of tight controls on employees (e.g. refusal to work, increased motivational problems, opportunistic and fraudulent actions) (Tannenbaum, 1968, p. 240; Merchant, 1985, pp.71-87; Merchant and Van der Stede, p. 131).

Subsequently, it is of the utmost importance for practitioners to achieve the right level of tightness to facilitate a high efficacy of MCS, while simultaneously reducing costs and minimizing negative side effects. Given the limited research on these issues, Merchant (1985, p. 57) and Van der Stede (2001) call for more research on tightness of controls. Currently, the

most refined definition of tight controls was developed by Van der Stede (2001) who identified five attributes of tight budgetary controls. 1. Van der Stede (2001) argues that an emphasis on meeting the goal should be high, for instance, that meeting the budgetary target reflects the employee's performance, the employee's own values, etc., and non-adherence to the budgetary target leads to consequences for the reputation and career of the employee. Furthermore, it also entails the importance of adhering to budgetary targets for the company, superior, department, etc. Van der Stede defined as follows 2. the latitude for control revisions during the year should be low, i.e. changes to the budget are at the least very difficult. However, Van der Stede (2001) himself finds little evidence to support this attribute. 3. The amount of control detail should be high, i.e. a very detailed budget as opposed to a high-level budget. 4. Van der Stede (2001) asserted that interim deviations from budgetary goals should be scrutinized carefully, i.e. the tolerance for interim deviations should be low. Lastly, Van der Stede (2001) defined tight budgetary controls as having 5. a high intensity of control-related communication, hence a high frequency of budget discussions with various counterparts (superiors, subordinates, etc.). In our previous paper (Tica and Weißenberger, 2024, submitted for publication), we focused on tightness of controls and its definition in order to broaden our understanding of this phenomenon by testing whether Van der Stede's (2001) definition of tight budgetary controls could be applied to other types of controls like codes of conduct (as a form of cultural control), personnel selection and placement (as a form of personnel control), and behavioral constraints (as a form of action control). During that study, we focused on the applicability of Van der Stede's (2001) definition to each type of control individually. However, our previous paper did not take into account the interplay between multiple controls and how this interaction might affect tightness of control. Merchant (1985, p. 57) argues that tightness of control might not only be created by tightening individual controls, but also by using many controls in combination. Thus, research on control tightness should not be limited to one type of control in isolation, but also consider various kinds of controls and how they affect each other.

This touches on another important stream of research within the MCS field which focuses on the interaction of controls. Researchers distinguish between MCS systems and packages: "*The term 'package' is employed because in most contemporary organizations there are a number of MCS. If all those were designed and coordinated intentionally, we might call the whole system a MCS. However, the concept of a package points to the fact that different systems are often introduced by different interest groups at different times, so the controls in their entirety should not be defined holistically as a single system, but instead as a package of systems.*" (Malmi and Brown, 2008, p. 291). Grabner and Moers (2013, p. 408) emphasize the importance

of interdependence between multiple management controls and pointed out that "*[…] the value of one MC practice depends on the use of another MC practice, and vice versa.*". Demartini and Otley (2020) argue in favor of a continuous scale, "*being neither totally uncoordinated nor perfectly integrated*" (Demartini and Otley, 2020, p.1) and advocate the use of the term "coupling". Similarly, Bedford (2022) emphasizes that MCS packages do not consist of entirely uncoordinated management controls. Ahrens (2018) further ascertains that controls can anchor other controls and hence structure and prioritize controls amongst each other.

Research within this field is significant, especially for practitioners who aim to create an effective MCS. Being unaware of these relationships between controls, practitioners run the risk of overengineering their MCS by introducing multiple controls that might be unnecessary, hence creating additional costs for redundant controls and even a lack of direction for employees by confusing them with a multitude of guidelines. Bedford (2022), as well as Choi (2022) particularly emphasize the causal relationships between multiple management controls and how they act to reinforce (or counteract) one another. Similarly, Merchant (1985, p. 57) and Merchant and Van der Stede (2017, p. 7) point out, the interaction of multiple controls might also lead to a planned or inadvertent tightness of MCS. Consequentially, one type of control should not be studied in isolation, but within its context, interacting with other controls. To date, research within the field of "MCS as a package" has focused on the interplay between results controls, action controls, cultural controls and personnel controls (e.g. Abernathy and Brownell, 1997; Wiersma, 2009; Grabner and Moers, 2013). Nevertheless, Malmi and Brown criticize: "*While much management accounting research has studied accounting-based controls and this is typically focused on formal systems, there is still limited understanding of the impact of other types of control (such as administrative or cultural) and whether/how they complement or substitute for each other in different contexts. Gaining a broader understanding of MCS as a package may facilitate the development of better theory of how to design a range of controls to support organizational objectives, control activities, and drive organizational performance.*" (Malmi and Brown, 2008, p. 288). Hence, they call for more research on MCS systems and packages, particularly focusing on action controls and cultural controls. Furthermore, Malmi and Brown (2008) call for more research a) in terms of the elements that constitute MCS systems and packages in organizations and b) how these elements relate to each other. Similarly, Merchant and Otley (2022) call for more comprehensive MCS research that goes beyond the interaction of a few individual management controls (see for example Demartini and Otley, 2022; Henri and Wouters, 2022; Lill, 2022; Malmi *et al.*, 2022; Schedlinksy *et al.*, 2022; Speckbacher and Wabnegg, 2022). Accordingly, this present paper contributes to the MCS field by

following these calls for more research on tightness of controls by focusing on the interactions of multiple controls as systems or packages, as well as offering a comprehensive insight into the overall MCS of a company in terms of action controls.

Irrespective of the conceptualization of MCS, most frameworks include a variable that calls for control of employees' tasks and actions. Anthony *et al.* (2007, p.17) include a dimension for task control, Ouchi (1977, 1979) addresses behavioral controls, whereas Merchant and Van der Stede (2017) use the term action controls. Bedford and Malmi (2015), as well as Bedford and Speklé (2018) interchangeably use the terms behavioral controls, action controls and administrative controls. Common examples used for this type of control are rules and procedures (Wiersma, 2009), policies and procedures (Bedford and Malmi, 2015), or routines (Kesting, 2023). This study uses the definition and conceptualization of Merchant and Van der Stede (2017). They use the term action controls and define it as a form of control that "*involves ensuring that employees perform (do not perform) certain actions known to be beneficial (harmful) to the organization.*" (Merchant and Van der Stede, 2017, p.86). Further, they identify four types of action controls: 1. behavioral constraints, 2. preaction reviews, 3. action accountability, and 4. behavioral constraints. First, behavioral constraints (Merchant and Van der Stede, 2017, pp. 86 - 90), as the term coined, constrain the behavior employees can engage in while performing their tasks. "*They make it impossible, or at least more difficult, for employees to do things that they should not do. The constraints can be applied physically or administratively.*" (Merchant and Van der Stede, 2017, p.86). Common forms of behavioral constraints are physical constraints like authorizations to enter buildings, office access or access certain filing cabinets. Today, administrative constraints play a more significant role in many industries. Employees are equipped with certain authorities and rights that are implemented in the company's IT systems (e.g. authorities to pay, to order, to access information, etc.). Second, preaction reviews are defined as the "*scrutiny of action plans*" (Merchant and Van der Stede, 2017, p.90), hence the routine of reviewing task fulfillment of one employee by another employee (superior or other) – *prior* to finalizing the task. Third, action accountability is defined by Merchant and Van der Stede (2017, p.90) as "*holding employees accountable for the actions they take. The implementation of action accountability controls requires (1) defining what actions are acceptable or unacceptable, (2) communicating these defined actions to employees, (3) observing or otherwise tracking what happens, and (4) rewarding good actions or punishing actions that deviate from the acceptable.*". Within real-life settings, action accountability is often implemented in the form of work guidelines, work instructions, procedural protocols, etc. that minutely describe the steps in fulfilling a task. Fourth, Merchant and Van der Stede (2017, p.91)

define the last type of action controls, redundancy, as "*assigning more employees (or equipment) to a task than is strictly necessary, or at least having backup employees (or equipment) available, [...] because it increases the probability that a task will be reliably completed.*". In practice this applies to backup IT systems that take over when one system fails, or having employees on call e.g., if maintenance works fail. Merchant and Van der Stede (2017, pp. 81-82) emphasize the value of all types of action controls for eliminating motivational problems of employees (i.e. by preventing them from behaving in inappropriate ways), while preaction reviews, action accountability and redundancy also function to address personal limitations of employees due to inadequate skills, by providing them with clear instructions and cultivating expertise by implementing reviews. Furthermore, preaction reviews and action accountability also address the control problem of a lack of direction by providing employees with clear guidance about desirable and undesirable behaviors and actions.

Given the substantial presence and significance of action controls in real-life settings, it is generally surprising that little research has been conducted on action controls within the discipline of MCS research – not least in comparison to other types of MCS controls, like results controls. Feichter and Grabner (2020) suggest that this might be due to the focus that action controls receive within the field of auditing research, and limited abilities to study action controls in detail and deduct general conclusions. One of the few concepts that has received attention within MCS research is monitoring the intensity of action controls (Campbell *et al.*, 2011; Fullerton *et al.*, 2013), supporting the preconception that an intensive use of action controls leads to bureaucracy (Burns and Stalker, 1961, p.5). However, rebutting the bureaucracy assumption, Bedford and Malmi (2015, p. 16) found in their study that "*an extensive array of formalized rules, routines, and operating procedures*" is more common in companies that operate in an unpredictable and unstable environment. Recently, research on action controls has seen renewed interest in the field of MCS research. The Covid 19 pandemic forced companies worldwide to close their physical offices and send employees home to work remotely. This unplanned and sudden change to working from home led to high levels of insecurity and distrust of employees by employers and subsequently, the introduction of tighter action controls, like unnecessary check-ins, a high intensity of video meetings, or the introduction of monitoring software. Flassak *et al.* (2022) examined changes organizations made to their MCS and point out the increase in the intensity and number of action controls – not least due to their high adaptability - and the resulting higher standardization of company procedures, which they attribute to a lack of observability of employees' tasks while working from home (Noto *et al.*, 2023; Carr and Jooss, 2023). Delfino and Van der Kolk (2021) also determined the increase in

number and intensity of action controls and asserted that this led to "*increased stress levels among employees, changes to employee autonomy, changed perceptions of hierarchies and a weakened sense of relatedness with others*" (Delfino and Van der Kolk, 2021, p. 1376). This refutes the findings of Kolk *et al.* (2018) that action controls do not have significant effects on intrinsic motivation.

Even though the main Covid 19 pandemic is over now, most companies subsequently introduced work models that combine working remotely and working at the office. Therefore, controlling employees' tasks while working from home remains part of the daily business of organizations (Noto *et al.*, 2023; Carr and Jooss, 2023). Finding action controls that meet this objective and do not form a system that employees consider too tight, poses an important challenge for practitioners and researchers alike. In this regard, awareness of the interplay of action controls and which action controls affect each other in what way, is essential. Hence, this study contributes to the MCS literature by addressing the lack of previous research about tightness of controls, action controls, and adds to the literature on management controls as a package or system.

3.   Research Method

A qualitative research design enables a better understanding of phenomena like control tightness and the interaction of multiple controls as a package, because it focuses on "*behaviour, values, beliefs, and so on in terms of the context in which the research is conducted*" (Bryman and Bell, 2011, p. 411). Merchant and Otley (2022) particularly called for more studies in the field: "*Understanding and assessing the factors affecting coupling is primarily an empirical issue requiring real-world data to ascertain what the state of affairs is within any organization (which may vary between its sub-units) and, ultimately, what overall outcomes are produced.*" (Merchant and Otley, 2022, p 2). Similarly, Malmi and Brown (2008) emphasized: "*With more refined conceptual and analytical approaches, case studies could be conducted in a range of theoretically different contexts, and this could provide inductively developed theory as a basis for larger cross-sectional studies. [...] However, it may be necessary to use interviews to collect large datasets, rather than questionnaire surveys, in order to guarantee data quality.*" (Malmi and Brown, 2008, p. 298). Yin defined the case study as "*an empirical method that investigates a contemporary phenomenon (the "case") in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident.*" (Yin, 2018, p. 15). Eisenhardt underlined the importance of case studies to develop theory: "*This research approach is especially appropriate in new topic areas. The resultant theory is often novel,*

testable, and empirically valid." (Eisenhardt, 1989, p. 532; see similarly Patton and Applebaum, 2003; Baxter and Jack, 2008; Blatter and Haverland, 2012; Rashid *et al.*, 2019). Hence, in order to gain a deeper understanding of the phenomena of control tightness, action controls and how controls interact as a package in contrast to a system, we conducted a case study.

This case study is set in the German insurance industry. Employees at German insurance companies have to follow many internal rules and procedures which prescribe exactly how an employee should act in certain functions and situations. The Solvency II regime specifies that all European insurers enforce "*strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks, at an individual and at an aggregated level, to which they are or could be exposed, and their interdependencies.*" (European Parliament and Council (2009), "Directive 2009/138/EC", Article 44, I). This calls insurers to implement tight action controls, and German laws add to these legal requirements, such as by detailing further obligations regarding how German insurers should develop insurance products and which components they should implement and how (Insurance Contract Act §§1-18 VVG, as well as specific regulations for different insurance products §§74-216 VVG). Insurers that fail to comply with these laws and directives face severe monetary penalties or in the worst case the suspension of their operating license. Hence, a German insurance company presents an ideal setting in which to study tightness of controls – particularly tightness and packages of action controls – because continuous existence of the firm depends on them.

In the interest of developing a better understanding of action controls, their tightness and how they interact as a package or system, we conducted 15 semi-structured, problem-centered interviews (Ruslin *et al.*, 2022) as part of a larger case study. Interviews provide participants with the freedom to voice their opinions without being restricted to a pattern (Miller *et al.*, 1997; Rowley, 2012), hence yielding findings beyond preconceived notions. Using an interview questionnaire allowed us to safeguard comparability between interviewees, while also providing the flexibility to validate information received in previous interviews (Bryman and Bell, 2011; Patton, 2015). The first step of this research was to create a questionnaire (see Appendix I), which addressed all types of action controls defined by Merchant and Van der Stede (2017, see above). Further, for each type of action control, the questions were based on Van der Stede's (2001) study to address all five attributes for tightness with respect to each type of action control (1. emphasis on meeting the goal should be high, 2. allowance for action control revisions during the year should be low, 3. amount of action control detail should be high, 4. tolerance for interim deviations should be low, and 5. intensity of action control-related communication should be high). Even though Van der Stede's (2001) study was not able to

corroborate attribute 2. allowance for control revisions during the year should be low, this study includes this attribute for a holistic analysis. The order of questions was adjusted in each interview to provide a comfortable flow of conversation for the interviewee. For this case study we conducted interviews until reaching theoretical saturation and new insight became marginal (Eisenhardt, 1989; Flick, 2009, p. 119). Interviewees were sampled by convenience. However, we are aware of the criticism of convenience sampling (see for example Galloway, 2005; Baxter *et al.*, 2015). Nevertheless, we would argue that the familiarity with and trust in the researchers is highly significant when discussing delicate topics, so that interviewees feel they can voice their opinions and criticisms freely and openly. Nonetheless, to reduce interviewee bias, they were only given rudimentary information about the research topic ("all types of measures organizations implement to guide employee behavior") (Albert *et al.*, 2010), and chosen by these authors to represent a cross section of the insurer (Baxter *et al.*, 2015). All interviews were conducted in person and later transcribed literally from audio recordings. About 1/3 was transcribed manually by the researchers and 2/3 by a transcription service. However, all transcripts were checked word-for-word and adjusted by these authors. Furthermore, interviewees were promised anonymity and confidentiality. Hence, transcripts were later adjusted (anonymizing names, places, etc.) to safeguard confidentiality.
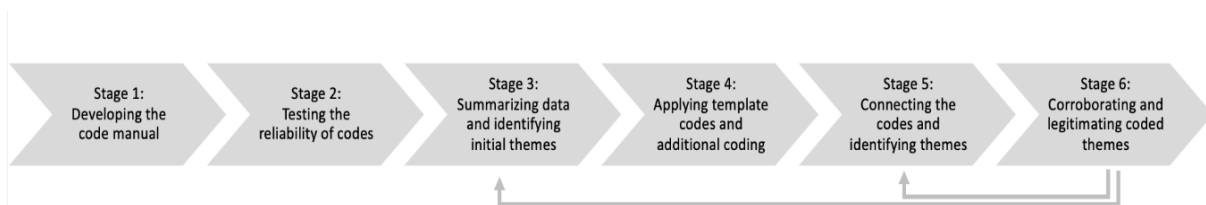

Figure 10: The hybrid approach of inductive and deductive coding and theme development, adapted from Fereday and Muir-Cochrane (2006).

To analyze the interview transcripts, we used the hybrid approach defined by Fereday and Muir Cochrane (2006, similarly Swain, 2018; Roberts *et al.*, 2019). This approach is a sub-form of the qualitative analytic method which Braun and Clarke defined as "*a method for identifying, analyzing, and reporting patterns (themes) within data.*" (Braun and Clarke, 2006, p. 78). The approach outlined by Fereday and Cochrane (2006, see Figure 10) describes six stages in the analytic process. The first two stages outline deductive coding, hence designing a code system that is routed in previous theoretical knowledge and assumptions of the researcher. Like Boyatzis (1998), during these stages, deductive codes are developed and defined from existing theory and refined after coding the texts deductively. This structures the analyzed text by means of theoretical constructs and provides the researcher with an overview of what topics/themes

interviewees have talked about. In the next two stages, the inductive coding takes place. Chandro and Shang (2019, p. 101) define inductive coding stages as the part of the process that "*allows a user to code a textual unit (e.g. paragraphs, sentences, words) that is close to (i.e. the basic or lowest level) the data without being predicated on any theory, construct or concept.*". Accordingly, inductive codes are results of open coding, allowing researchers to deduct constructs and themes from the analyzed materials. Hence, in stages 3 and 4, inductive codes are developed and texts coded thematically, giving researchers a structure that reflects how interviewees have talked about the discussed topics. Stage 5 reflects the iterative nature of inductive coding where researchers continuously develop inductive codes, refine their inductive coding system and by comparing these codes with one another, broaden, collapse and sharpen the inductive coding system. Stage 6 focuses on drawing conclusions from analyzing deductive codes and inductive codes, how they interact and correlate with each other. Hence, at this stage, researchers delve deeper and compare what interviewees have talked about, how they have talked about these topics and deduce insights from the study.

4.   Case Summary

This case study took place at a German insurance company with a company history of almost 150 years. Even though the insurer does have international subsidiaries and branches, the business concentrates largely on the German market. From 1st November 2021 until March 1st 2022, these authors conducted 15 interviews with employees of the insurer as part of a larger case study. Each overall interview lasted 1,5 hours on average (the longest took 2 hours and 53 minutes, and the shortest 38 minutes), resulting in 240 pages of transcripts for the overall case study (for the questionnaire please refer to Appendix I).

Participant	Gender	Function	Management Position	behavioral constraints	preaction reviews	action accountability	redundancy
#1	female	central functions	no	x	x	x	x
#2	female	operations	yes	x	x	x	
#3	female	central functions	yes	x	x	x	
#4	male	underwriting	yes	x	x	x	
#5	male	underwriting	yes	x	x	x	
#6	male	underwriting	yes	x	x	x	
#7	male	operations	yes	x	x	x	
#8	male	central functions	yes	x	x	x	x
#9	female	central functions	yes		x	x	
#10	female	operations	yes	x	x	x	
#11	female	central functions	no	x		x	
#12	male	underwriting	yes		x	x	
#13	female	underwriting	yes	x	x	x	
#14	male	central functions	no	x	x	x	
#15	male	operations	yes	x	x	x	

Figure 11: Overview of Interviewees and Action Controls they discussed.

Figure 11 provides a brief overview of the interviewees and the action controls they discussed. In general, the sample shows an almost even split between male (8) and female (7) participants and a broad cross-section of the insurer in terms of interviewee functions. All 15 interviewees came from different departments (e.g. underwriting, product development, central functions, operations, etc.), enabling a representative study of the implementation of actions controls throughout the insurance company. 12 of 15 participants held some form of management position, allowing for unique insights for this case study. On the one hand, these managers had to comply with various action controls at the company level (e.g. travel guidelines that applied to all employees irrespective of their position). On the other hand, these managers were responsible for implementing action controls in their departments to safeguard target fulfillment. Hence, they held a unique hybrid position as the object of action controls and as the implementing authority, being able to offer both perspectives on action controls - as controller and controlled. Figure 11 further depicts which action controls interviewees talked about. All 15 interviewees had experienced some form of action accountability at the insurer, 14 had experience with pre-action reviews and 13 with behavioral constraints. Only two interviewees mentioned redundancies, hence implying that this type of action control did not play a significant role at the insurer (see below, 5. case analysis). Overall, the broad experience that the interviewees had with most types of action controls underlined the omnipresence of action controls at this insurer and presented a good basis for further analysis.

As discussed under 3. Methodology, this case study followed the hybrid approach outlined by Fereday and Muir-Cochrane (2006). First, these authors developed, defined, and refined a deductive coding system from previous literature. Second, via open coding, we deducted

common themes and topics from the interviews and developed an inductive coding system. Below, we provide a brief overview of the deductive and the inductive coding systems developed.

4.1 Deductive Codes

The first aim of this study is to analyze the tightness of individual action controls. Hence, the deductive coding system we developed and used reflected our theoretical proposition of tightness of control and was also used as the basis for the interview questionnaire (see Appendix I). To properly address all action controls and how they interact with one another, the questionnaire addressed each type of action control as defined by Merchant and Van der Stede (2017) (1. behavioral constraints, 2. preaction reviews, 3. action accountability and 4. redundancy) in a separate part. Each action control was discussed according to Van der Stede's (2001) attributes of tight budgetary controls: 1. emphasis on meeting the goal, 2. allowance for control revisions during the year, 3. amount of control detail, 4. tolerance for interim deviations, and 5. intensity of control-related communication. As described above, even though little evidence was found to characterize 2. allowance for control reviews during the year, as an attribute for tight controls (Van der Stede, 2001), it was included in this study for a holistic analysis. Hence, the combination of the four types of action controls with the five attributes (plus an additional code per type of action control for general comments) constituted the deductive code system with 24 codes (see Figure 12).

Type of Action Control	Attributes					
	Overall	1 Emphasis on meeting the goal	2 Degree of Commitment	3 Amount of Detail	4 Tolerance for Deviations	5 Intensity of Communication
Behavioral Constraints (BC)	BC	BC - 1	BC - 2	BC - 3	BC - 4	BC - 5
Preaction Reviews (PR)	PR	PR - 1	PR - 2	PR - 3	PR - 4	PR - 5
Action Accountability (AA)	AA	AA - 1	AA - 2	AA - 3	AA - 4	AA - 5
Redundancy (R)	R	R - 1	R - 2	R - 3	R - 4	R - 5

Figure 12: Overview of Deductive Codes

During Stage 1, each of these codes was defined before beginning the coding procedure (Fereday and Muir-Cochrane, 2006), using the definition of the type of action control from Merchant and Van der Stede (2017), as well as the definition of the attribute from Van der Stede (2001). During Stage 2, the transcripts were coded based on these definitions, and refined the coding manual by adding our own definition of the type of action control, the attribute in the context of this case study, the respective questions in the questionnaire, as well as adding

examples from the case study. Hence, using the example of code "AA – 1" (Action Accountability – Emphasis on meeting the goal), the deductive coding manual defines deductive codes as depicted in Figure 13:

Label	AA - 1 - Emphasis on Meeting the Goal
Type of Code	**Deductive Code**
Source	Adaptation of measures used for measuring tightness of budgetary controls to Action Controls: **Action Accountability** (Van der Stede, Measuring Tight Budgetary Controls, 2001)
Own definition:	Work instructions are the most established form of action accountability guidelines in the company of this case study. "Emphasis on meeting the goal" describes how much employees adhere to the work instructions, how much emphasis is placed on and importance of sticking to procedural protocols and work instructions (Arbeitsanweisungen und Richtlinien) and the consequences as a reflection of one's own performance, career, reputation, etc. of the employee. Furthermore, it also entails the importance for the company, superior, division, etc. Main goal of this dimension is determining the importance of adhering to these work instructions for the company and its employees, NOT Tolerance for Deviations (what happens to employees who do not adhere to these instructions) and NOT Degree of Commitment (how fixed/stable are work instructions).
Questions in the interview questionnaire:	▪ - How important is it that you comply with these guidelines? ▪ - How important are these guidelines for you (and your team)? ▪ - What role do they play in regular decision making? Performance evaluation? ▪ - Do they provide security? ▪ - Does the fear of non-compliance cause insecurity?
Examples in this case study:	*We have developed our own processes, and I have written and designed my own process for the area for which I am responsible. From my point of view, it makes sense. [...] So I stick to it, I have to stick to it somehow. And even if we hadn't written it down in some [online-based process documentation tool], I would still do it the same way. (#14, Pos. 44)---* *I think, [they are] a given, an absolute given, so that's not questioned either. It's **there**, you have to stick to it. (#10, Pos. 70) ---* *In claims, we have a lot of things that are regulated by work instructions, which is good because you can follow them. But of course, no one can deviate from the work instructions without a **very, very good** reason. And so, of course, I **always** have certain limits in my entire daily work. (#2, Pos. 18)*

Figure 13: Example of the definition of deductive codes.

Using this deductive coding system, all transcripts were coded. This structured the interviews by type of action control and attributes, providing an overview of which action controls and attributes of tight action controls participants discussed.

4.2   Inductive Codes

In the next stage of the analysis, the inductive coding system was developed. As described by Fereday and Muir-Cochrane (2006), during Stages 3 and 4, we identified themes that emerged from the interviews. Each interview transcript was analyzed and coded individually to develop inductive codes that represented how interviewees talked about action controls at their company. Later, at Stage 5, these inductive codes were compared and through an iterative process the inductive coding system was widened, divided, changed, and refined. The aim was to arrive at an inductive code system that comprehensively represented the thoughts and feelings of interviewees about action controls, without overlapping inductive codes. Hence, each inductive code had to represent a new theme that previous inductive codes had not yet covered.

Inductive codes were defined following the same guidelines as deductive codes. Hence, each code description includes the type of code, our own definition of this code within the context of this case study, as well as examples of the code from the case study. Below, we provide a brief overview of the high-level inductive code system:

1. **Oversight**

   The code for oversight describes the oversight of controls e.g. by technology, external parties or audits.

2. **Perceptions**

   The code "perceptions" includes all types of perceptions of action controls that interviewees described. One such code was contentment with each action control. This was usually used as a warmup question for each type of action control and gave an indication of the general stance of the interviewee towards each control. This code is further divided into the subcodes 1 – happy, 2 – very content, 3 – content, 4 – not content, and 5 – very unhappy. Hence, the code of contentment provides a brief overview of whether interviewees perceive a particular type of control in a positive, neutral, or negative way. The code for perception further includes the subcodes degree of freedom (high/ low/ tight-loose), emotional perception (self-commitment/ acceptance/ negative emotions/ positive emotions), effort involved (low/ high), and degree of influence (low/ high) interviewees had on these action controls.

3. Effects – E

The code "effects" describes the ramifications of action controls, i.e. the wanted or unwanted side effects of action controls. This code consists of support for company targets (with a subcode for quality control), risk aversion (vulnerability/ labor sanctions), external effects beyond the company, and internal effects (acceptable illegalities/ documentation/ direction/ hindrance/ reward/ persuasion/ boundaries/ rules of the game).

4. Drivers - D

The code "drivers", in its detail, is similar to the code for "effects". However, as opposed to the side-effects of controls, "drivers" describes the intentional goals that interviewees attributed to the introduction or changes of action controls. "Drivers" is divided into the subcodes of support for company goals (cost targets/ reputation/ fraud prevention/ quality control), risk aversion (past experiences/ negative consequences), external drivers (market requirements/ legal requirements), and internal drivers (autotelic controls/ boundaries/ direction/ formal agreement/ self-induced).

5. Features of Good Controls

The code "features of good controls" describes all aspects interviewees mentioned in defining good controls: plausibility, transparency, fit with their daily tasks, and good communication.

6. Management System as a whole

The code "management system as a whole" is used for all accounts of interviewees that either describe the overall MCS of the insurer or accounts that describe more than one individual action control. This code includes the subcode for controls as a "system or package". Even though I discussed the literature on MCS as a package or system under Section 2. Literature Review, this code is not deductive (i.e., theoretically deducted), because it was created inductively from the transcripts of the interviews. This is supported by the questionnaire which did not provide any questions on the interaction of individual controls. Hence, this code was developed inductively from the accounts of the interviewees. This code is divided into the subcodes that will be defined in Section 5.: 1. interaction – competition, 2. interplay – cohesion, and 3. layering – stacking. Furthermore, "management system as a whole" also includes the subcodes number of controls, familiarity with controls,

and changes (frequency of changes/ unwillingness to change/ more complexity/ less freedom/ more freedom/ less controls/ more controls).

The developed inductive coding system represented how interviewees talked about action controls, their thoughts, ideas, and perceptions of the system. Reports and accounts that reflected multiple aspects were coded with all applicable codes.

Overall, the deductive and inductive coding stages structed the interviews along two dimensions. First, deductive coding structured transcripts along the types of action controls and attributes of tight controls. Inductive coding structured transcripts by concepts and themes that interviewees raised. The full overview of all codes and how often they were used can be found in Appendix II. In the next step, we compare and analyze how deductive and inductive codes interacted, and what conclusions can be drawn from how interviewees talked about which action controls.

5.   Case Analysis

The aim of this study is to analyze tightness of control and how it is affected by the interaction of individual controls as a package or a system. To this end, the first step is to establish if the individual controls are implemented tightly. Hence, in the first step tightness of the four types of action controls as defined by Merchant and Van der Stede (2017) (behavioral constraints, preaction reviews, action accountability and redundancy) is analyzed individually, using the suggested attributes of tight budgetary controls by Van der Stede (2001): 1. emphasis on achieving the goal should be high, 2. allowance for control revisions during the year should be low, 3. amount of control detail should be high, 4. tolerance for interim deviations should be low, and 5. intensity of control-related communication should be high. Therefore, in the first part of this case analysis, this paper discusses the tightness of each action control by analyzing them individually.

Secondly, the aim of this paper is to analyze how these action controls interact with each other as a system or package, and how these interactions relate to tightness of control. For this reason, this paper discusses in the second part of the case analysis, how multiple action controls are implemented, how they interact with each other, and how they affect each other.

5.1   Tightness of individual action controls

The first part of this analysis discusses the tightness of the four types of action controls individually. For this reason, behavioral constraints, preaction reviews, action accountability and redundancy are discussed separately. The analysis of each action control comprises the definition of the action control in this case study, examples of the particular type of action control at the insurer, and a general assessment of the action control by the interviewees in terms of contentment and perceived level of tightness. Further, this study analyzes which of Van der Stede's (2001) attributes of tight budgetary control apply to the action control, if the action control is indeed applied tightly, and how this tightness is achieved.

5.1.1   Behavioral constraints

In general, physical restraints were not a significant topic in the interviews. In this case study, behavioral constraints presented themselves almost exclusively in the form of authorities, e.g. to pay out money, to procure goods, or make decisions (e.g. underwriting decisions), depending on the function of the interviewee. Only interviewees #9 and #11 had little to no touchpoints with behavioral constraints and explained that this was due to their functions, which did not involve any monetary decisions on behalf of the insurer. Levels of authorities for groups of functions (underwriting, claims, etc.) were specified at company level. However, interviewees had a high degree of influence on deciding which level of authority they would give to individual employees. In this context, interviewees stressed the motivational factor of behavioral constraints. Good employee performance was usually rewarded by widening behavioral constraints and giving them more authority, hence signaling the personal development of employees. This motivational factor was the main reason interviewees gave for being happy or very content with behavioral constraints. Further, interviewees attributed behavioral constraints with many positive effects like strengthening the quality of company procedures, creating boundaries and reducing the need for coordinating individual tasks, and reducing the personal vulnerability of employees by giving clear instructions as to what the insurer expected of its employees.

The overall tightness of behavioral constraints was perceived by the interviewees to be very high. They stressed that behavioral constraints were very tight, i.e. allowing no room for undesirable behaviors, not least because all constraints were implemented in the IT systems and could not be bypassed. They further explained that behavioral constraints had been tightened during the past decade and unofficial channels (i.e. shortcuts) were no longer feasible. Adding to the tightness of behavioral constraints, interviewees reported that adherence to these controls was always a focus of audits, and failing to comply with behavioral constraints would most

probably lead to severe consequences and punishments defined by labor laws. Hence, interviewees in this case study described behavioral constraints as very tight.

Using the attributes of tight results controls defined by Van der Stede (2001), 3 of 5 can be applied in this case study to describe tight behavioral constraints. (1) Emphasis on meeting the goal was applicable, and interviewees remarked that these controls had been implemented to comply with legal requirements and to prevent negative consequences for the company and its employees. (3) Behavioral constraints were defined by a high level of detail, whereby each employee was prescribed a detailed level of authority (i.e. fixed sum in €). (4) Tolerance for deviations from prescribed authority levels was low. Interviewees clearly stated that any deviation from behavioral constraints might be sanctioned by labor law provisions (i.e. disciplinary measures, warning, written warning, notice, termination). Accordingly, these three attributes of Van der Stede (2001) did apply to tightness of behavioral constraints in this case study. However, similar to Van der Stede (2001), (2) a low allowance for revisions during the year was not applicable, as interviewees regularly adjusted levels of authority for their employees to reflect their skill level. Furthermore, (5) a high intensity of communication did not apply to behavioral constraints, because they were taken as a given and employees saw no need to discuss them regularly. Behavioral constraints were a topic of discussion only when employees were dissatisfied with them or felt that they constrained them from doing their jobs effectively.

Overall, even though only three of Van der Stede's (2001) attributes applied, interviewees described behavioral constraints as very tight. Nevertheless, they were perceived positively, even offering the possibility to motivate employees.

5.1.2   Preaction reviews

In this case study, interviewees explained that preaction reviews were implemented as a layer of behavioral constraints. Hence, if, for example, a claim exceeded the authority of a claim handler, they would handle and decide on the claim but would not pay it out. Instead, they would conduct a preaction review, recommending how to proceed with the claim to a person who had a sufficient, higher level of authority. This person would then review the claim and its handling (i.e. the task fulfillment) and decide on the appropriate course of action by either following the recommendation or revising the suggested course of action. All but one interviewee had to adhere to preaction reviews in their functions. Overall, interviewees perceived preaction reviews very positively and negatively at the same time. These contradicting views were demonstrated by all interviewees and could be traced back to the party that conducted the preaction review. Negative views were usually voiced when preaction reviews were conducted

outside the interviewee's own department. One Interviewee explains: "*I sometimes feel that when you try to coordinate things **between different departments**, it can lead to problems. Because one department says: Goodness, no. I'm not responsible for that, I have nothing to do with it. But you want someone to at least review it. And if there's no interest in doing that, you hit a wall. Because they say: That's not covered in our operating procedures. Goodbye.*" (#7, Pos. 148). However, when conducted within the interviewee's own department, preaction reviews were viewed very favorably. Interviewees explained that they found preaction reviews very transparent, plausible, and understood that they were implemented by the company to comply with legal requirements, increase quality and avoid negative fallouts for company and employees alike. Nevertheless, interviewees emphasized how much time and effort preaction reviews took, especially regarding the need to document them.

In general, interviewees in this case study described preaction reviews as very tight. For one, they stressed the need for preaction reviews to comply with legal regulations. Further, they demonstrated a large commitment to preaction reviews, because they saw them as a way to vindicate themselves by following prescribed guidelines and not stepping out of line, which might expose employees to legal repercussions. One interviewee explained: "*You can't do without it. So that's fine for me. I don't feel restricted by it. It gives me a sense of **security**, because I then get **confirmation** that I have understood it the right way. And that is then also a good feeling, if one [does] this and all I's are dotted and all T's are crossed and everything is right*." (#1, Pos. 164). Hence, even though interviewees criticized preaction reviews for the high level of effort they required, they would not infringe on preaction reviews by engaging in undesirable behaviors.

Using Van der Stede's (2001) attributes, four of the five attributes were applicable to preaction reviews in this case study. Similar to behavioral constraints, (5) high intensity of communication did not apply to preaction reviews, because interviewees described them as transparent and showed themselves as committed to them, hence emphasizing a lack of need for regular communication. (1) Emphasis on meeting the goal was demonstrated by all interviewees, not least due to strict instructions to document these preaction reviews in detail (and the focus on this topic in audits). Even though (2) a strong commitment was not found in Van der Stede's (2001) study, in the case of preaction reviews this attribute was applicable, as interviewees reported little to no changes to preaction reviews in recent years. (3) High level of detail was also observable in this case study by means of clear instructions as to what cases had to be reviewed by whom, and a high focus on detailed documentation. (4) Low tolerance for deviations was also applicable in this case study, as all interviewees described severe sanctions that they expected when straying from prescribed preaction reviews.

Overall, preaction reviews were found to be tight in this case study, also meeting four of five of Van der Stede's (2001) attributes of tight budgetary controls. Nevertheless, interviewees described a predominantly positive assessment of preaction reviews with many benefits to the company and themselves, mainly criticizing the high effort required for preaction reviews and their documentation, and whether they were done by other departments.

5.1.3 Action accountability

In this case study, action accountability was implemented in the form of procedural protocols and work manuals (sometimes interviewees also referred to them as handbooks, guidelines, etc.). These mandatory manuals were developed by each department, and detailed all procedures step-by-step with clear descriptions of who does what and how. First, all procedures at the insurer were documented in an online-based tool, providing a visual representation of process flows, as well as in-depth information on each step of the procedure. This step-by-step information not only prescribed who does what, but also the tools and protocols used, risks and risk control measures for each step, the decisions that needed to be taken and which escalation procedures applied. Furthermore, each department had documented all relevant procedures within their department in manuals or handbooks. As opposed to the online tool, manuals were written as continuous texts that allowed departments to include all exceptions to rules and step-by-step click guides for certain IT tools. Interviewees reported that these handbooks easily encompassed more than a hundred pages. Overall, all interviewees experienced action accountability and disclosed that they were overall very content with these controls, because they found them transparent and that they had influence on the implementation and changes of these action accountabilities.

In general, interviewees described a high tightness of action accountabilities, not least because the documentation of working guidelines was mandatory for all departments, but also the form and degree of detail of each type of documentation was clearly specified for the whole company. The online tool not only had a mandatory design including who, what, when, where, how, risks, controls, etc., but also specified that all procedures had to be documented with a level of detail that would clearly describe the process for an external insurance expert (e.g. auditors from the Federal Financial Supervisory Authority in Germany). Handbooks were required to be even more detailed, allowing a layperson without previous knowledge (e.g. intern or new employee) to use them as step-by-step guides. The tightness of action accountabilities at the studied insurer was also increased by strict regulations regarding the adherence to these procedural guidelines and the emphasis during audits. Furthermore, interviewees stressed that

these manuals and instructions were highly valued by employees as guidelines and quality control measures. This led to the interesting fact that many departments had introduced even more, or more detailed guidelines than strictly necessary, as a form of self-induced control. One interviewee explains: "*The motivation was simply that people themselves **wanted** to work in the same way, because that also makes work easier for you. If I know I'm looking for a particular piece of information and I know where I'll find it, it's easier than having to search in four different places. Yes, that has ensured that everyone has got involved [in the development of manuals] in the first place.*" (#7, Pos. 74).

Taking into account the definition of Van der Stede (2001) of tight budgetary controls, action accountability in this case study met the same three of five criteria as behavioral constraints. (1) Emphasis on meeting the goal was very high and the mandatory nature of work instructions etc. has been described above. In the same description, interviewees disclosed (3) the high level of detail these working procedures had to meet (see above). (4) Deviations from these procedures and their documentation were not even considered by the interviewees, as they believed this would be met with severe sanctions for employees. However, like Van der Stede's (2001) original study and similarly to behavioral constraints (described above), (2) a low allowance for revisions of work manuals was not reported. On the contrary, interviewees stressed that it was mandatory to keep guidelines and handbooks up to date to reflect legal changes or new company guidelines and targets. Further, similar to behavioral constraints, interviewees did not disclose (5) a high intensity of communication, but communication only took place when changes occurred.

Overall, even though only three of Van der Stede's (2001) attributes applied to action accountabilities at the studied insurer, interviewees described comprehensive action accountabilities that could or would not be bypassed by dysfunctional behavior. Nevertheless, action accountabilities too were perceived favorably, due to the high level of influence that interviewees exerted and their transparency.

5.1.4 Redundancy

In this case study, we could not identify any redundancies that were implemented at the insurer. As one interviewee described: "*We don't have time for that, and it would be too expensive and too time-consuming.*" (#1, Pos. 176-178). Another interviewee pointed out the redundant nature of monitoring functions at the company: "*So if you look at it at the department level or division level or whatever level, there are of course different designs [of controls]. Some [departments] are operational, others monitor. As a result, there is automatically a redundancy in the way an*

issue is dealt with. That is also the normal standard, at least for the sector where I come from. It is simply an original task of the monitoring function." (#8, Pos. 182). Nevertheless, as these types of monitoring functions and tasks are not defined as redundancy by Merchant and Van der Stede (2017, p.91), they are not included in this analysis. Hence, this case study does not show any redundancies at the insurer. Nevertheless, there is the possibility that redundancies might be implemented in departments that were not represented in this study (e.g. IT, maintenance, etc.).

To address the first research question of whether action controls were tight in this case study, we analyzed each type of action control individually, and arrived at the following conclusions. First, verifying Merchant and Van der Stede's assumption (2017, p.92), redundancy does not play a large role for practitioners and is limited in its use to specific scenarios. Hence, this study could not add any new insights on redundancy. Second, interviewees gave detailed accounts and descriptions of tight behavioral constraints, preaction reviews, and action accountability, hence affirming the research question. Third, this finding largely corresponds with the definition and attributes that Van der Stede (2001) described for tight budgetary controls. The overview per action control is reflected in Figure 14:

Type of Action Control	Attributes				
	1 Emphasis on meeting the goal	2 Degree of Commitment	3 Amount of Detail	4 Tolerance for Deviations	5 Intensity of Communication
Behavioral Constraints (BC)	BC - 1	BC - 2	BC - 3	BC - 4	BC - 5
Preaction Reviews (PR)	PR - 1	PR - 2	PR - 3	PR - 4	PR - 5
Action Accountability (AA)	AA - 1	AA - 2	AA - 3	AA - 4	AA - 5
Redundancy (R)	R - 1	R - 2	R - 3	R - 4	R - 5

Figure 14: Results of the Deductive Coding System.
Green: verified,
Yellow: verified with alterations
Red: not verified
White: not applicable

The definition of Van der Stede (2001) was not upheld for two attributes: (2) degree of commitment and (5) intensity of communication. (5) Intensity of communication could not be verified for any type of action control. However, we would argue that this does not negate the validity of the definition, nor affect the tightness of control in a negative way (i.e. loose controls). On the contrary, action controls were accepted and even expected by employees and hence did not need to be addressed frequently to create tight controls. Interviewees disclosed

that they had internalized these action controls and only saw a need for communication if they changed. In his study, Van der Stede (2001) found little evidence that corroborated (2) the degree of commitment as an attribute of tight controls. Similarly, in this study, this factor also did not a play role for action controls (except for preaction reviews). However, we would argue that the possibility of interim changes does not reduce tightness of action controls either. Action controls guide employee behavior in their day-to-day business and are often developed by the departments themselves. In order to guarantee a good fit with daily business and compliance to new rules and regulations, action controls have to be updated regularly. Hence, a high degree of changeability is inherent in action controls and does not affect their tightness negatively. Overall, with the exception of (5) intensity of communication, where a broadening of the current definition should be considered, the definition of Van der Stede (2001) can be used to describe tight action controls.

As the fourth conclusion of this analysis of individual action controls, we would emphasize that tightness of action controls did not automatically lead to negative perceptions from employees. In this case study, interviewees disclosed that they were content or even happy with action controls, not least because they understood why they were implemented, and they themselves had a high level of influence on their implementation and changes (thus reinforcing Steve Jobs' appeal that good people should tell organizations what to do). Further, participants valued the positive effects of action controls, especially in reducing the risk of severe sanctions for employees themselves, providing guidance and quality controls (which even led to self-induced additional controls), and the motivational impact of a widening of behavioral constraints. Overall, interviewees found them sufficient for their task fulfillment and did not perceive them as restrictive.

5.2   Action controls as a system or package and the effect on tightness

After analyzing all action controls separately, this paper found that all used action controls - behavioral constraints, preaction reviews and action accountability - were all implemented tightly as individual controls. In this part, this paper takes a deeper look at the interactions of these controls and addresses the second research question, how these action controls relate to each other as a system or a package and affect tightness of control.

As discussed under 2. Literature Review, research on MCS categorizes management controls as a system or a package. Researchers define two types of relationships: if one management control increases the efficiency of the other management control, they are considered complementary (Bedford, 2022; Choi, 2022). If all management controls complement each

other and form a cohesive concept, they are described as a system (Malmi and Brown, 2008). However, if one management control decreases the efficiency of the other, they are considered substitutes (Abernathy and Chua, 1996; Chenhall, 2003; Malmi and Brown, 2008; Feichter and Grabner, 2020; Bedford, 2022; Choi, 2022). If controls work as substitutes and do not form a cohesive overall picture at the organization, they are described as an MCS package.

As described under 3. Methodology, the interaction of individual controls was originally not included in the theoretical framework and therefore not directly addressed in the interview questions. However, as interviewees repeatedly referred to multiple controls and how they interacted, these statements were coded inductively with three codes, that were subsumed under the discussion of management control systems and packages: 1. interaction – competition, 2. interplay – cohesion, and 3. layering – stacking. These codes will be interpreted and discussed in this chapter.

5.2.1   Action controls as a package

First, the inductive code "interaction – competition" describes how individual management controls clash or compete with each other, if more than one type or subtype of control applies to the same action. Hence, this code represents the concept of substitutes and results in MC packages (Bedford, 2022; Choi, 2022). During this case study, this code was only used three times (each by a different interviewee) and all of them criticized the same situation: "*From the overall strategy of the company, to say we are reducing personnel in order to save costs and create synergy effects, perhaps also to consolidate certain areas or especially administrative units, I think makes sense in principle. The only difficulty is that this is always a decision that applies to everyone per se. And perhaps in certain individual departments, it does not correspond to the reality of the situation.*" (#8, Pos. 56). Interviewees criticized action controls being impaired by personnel controls that had been implemented to safeguard result controls (here: to cut down on staffing and support cost targets of the company). This indicates that other management controls conflicted with action controls in this case. A broader view of all management controls implemented at the insurer hence might represent an MCS package instead of a cohesive system. However, as the scope of this study is limited to action controls and their interaction with each other, this study did not find any evidence that action controls were implemented as a package in this case.

5.2.2 Action controls as a system

In order to describe action controls as a system, this paper will discuss two inductive codes that were used in this case study (Bedford, 2022; Choi, 2022). The code "interplay - cohesion" describes how individual management controls complement each other and lead to a cohesive picture and a cohesive MCS system. This code was used when participants emphasized the importance of action control cohesion. For one thing, this call for cohesion was directed at the divisional level. As one interviewee put it: "*But of course we are also talking within our department, because it is clear that a concept like this only makes sense if it is consistent throughout. Regardless of whether I'm working in underwriting, in a line of business, or in a central function, when I look at it, it has to be a consistent, integrated concept across the board. In other words, this applies to everyone in the department.*" (# 5, Pos. 78). Further, interviewees also stressed the importance of cohesion at a company level. As an example, one interviewee criticized that there were no cohesive or overall work manuals for similar functions: "*Because of the large number of topics, what has not yet been so successful is actually bundling them sensibly throughout the entire Group. In other words, you have a complete guidebook [for all product areas] where you can say: I'm going to look in there and find everything about [Product A, Product B] and other things. It is actually rather scattered throughout various departments.*" (#15, Pos. 78). Hence, interviewees themselves emphasized the importance of action controls presenting a cohesive system.

Second, the code "layering – stacking" describes more than one type or subtype of control that is combined or stacked on top of each other to control the same tasks. Hence, this code represents the theoretical concepts of controls as compliments. A look at the accounts on action controls shows that the code "layering – stacking" was used for 139 statements, clearly demonstrating that action controls in this case study were implemented to complement each other.

Figure 15: Frequency of correlations of individual action controls

Figure 15, which depicts the correlations of action accountability, preaction reviews and behavioral constraints, demonstrates that behavioral constraints and preaction reviews were most often combined with each other (52 segments). One typical example demonstrates the interaction of these types of action controls: "*And in the case of our claim adjusters, they have certain*

settlement authorities and payment authorities and, of course, always [act] within the frame-work of the dual review principle, so that the auditing requirements are implemented accord-ingly." (#5, Pos. 50), demonstrating that behavioral constraints (here: authorities to settle and pay out claims) work in concert with preaction reviews (here: dual review principle). Other interviewees give similar accounts: "*And everything that goes beyond your authority must be signed off by the next higher level. So if we have a [claim and the team leader has X €] payment authority at this point, the [payment voucher] must be signed [by the board].*" (#6, Pos. 124). Hence, preaction reviews usually acted as a safety net, or second line defense, for behavioral constraints.

Action accountability was less often combined with other forms of action controls, but almost equally mentioned in combination with preaction reviews (13 segments) and behavioral constraints (10 segment). For example: "*If the payment which the employee made is wrong, for example, if the second or third reviewer notices that something has gone wrong, then the pay-ment is reversed. And then an explanation is also given as to why. Then the employee has to correct it.*" (#10, Pos. 110). This emphasizes the feedback loop of preaction reviews back to action accountability. More often, however, interviewees emphasized that all other action con-trols had to be included in handbooks and manuals, hence reemphasizing preaction reviews and behavioral constraints by making them a part of action accountability measures: "*This is now also a fairly comprehensive manual, which stipulates, for example, that when the general man-ual states that everyone must adhere to the four-eyes principle, and what is required is clearly defined. And the supplementary guideline would specify [for example], we have very few em-ployees in the unit and if one is sick and one is on a business trip, what do we do? [There] has to be another option. So these options or this situation-specific four-eyes principle, as we call it, must then also be documented [in the handbook].*" (#13, Pos. 100).

Nevertheless, both codes, "layering – stacking", as well as "interplay – cohesion", demonstrate that the employees in this case study not only placed substantial emphasis on MCS as a cohesive system, but also that the implemented action controls worked as a cohesive MCS system which was orchestrated to support other action controls and improve their efficacy.

To address the second research question, namely how action controls interact with each other and how this affects tightness of control, this paper took a closer look at the interactions of the implemented action controls in this case study. Due to the multitude of action controls that were implemented for each process and the way they complemented each other, they worked as a safety net in case one control fails and amplified one another (Bedford, 2022; Choi, 2022). Hence, in accordance with Merchant's (1985, p.59) definition of control tightness, the design as

a cohesive action controls system leads to an increase in certainty that company objectives will be met. This design as a cohesive action control system further works to limit undesirable behaviors and actions. Accordingly, in this case study, where individual tight action controls complemented each other, the tightness of action controls was further increased by the MCS design as a cohesive system, severely limiting employees in their behavior and increasing the certainty that the company will meet its objectives.

To conclude, analyzing individual action controls at the studied company answered the first research question in the affirmative, demonstrating that the action controls were each implemented in a tight fashion. Even though not all of Van der Stede's (2001) attributes of tight budgetary control were applicable to tight action controls, these deviations are due to the nature of action controls and hence, this paper finds the definition to also be applicable to define tight action controls. In regard to the second research question of how the tightness of action controls was affected by their interactions, this case study found that the insurer had implemented a comprehensive action control system in which individual action controls complemented each other and thereby increased the overall efficacy. Furthermore, by acting as a safety net for the failure of one action control, this concerted system of action controls also increased the likelihood that the insurer will meet its company objectives. Hence, the design of a cohesive action control system increased the tightness of action controls further by offering multiple safety nets and severely limiting employee actions.

6.   Conclusions

Covid 19 shutdowns have forced companies worldwide to provide their employees with the opportunity to work from home. However, remote work and a low visibility of task fulfillment left most employers insecure about the productivity of their employees while working remotely. As a reaction they introduced new measures and monitoring tools. Lights, camera, action controls! Employees were forced into additional check-ins, a multitude of video calls, monitoring software, etc. Employees who found these controls too tight thus looked for remedies that simulated high productivity to their employer.

Generally speaking, organizations implement Management Control Systems (MCS) in order to align employee behavior with their organizational goals (Strauß and Zechner, 2013) and dissuade them from undesired behaviors. As Flamholtz (1996) emphasized, the introduction of MCS is necessary for organizations, as employees have their own goals that are not always naturally aligned with those of the organization. As one form of management controls

Merchant and Van der Stede (2017) defined action controls as those that directly target employee behavior and focus on their task fulfillment.

The recent developments described above touched on a multitude of theoretical discussions that have not yet received sufficient attention in MCS research. First, the concept of tightness of control is often mentioned by many researchers, but few researchers have focused on this phenomenon. As a result, the tightness-of-control literature has contributed only one detailed definition of tightness of control. Van der Stede's (2001) study identified five attributes that described tight budgetary controls: (1) emphasis on meeting the goal should be high, (2) allowance for control revisions during the year should be low (for which Van der Stede (2001) could not find sufficient evidence), (3) amount of control detail should be high, (4) tolerance for interim deviations should be low, and (5) intensity of control-related communication should be high. However, we are not aware of any research that has tried to apply these attributes to other types of controls. Second, as Merchant (1985) and Merchant and Van der Stede (2017) pointed out, tightness of control cannot only be achieved by tightening single management controls, but also by combining them. This theory also touches on another research string that discusses MCS as a system or as a package. However, we are not aware of any research that has focused on the effects of control interactions on tightness of control. Third, compared to other forms of management controls, action controls have not yet been widely discussed in the MCS literature. Hence, the aim of this study was to address these research gaps and develop a deeper understanding of action controls, tightness of action controls and how the tightness of action controls is affected by the interaction of action controls.

In order to gain insights into these phenomena, this paper followed Malmi and Brown's (2008) and Merchant and Otley's (2022) call for field studies and interview-based case studies to gather more information on action controls, how they are implemented and how they interact with each other in practice. We conducted a case study at a German insurance company, that by definition faces a multitude of strict legal regulations that forces the insurer to implement tight controls to safeguard compliance and avoid negative consequences that might threaten its operating license. As part of a larger case study, we conducted 15 interviews that were later analyzed using the hybrid method of Fereday and Muir-Cochrane (2006) as a sub-form of thematic analysis (Braun and Clarke, 2006). Using a deductive coding system, interview transcripts were first coded and then structured in terms of type of action control (as defined by Merchant and Van der Stede, 2017) and attribute of tight controls (as defined by Van der Stede, 2001). This step of the process allowed the testing of this theoretical framework. In the next step, inductive codes were developed from the transcripts that enabled the deduction of how

interviewees thought and talked about these topics. Combining and comparing deductive and inductive codes, this paper analyzed tightness of action controls, interaction of action controls as a system or a package and how these affect tightness.

This case study found that behavioral constraints, preaction reviews, and action accountability were all implemented tightly. However, this case study did not yield a deeper analysis of redundancy, because interview partners did not report any experience with this type of action control. Furthermore, this case study found that action controls were implemented as a cohesive system, thus increasing tightness of control.

Overall, this case study contributes to the MCS literature in several ways. First, this paper is able to illustrate what action controls were applied in practice and how they manifested themselves. Second, we describe how these action controls were implemented tightly. Third, this case study verified Van der Stede (2001) definition of tight budgetary controls for tight action controls. However, it was not able to verify the attributes (2) degree of commitment (for which Van der Stede (2001) was also not able to find sufficient evidence), and (5) intensity of communication in its current definition. Nevertheless, this does not negatively impact the validity of Van der Stede's (2001) definition, because this attribute is not applicable to the nature of action controls. Fourth, this paper finds that a high tightness of action controls did not automatically lead to negative employee perceptions. In this case study, interviewees perceived tight action controls positively overall, and valued the positive effects of action controls like reducing the risk of severe sanctions for employees themselves, providing guidance and quality controls, and the motivational aspect of widening behavioral constraints. Lastly, this study arrives at the conclusion that the tight action controls in this case study were implemented as a cohesive system that complemented each other. Hence, these management controls complementing each other (Bedford, 2022; Choi, 2022) allowed for a further tightening of controls, without investing in additional or tighter individual action controls, or without risking tempting employees into dysfunctional behavior.

This study is subject to several limitations, most importantly the question of the generalizability of case studies (Blatter and Haverland, 2014). However, studying these phenomena in a real-life setting offers valuable insights that constitute an useful starting point for further research. This was also reiterated by Merchant and Otley (2022): "*Although field research has its own issues and problems, we believe that it is more likely to produce relevant and valuable theories and insights than work conducted at arm's length from an academic office.*" (Merchant and Otley, 2022, p. 5).

We believe that this study offers valuable insights for researchers and practitioners on the design of individual action controls and action controls as a system for achieving tightness of control. As pointed out above, implementing tight action controls gained significantly in importance during the Covid 19 shutdowns. However, these findings are still significant in a post-Covid world. Most companies have implemented some form of remote work that had not been possible before the pandemic. Nonetheless, they still face the same insecurities about their employees' productivity. Hence, implementing a cohesive action control system that complements each tight action control increases overall tightness of control, increases the likelihood of reaching company targets and reduces undesired employee behaviors. At the same time, a cohesively tight action control system offers a number of advantages besides an increased efficacy of controls. First, companies do not have to increase the number of controls and the subsequent costs for controls. Second, if controls are transparent and plausible, and employees understand the reasoning behind them, they do not necessarily develop negative views on tight controls. On the contrary, if done correctly, tight action controls can be utilized as a form of motivation.

7.   References

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8.   Appendix I: Questionnaire

Interviewleitfaden für "Tightness of MCS"

- **Behavioral constraints**
  - Inwieweit umfassen diese Vorgaben und Arbeitsanweisungen auch Regelungen zu z.B.
    - Vollmachten (z.B. für Zahlungen und Unterschriften)
    - Systemfreigaben und Rechte
    - Zweitfreigaben und Kontrollen
    - Zugang zu Akten (abschließbare Büros, Akten) oder Stockwerken?
  - Welche Schulnote von 1 bis 6 würden Sie diesen internen Vorgaben geben und warum?
  - Inwieweit werden Sie (oder Kollegen von Ihnen) bei der Erstellung dieser Vorgaben mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Vorgabe angepasst auf Aufgabe und Umfeld oder „One size fits all"?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass Sie diese Vorgaben einhalten?
    - Wie wichtig sind diese Vorgaben für die Sie (und Ihr Team)?
    - Welche Rolle spielen diese in der regelmäßigen Entscheidungsfindung?
    - Geben Sie Sicherheit?
    - Verursacht die Angst vor Verstößen Unsicherheit?
  - Inwieweit werden diese Vorgaben (Zugänge, Vollmachten) aktualisiert bzw. aktuellen Gegebenheiten angepasst?
  - Wie detailliert sind diese Vorgaben und die Prüfung deren Einhaltung?
    - Dokumentationspflichten?
  - Was passiert, wenn von den Vorgaben abgewichen wird?
    - Konsequenzen? Revision, Rechtfertigung, etc.
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
    - Vereinbarung von Maßnahmen?
  - Inwiefern sind diese Vorgaben (z.B. Zugänge, 4-Augen-Kontrollen) ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

- **Action Accountability**
  - Sie erwähnten vorhin Vorgaben zu *XY*. Würden Sie sagen, dass es viele Vorgaben gibt, an die Sie (und Ihr Team) sich halten müssen?
    - Anzahl?
    - Stehen diese im Widerspruch zueinander?
    - Kapazitätsbindung?
    - Wie werden diese empfunden?
  - Inwieweit werden Sie (oder Kollegen von Ihnen) bei der Erstellung solcher Vorgaben mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Vorgabe angepasst auf Aufgabe und Umfeld oder „One size fits all"?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass Sie diese Vorgaben einhalten?
    - Wie wichtig sind diese Vorgaben für die Sie (und Ihr Team)? Leistungsbeurteilung?
    - Welche Rolle spielen diese in der regelmäßigen Entscheidungsfindung?
    - Geben Sie Sicherheit?
    - Verursacht die Angst vor Verstößen Unsicherheit?
  - Inwieweit geben diese Vorgaben (Arbeitsanweisungen, Richtlinien) Entscheidungsspielraum? Sind Abweichungen von den Anweisungen möglich?
  - Wie detailliert sind diese Vorgaben (Arbeitsanweisungen, Richtlinien) und die Prüfung deren Einhaltung?
    - Dokumentationspflichten?
  - Was passiert, wenn von den Vorgaben abgewichen wird?
    - Konsequenzen? Revision, Rechtfertigung, etc.
    - Auswirkungen auf Karriere?
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
    - Vereinbarung von Maßnahmen?
  - Inwiefern sind Arbeitsanweisung ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

- **Pre-Action Reviews**
  - Inwiefern spielt es für Ihre Tätigkeiten eine Rolle, dass gewisse Entscheidungen vor ihrer Finalisierung bzw. Umsetzung mit anderen Einheiten abgestimmt oder von diesen freigegeben werden?
    - Wie groß ist der Freiheitsgrad? Müssen nur große Entscheidungen abgestimmt werden oder bereits kleine (z.B. Geschäftsreisen o.ä.)?
    - Von wem muss Freigabe erfolgen? Vom Vorgesetzten? Bis zu welcher Ebene?
    - Von Zentraleinheiten? Von welchen?
  - Inwieweit werden Sie (oder Kollegen von Ihnen) bei der Erstellung solcher Vorgaben zu Vorabstimmungen und Freigaben mit einbezogen?
    - Sind Ihnen Vorgaben hierzu transparent/bekannt?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Vorgabe angepasst auf Aufgabe und Umfeld oder „One size fits all“?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass Sie diese Vorabstimmungen eingehalten bzw. Freigaben eingeholt werden?
    - Welche Motivation steckt dahinter?
    - Geben Sie Sicherheit?
    - Verursacht die Angst vor fehlenden Freigaben Unsicherheit?
    - Wie viel wird hier vom Unternehmen vorgegeben und wie viel erfolgt aus „Cover your back“ Gesichtspunkten?
  - Inwieweit sind diese Vorabstimmungen/Freigaben fest vorgegeben oder änderbar?
    - Gelten unterschiedliche Regelungen für unterschiedliche Sachverhalte/Themen? Oder für unterschiedliche Volumen/Ressourcen? Oder für unterschiedliche Risiken?
  - Wie detailliert sind diese Vorgaben für Vorabstimmungen und Freigaben und die Prüfung deren Einhaltung?
    - Gibt es dafür festgelegte Formulare etc.?
    - Wie viel Ressourcen und Zeit bindet das?
  - Was passiert, wenn keine oder nur eine mangelhafte Vorabstimmung bzw. keine vorherige Freigabe erfolgt?
    - Gültigkeit der Entscheidung/Sachverhalt/ des Projekts?
    - Erfolg des Projekts/Sachverhalts? Akzeptanz?
    - Konsequenzen? Revision, Rechtfertigung, etc.
    - Auswirkungen auf Karriere?
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
    - Vereinbarung von Maßnahmen?

- Inwiefern sind Vorabstimmung und Freigaben ein häufiges bzw. wichtiges Gesprächsthema?
  - Frequenz?
  - Bedeutung?
  - Mit dem Vorgesetzten?
  - Im Team?
  - Mit gleichgestellten Kollegen?
- **Redundancy**
  - Inwiefern kommt es vor, dass bestimmte Tätigkeiten von mehreren Mitarbeitern oder Einheiten durchgeführt werden?
    - Z.B. bei Projekten intern+externe Berater
    - Z.B. 4-Augen-Kontrolle
    - Fehlende Abstimmung oder geplante Doppelung?
    - Kapazitäten dafür?
  - Inwieweit werden Sie (oder Kollegen von Ihnen) bei der Erstellung solcher 4-Augen-Kontrollen mit einbezogen?
    - Mitspracherecht/Abstimmung mit Ihnen?
    - Vorgabe angepasst auf Aufgabe und Umfeld oder „One size fits all"?
    - Durch wen werden die Vorgaben erstellt/gegeben?
  - Welche Bedeutung spielt es, dass Sie diese 4-Augen-Kontrollen einhalten?
    - Wie wichtig sind diese Vorgaben für die Sie (und Ihr Team)?
    - Welche Rolle spielen diese in der regelmäßigen Entscheidungsfindung?
    - Geben Sie Sicherheit?
    - Verursacht die Angst vor Verstößen Unsicherheit?
  - Inwieweit lassen 4-Augen-Kontrollen Entscheidungsspielräume?
  - Wie detailliert sind 4-Augen-Kontrollen und die Prüfung deren Einhaltung?
    - Dokumentationspflichten?
    - Aufwand? Ressourcen?
  - Was passiert, wenn von den Vorgaben der 4-Augen-Kontrollen abgewichen wird?
    - Konsequenzen? Revision, Rechtfertigung, etc.
    - Betonung der Bedeutung/Reaktion durch Vorgesetzte?
    - Vereinbarung von Maßnahmen?
  - Inwiefern sind 4-Augen-Kontrollen ein häufiges bzw. wichtiges Gesprächsthema?
    - Frequenz?
    - Bedeutung?
    - Mit dem Vorgesetzten?
    - Im Team?
    - Mit gleichgestellten Kollegen?

9.   Appendix II: Quantitative Overview of Codes

1 Inductive Codes	0
1.1 Oversight	0
1.1.1 oversight by technology	32
1.1.2 oversight by outsiders	33
1.1.3 audits	11
1.1.3.1 Audit - Intensity of Communication	3
1.1.3.2 Audit - Tolerance for Deviations	29
1.1.3.3 Audit - Amount of Detail	7
1.1.3.4 Audit - Degree of Committment	5
1.1.3.5 Audit - Emphasis on Meeting the Goal	37
1.2 Perceptions	0
1.2.1 Amount of time	23
1.2.2 contentment	0
1.2.2.1 1 - happy	16
1.2.2.2 2 - very content	22
1.2.2.3 3 - content	15
1.2.2.4 4 - not content	4
1.2.2.5 5 - very unhappy	1
1.2.3 Degree of Freedom	1
1.2.3.1 high degree of freedom	28
1.2.3.2 low degree of freedom - strict corset	71
1.2.3.3 tight-loose	43
1.2.4 Emotional perception	9
1.2.4.1 self-commitment	34
1.2.4.2 acceptance	9
1.2.4.3 negative emotions	52
1.2.4.4 positive emotions	82
1.2.5 Effort involved	6
1.2.5.1 low effort	7
1.2.5.2 lots of effort	65
1.2.6 Degree of Influence	1
1.2.6.1 high influence	68
1.2.6.2 low influence	51

1.3 Effects - E	4
1.3.1 E - support company targets	4
1.3.1.1 E - quality control	12
1.3.2 E - risk aversion	7
1.3.2.1 E - vulnerability	41
1.3.2.2 E - labour sanctions	21
1.3.3 E - external effects	4
1.3.4 E - internal effects	2
1.3.4.1 E - acceptable illegalities	14
1.3.4.2 E - documentation	58
1.3.4.3 E - direction	19
1.3.4.4 E - hindrance	3
1.3.4.5 E - reward	24
1.3.4.6 E - persuasion	5
1.3.4.7 E - boundaries	4
1.3.4.8 E - rules of the game	15
1.4 Drivers - D	10
1.4.1 D - support company goals	1
1.4.1.1 D - cost targets	5
1.4.1.2 D - reputation	5
1.4.1.3 D - fraud prevention	4
1.4.1.4 D - quality control	10
1.4.2 D - risk aversion	0
1.4.2.1 D - past experiences	13
1.4.2.2 D - negative consequences	20
1.4.3 D - external drivers	0
1.4.3.1 D - market requirements	5
1.4.3.2 D - legal requirements	39
1.4.4 D - internal drivers	0
1.4.4.1 D - autotelic controls	2
1.4.4.2 D - boundaries	5
1.4.4.3 D - direction	9
1.4.4.4 D - formal agreement	2
1.4.4.5 D - self-induced	22

1.5 Features of good controls	0
1.5.1 plausibility	33
1.5.2 transparency	36
1.5.3 fit	26
1.5.4 good communication	2
2 Management Control System as a whole	18
2.1 System or package	0
2.1.1 interaction - competition	4
2.1.2 layering - stacking	139
2.1.3 interplay - cohesion	9
2.2 Number of controls	11
2.3 Changes	8
2.3.1 frequency of changes	23
2.3.2 unwillingness to change	9
2.3.3 more complexity	6
2.3.4 less freedom	5
2.3.5 more freedom	4
2.3.6 less controls	2
2.3.7 more controls	16
2.4 Familiarity	36
3 AC - Action Controls	0
3.1 AA Action Accountability	29
3.1.1 AA - 5 - Intensity of Communication	62
3.1.2 AA - 4 - Tolerance for Deviations	72
3.1.3 AA - 3 - Amount of Detail	74
3.1.4 AA - 2 - Degree of Committment	67
3.1.5 AA - 1 - Emphasis on Meeting the Goal	132
3.2 R - Redundancy	4
3.3 PR Preaction Reviews	33
3.3.1 PR - 5 - Intensity of Communication	37
3.3.2 PR - 4 - Tolerance for Deviations	71
3.3.3 PR - 3 - Amount of Detail	65
3.3.4 PR - 2 - Degree of Committment	80
3.3.5 PR - 1 - Emphasis on Meeting the Goal	208

D. How regulatory changes are driven by a need for control in reputational scandals: A case study in the German insurance industry

Abstract

Purpose

The paper contributes to our understanding of the mechanisms that evolve during reputational scandals and lead to changes in industry regulation. It explores the processes by which a demand for external industry regulation evolves, also addressing the consequences of firms' competitive behaviors which lead to substantial misbehavior and the destruction of reputational capital. The authors are interested in whether and how regulatory activities – in the case analyzed here, changes in insurance regulation regarding sales commissions for insurance brokers – are used as a costly, external behavioral control mechanism (third-loop learning) to terminate a reputational scandal that cannot be stopped by internal controls at a firm level (first-loop and second-loop learning) anymore.

Design/methodology/approach

The paper explores a real-life case in the German insurance industry that peaked in 2012 and has been well documented by broad media coverage, complemented by interviews with leading industry representatives. Using causal process-tracing as a methodology, the authors study the factors in the case that led to an industry scandal. The authors further analyze why the insurance firms involved were not able to limit the scandal's impact by internally controlling their behaviors, but had to call for external regulation, thus imposing costly restrictions on sales and contract processes. To identify the mechanisms underlying this result, theories from the fields of economics (game theory) and sociology (vicious cycle of bureaucracies), as well as organizational learning theory, are employed.

Findings

The authors find that individual rationality does not suffice to prevent insurance firms from scandalous business practices, e.g., via implementing appropriate internal behavioral control measures within their organizations. If, as a result, misbehavior leads to reputational scandals, and the destruction of reputational capital spills over to the whole industry, a vicious cycle is set in motion which can be terminated by regulation as an externally enforced control mechanism.

Research limitations/implications

This study is limited to the analysis of a single case study, combining published materials, e.g., broad media coverage, with interviews from representatives of the insurance industry. Nevertheless, the underlying mechanisms that have been identified can be employed in other case studies as well.

Practical implications

Our paper shows that if firms want to avoid increasing regulation, they must implement strong reputational risk management to counteract short-term profit pressure and to avoid restrictive regulation imposed on the industry as a whole. Furthermore, it sheds light on the relevance of spillover effects for reputational risk management, as not only employee behavior within an organization might lead to the destruction of reputational capital, but also that from other firms, e.g., from elsewhere within an industry.

Originality/value

Our paper contributes by emphasizing a direct causal link between corporate scandals, loss of reputation and regulatory change within the insurance industry. Furthermore, our paper contributes by combining economic theories with organizational theories to understand real-life phenomena.

Keywords

Reputation risk, scandals, regulatory change, insurance industry, causal process tracing

Paper type

Research paper

How regulatory changes are driven by a need for control in reputational scandals: A case study in the German insurance industry

> *"It takes 20 years to build a reputation and five minutes to ruin it.*
> *If you think about that, you'll do things differently." - Warren Buffet[8]*
> *"The insurance industry is the latest financial sector*
> *to have its darkest secrets exposed to the light." The Economist[9]*

1.   Introduction

For several decades, insurance has been one of the most scandal-prone industries. These extend from the spectacular collapse of the Austrian Phoenix life insurance in 1936 to the bid-rigging scandal compromising the US insurance brokers Marsh McLennan, as well as the insurance firm AIG in 2004, to the 2012 MEG scandal instigated by the insurance broker Mehmet Göker, dubbed by the media as the 'Wolf of Kassel'. Quite recently, under the Covid-19 pandemic, a new scandal has been tarnishing the relationship between insurers and customers. Although insurers had underwritten business interruption insurances (i.e., contracts that were supposed to cover losses resulting from business closures due to infectious diseases) as late as March 2020, after the lockdown, the insurance industry had taken the stance that pandemics were excluded in the contracts' fine print. This position quickly came under fire as customers felt defrauded and the number of complaints as well as public outrage grew (Maniar, 2020). Until today, several court decisions have sided with customers when insurers had failed to detail the insured events (Versicherungsbote, 03 August 2020). As a result, insurers find themselves under public scrutiny for their handling of pandemic-related insurance claims and the industry is once again facing a substantial crisis and loss of reputation.

Such events are especially problematic for the insurance industry, as its financial success is particularly dependent on maintaining a good reputation. In a nutshell, corporate reputation is an individual's overall evaluation of a firm's key attributes, performance and behavior towards its stakeholders. With respect to a firm's products, reputation comprises customers' subjective beliefs about the qualities of the products and services delivered (Burke *et al.* 2018). As reputation adds to customers' motivation to enter into a contract and/or pay price premiums,

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[8] As cited by Forbes online, 20 April 2014.
[9] The Economist, 21 October 2004.

it yields economic benefits subsumed as reputational capital (Raithel and Schwaiger 2015; Walsh *et al.* 2009) which is a part of a firm's market value.

For insurance firms, building and maintaining reputational capital is of paramount importance, as insurance products are credence goods, whose main quality, i.e., the insurer rightfully stepping in if the insured event occurs, cannot be evaluated in the usual course of business (Darby and Karni, 1973). Instead, insurance firms sell contracts that are rather opaque, as they are characterized by virtuality, typically long durations (e.g., in life insurance a contract could encompass the entire human life span) and complexity regarding the specific conditions under which an occurring event is insured. This results in information asymmetry at the expense of customers who are often unable to assess how risk calculation and profit margins are reflected in a given insurance premium, or whether an insurer rightfully denies insurance claims. Even more so, customers must rely on the sustainability of an insurance firm's business model, as they must trust that the insurer will still be in business when they have a claim, or that the insurer will be financially sound enough to handle a claim in the customer's best interest.

It is obvious that if an insurance firm or one of its employees chooses a course of action that substantially impairs customers' beliefs on credence qualities, existing reputational capital will be destroyed either partially or as a whole. The same holds, if customers' beliefs change due to an external event, e.g., because a corporate scandal that originally affects another insurer has spillover effects into the industry as a whole (Nienaber *et al.* 2014). It is therefore not surprising that the management of such reputational risks, i.e., all activities avoiding (further) damage of an insurance company's reputation, is a vital part of an insurer's overall risk management.

A particular challenge in reputational risk management is that the financial value of a firm's reputational capital cannot be measured reliably. As a consequence, such changes are not included in a firm's formal accounting and control systems, which typically comprises formal results and action controls, e.g., key performance objectives or budgets (Merchant and Van der Stede 2017). Thus, in situations with pressure for financial profitability and/or with managers prone to myopic behavior, the short-term gains of exploiting reputation at the expense of customers' expectations are oftentimes overstated against the resulting long-term losses when customers switch towards competitors or are less willing to pay price premiums (Mizik and Jacobson 2007), leading to the observed scandalous behaviors to the disadvantages of customers.

To prevent a resulting market failure in the insurance industry, whose services are of high economic relevance (Haiss and Sümegi 2008), it is subject to comprehensive regulation, e.g., the European Directive Solvency II that implements comprehensive EU-wide insurance regulation in terms of quantitative requirements, governance and risk management requirements, as well as

disclosure and transparency requirements; or the international accounting standards IFRS 4 and IFRS 17, establishing principles for recognizing and measuring contracts issued by insurance firms.

But as regulation imposes costly restrictions on firm behavior, firms usually try to avoid direct as well as indirect costs of regulatory activities caused for example, by fees, taxes and behavioral restrictions (Darby and Karni, 1973; Gino *et al.*, 2013). Even so, we find that in some cases, insurance firms even demand additional regulation instead of using self-imposed, but less costly internal control mechanisms (Merchant and Van der Stede, 2017) to build up reputational capital. Our research objective is to investigate this seemingly counter-intuitive interplay between insurance firm-behavior and regulatory activities, to better understand why regulation might be used as an externally imposed behavioral control mechanism.

Our paper addresses this research objective by taking a closer look at the management of reputational crises and the underlying causal mechanisms that have led to changes in insurance regulation regarding sales commissions for insurance brokers. To this end, we analyze a real-life case from the German private health insurance industry that started in 2009 and peaked in 2012. We combine economic and sociological theories to understand the dynamics that lead to increased regulation as a result of scandals. Our paper therefore contributes the field threefold. First, we add to the management control literature, suggesting that a need for behavioral control might also be addressed by firms demanding external regulation as a mechanism for limiting dysfunctional employee behavior. Second, we show that in our case, it was part of insurance firms' reputational risk management, i.e., the prevention of further destruction of reputational capital, that had been driving the resulting changes in German insurance regulation. Third, we provide additional insights into why firms choose this rather costly and inflexible way to address behavioral control problems instead of implementing internal controls.

Our paper is organized as follows: in the second section, we provide a brief literature review on risk management, regulation, and reputational risks. Section 3 gives an overview of our research method. Section 4 contains our case, the MEG scandal. Section 5 analyses theoretical mechanisms and compares and combines their explanatory merits by using causal process tracing and Section 6 concludes.

2.   Literature Review

Even though there is a broad body of literature on corporate risk management, most of it deals with the integration of risk considerations into the firm's management and control cycle, dealing with, for example, risk as an economic phenomenon, managerial conceptualizations of risk

and the organization of risk management as well as its integration into the administrative management control cycle (for a comprehensive overview see Bromiley *et al.* 2015). Nonetheless, Wagenhofer (2016) criticizes the fact that research on risk management remains somewhat scarce, especially with respect to the interplay of regulation and risk management.

Traditionally, accounting research deals with 'risk counting' (Mikes 2011), i.e., integrating risks into meaningful financial accounting measures. In this vein, accounting regulation is a mechanism for making financial statements more informative for investors and other decision-makers with respect to variance in future performance, and – at least to some extent – also serving as an instrument for managerial governance and control to prevent excessive risk-taking behaviors by a firm's management. However, as accounting-based financial controls do not suffice, firms also use a broad array of other behavioral controls, e.g., codes of conduct, compliance training, whistle-blower hotlines as well as employee selection and development to restrict dysfunctional employee behavior (Merchant and Van der Stede 2017). Nevertheless, until today, there remains a research gap regarding the role of external regulation within a firm's "*management control package*" (Grabner and Moers 2013, p. 408). For example, Power (2002) implies that regulation plays only a decreasing role compared to internal controls, e.g., firms being forced to implement standardized risk management and corporate governance systems. Both Modell (2012) and Ahrens and Khalifa (2015) include external regulation only as a trigger for the development of internal control systems into their analyses, but not as a control instrument in itself.

Whereas these papers are in line with traditional political economy going back to Pigou (1938), arguing that regulation is an externally inflicted measure to mitigate conflicts between corporate insiders and outsiders, new approaches discuss regulation as an instrument in itself, that can be used by economic actors to yield economic rents. One of the first papers addressing the latter notion is the seminal analysis by Stigler (1971), who shows how relatively small economic groups, e.g., industries, benefit by actively seeking regulation restricting their activities. This idea has been taken up, amongst others, by Hail *et al.* (2018), who focus on the self-interest of regulators.

Our paper adds to both literature streams by addressing the original idea presented by Stigler (1971), and linking it to the management control literature by providing additional insights showing that the demand for regulation might also be an instrument for mitigating reputational risks. It can do so by serving as an externally enforced behavioral control instrument, thus creating economic rents at the level of a firm's real-economy business model.

For our analysis, we have chosen the insurance business, due to the exceptional importance of reputation for this industry. With this notion, our study uses a second literature

stream showing that trust is one of the decisive factors for insurance customers (Csiszar and Heidrich, 2006; Schanz, 2006; Stewart, 2006). Gatzert and Schmit (2015), for example, argue that reputation signals a corporation's quality and reliability, especially when informational asymmetry is high. Moreover, many studies underline a positive link between reputation and firm performance (e.g., Raithel and Schwaiger, 2015).

Another literature stream analyzes the effects of reputation on clients and investors. Yoon *et al.* (1993) show that reputation can assist in generating purchase intention, while others demonstrate that a good reputation reduces price-sensitivity and increases willingness to pay (Graham and Bansal, 2007; Walsh *et al.*, 2009; Burke *et al.*, 2018). Milgrom and Roberts (1986) argue that a good reputation can also attract investors. Overall, researchers agree in their assessment that a good corporate reputation can function as a strategic asset that sets a company apart from its competitors. In this vein, Belva (2005) demonstrates in his research that reputational risks can have significant financial consequences. Fombrun and Van Riel (2004) argue that the financial impact reputational damages cause depends on how organizations manage reputational risks during a crisis. In fact, reputational risks play such an important role in insurance, that the Solvency II regime also addresses them as a separate risk category that has to be managed by insurers (Gatzert and Kolb, 2013).

In general, insurers already face a very tight regulatory regime imposing restrictive internal structures (Liedtke, 2011), and practitioners caution that reputational scandals will lead to an even stronger tightening of regulations for the industry, making internal organization costlier (Forstmoser and Herger, 2006; Nienaber *et al.*, 2014, Schanz, 2006; Zboron, 2006). When misdemeanor becomes public, it is therefore critical how an organization or industry deals with this scandal (Poppo and Schepker 2010).

Given this literature and the extensive damage that reputational scandals can impose on individual insurers as well as the overall insurance industry, the lack of academic research on the reputational risks in financial industries and especially in insurance is quite surprising (Veh *et al.*, 2019; Zaby and Pohl 2019; Will *et al.*,2017; Schanz, 2006). The critique of Overbay (2003, p.1) still holds that "*reputational risk management (RRM) is poorly understood in the risk management and insurance community*".

3.   Research Method

The focus of our study is to analyze how changes in insurance regulation are driven by reputational scandals, and on industry efforts to mitigate the resulting reputational risks. This research topic is rather difficult to assess in a quantitative study. First, reputational risk and the loss of

reputational capital is a relatively delicate issue that might yield highly biased answers in a survey. Second, the constructs on which we focus are difficult to quantify; changes in regulation as well as reputational risks are difficult to measure as there are no standardized assessment methods (e.g., Zboron, 2006). Third, our main research interest lies in the interplay of factors and mechanisms that lead to changes in the regulatory environment of the insurance industry.

Therefore, we have chosen a qualitative case study to capture an in-depth and multifaceted view of the complex interplay between scandals, loss of reputation, industry behavior and regulation. Case studies constitute a common method in behavioral research, psychology and sociology and have gained popularity in management research too (Yin, 1984; Eisenhardt, 1989). With respect to the different approaches within case study methodology, we have chosen the causal process tracing method (short: CPT) for our analysis.

Blatter and Haverland (2014, p. 60) describe CPT as a "*within-case method of analysis that concentrates on the processes and/or mechanisms that link the causes and the effects within specific cases.*" One of the main objectives of CPT is to highlight the interplay of different causal factors within a case study to pinpoint the underlying social mechanisms driving mechanism-based conjectures (Blatter and Haverland, 2012). CPT is particularly useful if the research object is the cause of an effect, rather than the effect of certain causes, and allows researchers to analyze a plurality of factors that work together to produce that effect. Therefore, CPT can be seen as a "*tool for drawing descriptive and causal inferences from diagnostic pieces of evidence – often understood as part of a temporal sequence of events or phenomena*" (Collier, 2011, p. 824).

Beach and Pederson (2013, p. 11) distinguish between three types of CPT methods: theory-testing process-tracing, theory-building process-tracing and explaining outcome process tracing. In this case study, we have chosen theory-testing process-tracing as "*we know both X and Y and we either have existing conjectures about a plausible mechanism or are able to use logical reasoning to formulate a causal mechanism from existing theory*" (Beach and Pederson, 2013, p. 14). Therefore, the objective of this case study is to specify theories and variables that can best explain causality between the witnessed phenomena (Kay and Baker, 2015).

As pointed out in the literature, the most important factor in choosing a particular case for study is accessibility and that the case shows the outcome the researcher is interested in analyzing (Yin, 1984; Eisenhardt, 1989; Blatter and Haverland, 2012). In our research field of reputational scandals, loss of reputation, industry behavior and change in regulation, accessibility is very high, due to publicly available documentations of the law-making process and media coverage. From the number of scandals that have afflicted the insurance industry in the past decades, the scandal surrounding the insurance broker MEG and its founder Mehmet Göker

is most suitable for our research, as the factors leading to the changes in regulation are to a large extent publicly documented, as is the desired effect, i.e., the change in regulation. We have used the extensive media coverage and, complementarily, the information from two film documentaries on MEG. Furthermore, we conducted narrative interviews with management-level representatives of three insurance companies who at the time were, and remain important protagonists in the health insurance market. These interviews shed light on background discussions within the industry and the different motives at play.

One prominent limitation of case studies is the challenge of gathering results that can be generalized beyond the analyzed case. However, a CPT case study results in a set of potential factors and mechanisms that lead to the observed result. Therefore, as Kay and Baker (2015, p. 3) argue, these deductions "*are portable within and across cases and can be the basis for systematic theorizing about policy processes, particularly if some kind of typological theorizing is employed to work out how mechanisms may interact in any particular situation*".

4.   Case Study: The MEG scandal

Mehmet E. Göker was born in 1979 in Germany. After finishing his training as a sales agent at a health insurance firm, he founded his brokerage MEG AG in 2003. He soon focused on selling private health insurance contracts for several health insurance firms, which at the time offered the highest commissions of all private insurance lines. Due to its focus on high commissions, MEG experienced a large growth within a short period and in 2005 had about 40 employees and total commissions of EUR 2.6 million. In 2006, MEG went public with 150 employees, revenue of EUR 11.1 million, but a loss of EUR 2.2 million (Handelsblatt, 13 February 2013).

Due to the resulting financial pressures, Göker started to push the boundaries of the business to his advantage. In 2006, he succeeded in negotiating substantially higher commissions from the insurers he cooperated with and – even more important – advance payments for these commissions. Whereas other health insurance brokers supposedly received a commission of 6 or 7 monthly premiums (i.e., given a monthly insurance premium of EUR 500, the broker would earn about EUR 3,000 to EUR 3,500 per sale), Göker was rumored to have received commissions of up to 21 monthly premiums (i.e., in this example EUR 10,500) (Frankfurter Allgemeine Zeitung, 09 March 2012). FOCUS reports a maximum amount of EUR 8,000 per insurance policy, which still amounts to more than twice the average compared to other sales agents (FOCUS Online, 08 April 2015). More importantly, such excessive commissions imply that a health insurer reaches break-even on an insurance policy after 16 to 21 months of contract duration at the earliest.

This commission scheme, paired with a low liability period fueled a "churning" market in the German health insurance industry, from which MEG heavily gained (Handelsblatt, 13 February 2013). With a liability period of only one year, brokers like MEG had a high incentive to change a customer's health insurance provider. Every year, as soon as the liability period ended, thus generating a new broker commission for the same customer. This churning affected insurers and insurance customers negatively. For one, even though the churning offered the opportunity to grow one's market share, this was very costly for insurers, because churning caused losses, if the commission exceeded the annual insurance premium.

Furthermore, churning affected the remaining customers of this insurer in two ways. In general, insurers pool individual risks into collectives (i.e., groups of insurance customers) in order to hedge risks within larger groups. Thereby, individual risks, which are highly uncertain in occurrence and severity, become calculable, as the insurer can collect data and calculate probabilities on average risks. However, this also entails sharing losses in the collective as well. Therefore, the losses from the re-sold contracts were borne by the remaining insurance collective in the form of increasing insurance premiums due to high acquisition costs. Second, as churning usually affected healthy customers (who are easiest to churn) this harmed the collective by shifting the structure of the collective to a disproportionate share of customers with poor health and high health costs. This too, resulted in losses for the insurance collective due to poorer performance of the collective, leading to increasing insurance premiums as well. Even more so, churning led to disadvantages for those customers whose contracts were re-sold. When signing with a new health insurance provider, customers had to endure a waiting period (usually 12 months) in which the insurer would not pay out any claims. However, if the insurance broker re-sold this health insurance contract to a different health insurer, the waiting period would start all over again, leaving the customer effectively without health insurance cover, despite paying his insurance premiums. Consequentially, the commission scheme and low liability period posed a high incentive for brokers like MEG to focus on churning, effectively putting their own self-interest before that of their customers in order to get professional consultation. Churning paired with a pyramid-scheme sales structure and highly organized and unethical sales practices offered brokers like MEG large growth potential.

As all these disadvantages and shady practices were neither discussed in public at that time nor transparent to most customers, MEG continued its exponential growth and in 2007, revenue was at EUR 33.3 million, with a profit of EUR 280,000. In 2008, revenue increased to 53.7 million Euros, with a profit of 3.1 million Euros. In 2009, revenue seemed to grow as well, and in August 2009, MEG reported revenue of EUR 48.5 million. At that time, MEG was

considered the second largest health insurance sales agency in Germany (FOCUS Online, 08 April 2015). Therefore, the sudden announcement that Göker would be stepping down from his position as CEO came as a surprise to outsiders, especially as a new investor took over Göker's stock shares for a symbolic price of 1 Euro. Only two months later, MEG filed for insolvency (Handelsblatt, 13 February 2013).

Later, it was revealed that MEG had for some time been in deep financial trouble. For one, Göker had withdrawn large amounts of money for private expenses. However, he had done so without approval from the supervisory board (Handelsblatt, 13 February 2013). Furthermore, the large and quick personnel growth of MEG fueled dubious contract-acquisition practices. As a result, contract annulments by customers increased from an average of 20–30% to almost 90% (Frankfurter Allgemeine Zeitung, 09 March 2012). MEG had neither made substantial provisions for repayment of the advance payments received by the health insurers, nor did it have sufficient net assets to cover these liabilities.

This development of course made large waves within the industry and especially at those insurance companies with which MEG had cooperated, as they had paid out large amounts of advance payments for commissions to MEG without receiving the corresponding insurance sales. The authorities started to investigate Göker for delayed filing of insolvency. In 2011, he faced criminal charges and many insurers were suing for the return of advance payments and restitution for annulled contracts. For example, Allianz and AXA, two of the largest insurance firms worldwide, filed for a sum of EUR 3.4 million (Allianz) resp. EUR 2.6 million (AXA) (DAS INVESTMENT, 24 February 2015). Local newspapers started to report regularly on the court proceedings (e.g., Hessische/Niedersächsische Allgemeine (HNA), 11 January 2011; *HNA*, 7 February 2011; *HNA*, 24 February 2011), and as the press gathered interest in MEG, the first misdemeanors became public. Media reported on illegal practices and that MEG sales agents might have even forged customer signatures (HNA, 10 March 2011).

At the same time, the association of German private health insurers (PKV) comprising 42 insurers (more than 90% of the market)[10] proactively called for legislation to introduce significant new regulations for the German health insurance industry (Deutscher Bundestag, 21 September 2011) as a direct result of the MEG scandal (SPIEGEL Online, 23 January 2013). During the public hearings for the policy draft, the association argued that they were not able to implement a limitation of commissions on their own, e.g., via internal behavioral control

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[10]See Verband der Privaten Krankenversicherung, available at: https://www.pkv.de/verband/ueber-uns/ (last accessed on 27 November 2020).

mechanisms, as this would bring insurers into conflict with anti-competition laws (Deutscher Bundestag, 28 September 2011).

On 6 December 2011, as a consequence to the MEG scandal, a new law for private health insurance (Art. 22, Gesetz zur Novellierung des Finanzanlagenvermittler- und Vermögensanlagenrechts, changing §§ 12 and 80 Versicherungsaufsichtsgesetz (VAG))[11] was introduced into German legislation, taking effect on 1 April 2012. This law had significant effects on the payment of insurance sales commissions. Before the new legislation, sales commissions for insurance brokers were negotiable between insurers and brokers and therefore a significant competitive factor for insurers. Furthermore, the commission was usually earned by the broker after a liability period of 1 year to accommodate the risk that customers might cancel the insurance policy right after its inception.

The new regulation introduced significant and costly changes to organization and accounting of insurance firms and brokers. For one thing, it prolonged the liability period from 1 to 5 years, and furthermore, commissions were now limited to a maximum of 9 monthly premiums. The industry association of German private health insurers (PKV) estimated at the time that 400,000 individual contracts between brokers and insurers had to be changed (Deutscher Bundestag, 28 September 2011). In addition, insurance brokers were now forced to recognize increased provisions in the balance sheet regarding potential contract annulments.

Overall, the new regulation had significant effects on private health insurance. For a start, with a limitation on commissions, a market standard for health insurance commission was effectively introduced. This changed inter-organizational cooperation by abolishing commission-based competition between health insurers. The regulation thus put a stop to commission excesses and lowered acquisition costs. Health insurance premiums consist of a risk premium, administrative costs (including acquisition costs) and provisions for old age. Therefore, a reduction of acquisition costs directly benefits the insurance collective by increasing funds for provisions for old age.

In addition, the prolongation of the liability period effectively abolished churning in the private health insurance market and the resulting losses for insurance costumers, which, due to the credence qualities of health insurance contracts, became publicly known only in the aftermath of the MEG scandal.

On 8 March 2012, a documentary on MEG opened in German cinemas and made news at the national level. A film team had been documenting Mehmet Göker's path and the rise and fall

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[11] In 2016 the Versicherungsaufsichtsgesetz (VAG) was restructured. The adaptation of Articel 22 Gesetz zur Novellierung des Finanzanlagenvermittler- und Vermögensanlagenrechts can now be found in §§49, 50 VAG.

of MEG for years. MEG and Mehmet Göker came under media scrutiny and the mass media detailed the sales practices within his organization. The director summarized the documentary: "*If you offered the story as a movie script, you would be rejected because it includes too many clichés.*" (Frankfurter Allgemeine Zeitung, 09 March 2012). The documentary "Der Versicherungsvertreter" depicted the greed of sales agents and their hunger for money, power and status at the expense of their customers, and, even more so, that insurance companies supported such sales-driven brokerage organizations and cooperated with them willingly and enthusiastically, thus impairing their reputation dramatically (SPIEGEL Online, 20 July 2015).

By 2011, MEG AG had gone out of business, and Göker had moved to Turkey, where a prohibition of extradition prevented the German authorities from enforcing judgment until 2021. The insurance regulation enacted after the scandal is still in effect to this day. Regulatory authorities have declared it a success (Deutscher Bundestag, 20 September 2018), so that the German insurance industry finds itself confronted with repeated pressure to introduce similar accounting changes for other insurance lines as well (see for example the newly introduced limitation on commissions for residual debt insurance, DAS INVESTMENT, 24 February 2021).

5.   Analysis

As a starting point for analyzing the industry factors leading to the MEG scandal, we use the Prisoner's Dilemma, which, as an essential part of game theory, describes the (un)cooperative behavior of two competing actors. Specifically, in a situation with two players, each faces the possibility to exploit a cooperative co-player in order to increase his/her own gain. As both players' actions are based on rational choice, they anticipate the exploitative behavior of the other one and act in an exploitative fashion as well. The resulting Nash equilibrium is Pareto-inferior (Axelrod and Hamilton, 1981).

Applying the perspective of the Prisoner's Dilemma to the insurance industry and the MEG scandal, the players are the insurance firms that compete for market shares. The insurance broker (in our case: MEG) serves as an external sales channel whose activities are based upon a simple commission mechanism: New health insurance contracts are shifted towards the insurance firm that agrees to the most advantageous commission scheme for the broker. As a result, commissions increase, and profits are gradually shifted from health insurers to the insurance brokers. On the other hand, as overall market volume cannot be increased indefinitely, there is no corresponding increase in sales volumes if all insurance firms are engaged in the competition for contract sales with the insurance broker. In the Pareto-inferior Nash equilibrium, insurance firms pay the maximum commission (compared to an average commission

before engaging in competition) and the volume of contracts sold remains virtually unchanged. As contract losses are covered by the premiums paid by all customers, i.e., the insurance collective, insurers' payoffs do not become negative, but with increasing commissions, there is a welfare loss to the customers which is unobservable in the usual course of business due to the credence qualities of insurance contracts. This is illustrated in Figure 16.

Insurer A		Insurer B	
		competition on commission	average commission
	average commission	1 ; 4	3 ; 3
	competition on commission	2 ; 2	4 ; 1

Figure 16: Prisoner's Dilemma in the insurance industry when engaging in sales competition at an insurance broker, e.g. MEG (source: authors)

In a stylized case of two insurers, both had the choice to either pay a standard commission to MEG or compete against each other in terms of commission. If both insurers pay an average commission, they reach the market optimum with the highest overall gain (payoff 3 for both insurers). If only one insurer offers higher commissions to the broker, all sales are channeled to this insurer. As a consequence, for this insurer, contract volume increases overproportionally compared to the reduction in profit per contract due to the higher commission. As a result, this insurer realizes higher net earnings compared to the other insurer which loses the corresponding sales volume (payoffs 1 and 4, and/or 4 and 1). The overall sum of payoffs (5 < 6) is lower compared to the first case, as the broker receives excess commission. If both insurers compete on commissions, the Pareto-inferior Nash equilibrium of the Prisoner's Dilemma materializes (payoff 2 for both insurers) which reduces insurers' profits to a sum of 4, once again increasing excessive broker commissions even more, and in fact creating a deadweight welfare loss of the insurance collective mentioned above. As we have seen in the MEG case, almost all insurers had competed on commission.

However, in the case of MEG, the Prisoner's Dilemma had in fact been repeated for several years, i.e., without any foreseeable end, so that from a model perspective, the game has to be played for an infinite number of rounds which each of the players remembers. In that case, game theory suggests that players can develop strong cooperative strategies, e.g., tit for tat (Wedekind and Milinski, 1996), and reach the Pareto-optimal solution.

If this had been the case with MEG, neither the competition on commissions would have evolved, nor would regulation have been implemented. Instead, the behavior of all health insurers would have been driven by a collective self-commitment not to tolerate MEG's aggressive sales behavior towards customers. Interestingly, however, such behavior did not materialize, i.e., firms were obviously not implementing internal controls restricting their own behavior. Interviews with leading representatives of the German insurance industry that we conducted show an overall agreement in this respect. Insurer A explains: „*An industry is a competitive market. There are always those [insurers], of course, that are largely dependent on brokers, that also considered these sales practices, well, necessary. And contrary to that, there are certainly those who had addressed this issue intensely: can it be, that commissions are paid to this extent?*" Insurer B similarly elaborates: "*Because, it was not just one or two insurers, there were quite a few that were delighted with this <u>greed</u> and I think they tried to use this in order to increase sales numbers for themselves. But it is always baffling how many actually fell for that. Well, even back then I found this very puzzling.*" Insurer C even reports how individual attempts to remedy the situation were hindered: "*There was heavy resistance from the industry itself and there were of course the normal industry associations, that took the lead – whether it was associations like GVK[12] and so on, that are actually more focused on sales agents and brokers. On the other hand, there were our mouthpieces, like GDV[13], who massively fought against [a standardization of commissions]. I think, people thought that this would lead to heavy decreases in sales.*"

In the context of the Prisoner's Dilemma, ordonomic game theory suggests as well that "*in a many-sided dilemma, an individual self-commitment can never solve the problem of collective self-damage*" (Pies *et al.* 2009, p.385). In this vein, a potential solution mechanism suggested by Pies *et al.* (2009) is then industry regulation. This view is reiterated by Insurer A: "*Well, of course, there was the opinion that in a free-market economy every form of [statutory] intervention into the relationship between contractual parties is not necessary. That's why there was a strictly liberal school: no intervention. However, there was also the view that private health insurance – which we're talking about – is a part of the social security system, and excesses which we had partially seen, had to be limited by the appropriate statutory intervention if the market was not able to regulate itself.*" This implies that the official justification presented by the association of the German health insurers, of not being able to stop competing

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[12] GVK is short for Spitzenverband Bund der Gesetzlichen Krankenkassen (The National Association of Statutory Health Insurance Funds).
[13] GDV is short for Gesamtverband der Deutschen Versicherungswirtschaft (German Insurance Association) which ist he federation of private insurers in Germany.

on commission, as this would violate anti-competition laws is – in our opinion – just a symbolic argument, covering up the true reasons for the need for regulation.

To identify the hidden mechanisms explaining why insurance firms over a long time not only tolerated but even fueled the shady sales practices and misbehavior of MEG at the expense of the insurance collective, we will therefore, in a next step, draw on sociological theory, more specifically on the theory of vicious cycles of bureaucracies (e.g., Crozier 1963; Luhmann 1964) combined with organizational learning theory (Argyris 1977; Grebe 2013). This follows Masuch (1985), who also applies both approaches in combination, to explain underperformance, stagnation, or decay in organizations.

In the context of corporate misbehavior or transgressions becoming public, Kühl (2019) argues that such events can set in motion a vicious cycle that will lead to long-lasting changes in the governance of a company or even regulatory changes. We draw on these deliberations to understand how scandals develop, why they spiral out of control, and what consequences result. However, we broaden the application of this mechanism from an organizational level to at an industry level.

As a starting point, we assume that vicious cycles evolve in three stages: 1. A transgression becomes public 2. Firms start window dressing 3. Firms come under scrutiny of the public that is now wary of new transgressions. Depending on how the reputational risks are managed at these stages, firms' actions can put a stop to this cycle or cause the crisis to spiral (see Figure 17).
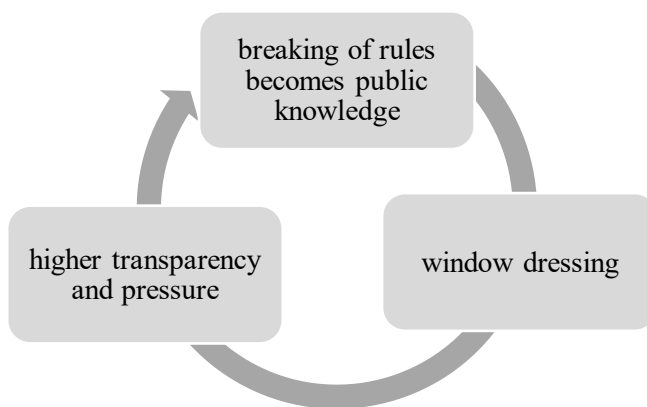

Figure 17: Vicious cycle of public scandals (source: authors)

The starting point of a vicious cycle, i.e., public transgression, can occur in different ways and encompass all kinds of rule-breaking, from accepted procedures and practices, to unethical behavior or even illegal activities. Whether a scandal develops then depends on how unethical or enraging this action is perceived by the public (e.g., Eccles and Vollbracht, 2006; Forstmoser and Herger, 2006; Kühl, 2019; Will *et al.*, 2017; Zboron, 2006). These circumstances make the

management of reputational risks challenging for an organization, as it is difficult to anticipate its potential impact. Nevertheless, if a scandal occurs in one firm, there are often spillover effects to the industry as a whole, which create pressure for the industry.

In the second stage, the firms try to repair reputational damage, engaging in activities that are supposed to repair the 'display window', meaning they focus on risk management measures that have a significant and positive signaling effect to external observers. The quality of these risk-management measures is a decisive factor for the further development of the scandal. Poppo and Schepker (2010) emphasize that no reaction at all is much worse than a simple public apology, and Grebe (2013) adds that cosmetic 'white-washing' is not enough, which also comprises activities such as public apologies, image campaigns, by claiming that this is an isolated event, downplaying negative consequences, or presenting them as common practice (Hahn *et al.* 2021; Beaubien, 2008). Another popular 'white-washing' method aimed at containing the reputational risk is to offer a sacrificial lamb (so-called scapegoating). Guénin-Paracini *et al.* (2014) analyze the surprisingly insignificant regulatory changes in the U.S. that resulted from the 2008 global financial crisis. They argue that successful scapegoating at an industry level (i.e., putting the blame on Lehman Brothers) was crucial in protecting the overall industry and preventing new regulation. They conclude that scapegoating works to protect the existing system from blame, and thereby deflects calls for new and extensive regulations at an industry level.

To effectively address a reputational scandal at firm level, Grebe (2013) points out that double-loop learning (Argyris, 1977) becomes necessary, which extends way beyond organizations apologizing for their behavior and discontinuing the criticized practices, which is denoted as single-loop learning (Pfarrer *et al.*, 2008). If organizations establish internal behavioral controls that prevent these and similar types of misconduct, they have accomplished double-loop learning. Even so, reputational risk controls that are effective at firm level, e.g., the introduction of regular external audits, changes in the code of conduct or other compliance measures within a firm's ethical infrastructure, are no longer feasible if a scandal grows. First, the impact of such risk controls materializes rather slowly. Second, public awareness of the effectiveness of these measures is difficult to achieve. Third, there are still spillover effects from firms within the industry which do not implement such reputational risk controls.

In the third phase, a firm finds itself under the looking-glass, as the scandal has created a situation in which the public remains critical or even skeptical. Kühl (2019) notes that in this phase, it is likely that attention and scrutiny lead to more scandals because other transgressions are unearthed. As a result, the whole cycle could start all over again and if other firms are affected, spills over to the whole industry.

Using the example of the scandal surrounding an oil company, Grebe (2013) argues that third-loop learning becomes necessary if the double-loop learning by an organization in the second stage, through implementing adequate reputational risk measures, is no longer adequate to appease the public outrage. Third-loop learning in that case implies that regulatory authorities intervene to incorporate the outcome of the organization's double-loop learning (either a best practice or lessons learned) into new regulation for the whole industry, shifting reputational risk management and the implementation of behavioral controls from firm-level to industry-level.

Applying these foundations to the dynamics of the MEG case, we find that even though the first misbehaviors by MEG became public in 2009, they only made news at the local level and within the German insurance industry. However, with the release of the documentary on MEG in 2012, a reputational scandal developed at the national level as the immoral and greedy sales practices of brokers and insurers became transparent to the public at large (stage 1), and triggered public outrage, spilling over from MEG to health insurers and the whole insurance industry, damaging its reputation. The insurance industry hurried to assure the public that MEG was not representative for industry practices, or that insurers themselves had proactively withdrawn from business dealings with MEG (Versicherungsmagazin, 14 March 2012). However, a myriad of picture and video footage made it difficult for insurers to distance themselves from the scandal. Insurer C states: "*Well, I can tell you, the reputation [of the] insurance industry, very much teetered on the brink. The reputation teetered on the brink because people were questioning, how it can be that someone earns so much money – to put it very simply – how someone can earn so much money with commissions for a consultation that is not professional but ultimately unprofessional.*"

However, the culprit of this scandal was not remorseful and Göker did not take any steps to manage the reputational risk at the level of MEG, such as by renouncing his sales practices. Instead, afflicted insurers themselves had to implement reputational risk measures, i.e., the task of 'repairing the display windows' devolved on them. Insurer A elaborates on the situation in which insurers found themselves: "*The pressure, of course, in terms of whether private health insurers are operating a sustainable business model, had indeed increased again and again due to media coverage. [...] And that led to pressure also with regard to the future viability of the industry.*" Insurer C reports that the industry tried to implement internal and industry-level controls: "*At the time when the commission binges happened, we discussed that we somehow had to improve the image of insurance sales agents and brokers, because this also reflects negatively on*

us [insurers]. That is why the industry then introduced the initiative "well advised"[14].[...] Then of course we said, we as an industry have to see what we can do. That is when the expert training by the BDV[15] was introduced. But that was not enough, because not everyone had joined [this initiative].". However, these industry initiatives did not eradicate dubious sales practices like those of MEG.

Another risk management measure in that case could have been scapegoating. Finding a sacrificial lamb would have enabled the industry to deflect the blame onto one player and protect the health insurance industry as a whole. However, since almost all major health insurers were involved in business dealings with MEG, scapegoating was not feasible in this case.

Furthermore, stopping these sales practices at each individual insurer (single-loop and double-loop learning) was not considered sufficient. Insurer C explains: "*Well, I think if certain things transpire so publicly, you cannot solve them internally anymore. You can only solve things internally, that do not explode like that. That [creates] a certain expectation.*" As a consequence, the association of German private health insurers (PKV), took more drastic measures in order to prevent this cycle from going further. Reinhold Schulte, then head of the association, stated that the association had proactively and unilaterally called on regulators to introduce new regulations (Deutscher Bundestag, 21 September 2011). He disclosed that new regulation was a direct result of the MEG scandal (SPIEGEL Online, 23 January 2013). Insurer A conveys: "*However, there was no self-commitment [in the industry]. This is an issue, of course, that self-commitment is not possible due to anti-trust requirements. And that is why there were different opinions on that [topic]. We did not reach the point where insurers had decreased their commissions [on their own], as they had <u>other priorities</u>. Given this environment, it is my opinion that it's better to have a clear regulatory framework.*" Insurer B similarly states: "*And that is why I say, as long as we have these colleagues in the industry, these companies, it will not work out by making each individual and the industry as a whole see reason. You have to regulate it by law.*" This implementation of lessons learned at an industry level constitutes third-loop learning.

At the third phase, the industry found itself under scrutiny from various parties. Up to this point, most politicians had avoided the issue of commission binges. Insurer A ascribes this to a lack of understanding and describes the role that the MEG scandal played in raising awareness: "*The change of mind within [parliament] politics entailed, of course, a better understanding of the problem, witnessing and noticing these sales practices. MEG certainly played a role, in the sense that it became more transparent how these sales practices operated.*" Therefore,

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[14] The initiative "well-advised" was introduced as a self-commitment by the German insurance industry and focuses on professional and continuous trainings for insurance brokers and sales agents.
[15] The German Association of the Insured (BdV) is one of the most important German consumer associations.

the scandal acted as a catalyst which created a sense of urgency within the political sphere. However, consumer organizations have always held a more critical view of the private health insurance industry. Therefore, the MEG case strengthened their call for action, as Insurer B notes: *"I think the pressure was too great to be able to continue like this. […] But, in the end, you could not go on like this because consumer protection organizations had focused on this issue."* At this point the cycle might have continued and led to externally imposed and much more restrictive regulation. However, when the MEG scandal broke publicly in 2012, media also reported that the insurance industry had already taken measures to prevent this type of sales frenzy in the future, by means of new regulation (e.g., Versicherungsmagazin, 14 March 2012), effectively bringing the vicious cycle to a halt. Nevertheless, those insurers involved in these market practices still struggled with these new regulations, as all three insurers mention. Insurer B explains: "*And even after [the introduction of the law in 2012], the regulatory authority and the industry association both conducted surveys: ok, how is it regulated, how have you adapted the regulation within your company. Even then, especially in the first year, you could see who complied [with the new regulation] and who did not comply. And that was an insight, that was truly gruesome.*"

Even though the subsequent industry regulation prevented excessive competition on commission and thus moved the industry towards a situation reflected by the Pareto-optimal equilibrium in our model, we still find indications that this solution is costly, not very flexible and not flawless. All our interview partners noted in unison that those insurers that were heavily involved in the illicit sales practices at that time still feel burdened and restricted by the existing regulation and therefore seek workarounds and means of evasion. Hence, the industry still relies heavily on regular insurer audits by supervisory bodies. Insurer C, for example, discloses: "*Well, the thing is that in the industry, many insurers still pay higher commissions [than the standard]. It could be that this will be corrected by audits from the BaFin[16]. The GDV also does annual or bi-annual evaluations, I think. The commissions appear to have decreased, but we also know that there are other ways to pay.*"

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[16] BaFin is short for Bundesanstalt für Finanzdienstleistungsaufsicht (The Federal Financial Supervisory Authority).

6.   Conclusions

In our paper, we have taken a closer look at the direct link between reputational scandals and changes in insurance regulation as a measure of reputational risk management, and we have discussed the mechanisms that led to these changes.

In our case study, we have detailed the MEG scandal, which engulfed the German insurance industry and peaked in 2012. The MEG scandal was picked up by the mass media and spilled over from broker to health insurers and the private health insurance industry as a whole, which then faced massive public criticism. As a result, insurers proactively called on the regulatory authorities to introduce new regulations, instigating accounting as well as organizational changes. These new regulations were targeted at preventing aggressive sales strategies and excessive commission payments to insurance brokers and are still in effect to this day, restricting employee behavior in insurance firms as an external control mechanism and thus safeguarding reputational capital.

Using causal process-tracing, we have analyzed the initial situation in which this real-life case was set, using economic mechanisms described in game theory. However, we found that the Prisoners' Dilemma did not fully explain the behavior within the health insurance industry in our case, as even though we observed several rounds of the game without a fixed end, cooperative behavior induced by sufficient internal behavioral controls did not emerge. In the next step, we utilized theories from sociology to better understand the behavior of the actors in our case and how external regulation was used as a measure of reputational risk management. Employing theories of vicious cycles of bureaucracies combined with organizational learning theory, we have seen that the dynamic can be divided into three stages, which can lead to a downward spiral. The crucial factor in this cycle is the industry's behavior, which determines whether the cycle can be stopped or whether it continues. We have seen that insurers were unable to contain their behavior through internal controls and thus demanded external regulation, which effectively addressed dysfunctional behaviors and served to finally resolve the scandal.

Our paper thus shows that industry regulation and the resulting organizational changes may be driven by the regulated firms themselves to mitigate reputational risks, as other less costly and internal control mechanisms for reputational risk management may fail. Our results also suggest that if firms want to avoid increasing regulation, they have to implement internal controls to ensure strong reputational risk management, so as to counteract short-term profit pressure and to avoid restrictive regulation imposed on the industry as a whole. Furthermore, our study indicates that effective reputational risk management should not be restricted to controlling employee behavior within an organization, as due to spillover effects, reputational

capital especially with respect to credence goods, might also be destroyed by misbehavior at other firms within the same industry.

Our paper is subject to several limitations, which leave room for future research. Most importantly, as we utilized a case study, generalizability is at first glance limited. Nevertheless, as Blatter and Haverland (2014) argue, causal process-tracing allows tracing evidence for theoretical deliberations in complex case situations when 'smoking gun observations' and specific process dynamics are highly relevant. Furthermore, we are able to shed light on the causes of the observed effect, i.e., the introduction of regulation, which is in fact the use of regulation as a control mechanism to prevent scandals escalating out of control and causing further destruction of reputational capital.

Today, more than a decade later, the MEG scandal is once again a trending topic. Because Mehmet Göker's sentencing is subject to the statute of limitation in 2021, he is currently starting to build up his brokerage once again. Insurer C complains that this can bring the MEG scandal to the forefront again: "*Mehmet Göker is now active again and immediately, there it is again in the papers: commission binges, even though this de facto is no longer possible. [But] it is stuck [in people's heads]*." Insurer B cautions as well: "*So I hope, I really hope, that he will not gain a foothold. And if [he does], then there will be fierce, fierce discussions. And, I think, we will shoot ourselves in the foot, […] if we get involved in these types of sales models. I really feel it would be catastrophic. I hope that it does not happen and that type [of conduct] will be publicly chastised and ((groan!))*."

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E.   Affidavit

Ich, Frau M.A. Amra Tica, versichere an Eides statt, dass die vorgelegte Dissertation von mir selbstständig und ohne unzulässige fremde Hilfe unter Beachtung der „Grundsätze zur Sicherung guter wissenschaftlicher Praxis an der Heinrich-Heine-Universität Düsseldorf" erstellt worden ist.

Düsseldorf, 20. März 2024

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Amra Tica

Titles of the three studies constituting the dissertation:

Study 1: A tight leash or a tight spot? A case study of tightness of management controls in the Ger-man insurance industry

Study 2: Lights, Camera, Action! Tightness of action controls and their interaction as a package or system

Study 3: How regulatory changes are driven by a need for control in reputational scandals: A case study in the German insurance industry

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