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One-size-fits-all?

The role of internal control for identifying and mitigating risks of interorganizational relationships

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Similarly to the research process of the articles included in this thesis, the journey of my entire PhD thesis has followed a hermeneutic circle. While the initial idea of the project has remained similar throughout the years, there have been obstacles on the way that had to be overcome. While some of these obstacles were of a technical nature and often possible to tackle, others were more mysterious and depressing (yes – I am looking at you Corona-Virus). I am grateful to everyone who has helped me to overcome those obstacles on the way and contributed to my journey, through courses, seminars, conferences, or casual discussions on and off the campus. Particularly, this thesis would have not been possible without the continuous support from my family, friends, and of course my supervisors. Thank you all!

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Abstract

Internal control has received much attention in the academic literature as well as in public policy debates in both corporate governance and auditing. However, the focus of those debates in both practice and theory has been on the antecedents and consequences of internal control in single organizations. This is compelling since many firms operate in cooperation with other firms or have other interorganizational relationships (IOR) that shift their locus of control away from the single firm perspective. This particular issue of internal control in IORs is addressed in the thesis through a literature review and three empirical case studies from the (1) fishery sector, (2) healthcare sector, and (3) the accounting industry.

The thesis finds that internal control is largely context dependent and normative approaches towards the implementation and execution of internal control in IORs are therefore not suitable. The reasons for this are threefold: 1. The normative ambition of internal control present ignores a potential misalignment of the internal control activities between different organizations; 2. Organizations that are part of the IOR can be embedded in different institutional environments and the actors that are involved in the relationship are guided by different and potentially conflicting institutional logics; 3. Organizations need to be aware of both their level of interdependence with the other organization(s), and their level of institutional embeddedness to find the appropriate internal controls that can help them to identify and mitigate potential risks from the IOR.

The thesis contributes to both theory and practice by showing that different partners of IORs might be influenced by conflicting or mutually exclusive institutional logics. This suggests the need for firms to have well-established and efficient internal control systems in place that enable them to mitigate risks stemming from misunderstandings and misinterpretations among the different involved actors.

Sammendrag

Internkontroll har fått mye oppmerksomhet i den akademiske litteraturen så vel som i offentlige politiske debatter innen både virksomhetsstyring og revisjon. Imidlertid har fokuset for disse debattene i både praksis og teori vært på forutgående og konsekvensene av intern kontroll i enkeltorganisasjoner. Dette er overraskende siden mange firmaer opererer i samarbeid med andre firmaer eller har andre interorganisatoriske relasjoner (IOR) som flytter deres kontrollsted bort fra det enkelte firmaperspektivet. Denne oppgaven tar for seg dette spesielle spørsmålet om internkontroll i IOR på grunnlag av en litteraturgjennomgang og tre empiriske casestudier fra (1) fiskerisektoren, (2) helsesektoren og (3) regnskapsbransjen.

Oppgaven finner at internkontroll i stor grad er kontekstavhengig og normative tilnærminger til implementering og utførelse av internkontroll i IOR er derfor ikke egnet. Årsakene til dette er tredelt: 1. Den tilstedeværende normative ambisjonen om internkontroll ignorerer en potensiell feiljustering av internkontrollaktivitetene mellom ulike organisasjoner; 2. Organisasjoner som er en del av IOR kan være innebygd i ulike institusjonelle miljøer og aktørene som er involvert i relasjonen styres av ulike og potensielt motstridende institusjonelle logikker; 3. Organisasjoner må være klar over både nivået av gjensidig avhengighet med den eller andre organisasjonen(e), og nivået av institusjonell forankring for å finne passende internkontroller som kan hjelpe dem til å identifisere og redusere potensielle risikoer fra IOR.

Oppgaven bidrar til både teori og praksis ved å vise at ulike partnere til IOR kan bli påvirket av motstridende eller gjensidig utelukkende institusjonelle logikker. Dette tyder på behovet for at bedrifter har veletablerte og effektive internkontrollsystemer på plass som gjør dem i stand til å redusere risikoer som stammer fra misforståelser og feiltolkninger blant de ulike involverte aktørene.

Table of Contents

Introduction to the Doctoral Dissertation

1. Introduction

1.1 Background on the study

Internal control can serve as a means of thwarting in corrupt intentions and reducing risk for the purposes of achieving operational objectives. For this reason, systems or combinations of internal controls are increasingly recognized in public debates on both corporate governance and auditing (Maijoor, 2000). But while attention to the theory and practice of this subject has increased to the degree that we can talk about an "internal control explosion" (Maijoor, 2000), this research remains limited and has not eliminated confusion over how internal controls can be designed efficiently, so that their function extends beyond serving as a mere tool for compliance and proves useful for organizations in practice (Power, 2009).

The increasing failure of internal controls to prevent fraud has become a serious issue not only in developing countries but also in major Western economies since the end of the 20th century. The Enron and WorldCom scandals in the United States showed that big and powerful organizations with outsized public profiles are just as capable of finding ways to circumvent rules and regulations as smaller organizations that are not the center of attention. In response to these scandals, the US passed the Sarbanes-Oxley Act (SOX) in 2002, mandating that corporate executives attest to internal control effectiveness (§401a) and that corporate internal controls should be externally audited in conjunction with the audit of financial statements (§401b). At the same time, the act also introduced the Public Company Accounting Oversight Board (PCOAB), which aimed at regulating and establishing specific auditing requirements for the audit of internal control of financial reporting in the public accounting profession, which was previously largely unregulated (Janvrin et al., 2012).

Besides the legal regulations that were introduced during this time, groups such as the Committee of Sponsoring Organizations of the Treadway Commission (COSO) aimed at helping companies structure their internal control efforts through a normative framework. The COSO framework (first introduced in 1992 and updated in 2013) identifies five main components of internal control: the control environment, risk assessment, control activities, information and communication, and monitoring activities. Moreover, the framework specifies that the objectives for internal control should be related to the effectiveness and efficiency of operations, the improvement of internal and external financial and nonfinancial reporting, and compliance with laws and regulations that a company should follow (COSO, 2013). While the framework helps companies in their compliance efforts, it has come under criticism in the literature for its failure to integrate technology (Janvrin et al., 2012) and for shifting responsibility away from the CEO and onto all company employees (Oliverio, 2001). Perhaps most importantly, the framework is criticized for its normative approach, which diverts attention from potential risks that lie outside of its closed system (Williamson, 2007). One such factor that is omitted from the framework despite its importance for organizations is interorganizational relationships (Janvrin et al., 2012).

1.2 Research problem

Internal control contributes to the process of management control, steering organizations toward the achievement of both short-term and long-term goals (Otley and Soin, 2014) by providing reasonable assurance regarding the effectiveness and efficiency of operations; reliable financial reporting; and compliance with laws, regulations, and policies (COSO 2013). Assurance against risk, or risk management, is an important part of the internal control process and is relevant to organizations in both the public and private sector. While risk management has a longstanding history in the private sector, it is becoming increasingly prominent in the public sector (Woods, 2009) and there are now several frameworks that discuss the importance of assurance against risk for the public sector. For instance, COSO issued a framework that is targeted towards enterprise risk management (ERM) in 2004, as well as an updated version in 2017 that focused on the integration with strategy and performance. However, policy makers base their recommendations for businesses on assumptions about internal control and risk management that are largely unexplored in the literature (Spira and Page, 2003, Chalmers et al., 2019, Janvrin et al., 2012). Possibly faulty recommendations present issues for companies as they implement controls that might not provide them with the necessary assurance against risk.

This is the case, for example, in interorganizational relationships, where the scope of management control exceeds the boundaries of one entity (Otley, 1994) and extends to other strategic combinations of firms, such as relationships involved in outsourcing, supply chains, or partner organizations (as in the case of joint ventures, or networks; van der Meer-Kooistra and Vosselman, 2006). Moreover, organizations can have "boundary-spanning linkages" (Brewer et al., 2014) with their supplier base, which means that they have interconnections through e.g. activities that cross the organizational borders of the different organizations

(Santistevan, 2022) and different sectors, as it is for example the case in public-private partnerships or public networks.

These interconnections, in turn, can result in very complex interorganizational relationships that are characterized by more or less formalized forms of control (Howard et al., 2019). The "dark side" of interorganizational relationships is then that they carry a significant amount of additional risk (Villena et al., 2011). This kind of risk manifests in the literature as various negative outcomes, such as opportunism and conflicts between the involved parties, mistrust and noncooperation, and unethical practices (Oliveira and Lumineau, 2019). Unfortunately, these aspects are not well accounted for by the contemporary normative frameworks due to their focus of internal control in single firms (Janvrin et al., 2012), posing great challenges for the internal control systems needed to reduce the appropriation and coordination risks in such relationships (Dekker, 2004, Speklé, 2001).

Despite the importance of efficient operations for organizations and despite evidence of the influence of internal control on interorganizational relationships (Kinney, 2000), the extant literature on internal control has mostly focused on settings within a single firm (Bauer et al., 2017). Hence, the aim of this thesis is to add to the existing knowledge on internal control by investigating its role in different configurations of interorganizational relationships. To achieve the aim of the research, I have formulated the following research question:

RQ: How can internal control help to identify and mitigate risks of interorganizational relationships?

To address this research question, the thesis focuses on different cases of internal control within various interorganizational relationships. As discussed above, the form and type of interorganizational relationships can vary widely; focusing on different interorganizational relationships provides insight into the contributions of internal control within those specific constellations. The thesis focuses on empirical cases using Norway as the context. This choice of this context not only allows the researcher easy access to the studied relationships, it also offers a nontraditional perspective since most studies of internal control focus on the US (Chalmers et al., 2019). One interesting aspect of Norway as the setting for this study is that it is generally considered a country with low levels of corruption and high standards for internal control, but nevertheless, scandals sometimes do occur (Transparency_International, 2022). For this reason, the thesis potentially contributes to the wider international academic literature by underlining misguided contemporary assumptions about internal control that could lead to problems for firms in other countries as well.

Specifically, the thesis focuses on three particular interorganizational relationships that are different in terms of both their settings and the constellations analyzed. The first empirical case focuses on the fishing industry and includes both horizontal and vertical interorganizational relationships among public and private actors in a very complex environment that is difficult to govern. The second case looks at risk management reporting practices in the health care sector, where public authorities struggle to reconcile the reporting practices among hospitals. And finally, the third case examines the accounting sector, which is perceived as facing a threat from current developments in digital technologies.

This introductory chapter of the thesis is structured in the following way: In the next part, I will introduce the different research streams and relevant theories for the field of internal control and interorganizational relationships. I will then present the methodology for the thesis project and provide an overview of the articles comprising the thesis. I will end with discussion and the conclusion, including remarks on the study’s contributions to the field and suggestions for future research.

2. Major concepts of the study and theoretical framework

2.1 Definition and scope of internal control and interorganizational relationships

The thesis focuses on internal control from a micro-level perspective. In other words, it is interested in the actors who deal with internal control practices in their daily work. Previous studies on internal control limited their understanding of the term to its influence over financial reporting (see e.g. Chalmers et al., 2019). However, given that internal control contributes significantly to the assurance of efficient operations in all areas of organizations, this thesis acknowledges its wider scope (Power, 2007). The knowledge on internal control and its wider scope is however fragmented in the literature and Henk (2020) discusses the use and definition of internal control, therefore, in great detail. The findings from this article indicate that internal control is similar and often considered equivalent to enterprise risk management (ERM), or risk management practices in general. This thesis follows from those studies in the sense that internal control contributes significantly to the identification and mitigation of potential risks that threaten operational efficiency. However, rather than perceiving the two concepts of internal control and ERM as identical, I agree with the argument of COSO (2013) that risk management is one part of internal control (albeit arguably one of the most important aspects).

The intention of this thesis is to show the role of internal control practices in interorganizational relationships characterized by different types of organizations. Interorganizational relationships are "strategically important, cooperative relationships between a focal organization and one or more other organizations to share or exchange resources with the goal of improved performance" (Parmigiani and Rivera-Santos, 2011, p.1109); they can engage in a wide range of possible collaborative exchanges that might include joint ventures, strategic alliances, buyer-supplier relationships, cross-sector partnerships, or networks (Rossignoli and Ricciardi, 2014). Inherently, such relationships have wide benefits for the involved organizations as they increase the possibilities for exchanging resources and learning (Mesquita et al., 2017). However, relationships between two or more organizations are prone to appropriation and coordination concerns (Håkansson and Lind, 2006, Marques et al., 2011, Dekker et al., 2018) and therefore carry risks that go beyond the scope of expected risks within a single firm (Oliveira and Lumineau, 2019). A system of well-functioning internal controls is therefore important to ensure that those risks are identified and mitigated.

The following section introduces the discourse of internal control and how it relates to the setting of interorganizational relationships. This particular setting of internal control in interorganizational relationships is rarely researched in the contemporary literature on internal control, and as a result, the problems and challenges raised 20 years ago by Kinney (2000) have remained unaddressed. One of the reasons the literature has neglected the interorganizational aspects of internal control is that, traditionally, issues relating to internal control practices are analyzed on the basis of large data sets, which researchers use to analyze the antecedents or consequences of internal control practices on the basis of theories such as the transaction cost economics perspective (Henk, 2020). Typically, those perspectives focus on the macro level and help us to understand the general trends in the field. Unfortunately, those perspectives have the shortcoming of providing little help in understanding what is involved in the actual practices of internal control. The current thesis addresses those issues and adopts a new framework—the perspective of institutional logics, which allows for discussion and analysis of internal control practices in different settings. The following literature review presents the relevant discourses and choices analyzed in the papers comprising this study.

2.2 Internal control for interorganizational relationships

The literature on internal control has to date mostly focused on its influence on the performance within a single firm and not on the relationships between different actors (Bauer et al., 2017). However, Kinney (2000) argues that internal control is not only an important tool, its effects are felt by all members of a company's value chain. As the author indicates, companies use internal control to ensure the future success of their operations for their customers, suppliers, and employees. This finding is also in line with other studies on interorganizational relationships that suggest that internal competencies and resources have a direct impact on the success of a firm's interorganizational relationships and can therefore help to explain the fact that every firm has a different internal control design, depending on the particular environmental demands (Dekker et al., 2018). Figure 1 depicts the role of internal control both internally within an organization and externally for interorganizational relationships:

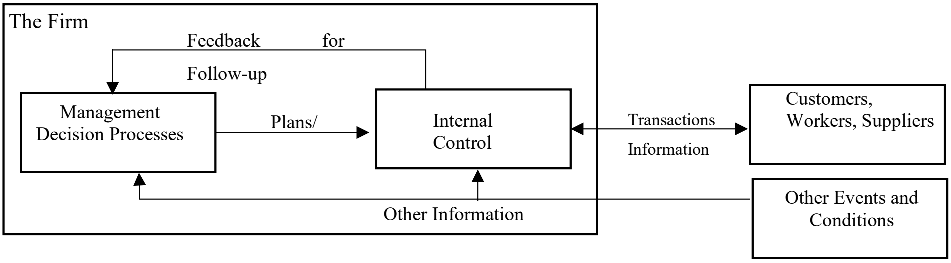

Figure 1: The role of internal control

(adopted from Kinney (2000, p.85))

While the literature of the past 20 years on internal control has largely ignored the suggestions of Kinney (2000), recent research provides evidence for the assumption that internal controls affect not only the internal operations of individual firms but also the whole value chain (Bauer et al., 2017). In an analysis of the influence of the supplier's internal control quality on the duration of customer-supplier relationships, Bauer et al. (2017) find that the quality of internal controls is of crucial significance for the establishment and success of the interfirm relationships. In turn, the authors argue that the relationships between the actors developed over time into "an integrative and collaborative system of information sharing" (p.32). This system of information sharing benefits all partners in the relationship and their respective internal control systems. Hence, the authors suggest that customers could better rely on and "trust" suppliers with conclusive internal control data. However, relationships with suppliers who had internal control weaknesses tended to be terminated quickly.

The literature on management control provides more evidence for the importance of control in interorganizational relationships. The interest in such relationships has been growing in the past years (Rossignoli and Ricciardi, 2014, Varoutsa and Scapens, 2018, Dekker et al., 2018, Roehrich et al., 2020) and bringing new perspectives to the field of management control in which "the scope of the activity of management control is enlarged and it no longer confines within the legal boundaries of the organization" (Otley, 1994:293). Extensive reviews of the literature in the field of management control show that interorganizational relationships have mainly been analyzed from three different perspectives: (1) control archetypes, (2) management control mechanisms, and (3) cost and accounting controls (Caglio and Ditillo, 2008, Roehrich et al., 2020).

For instance, focusing on management control mechanisms and building mainly on transaction cost economics, the literature has found that interorganizational relationships are steered through the usage of both formal and informal controls. Formal controls, on the one hand, have been described as “contractual obligations,” “formal organizational mechanisms for cooperation” (Dekker, 2004), “contracts” (Klein Woolthuis et al., 2005), “plans,” “arrangements,” or “systems ensuring goal achievement” (Collier, 2005). Informal controls, on the other hand, have been described in terms of “informal cultures and systems influencing members” (Dekker, 2004), “group norms,” “socialization,” “culture” (Collier, 2005), and “trust” (Varoutsa and Scapens, 2018). In analyzing appropriation concerns in interorganizational relationships, Dekker (2004) finds that such concerns are the result of an interplay between asset specificity, environmental uncertainty, and frequency. The author shows that to manage these factors, organizations need to achieve an appropriate coordination of both formal and informal control mechanisms. These themes have become increasingly important in the public sector as well given the relationship that governments establish with a variety of organizations. For instance, Argento and Peda (2015) point out that interorganizational relationships in the setting of local governments involve both formal and informal forms of control and highlight the relationship between trust and control. Hence, the authors show that trust between actors can reinforce formal controls. However, a balance between trust and control is important since overly strong contractual obligations might lead to less trust between actors, and too much trust might lead to the failure of contracts. In this regard, internal controls that are capable of identifying those risks that lie within these formal and informal forms of cooperation are useful to reduce the uncertainty of the relationships and shift the focus of the organizations to the efficiency of their operations.

2.3 Challenges of internal control in interorganizational relationships

Even though the extant literature has identified many different control solutions to several situations, calls have nevertheless gone out for more research on management control in interorganizational relationships (e.g. Caglio and Ditillo, 2008, Cäker, 2008). Caglio and Ditillo (2008) state that previous research has mainly focused on solutions to single case studies that have no direct connection to other cases. Thus, it is unclear whether these different solutions are combinable or applicable to other situations.

A relatively recent line of research in this field is concerned with the role of internal controls in interorganizational relationships with respect to corrupt environments in both public and private settings and what influence they might have on managers' ethical considerations in such environments. Considering that government procurement is the most likely area for corrupt practices in the public sector in many countries, Neu et al. (2015) find that the implementation of effective anti-corruption measures has a potential to reduce engagement in corrupt practices. Expressing their belief that truly ethical behavior in governmental procurement is possible, the authors concede that governmental procurement is predisposed to corruption as specifically large infrastructure projects are difficult to evaluate. While the market price of certain types of governmental procurement activities, such as inventory, is easily determinable, this is not true for others. The market prices for construction are not always available, and delays in construction could dramatically change the cost for a finalized project. This creates room for corruption that is hard to control. However, implementing rules for the bidding process and issuing contracts in the pre-contract phase could significantly increase transparency for these types of procurement. In the post-contract phase, internal controls can further enhance the transparency of modifications to contracts and the addition of costs that the actors had agreed on in the beginning. The authors highlight that these suggestions are very much in line with the hopes of Transparency International that internal control practices such as division of labor and adequate bookkeeping can reduce the willingness of individuals to engage in corrupt activities and increase the transparency of governmental procurement.

While the study by Neu et al. (2015) seems to present reasonable arguments for why internal controls can be a helpful tool for discouraging corrupt activities in governmental procurement activities, some research in this area does not agree with their findings. Sikka and Lehman (2015) reply to Neu et al. (2015) with the argument that governments cannot be corrupt by themselves and that the main driver for corruption in government procurement is actually the so-called supply side. The authors show that companies will always have an intrinsic motivation to engage in corrupt activities to receive contracts as they have a "constant appetite for profits" that is not stopped by internal control activities on the part of the government. Using a global case study, Sikka and Lehman (2015) show that market prices are not easily determinable in governmental tenders, even though the company operates in a market where comparable prices are available. Moreover, large corporations possess the power to influence the prices of products artificially and are therefore able to hide corruption and work around internal government controls. Thus, the authors argue that the ability of bidding companies to skirt anti-corruption measures in governmental tenders limits the potential effectiveness of internal control efforts. Stopping corruption in a governmental procurement setting might therefore be all but impossible.

Issues of internal control relate not only to relationships between public- and private-sector organizations. They are relevant even in private firms' interorganizational relationships. For example, Kraus and Strömsten (2016) analyze how the concept of power influences the internal control mechanisms of the two telecommunication companies Vodafone and Ericsson. The authors find that power is a central aspect in the dynamics of interfirm relationships, and internal controls can be a significant means of executing power over a partner. For instance, in the case described by Kraus and Strömsten (2016), Vodafone's strong financial internal controls enabled their management to assess the R&D department of Ericsson and find ways to improve efficiency in their operations. This information gave them significant power over Ericsson, which was in urgent need of change, and Vodafone could use this information as leverage in their negotiations.

Research on internal control in both public and private interorganizational relationships is quite recent (Neu et al., 2015, Sikka and Lehman, 2015, Kraus and Strömsten, 2016) and in its early stages. More research is needed in this area, especially to identify differences between internal control mechanisms employed by public versus private entities.

2.4 Importance of institutional theory for the study of internal control in interorganizational relationships

Internal control and interorganizational relationships have traditionally been analyzed on the basis of "organizational economics and strategic contingency-based works" (Caglio and Ditillo, 2008:61). However, Rossignoli and Ricciardi (2014) point out that theories such as transaction cost economics (TCE) and a resource-based view (RBV) of organizations fail to consider the importance of organizational social contexts. Moreover, theories that are based on classical economics, such as TCE, agency theory, and RBV, "share an anthropological assumption: human nature is based on opportunism and relations must be strongly coordinated and controlled to prevent opportunism from harming us" (p.33-34). Given that this assumption does not fit every circumstance, Rossignoli and Ricciardi (2014) suggest that theories capturing the relational and institutional levels of analysis, such as old institutionalism, new institutionalism, and institutional systems, can add insights into many different interorganizational phenomena that the classical theories "left substantially unexplained" (Rossignoli and Ricciardi, 2014:55).

To avoid these shortcomings of classical theories, this thesis analyzes internal controls in interorganizational relationships using institutional theory. Given that there has been extensive research on the design and implementation of internal controls (e.g. Dikan et al., 2014, Bogdan, 2014) as well as on the effects of internal controls (or the lack thereof) on single organizations (e.g. Lee et al., 2016, Brown and Lim, 2012), an analysis from the perspective of institutional theory offers a more practice-oriented point of view on internal control. Few studies have analyzed the day-to-day practices of internal control, and knowledge of what happens between the implementation of internal control and the outcome of its implementation (i.e., the social perspective of internal control in organizations where people perform and shape the practice) is largely lacking. Internal control has been criticized for consisting purely of calls for compliance that many organizations ignore (Power, 2009). Thus, in order to shape the practice so that it becomes relevant to individual organizations and helps to achieve efficient operations, it needs to be adjusted in those daily operations and work practices (i.e., at the "micro-level").

Institutional theory enables researchers to analyze different questions from the perspective of how organizational practices develop and are carried out in different institutional environments (Battilana and D'Aunno, 2009). While this perspective has been central to organizational studies for a long time (Lawrence et al., 2013), neo-institutional studies are criticized for presuming that individuals and organizations comply with institutional pressures without following their own interests or exercising their own agency. Moreover, neo-institutional studies largely ignore the micro level, comprising individuals and the activity of work itself (Battilana and D'Aunno, 2009). This criticism is emphasized by Empson et al. (2013), who state that while neo-institutional theory has focused in detail on how institutions affect individual actions, it has lost focus on the individual actors and how they are influenced by different institutions.

A different, yet closely related approach that aims at analyzing the interrelationships between institutions, individuals, and organizations is institutional logics (Thornton et al., 2012). Institutional logics is a "macro-level" belief system that shapes the way actors perceive their environment and make decisions concerning organizational structures, practices, and strategies in their daily operations—at the "micro-level" (see e.g. Thornton and Ocasio, 1999, Thornton and Ocasio, 2008). Previous research on institutional logics has significantly increased our understanding of the practices of different actors and how their actions may be embedded in different institutional logics (McPherson and Sauder, 2013). According to Pache and Santos (2013), logics relate to each other on the basis of a continuum that ranges from conflicting to complementary. Conflicting or contradictory logics are often responsible for processes of change in organizations, and it comes as no surprise that much of the previous literature has focused on such constellations of logics. However, Ocasio et al. (2017) highlight the importance of recognizing that logics can also be complementary to each other, and Lindberg (2014) and McPherson and Sauder (2013) show that individual actors can act as carriers of institutional logics and use both conflicting and complementary logics to their own personal benefit, as needed in different situations.

Despite the fact that institutional logics relates to beliefs on the macro level, recent literature using the approach recognizes the importance of analyzing them on the micro level, where different actors try to make sense out of the logics in their everyday work (Wry et al., 2014). Similarly, Ocasio et al. (2017) call for further research on the use of institutional logics in complex environments where actors on the micro level must "juggle" different competing and complementary logics at the same time. Consequently, the perspective of institutional logics is well-suited to the study of internal control in interorganizational relationships as it enables the researcher to make sense of the significantly increased environmental uncertainty in these kinds of relationships (Greenwood et al., 2011). Moreover, institutional logics connect the organizational responses of micro-level actors in their daily interactions with macro-level internal control, which aims to shape practices from "above." It is presumed that this clash of macro and micro levels leads to significant challenges in the implementation of internal control practices, with a central focus on the interpretation of different rules and regulations.

3. Methodology

3.1 Empirical context of Northern Norway

The literature review (paper 1) shows that internal control is relevant for different organizations and actors in numerous countries. Much of the previous research has focused on Anglo-Saxon contexts, such as the US in particular, because of the availability of data that is disclosed as a result of the institutional requirements of the Sarbanes-Oxley Act (SOX404). This statutory requirement makes it necessary for all registered organizations in the US to report on their internal control efforts, making it fairly easy for researchers to obtain large amounts of required data for studies conducted with quantitative methods. What we can learn from these large-scale studies are the consequences of having effective internal control systems and the potential antecedents that help organizations achieve functioning systems. However, these studies do not allow for a deeper analysis of actual internal control practices, what might define a well-functioning system, and what might differentiate such a system from those less beneficial to organizations. Recent studies have therefore started to investigate internal control issues with a qualitative approach and in different settings outside of the US (see Henk, 2020 for a detailed discussion of the different contexts that internal control has been investigated in).

Setting up this analysis of internal control in interorganizational relationships from different perspectives and in different contexts required the identification of relevant empirical cases. In this respect, Northern Norway served as an advantageous location because it offered access to very unique contexts that have rarely been addressed in the literature on internal control or in studies based on institutional logics. Given that the region's firms are mainly small and medium sized—with large geographical distances between different departments, partner organizations, or clients—this setting allows for extreme scenarios that might not be visible in other geographical regions, such as central Europe. One case in the health care sector (paper 3) and another focusing on accounting firms (paper 4) show that the geographical distance between involved partners has an influence on companies' internal control and risk management systems; limiting the context to Northern Norway helped to identify this issue. At the same time, it is important to mention that the issues that were found and highlighted within this setting are also relevant for other geographical contexts, and the same inferences from the findings and conclusions of this thesis regarding internal control efforts apply to other countries as well. In this regard, more should be said here about the methodological choices and philosophical assumptions made in the thesis. These are presented and summarized below.

3.2 Philosophy of Science and Methodological Reflections

The following choices concerning the philosophy of science and applied methodology are foundational to this thesis. In this section, I will first provide a description of the philosophical position of the project, including both ontological and epistemological assumptions. Afterwards, I will provide the reader with an overview of the project's methodology and method.

3.2.1 Philosophical positioning

Easterby-Smith et al. (2012) define epistemology as "different ways of inquiring into the nature of the world" and show that there is a continuum of different possibilities, from strong positivism, which is closely related to a realist ontology, to strong social constructionism, which closely corresponds to nominalism. As Chua (1986) has argued, there is great value in analyzing the world of accounting from the perspective of social constructionism. For instance, Gergen (2001) shows that constant changes in the ways in which humans perceive reality make it important to be open to changes in contingent variables. A social constructionist view reflects such changes well, in that it rests on the assumption that there is no one single truth but rather many different truths that can change over time.

While the accounting literature has historically adopted a positivist point of view for the most part, in recent decades accounting has followed the general trend of social sciences toward a more constructionist view of the field (Chua, 1986). In addition to that, Kinney (2000) argues that one of the major research barriers in internal control is the complexity of the concept, as it is "operationalized in complex, dynamic organizations that differ substantially across time, across organizations, and across cultures" (Kinney, 2000:88). Thus, a social constructionist epistemology has the advantage of capturing possible truths that might be left out by assuming a positivist point of view. According to Doz (2011), applying a social constructionist point of view enables the researcher to investigate the ways in which organizations actually operate. Thus, the author states that this type of epistemology can significantly add to the literature by not only testing findings that have been suggested by previous researchers, but also finding evidence for different situations and solutions.

However, it is worth noting that Nørreklit et al. (2006) argue that social constructivism in management accounting research faces the problem of defining what is real in the world, leading to significant validity issues. Hence, the authors suggest the approach of pragmatic constructivism, which integrates the concept of reality into a constructivist perspective. While

Nørreklit et al. (2006) agree with the argument that all facts include social constructs, they suggest that focusing on social constructs alone is a form of "reductivism" and that facts are more than just social constructs. Instead, the authors suggest that researchers in management accounting should integrate four aspects of reality into their studies: communication, facts, logic, and values. This holistic approach toward constructivism increases the validity of the research and makes it possible to gain a deeper understanding of the actual role of internal control in interorganizational relationships.

The appropriateness of social constructivism, and particularly pragmatic constructionism, as a potential theoretical approach to the study of internal control has been addressed in the literature. Niamh and Solomon (2008) show that research in the field of corporate governance has been dominated by a focus on conflicts of interest and the application of agency theory as a theoretical framework. Similarly, Caglio and Ditillo (2008) argue that control issues within organizations, whether intra- or interorganizational, have often been traditionally analyzed based on "organizational economics and strategic contingency-based works" (p.61). However, Rossignoli and Ricciardi (2014) point out that organizational theories, such as TCE and RBV, do not consider the importance of organizational social contexts and assume a reductionist and negative image of human behavior. Given that this assumption does not fit each circumstance, the authors suggest that theories capturing the relational and institutional levels of analysis, such as old institutionalism, new institutionalism, and institutional systems, can add insights into many different interorganizational phenomena that the classical theories "had left substantially unexplained" (Rossignoli and Ricciardi, 2014, p.55).

When using agency theory to study internal control, findings based on a positivistic approach might presuppose an understanding of the economy that is inadequate when applied to real-life business practices. According to Donaldson (1990), this issue has been prominently defended through the argumentation that "in science, the validity of a model rests not on the accuracy of the assumptions but on the utility of its predictions; therefore, a simplistic model of human motivation can nevertheless yield robust predictions" (p.372). This is based on the nominalist idea that scientific models should be perceived as "useful fiction" that is accurate when all given assumptions are correct. However, Donaldson (1990) argues that this way of thinking has been challenged by the realist school of thinking, arguing that "a theory which is accurate in its predictions but whose assumptions do not correspond to reality is thereby predicting satisfactorily but is not explaining the phenomena (i.e., it does not tell us why and how things actually happen)" (p.372). Moreover, in line with the realist way of thinking, the author points out that scientific theories should allow for “deductions that go beyond present observables, guide future enquiry, and yield new testable hypotheses and, thus, new findings” (Donaldson, 1990, p. 372). This clearly challenges the applicability of agency theory for the practice of internal control in the setting of a modern and complex business environment.

On a purely theoretical basis, the positivistic perspective of agency theory can yield interesting insights about a given institution, including the mechanisms that could potentially improve the control system, if everything stays the same in the future (Donaldson, 1990). However, such perspectives are not accurate to improve the performance of organizations in real life, where things are complex and in constant flux. Instead, I adopt a social constructionist perspective to study internal control because it allows for a more qualitative investigation of phenomena that are both complex and constantly changing.

At the same time, it should be mentioned that the choice of the epistemology has not always been my personal one. While I do believe that from a theoretical perspective, social constructionism fits the current study, it is clear that other institutional factors have contributed to this “choice.” While writing the thesis, at several points I asked myself the question, “If I had been affiliated with a different university with a much more positivistic tradition, would I have approached this thesis in the same way?” This is an inherently difficult question to answer. It is possible that under different circumstances, I might have approached the study differently. My supervisors of both my bachelor’s thesis in Germany and the master’s thesis in Norway took primarily qualitative approaches, and since I was introduced to and trained in the methodologies they used, I naturally gravitated toward them for this study. However, I originally planned a slightly more positivistic study for this PhD thesis using both quantitative and qualitative data. The deciding factors in the final approach taken in this study were the limited availability of quantitative data for the chosen context and the likelihood that the conclusions I would be able to draw from the purely qualitative studies would not differ in a mixed method approach.

3.2.2 Research design and method

3.2.2.1 Methodology

Based on the research question, pragmatic considerations, and the previously discussed theoretical and philosophical reflections, the four articles that are included in this thesis follow a qualitative approach. According to Frankfort-Nachmias and Nachmias (1996), using a qualitative research approach makes it possible for the researcher to “understand behavior and institutions by getting to know the persons involved" (p.281). According to Parker (2012), there is a well-defined difference between qualitative and quantitative research in the area of management accounting. While quantitative research "focuses on constructing generalizable, predictive laws of behavior," (p.56) qualitative research "stresses the understanding and critique of process and context, recognizing uniqueness and difference" (p.56). The author states that, due to the inadequacy of quantitative methods for analyzing the influence of surroundings and organizational structures, quantitative researchers often need to rely on qualitative methods to understand and answer questions arising from their data. Moreover, he states that in practice, managers often prefer evidence unique to their individual circumstances over evidence that is generalizable across large population sets. Hence, a qualitative approach to studying internal control procedures in interorganizational relationships can generate insights that potentially contribute not only to the academic literature but also to practitioners. In fact, qualitative or "involved" research enables the researcher to "penetrate actors' socially constructed worlds, their cultures, thinking, language and behavior" (Parker, 2012, p.56-57). Moreover, Beasley et al. (2009) point out that qualitative data that have been collected through in-depth interviews or relevant secondary data such as internal documents can make it possible to gain an understanding of the organizational context. Furthermore, the use of data from different primary and secondary sources is important for the epistemological approach of social constructivism and increases the validity of the study.

3.2.2.2 Methods

This thesis consists of four articles. Each article employs a specific method. In particular, the first article employs a literature review approach while the empirical papers follow a case-study strategy with different approaches that were adopted to capture the individual environments in which the phenomenon of internal control in interorganizational relationships was analyzed. Yin (2014) shows that researchers should choose an appropriate method according to three guiding conditions: "(a) the type of research question posed, (b) the extent of control a researcher has over actual behavioral events, and (c) the degree of focus on contemporary as opposed to entirely historical events" (p.9). Yin (2014) claims that case studies are appropriate when the research question starts with either "how" or "why," when the study does not require much control for behavioral events, and when the focus is on contemporary events. In addition, Arwinge (2012) recommends the use of case studies for the study of internal control as a means of learning more about the actual control-related day-to-day activities experienced by managers in organizations.

The following table gives an overview of the different articles of the thesis and their particular research designs.

Table 1: Overview of the articles in the thesis

	Article 1	***Article 2***	***Article 3***	***Article 4***
Approach	Systematic literature review	Case Study	Comparative Case Study	Comparative Case Study
Phenomenon	Concept of internal control	Internal control and governmentality in a horizontal interorganizational relationship	Risk management in a vertical interorganizational relationship	Risk appetite
Empirical Setting	Worldwide	Northern Norwegian fishing industry	Hospital sector in Norway	Accounting industry in Norway
Data Collection Method	Systematic literature review	- Observations - Interviews - Secondary data	- Document review - Secondary data	Interviews

Yin (2014) shows that case studies provide the author with an opportunity to focus on a phenomenon in depth while at the same time retaining a holistic overview over, for instance, "organizational and managerial processes, … international relations, and the maturation of industries" (p.4). However, it is important to recognize that the number of cases should not be too high. For example, Ragin (1987) shows that ten positive and ten negative cases would leave the researcher with an analysis of about 200 different possible comparisons. Because this decreases the possibility of identifying noteworthy commonalities, it is not advisable to compare more than two to four positive and negative cases. Following this recommendation, none of the articles included more than four positive and four negative cases. To achieve this aim in the fourth article, seven firms had to be grouped into typologies that made it possible to compare them against other groups of firms.

3.2.2.3 Data collection

According to Ahrens and Chapman (2006), interviews form an integral part of qualitative studies because they involve the researcher in an active exchange of information with interviewees and are therefore useful for understanding how an organizational practice is perceived in relation to the interviewees' work. However, case studies do not need to be restricted to one single data collection method. Instead, Eisenhardt (1989) argues that case studies often involve many different methods of data collection that go beyond interviews since triangulation of different kinds of data can corroborate potential findings. Similarly, Rae and Subramaniam (2008) find that data on internal control that is exclusively based on the perceptions of the financial controller is not objective. Instead, the authors suggest that future studies should aim at gaining knowledge from multiple sources in a firm, including perceptions of different employees and an evaluation of the companies' resources, policies, and procedures. Moreover, Parker (2012) points out that in the area of management accounting, researchers might take advantage of multiple sources of information, including "interviews, observations, and documentary analysis." I therefore propose that studying internal control in interorganizational relationships might profit as well from a mixture of several sources of data, such as interviews and documentary analysis, as suggested by Parker (2012).

3.2.2.4 Challenges

Choosing a case study approach to the study of internal control presents certain significant challenges and limitations. Bell (2010) mentions the risk of choosing a case that is not generalizable for other cases in the area. One way of mitigating this selection risk is to position the case relative to others that have already been researched (Bell, 2010). In addition, Eisenhardt and Graebner (2007) argue that case studies are not always aimed at testing theories. Theory-building case studies apply to theoretical sampling, where the cases are chosen because of what they explain about a theoretical phenomenon, not because of how representative they are. Such cases can be a "revelation of an unusual phenomenon, replication of findings from other cases, contrary replication, elimination of alternative explanations, and elaboration of the emergent theory" (Eisenhardt and Graebner, 2007, p.27). Such an approach had to be applied in the case of paper 4 since it would not have been feasible to analyze the entire accounting industry for similar traits; a selection process was needed to differentiate the relevant firms from each other. Thus, in a first step (pre-study), local accounting firms were interviewed about their perceptions of recent developments in the sector and about the risks associated with those developments. One of the interviews included a representative of an online accounting software provider. This was important because this firm has a wide overview of the accounting sector in Norway and their evaluation of the different firms and types of managers in the market delivers a certain amount of validity to the study, as they were able to connect the case studies identified within our study with the rest of the market. The interviews from the first round of this hermeneutic circle enabled us to come up with certain traits that could be used to differentiate the firms and their owners. This list of traits was then sent to a professional industry association that handpicked potential interview partners for us. As a result, it was possible to categorize the firms according to different typologies without analyzing the entire market.

Additional challenges related to decisions about which theoretical lens to apply to the different papers. Given that the practice of internal control has historically been framed to a large extent by institutional requirements that ensure a well-functioning practice (e.g., bank regulations following the devastating scandals of Enron and WorldCom in 2000), paper 1 addressed the issue of internal control through the theoretical framework of institutional work. Institutional work is useful for investigating the role of individuals in shaping practice. The theory assumes that the institutional framework locks the individual "into a cage" that frames the actors' actions. However, at the same time actors' reflexivity, interests, and power enable them to break free from this cage and shape the practice to their own personal benefit. Applying this perspective to the literature on internal control was useful as it allowed for a more micro perspective on the actual work of internal control.

However, the literature review as well as the different cases in practice have shown that the actors' influence is not the only thing that shapes internal control in practice. Instead, the actors are largely influenced by the organizational field in which they are embedded. It was therefore useful to apply the perspective of institutional logics to the different case studies of the thesis as this perspective takes one step out from the micro level and makes it possible to analyze not just the actions of different actors, but also decisions that are influenced and guided by the prescriptions of their organizational fields. Moreover, while the analytical lens of institutional work was beneficial for the literature review, it proved difficult to use in the empirical part of the thesis, particularly since this perspective relies heavily on actors' reflexivity, which was hard to capture in case studies. While reflexivity is one of the main pillars of institutional work, it implies that actors really understand the institutional environment that influences them and actively want to change it, and capturing this phenomenon empirically is challenging. This issue is not often highlighted in research that applies institutional work; the literature review was therefore a good opportunity to try out this analytical lens and pinpoint its flaws. Conducting an empirical study of actors' reflexivity would have required a longitudinal study over a longer time than was feasible for the current thesis. Moreover, given the fact that three different empirical settings were involved, a series of longitudinal investigations would not have been possible. The perspective of institutional logics allows the study to focus on the organizational field while at the same time including the actors on the ground.

4. Main Findings (Articles 1-4)

The thesis is based on four articles that analyze the main research question of the study from different angles using three distinctive cases focusing on the role of internal control in interorganizational relationships. The cases show particular challenges that internal control brings to different types of interorganizational relationships. Here, the requirement for successful control measures varies, depending on the complex environmental conditions and the different institutional logics that are present in those settings.

4.1 Article 1. Henk, O. "Internal control through the lens of institutional work: A systematic literature review"[1]

The first article of the thesis provides an informative overview of the literature on the actual practice of internal control. Using a theoretical framework of institutional work, the article takes a micro-level perspective. Despite the growing interest in internal control and its application in practice, there is considerable confusion over the exact definition of internal control and how to employ it. For this purpose, several frameworks, such as COSO, aim at framing the concept and what it includes. For instance, COSO (2013) defines internal control as a process that provides reasonable assurance regarding the effectiveness and efficiency of operations; reliable financial reporting; and compliance with laws, regulations, and policies. At the same time, internal control is institutionally framed by regulations such as the Sarbanes-Oxley Act (SOX 2002) or the European Audit Directive. These do not correspond immediately with the definition that is provided by COSO. As a result, users of internal control directives often have trouble implementing controls that are efficient and useful. However, environmental complexity means that the application of internal control will never be the same from one organization to the next. The literature review investigates this issue by pinning down how previous literature defines internal control and how it is applied in actual work practices.

Previous literature reviews on internal control have tended either to adopt a narrow focus on internal control over financial reporting (ICFR) or to address literature peripheral to internal control, on issues such as internal auditing. Moreover, previous research was heavily focused on the geographical region of the US and largely took a quantitative perspective, which does

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[1] Published in the Journal of Management Control (2020), Vol.31, Issue 3, Pages 239-273.

not allow for a deeper analysis of actual work practices. The literature review in this thesis addresses these shortcomings by analyzing the content of studies conducted worldwide and by focusing beyond ICFR. This is warranted, for example, by the fact that the COSO definition encompasses more than just financial control and includes all aspects of control that have an impact on the effectiveness and efficiency of operations. The article therefore identifies several different literature streams on internal control that take into account how it is used and perceived on the micro level, where internal control practices actually take place.

More specifically, the literature review finds that current research is divided between two different understandings of internal control: one that is focused on ICFR, and one that is focused on operational efficiency and offers a new definition of internal control in various environments. In addition, the theoretical lens of institutional work added a new perspective to the study of internal control as it allowed for an analysis of actual work practices. The theory assumes that actors on the micro level work toward creating new ways of working with internal control, maintaining the state-of-art, or disrupting current work practices as they fail to improve the efficiency of operations—that is, if they can "break out of their cage" of institutional embeddedness. However, the literature review reveals that actors who deal with internal control are largely framed by their institutional embeddedness and therefore unable to realize all of the possible institutional work practices that might have otherwise been identified through the literature review. As such, the article contributes to the literature.

4.2 Article 2. Henk, O.; Bourmistrov, A.; Argento, D. "Unintended use of a calculative practice: Conflicting institutional logics in the Norwegian fishing industry"

While the first article had the aim of providing the reader with a holistic picture of internal control and its current discourse in the academic literature, the second article focuses on a concrete example of internal control in a situation that involves several actors on both the macro and the micro levels (i.e., it looks at internal control in an interorganizational relationship). More specifically, this first case study focuses on the value chain of the Norwegian fishing industry, which connects different actors through an important and complex value creation process. The Northern Norwegian fishing industry uses a "conversion factor" in order to indicate the difference in weight between gutted and whole fish. This, in turn, is intended to make it possible to register the total amount of fish caught from the ocean and thereby control and govern the extraction of fish on the basis of scientific data on sustainable fishing levels.

However, the conversion factor leads to constant conflicts on the micro level, where the different actors in the industry must implement the governmental regulations. Seasonal variations in the size and weight of the fish mean that the conversion factor does not provide the Norwegian state with a true picture of the amount of fish being taken from the ocean. Importantly, the use of the factor leads to “unfair” pricing in the sale of fish as it results in incorrect weights, which must then be paid for. This, in turn, creates situations in which fishermen seeking workarounds may potentially find themselves accused of opportunism and corruption (Ytreberg, 2018).

This study allows for an analysis of the internal control practices from different perspectives. On the macro level, different Norwegian and Russian institutions follow a logic of compromise in which the partners commonly agree on a number that is suitable only some of the time but that is based on the most accurate average for all categories of fishermen throughout the year. Unfortunately, seasonal variations mean that the factor is inaccurate during the winter and incentivizes small fishermen that deliver their catch in full and the landing facilities that purchase the fish from them to game the system by maximizing their quotas and profits. At the same time, this situation is disadvantageous for the state as it leads to depletion of the fish stock. This highlights a familiar issue for governance of the commons: where the use of common resources is concerned, personal opportunism is often placed in opposition to the greater good.

This case is theory-driven and contributes to the small number of studies that focus on more than two competing logics on the ground, i.e. on the micro-level where different actors work with the factor on a daily basis. The analysis through the theoretical perspective of institutional logics revealed that there is currently a conflict between the institutional logics of the actors on the macro level and the actors on the micro level. As such, the long-term institutional logic of compromise is clearly at odds with the short-term logic of the market. In addition, the findings point to a conflict between the long-term and short-term institutional logics of the different micro-level actors. As such, on the micro level, the more long-term oriented institutional logics of the community and science are in conflict with the short-term oriented institutional logic of the market.

4.3 Article 3. Henk, O. "Resistance vs. compliance in risk reporting practices: A case study of the congruence between different interpretations and adoption of normative risk reporting regulations in hospitals"

The purpose of the third article included in the thesis is to analyze the differences that can appear in the way internal control and risk management practices are communicated through written reports to the controlling institutions and also in the implementation of these practices in reality. To achieve this aim, the article analyzes the case of two hospitals in Norway that are located in the same administrative region but are significantly different. As part of their risk management practices, both hospitals are required to report incidences to a national registry for patient complaints (Norsk Pasientskade Erstatning). At the same time, patients who are treated in these hospitals and have experienced adverse events are required to report to the same authorities. As a result, it is possible to compare how well the reports from these two hospitals on these incidents (i.e., the results of their own internal control systems) corresponded with patient complaints. It is noteworthy that incident reports at *Hospital 1* had a correspondence rate of 37% with patient claims to the authorities, while at *Hospital 2*, the correspondence rate was a striking 0%. This indicates that the risk management system of *Hospital 1* is much stronger and manages to identify many of the adverse events, ultimately giving the hospital opportunities to address issues in the future and learn from past mistakes. The risk management system of *Hospital 2*, however, appears to be weaker in practice as its internal systems did not manage to identify any of the adverse events that were reported by the patients they treated.

In order to analyze whether the same difference is observable in the reporting of risk management practices (i.e., the communication of risk management practices to the controlling institutions), the article analyzes the content of the two hospitals' management reviews. It is noteworthy that this content analysis reveals that *Hospital 2* adheres much more closely to the risk management reporting requirements of the regional health authority than *Hospital 1* does.

To analyze the potential reasons for *Hospital 2*'s closer compliance with the regulations on risk reporting, despite its apparently weaker risk management system, which was not able to identify reliably any adverse events at the hospital, the article adopts a theoretical perspective that analyzes the different institutional logics of the actors involved in the production of the management reviews. The article finds that *Hospital 1* already had a well-established risk management system in place that was built on the medical expertise of the hospital. As such, the management reviews were strongly influenced by the logic of medical professionalism. The analyzed documents provided strong evidence for the idea that the strong influence of the logic of medical professionalism enabled the actors at *Hospital 1* to resist the plans to harmonize the risk management systems of the different hospitals and deliver reports according to the same unified framework. The logic of medical professionalism is also present for *Hospital 2*, but in a weaker form. The article finds that a different institutional logic, the logic of management, has a stronger influence on the actors responsible for producing risk management reports at *Hospital 2*. Introduced with the new public management reforms, this logic is derived from ideals that emphasized administrative performance rather than medical excellence. The management review of *Hospital 2* was produced by the hospital's administration for the regional health authority administration and involved few members of the medical staff, which made it easy to comply with new regulations immediately upon their introduction. At the same time, according to the study by the national registry for patient complaints, this type of efficiency came at the expense of medical professionalism and the opportunity to strengthen the hospital's risk management system.

4.4 Article 4. Henk, O.; Argento, D.; Bourmistrov, A. "Risk appetite and innovativeness in an era of digitalization: The impact of institutional logics on the risk perception of small and medium-sized accounting firms"

The fourth article of the thesis analyzes the accounting industry and in particular how small and medium-sized accounting firms are reacting to changes to the sector because of developments in digitalization. Previous research (Frey and Osborne, 2017) has predicted that up to 97% of the accounting industry will disappear in the near future due to ongoing technological developments. It is therefore highly relevant to find out how firms in the sector are adapting to these changes. The article finds that there are currently four different typologies of accounting firms in the sector for small and medium-sized practices. *Defender* firms are those that try to remain successful through their continued focus on traditional accounting services, very close relationships with their clients, and small technological developments. *Opportunists*, *Advancers*, and *Revolutionists*, on the other hand, are firms that to an increasing degree implement technological developments in their operations and thereby also accept and try to mitigate risk.

From a theoretical point of view, the article shows that the introduction of digitalization in the sector, and the resulting need for innovation, is reflected in a variation of the dominant institutional logic for these firms. Traditional firms that are closely connected to their clients and are often deeply embedded in their local communities are strongly guided by the logic of community. For them, it is important that they know and value the preferences of their clients, meaning that if a client is not willing to move away from traditional paper-based accounting practices, then a *Defender* firm will not force innovations upon the client. This logic of community holds less sway the more innovative a firm becomes. More technological integration means that there is no longer a need for close contacts with clients; it is more important that a fit be found between clients and specialized technological solutions. Given that the firms with the most innovative business approaches accept a large degree of risk, the article contradicts quantitative findings in the area of risk management that focus on the negative impact of risk management systems on innovation. However, the findings from article 4 suggest that the firms with a high degree of risk appetite also employ the strongest risk management systems, without apparent negative effects on their innovativeness.

Table 2 gives an overview over the different articles of the thesis.

Table 2: Overview of the different articles for the Ph.D. thesis

Article	Research Question(s)	Applied theories	Methodology	Contribution	Status
Internal control through the lens of institutional work: a systematic literature review	**RQ1:** *What are the different meanings of "internal control" and how can it be defined?* **RQ2:** *How is internal control institutionalized?* **RQ3:** *What do we learn from this for future research?*	Institutional work	Systematic Literature Review	To systematize the knowledge and identify gaps in the literature	Published in *Journal of Management Control (2020)*
Unintended use of a calculative practice: Conflicting institutional logics in the Norwegian fishing industry	**RQ:** *How do conflicting institutional logics guide the behaviors of macro- and micro-level actors and undermine the intentions of a governance system that relies on a single number?*	Institutional Logics	- Single Case Study - Participant observations and semi-structured interviews	By applying a framework that integrates institutional logics and the literature on calculative practices, the study adds new knowledge on the use of numbers for purposes of governmentality in complex industries.	Submitted to the *Accounting, Auditing & Accountability Journal*

Resistance vs. compliance in risk reporting practices: A case study of the congruence between different interpretations and adoption of normative risk reporting regulations in hospitals	**RQ:** *How do conflicting institutional logics cause a failure of alignment between different entities' risk management reporting and what are the consequences for risk management practices?*	Institutional Logics	- Comparative Case Study - Document Analysis	The article extends our knowledge on conflicting institutional logics by showing that a lack of congruence between the institutional logics of the framework and the individual organizational actors is the reason why normative frameworks do not work for many organizations in the way that they were intended to.	Submitted to the *Journal of Public Budgeting and Financial Management*
Risk appetite and innovativeness in an era of digitalization: The impact of institutional logics on the risk perception of small and medium-sized accounting firms	**RQ:** *How do owners of small and medium-sized accounting firms perceive and cope with the risks of digitalization?*	Institutional logics	- Comparative Case Study - Semi-structured interviews	Extant research in the field of risk management, often based on quantitative data, finds that risk should be decreased as much as possible in complex environments with a lot of turbulence. Yet a qualitative analysis of these key cases in Norway shows that firms with a high appetite for risk-taking can also be profitable and well tuned to the environment. In fact, some of these firms embrace risk rather than avoiding it.	Submitted to the *Accounting, Auditing & Accountability Journal*

5. Discussion and Conclusion

5.1 Combining the results: The practice of internal control in interorganizational relationships and how it is influenced by different institutional logics

This thesis addresses the lack of research on internal control in interorganizational relationships by investigating the main research question of how internal control can help to identify and mitigate risks of interorganizational relationships. The idea that internal control has a role in interorganizational relationships was raised more than 20 years ago by Kinney (2000), who proposed a framework for the study of internal control practices in organizations. However, few studies have addressed this call for increased research on the different issues that relate to his framework remained unanswered throughout all those years and the lack of knowledge on internal control in interorganizational relationships remains. One of the contributing factors for this particular lack of knowledge in the previous literature is the strong focus on macro level perspectives and methodologies that focused on large data sets rather than analyzing the challenges of internal control practices on the micro level. In response to this, the current study analyzes internal control in interorganizational relationships from a perspective of institutional logics in different empirical settings. Particularly, the thesis focuses on the following three aspects: the nature of internal control, the complexity that is introduced through interorganizational relationships, and the different institutional logics that shape the form and usage of internal control in these relationships. Figure 2 depicts these relationships of internal control for interorganizational relationships as conceptualized in this thesis.

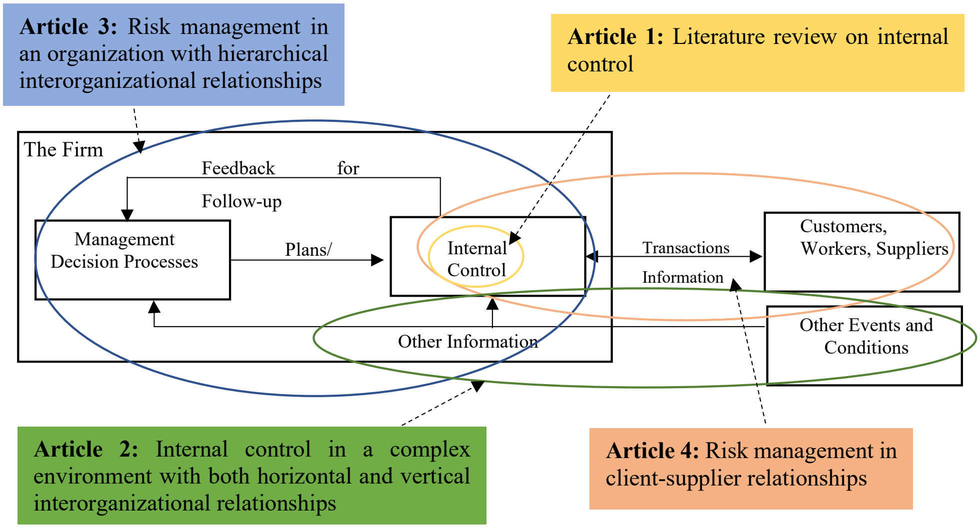

Figure 2: Internal control in interorganizational relationships and its analysis in this thesis (based on Kinney, 2000, p.85)

5.2 The normative approach to internal control is ignoring the misalignment between organizations

Internal control is a concept and practice that is widely discussed in the accounting and management control literature. Much of the contemporary literature focuses on internal control as a tool that is applied to exercise control over financial reporting. However, Power (2007) argues that internal control has undergone a significant change from a "lowly technical and bureaucratic function" to a concept and phenomenon with a much wider reach throughout an organization's entire operations. As such, it is not only of interest to "relatively insulated specialists," it is now considered "co-extensive with risk management" and a "distinctive mode of organizational uncertainty handling" (Spira and Page, 2003). According to Power (2007), there has been a general shift in the rationale and design of internal control mechanisms from centrally regulated control over organizations toward a regulatory style that is focused more on the internal capacities of organizations to govern themselves. As such, regulatory frameworks such as those provided by COSO or ISO represent an important advancement in the development of internal control as they aim to deliver standardized solutions for firms that want to strengthen their internal control systems (Balakrishnan et al., 2019). While the provided frameworks have undoubtedly advanced the practice of internal control during the past 30 years, the findings from this thesis suggest that internal control is not always aligned between different organizations, and this normative desire to follow a particular framework approach to internal control can be potentially problematic.

For instance, article 3 discusses the different risk management approaches that have been applied in two hospitals. While one of the hospitals has developed a risk management approach that is closely aligned with the normative suggestions of COSO and ISO, this is not the case with the other hospital. Instead, the second hospital follows risk management guidelines that are imposed by the central governmental authorities in an attempt to facilitate the nationwide governance of hospitals. While the government may have the best intentions in setting these guidelines, the findings of this article show that harmonization between the different approaches to risk management is unexpectedly problematic in practice. External data from the Norwegian patient complaint system indicates that the hospital that follows the more normative approach to risk management has effectively more control over errors that have occurred in the hospital, and this has enabled the hospital to learn from the past. On the other hand, the hospital that complies with the more recent central risk management regulations has a 0% correspondence rate between the errors that have been reported by patients and errors that could be found in the hospital's data base (NPE, 2019), suggesting that it has much less opportunity to do what strong internal control systems are supposed to do: help the organization learn from its mistakes. The findings indicate that while the normative approach to internal control is to allow organizations to get "their houses in order" (KS, 2020) and improve their operations, when different organizations come into play and other logics contribute to the development of practices, unforeseen obstacles can arise. COSO is criticized in the literature for its failure to focus on digital technologies and recognize interorganizational relationships (Janvrin et al., 2012). As the cases from the hospital sector in article 3 show, different approaches to risk management practices are difficult to align. Moreover, the actors that are working with regulations and controls on a daily basis appear reluctant to change their practices based on new requirements that are imposed from outside of the hospital. Thus, the hospital that was following the more practical and efficient normative approach to risk management operated independently of the central authorities throughout the entire analyzed time frame of the study. While this might be a positive mode of internal control for the hospital, it means that each hospital follows a different approach, and central governance at a higher level becomes more challenging.

The findings in article 2 suggest that similar complications can occur with different external actors that are involved in the interorganizational relationship. Here, the aim of the central government to control and govern the sector through a single number that every actor has to use, is not in the same interest for all the involved actors. Hence, the normative approach to simplify and structure internal control in this setting that is highly complex, had not the effects that were originally intended as the institutional logics of the macro level actors are in conflict with the institutional logics of the micro level actors. At the same time, the findings from article 4 indicate that internal control is highly context dependent and can have many different forms and shapes. The setting in the accounting sector is different from the ones described in article 2 and 3, as there is no involvement by the state in the development and implementation of normative frameworks. Instead, the firms are free to choose the internal control practices that are relevant for their respective situations and risk appetites that they have with regard to the technology adaption.

5.3 Differences in institutional embeddedness as reason for the misalignment

Frameworks such as that of COSO typically fail to recognize the importance of interorganizational relationships, compounding the complexity of internal control by increasing appropriation concerns and requirements regarding coordination between the involved organizations (Dekker, 2004, Greenwood et al., 2011). According to Greenwood et al. (2009), one factor in the need for stronger internal control systems is the institutional complexity that organizations face. Different organizations are embedded in different institutional environments, and the logics that guide the actions of the actors in those organizations are likely to be different, resulting in an increased need for control. Previous literature in the area of institutional logics has picked up on this issue with a focus on peripheral and central organizations in a field. According to this stream of the literature (e.g. D'Aunno et al., 2000), peripheral organizations are often disadvantaged in an organizational field due to their smaller size, limited resources, or lower name recognition in comparison to the more central organizations. In turn, this means that they are less likely to be strongly embedded in the pre-existing institutional logics of the field and may be more open to new structures and innovations that disrupt the institutional environment of the organizational field.

However, while this literature recognizes the fact that different organizations can experience differences in their institutional embeddedness, it ignores the fact that organizations might be embedded in more complex institutional environments where several logics are competing with each other (Greenwood et al., 2009). This is a particularly important factor on the interorganizational level, where organizations bridge different fields and are therefore influenced by different logics. Thus, while the literature on central and peripheral organizations explicitly assumes that peripheral firms experience less institutional complexity (Hinings et al., 2004), the findings from the thesis show that this is not the case where interorganizational relationships are concerned. For example, article 4 has shown that external environmental forces, such as developments in digitalization, which are creating pressure within the accounting industry, can strongly influence the guiding institutional logics. In this particular case, this meant that organizations that treated changes to the industry as an opportunity to become more innovative and stay competitive in the market were largely influenced by a logic of innovation. At the same time, this meant that relationships with their clients changed. More traditional firms that were embedded in their local communities tended to have close relationships with their clients and were largely guided by the logic of community accountability. However the more innovative a firm became, the less importance it placed on community and client relationships. The more innovative firms sought clients who were interested in the new solutions the firm had to offer and who were willing to adapt to change. Notably, the firm with the highest level of innovativeness was one that might have been considered a central player in the industry according to the previous literature because of its many resources and brand-name recognition in the field. At the same time, several of the firms that would normally be considered peripheral based on their size and structure were deeply embedded in the predominant institutional logics of the organizational field. Thus, the findings contradict previous knowledge regarding how complexity relates to an organization's position relative to an industry or institutional network as a whole. The multiplicity of institutional logics that firms might be embedded in and that guide the actions of the owners of the firms should be taken into consideration when implementing the appropriate internal controls.

In addition, the evidence from this thesis shows that predominant internal control frameworks, such as that of COSO, are missing an important dimension that organizations need to consider in the implementation of internal control. Kinney (2000) has suggested a framework for internal control that includes the dimension of interorganizational relationships between firms and their immediate clients, employees, and suppliers. However, the different empirical cases suggest that internal control is also important on a vertical level, particularly with regard to the state. Both article 2, on the fishery sector, and article 3, on the hospital sector, have shown that the state has an interest in efficient governance mechanisms. Given that these sectors are highly complex, the state follows a logic of politics that is largely based on compromise strategies and solutions that are theoretically simple to follow and implement. But at a lower level, where the issues of risk management and internal control are more practical, organizations are influenced by institutional logics that conflict with the political dimension, and firms need to prioritize their own interests in order to stay legitimate in their respective markets. This in turn means that it is important to consider this dimension when thinking about internal controls and how they should function in practice. Indeed, both article 2 and article 3 show that misguided internal controls on the vertical level can result in unintended negative consequences, such as financial loss, medical errors, or natural resource waste.

5.4 Different internal controls to handle the risks of interorganizational relationships based on the level of interdependence and embeddedness of the actors

Based on the previous discussion on internal control and interorganizational relationships, it follows that the scope and strength of appropriate internal control systems are predominantly dependent on two dimensions: an organization's embeddedness within different institutional logics and its interdependence with other organizations. Arguably, organizations can spend fewer resources on strong internal control systems if their interorganizational partners are embedded in an institutional environment with similar dominant logics and they are strongly interdependent (i.e., they rely strongly on each for future development). At the same time, organizations that are embedded in an environment where the decision makers of the firm are guided by dominant logics that differ or potentially conflict will need to focus on finding appropriate measures that can capture the potential risks stemming from the relationship. The following figure captures this interrelation between firms' and organizations' interdependence with each other and their embeddedness in different institutional logics that came to light in the cases studied in this thesis:

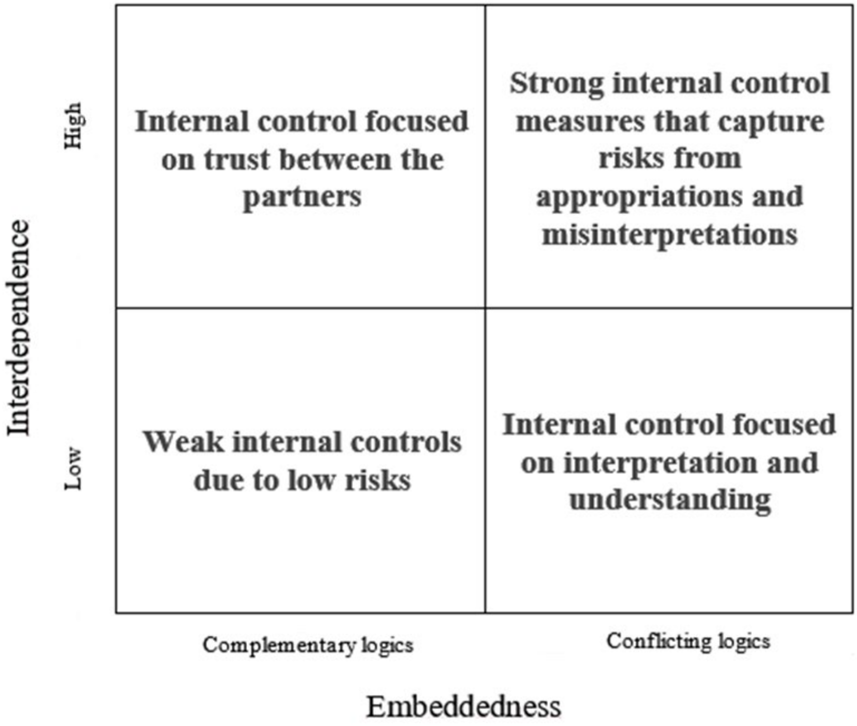

Figure 3: Internal control in interorganizational relationships

The findings from this thesis have shown that internal control is largely context dependent and is therefore difficult to capture in framework approaches that look at only part of the reality. Figure 3 illustrates that it is important for organizations in interorganizational relationships to have internal controls in place that ensure that they are capable of identifying the underlying institutional logics that guide cooperating partners. Particularly organizations that are strongly interdependent with others need to be aware of potential risks that might arise from relationships with partners in areas such as appropriation. In cases where firms are embedded in institutional environments with similar dominant institutional logics, appropriation concerns can be balanced through strong communication and trust. However, if the underlying institutional logics that guide the actors of different organizations are different and in competition with each other, stronger controls will need to be in place to ensure that potential misinterpretations are avoided and risks and errors that might arise from conflicting interests are captured in the system. If those logics are not identified, unforeseen risks may arise because of different understandings or interpretations of situations.

5.5. Contribution of the thesis

Despite previous calls for more research on internal control at the interorganizational level (Kinney, 2000), the practice of internal control has almost exclusively been studied with a focus on a single firm. The current thesis addresses this significant gap in the literature by showing that the interorganizational level is an important focal point that deserves increased attention. The thesis shows that the interorganizational level increases complexity. Organizational complexity means that an organization in different environments will be influenced by different institutional logics, making internal control according to a common scheme or framework (e.g., COSO) more difficult and sometimes impossible. This is true for private organizations, such as accounting firms that might struggle with the competing logics of their organizational field and their immediate business environments. It is also true for public organizations such as hospitals, which may face regulations from the state that are in conflict with the internal control mechanisms they perceive as beneficial for their operations. The thesis shows that the different partners of interorganizational relationships might be influenced by conflicting or mutually exclusive institutional logics. This in turn suggests the need for firms to have well-established and efficient internal control systems in place that enable them to mitigate risks stemming from misunderstandings and misinterpretations among the different involved actors.

5.6 Implication for practitioners

The findings of the thesis have important implications for practitioners as they indicate that internal control is not a one-size-fits-all solution for every organization. Rather, it is largely dependent on context, and the complexity increases on an interorganizational level, especially when different organizations are influenced by different, possibly even conflicting, institutional logics. Close interorganizational relationships with similar institutional logics guiding all of the involved organizations might have less need for strong internal controls. This research suggests the wisdom of practitioners thinking through their internal control procedures and evaluating whether they need to identify and mitigate potential risks stemming from possible misunderstandings and misinterpretations due to conflicting institutional logics.

There are different tools that can help to identify risks in either of the identified quadrants in figure 3. For example, it is advisable to implement risk matrices that can be completed on any level of the organization and can help to understand what the potential risks in the interorganizational relationship might be. No internal control system is failure proof, however, having an understanding of the potential risks that might appear in the future can help to mitigate those challenges. At the same time, in the cases when there is a need for strong internal controls that can capture the risks from both misappropriations and misinterpretations between the partners in the interorganizational relationship, a risk matrix will not be sufficient to identify the potential threats to the organizations. Here, it is important to be aware of the potential differences between the partners and try to anticipate how the other organization might interpret and correspond to changes in practice. In addition to that, good communication between the main decision makers is key to understanding the risk areas that need be addressed most urgently. In addition to that, good communication internally in one organization can also help to increase the benefits from learning that can further mitigate risks and improve the relationship between the involved partners. As the cases of this thesis have shown, it is important to understand the situation and be aware of the potential misunderstandings in the relationship. The more the partners can trust each other, the less formal internal control they will need in the future.

5.7 Suggestions for future research

During the course of the study, several ideas and concepts have emerged that would have been worth investigating but were not feasible within the planned time frame of the thesis. For instance, the thesis has shown that institutional logics has an explanatory value for the practice of internal control. At the same time, the closely related perspectives of institutional work and institutional entrepreneurship should be similarly useful in explaining actors' daily work procedures. Internal control is often denoted as routine work that follows a given structure. However, the findings of this thesis have shown that internal control is not the same in every context. For that reason, it makes sense to give actors dealing with internal controls the opportunity to break out of their "cage" and shift their daily routines away from the expectations of various frameworks and toward practices that improve the operations of their organizations. Future research could help us to understand this process better, for example, by delving more into the issue of reflexivity and its role in enabling actors to actively change their institutional environments. Another interesting avenue for studying this issue might be to follow an interorganizational relationship in depth through a longitudinal study to observe the work processes that go into different internal control procedures and propose ways of adapting the procedures to better fit the current environment.

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Article 1: Internal control through the lens of institutional work: a systematic literature review

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ORIGINAL PAPER

Internal control through the lens of institutional work: a systematic literature review

Oliver Henk[1]

Abstract
Despite the growing interest in research on the topic of internal control, there is confusion about the concept in both theory and practice. This study addresses this lack of clarity by systematically structuring the literature that uses the concept by investigating what we know from previous studies about the practice of internal control and how it is institutionalized. To examine the existing literature in this field, the paper utilizes the theoretical lens of 'institutional work'. The review finds that the understanding of internal control is currently divided: one part of the literature understands the concept as internal control over financial reporting, while the other part has a more global and strategic understanding of the term. Internal control is institutionalized by different organizational actors at the micro level in an attempt to implement internal control systems that are not a simple act of compliance but present an added value for the organization. At the same time, it is noteworthy that not all categories of institutional work could be identified in the internal control literature, indicating that the actors are largely limited by their institutional embeddedness. The paper also presents an aggregated understanding of the term *internal control*, which can therefore significantly supplement the efforts of practitioners and regulators to implement internal control procedures that add value for the corporate governance of organizations.

Keywords Internal control · Corporate governance · Institutional work · Systematic literature review

JEL Classification M4 · M42 · M48

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1. Introduction

Research on internal control is increasing and has focused on many different aspects of the subject, such as the design and implementation of internal controls (e.g. Dikan et al. 2014; Bogdan 2014), the determinants (e.g. Jokipii 2010), as well as the effect that internal controls (or the lack of) have on organizations (e.g. Lee et al. 2016; K. E. Brown and Lim 2012). However, continuing scandals and failures in many companies around the globe (e.g., Enron, WorldCom, Volkswagen) show that the issue of risk and how to mitigate it through internal control efforts is far from resolved. The purpose of this study is to provide a systematic literature review that investigates the different streams and meanings of internal control in the research. This review goes beyond other systematic reviews in the field by employing a theoretical framework that enables a content analysis of what internal control means in practice.

The practices of internal control and management control are closely connected. While management control aims at steering organizations through the organizational environment toward the achievement of both short-term and long-term goals (Otley and Soin 2014), internal control contributes to this process by providing reasonable assurance regarding the effectiveness and efficiency of operations, reliable financial reporting, and compliance with laws, regulations and policies (COSO 2013). Yet, while Otley and Soin (2014) identify both corporate governance and risk management as emerging trends within the field of management control, Speklé and Kruis (2014) find that this is not quite as simple with internal control. One of the problems for researchers and practitioners relates to the fact that the understanding of the term *internal control* that is institutionalized through legal requirements such as the Sarbanes-Oxley Act (SOX) of 2002 in the USA and the 2015 Audit Directive in the EU is substantially different from other official guidelines and frameworks that define internal control in a more holistic way (e.g., COSO, or the Three Lines of Defense Model).

This inconsistency between the provided frameworks and legal requirements for organizations inherently leads to various interpretations of the term in both the academic and the professional literature (Holm and Laursen 2007). Such inconsistency also leads to a potential problem for the user of the internal control reports, such as when trying to link the terminology that is used in auditors' reports back to that which is used in the professional literature or published guidelines and standards (Boritz et al. 2013). The management control literature tends to understand the term as a 'narrower scope definition of management control' or the process of 'strategy implementation' (Merchant and Otley 2007) and thereby sees internal control as a basis of information that feeds into both the strategic control (external focus) and the management control (internal focus) systems of an organization (Pfister 2009). Other authors, however, believe that internal control is a much more holistic concept. Power (2007), for instance, states that internal control is nowadays much more an extension of risk management than an instrument of control and reaches ‘into every corner of organizational life’ (p. 63). Spira and Page (2003) similarly argue that internal control can be viewed as a ‘risk treatment’ that is increasingly institutionalized as a form of enterprise risk management. Finally, there is the literature on financial reporting (see e.g. Schneider et al. 2009), which is heavily influenced by the requirements of the SOX and therefore perceives internal control merely as a tool to assure that financial reports are of high quality, with a focus on potential material weaknesses in those reports.

Previous literature reviews on the topic of internal control have focused exclusively on the literature that relates internal control to financial reporting (Schneider et al. 2009) or internal control audits (Kinney et al. 2013) under SOX in the United States. In an attempt to provide a more comprehensive and timely understanding of the term ‘internal control,’ Chalmers et al. (2019) extend these reviews by including literature that was published in settings outside the United States. While their study provides a deeper understanding of the determinants and consequences of internal control for financial reporting on an international level, it remains limited by its focus on internal control reporting. The fact that internal control is often understood in broader terms (see e.g. Kinney 2000) justifies a literature review approach that includes research on internal control with a wider focus on the efficiency of operations. Moreover, while we know much about the potential determinants and outcomes of having an efficient internal control system, there is a lack of research on the actual practice of internal control and how managers and employees work with the system so that it actually becomes an added value for companies. Analyzing the existing literature with a deeper focus on the actual work of internal control is therefore beneficial, as it allows one to analyze how people work with internal control in practice while at the same time offering a global understanding of the term *internal control*. For this purpose, I argue that the theoretical lens of *institutional work*, as suggested by T. Lawrence and Suddaby (2006), will add a new perspective to the study of internal control. The theory suggests that individuals are able to create, maintain, and disrupt institutions by interacting with pressure from the institutional environment, making it possible to learn about the practice of internal control and how it is institutionalized.

The review identifies 135 studies that were published between 2000 and 2019 and focus on various aspects of the term *internal control*, including the relationship between internal control and enterprise risk management (ERM), its influence on audit quality, its effect on the quality of external reporting, its influence on financial innovation and on other settings, such as interorganizational relationships. While the introduction of the Sarbanes-Oxley Act has created great interest in the topic for researchers in the United States, this review identifies a wide range of studies with more international heterogeneity, especially in more recent years.

Beyond that, the review shows that the understanding of internal control is currently divided between the narrow understanding of internal control as internal control specifically over financial reporting and the more global understanding of internal control on a strategic level, which is presumably the outcome of larger institutional developments. At the same time, internal control is a practice that is executed by individual actors, who need to make sure that the controls present not only an act of compliance but an added value to their organization. Hence, the analysis of internal control through the lens of institutional work presents evidence for the different ways actors in organizations work with internal control at the micro level. This review is thus relevant for researchers, managers, policymakers, and other stakeholders who are interested in the practice of internal control.

The remainder of this paper is structured as follows. In the first section, I provide the reader with a more detailed introduction to the theoretical lens of institutional work. In the second, I describe the methodology of the systematic literature review that I use to categorize the literature. Third, I present and discuss the findings. Finally, I draw conclusions and offer possible directions for future research.

2. Theoretical Considerations

'Somewhat lost in the development of an institutional perspective has been the lived experience of organizational actors, especially the connection between this lived experience and the institutions that structure and are structured by it' (T. Lawrence et al. 2011, p.52)

Schäffer et al. (2015) show that control systems can be perceived as 'socially constructed patterns' (p. 396). This has the implication that in situations of 'institutional complexity,' that is, situations in which actors have to deal with several institutional pressures at the same time, different organizations might respond in different ways in an attempt to not only comply with regulations but also to achieve their legitimate goals. T. Lawrence and Suddaby (2006) argue that this 'institutionalization' of activities and processes, such as internal control, is especially visible at the micro level of organization, where individuals apply the practices in their everyday work.

The theoretical perspective of institutional work invites researchers to shift their focus away from the developments that happen on the macro level of organizational fields toward the relationships between institutions and individual actors (T. Lawrence et al. 2011). More specifically, the original approach (T. Lawrence and Suddaby 2006) emphasized that the focus for the study of institutional work is, in contrast to other institutional studies, on the ways institutions are affected by action and actors (T. Lawrence et al. 2009). Essential for this relationship is the notion that individual actors possess agency. The idea is that these actors can critically reflect on their actions and are thus able to influence (i.e., create, maintain, and disrupt) their institutional environment through their individual actions (T. Lawrence and Suddaby 2006).

Being focused 'on activity, rather than accomplishment' (T. Lawrence et al. 2009, p.11), the concept of institutional work suggests that the actors need to be reflexive about how they are embedded in the institutions and that they must possess a degree of intentionality in their actions to be able to change existing institutions. Discussing the underlying issue of agency, Emirbayer and Mische (1998) show that intentionality is the combination of three cognitive processes that are based on a temporal perspective. The first process relates to the past of the actors and describes how they are able 'to recall, to select, and to appropriately apply the more or less tacit and taken-for-granted schemas of action that they have developed through past interactions' (p. 975). The second process relates to the present and requires the actors to reflect critically on habits that they take for granted. Finally, the third process relates to the future-oriented intentionality, suggesting that the actors need to be able to use their experience to create solutions for complex situations in the future.

Based on such an understanding of intentionality and agency, T. Lawrence et al. (2009) suggest that there are two possible approaches to studying the role of the actors in institutional work. The first approach limits its scope to 'institutional work that is motivated significantly by its potentially institutional effects' (p. 13). In this approach, the boundaries of institutional work are narrower as it assumes that any action an actor performs unintentionally is not to be perceived as institutional work, even if it has a significant influence on institutions. In contrast, the second possible approach assumes a broader definition for institutional work, taking into account all actions that actors perform to influence institutions, whether they are intentional or not. T. Lawrence et al. (2009) suggest that the latter approach is too conservative, but Smets and Jarzabkowski (2013) disagree and find that actors are often engaged in institutional work without actual intentionality. The authors argue that actors can often influence institutions by performing their practical work without having critically reflected on what the ultimate consequences of their actions are. Instead, they suggest that the study of institutional work should incorporate the primary objectives of the performed work.

T. Lawrence et al. (2011) suggest that the key issue for studies on institutional work is to focus on the work that happens in the course of institutional change, as this can give new insights 'into the recursive relationship between forms of institutional work and patterns of institutional change and stability' (p. 55). To achieve this focus, T. Lawrence and Suddaby (2006) suggest the following taxonomy of different types of institutional work for each of the three categories of activity of creating, maintaining, and disrupting institutions.

Creating Institutions	
Forms of institutional work	Definition
Advocacy	The mobilization of political and regulatory support through direct and deliberate techniques of social suasion
Defining	The construction of rule systems that confer status or identity, define boundaries of membership or create status hierarchies within a field
Vesting	The creation of rule structures that confer property rights
Constructing identities	Defining the relationship between an actor and the field in which that actor operates
Changing normative associations	Re-making the connections between sets of practices and the moral and cultural foundations for those practices

Constructing normative networks	Constructing of interorganizational connections through which practices become normatively sanctioned and which form the relevant peer group with respect to compliance, monitoring and evaluation
Mimicry	Associating new practices with existing sets of taken-for-granted practices, technologies and rules in order to ease adoption
Theorizing	The development and specification of abstract categories and the elaboration of chains of cause and effect
Maintaining Institutions	
Forms of institutional work	Definition
Enabling work	The creation of rules that facilitate, supplement and support institutions, such as the creation of authorizing agents or diverting resources
Policing	Ensuring compliance through enforcement, auditing and monitoring
Deterring	Establishing coercive barriers to institutional change
Valourizing and demonizing	Providing for public consumption positive and negative examples that illustrate the normative foundations of an institution
Mythologizing	Preserving the normative underpinnings of an institution by creating and sustaining myths regarding its history
Embedding and routinizing	Actively infusing the normative foundations of an institution into the participants' day to day routines and organizational practices
Disrupting Institutions	
Forms of institutional work	Definition
Disconnecting sanctions	Working through state apparatus to disconnect rewards and sanctions from some set of practices, technologies or rules
Disassociating moral foundations	Disassociating the practice, rule or technology from its moral foundation as appropriate within a specific cultural context
Undermining assumptions and beliefs	Decreasing the perceived risks of innovation and differentiation by undermining core assumptions and beliefs

Table 2 *Categories of institutional work (adopted from T. Lawrence and Suddaby 2006)*

In light of the main arguments about institutional work presented above, I suggest that this framework is appropriate as a lens to analyze the literature that focuses on the organization and adoption of internal control, as well as how it changes, in various organizational contexts.

3. Methodology

In order to review scientific contributions in the field of internal control, I apply the methodology of a systematic literature review (SLR). According to Littell et al. (2008), systematic literature reviews aim 'to comprehensively locate and synthesize research that bears on a particular question, using organized, transparent, and replicable procedures at each step in the process' (p. 1). Booth et al. (2012), however, highlight the fact that comprehensiveness in systematic literature reviews does not mean to identify 'all studies' (p. 24) on a specific topic, since this goal is not realistic. Instead, researchers should aim to find literature that fits most appropriately with the defined topic. To achieve such a fit, Fink (2010) suggests a four-stage process toward the SLR methodology that I use to structure the paper. Using this method, I first select research questions, databases, and search terms on the topic of internal control. I then use practical screening to identify the articles that should be included or excluded from the study. Next, I systematically analyze the content of the studies through the application of a review protocol. Finally, I synthesize the findings by applying institutional work as a theoretical framework.

3.1 Stage 1: Selecting research questions, databases and search terms

In order to inquire about the main research question of the study in more detail, I suggest several sub-research questions. Because the topic of internal control is highly interdisciplinary, with many different understandings of the actual concept, I suggest a first, rather broad, sub-research question to identify these variations:

'What are the different meanings of internal control and how can it be defined?'

In addition to that, I suggest several generic sub-research questions that relate to the theoretical framework of this study:

'How is internal control institutionalized?'

Who are the actors?

How are internal control processes created?

How are internal control processes maintained?

How are internal control processes disrupted?

'What do we learn from this for future research?'

To find appropriate literature on the concept of internal control, I searched the database Web of Science for the term 'internal control' in the title, abstract, or keywords of scientific articles in peer-reviewed journals. To ensure the quality of the findings, and in line with the methodological choices made by other researchers (e.g. Mauro et al. 2016), other types of literature, such as conference proceedings or books, have not been reviewed.

3.2 Stage 2: Applying practical screening

To identify state-of-the-art publications, I set the starting date to the year 2000, because there have been several regulatory changes for internal control afterwards, such as the introduction of the Sarbanes-Oxley Act in the United States and the Turnbull Report in the United Kingdom, which changed the role of internal control significantly. While the articles that are included in the study are selected from internationally recognized journals in a variety of disciplines, they should all focus on the topic of management control. Studies that were based on technical internal control in a medical, biological, or engineering environment were thus excluded from the study. To ensure the quality of the search results, I included only articles published in journals that are ranked level 3 or higher by the 2018 ABS Academic Journal Guide. The ABS Academic Journal Guide, however, is based in the UK and thus a certain bias toward Anglo-American research journals could be expected in its rankings. Therefore, in a second step, I also included articles published in journals that are ranked level B or higher according to the 2019 ABDC journal quality list, which is provided by the Australian business dean council. According to the official guidelines of the ABDC list, levels A and B correspond to well over 50% of the recognized journals and include both high-quality academic and more specialized, practice-oriented journals. Using these rankings, I identified 184 articles that discuss internal control in different settings. However, after a first round of screening based on the abstracts of the articles, I identified 50 articles that were not relevant for the current study, such as cases that discuss the internal locus of control for the psychology of individuals, but not internal control from a management accounting perspective. In total, this left 135 articles for analysis after the practical screening.

3.3 Stage 3: Applying methodological screening

In order to be able to analyze the content of the literature systematically, I developed a review protocol comparable to those used in previous systematic reviews (see e.g. Stechemesser and Guenther 2012). The protocol comprises three main sections. The first section holds information on the bibliographic data of the article, that is, the author(s), year, title, author(s) geographic origin, and the name of the journal that published the article. In addition, I recorded the methodology and theory (if any), as well as the country and industry (if relevant) the article analyzed. In the second section, I examined the definition of internal control and potentially any alternative terms used for the concept of internal control. If the author gave an explicit definition of internal control, I recorded this as an explicit definition. In cases when authors described internal control closely but did not directly define it, I recorded it as an implicit definition. In addition to that, I was looking for potential alternative terms that essentially describe the concept of internal control in different words. I also registered the focus and content of the studies I analyzed. Finally, I aimed to extract any information that the literature provided regarding how the actors work with and institutionalize internal control on a daily basis.

3.4 Stage 4: Synthesize the results

In line with previous systematic literature reviews (e.g. Stechemesser and Guenther 2012), I structure this final step of the literature review around the review protocol. I start by providing the reader with a brief overview of the bibliographic data and the background of the literature I analyze. I then present the findings of the content analysis and discuss them in the light of the institutional work perspective.

3.4.1 Bibliographic data and background of the studies

The literature review includes a total of 135 studies published between the years 2000 and 2019. Figure 1 shows several trends in the literature on internal control. Interestingly, while there are no published articles in the year 2002 when the Sarbanes-Oxley Act was introduced in the United States, the topic quickly gained momentum and reached a small peak with 14 studies appearing in the year 2009. In the wake of the global financial crisis of 2008–2009, the literature appears to have lost some interest in the topic with only 4 published studies in 2012 and 2015. However, since then the interest has grown, with 18 research studies being published in 2019. The trendline indicates that interest in the concept of internal control is clearly increasing, suggesting that research will continue to grow in the coming years.

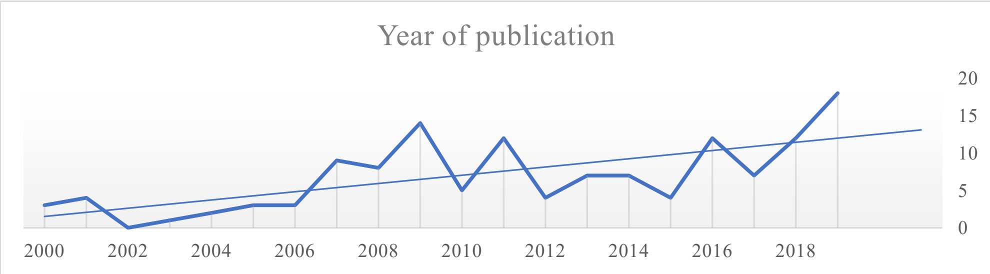

***Fig. 1** Distribution of published articles over time*

The distribution of the geographical origin of the first author of the publication (figure 2) shows that the sample of articles is clearly flawed, in that that most of the authors (55%) come from the United States. Twenty-five of the studies have authors with origins in a European country. However, it also needs to be mentioned here that nine of these twenty-five authors (36%) have their origin in the UK. Hence, it is indicated that the field of internal control is strongly influenced by Anglo-Saxon accounting research traditions in line with findings of Alexander and Archer (2000). This body of literature also includes studies with first authors from China (18), Canada (4), Australia (4), Belgium (3), Finland (2), Singapore (2), South Korea (2), The Netherlands (2), Tunisia (2), and many other countries, as summed up in figure 2.

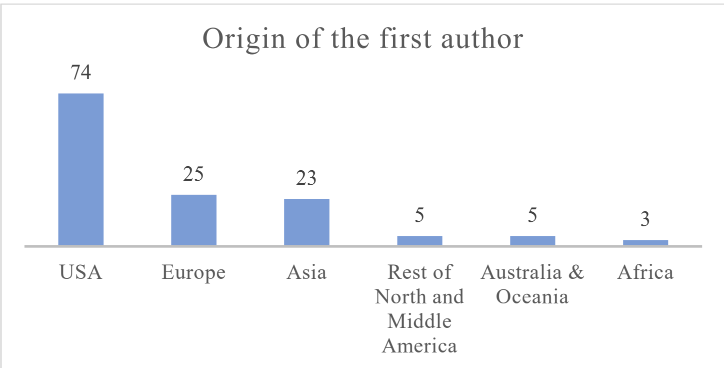

***Fig. 2** Geographical origin of the first author*

An analysis of the journals that publish the articles shows the interdisciplinary nature of the concept internal control. In total, the 135 articles were published in 51 different journals representing disciplines ranging from accounting and auditing to finance, business ethics, and information systems and technologies. The journals that published most of the analyzed articles are summarized in figure 3. The wide range of journals also suggests that there are no high-quality journals (i.e., ABS (2018) level 3 and above, or ABDC (2019) level B and above) that focus entirely on internal control issues.

Fig. 3 *Journals with 3 or more published articles in the review*

Breaking down the applied methodology of the studies shows that empirical research strongly influences the literature on internal control. A substantial majority of the sample (approximately 90%) of the studies I analyzed are of an empirical nature, and can be described as economic models, case studies, surveys, or experiments. Notably, however, only a few (mostly European) studies build their reasoning on qualitative data collected either through interviews or ethnographic work. Other studies that are included in the main sample are either of a conceptual nature or present practical solutions with respect to IT systems.

Theories are not widely used in the literature on internal control and it was not possible to identify a theoretical framework in most of the studies I analyzed. For the remaining studies, and in line with the findings of previous literature reviews (Niamh and Solomon 2008), the most popular lens of analysis is Agency Theory. Besides, the studies rely on e.g., Accounting Theory, Economic Theory, Contingency Theory, and Neo-institutional Theory for their analysis. Additionally, I recorded the setting of the studies I analyzed by both countries and industries that literature has focused on. The analysis (highlighted in figure 4) shows that most of the publications have focused on the United States (82), China (7), The Netherlands (3) and the UK (3). In addition, there are 8 studies with an international focus and 9 studies that do not focus on a specific geographic region. The studies analyze mostly private, listed companies without specific industrial focus, since, according to SOX, such firms are, in the United States, required to report on their internal control situation, which makes it relatively simple to access the data. Studies that do focus on specific industrial settings examine the public sector (both federal and municipal), financial services, tourism, shipping, telecommunications, manufacturing, as well as religious and non-profit organizations.

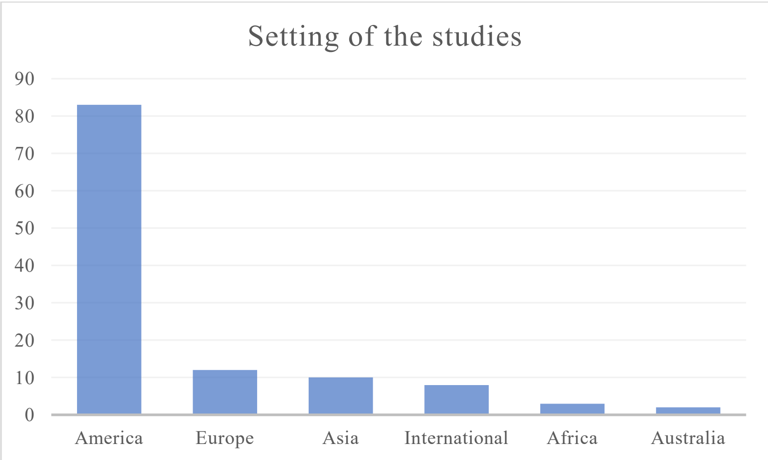

Fig. 4 *Setting of the studies*

4. Findings

4.1 The meaning of internal control

Maijoor (2000) argues that while the research on internal controls has covered various aspects of accounting concepts on different organizational levels, it lacks structure. My review shows that this lack of structure and the limited possibility for 'cross-fertilization' between the different research streams is still problematic in the field. I was able to identify several different streams that analyze the concept of internal control (see Table 2 for an overview). First, there is research that discusses internal control in the light of enterprise-risk management (ERM), how it relates to it and where the differences are. Second, an abundant line of research discusses internal control with respect to auditing and what effect the introduction of the Sarbanes-Oxley Act (2002) has on both audit quality and the quality of external reporting for the firm. Third, other contemporary lines of research discuss internal control issues from the perspectives of interorganizational relationships and financial innovation.

Research Stream	Topic
Internal control and its relation to ERM	<u>*Organizational culture for internal control*</u> (J. Wang and Hooper 2017; Lisic et al. 2016; Reginato et al. 2016; Pasiouras and Gaganis 2013; Adams et al. 2013; Roberts and Candreva 2006) <u>*Internal control as element of ERM*</u> (Mikes 2009; Spira and Page 2003) <u>*Contingent environment*</u> (F. J. Wang et al. 2018; Agyemang and Broadbent 2015; N. C. Brown et al. 2014; Woods 2009; Roberts and Candreva 2006; Bowrin 2004; DeHart-Davis and Bozeman 2001) <u>*Corporate Governance*</u> (Monem 2011; Jones 2008; Fernandez and Arrondo 2005; Deakin and Konzelmann 2004; Oliverio 2001) <u>*ERP systems*</u> (Pernsteiner et al. 2018; Dutta et al. 2017; S. I. Chang et al. 2014; Boritz et al. 2013; Kerr and Murthy 2013; Masli et al. 2010; Heise et al. 2014; Benaroch et al. 2012) <u>*Risk reporting*</u> (A. Lawrence et al. 2018; Deumes and Knechel 2008; Abraham and Cox 2007; Solomon et al. 2000) <u>*Peer pressure and occupational community*</u> (Gao and Zhang 2019; Yu et al. 2019; Campbell et al. 2016) <u>*Regulatory frameworks*</u>

	(Balakrishnan et al. 2019; Lentner et al. 2019; Dickins and Fay 2017) *Operational efficiency* (Y. T. Chang et al. 2019; Q. Cheng et al. 2018; Chong et al. 2018; Länsiluoto et al. 2016; Feng et al. 2015; Lin et al. 2015)
Interaction between internal control and auditing	*Effect of PCAOB inspections* (Defond and Lennox 2017; López and Peters 2010) *Role of internal control for the audit committee* (Lisic et al. 2019; S. J. Cheng et al. 2019; Bruynseels and Cardinaels 2014; Sarens et al. 2009; Zhang et al. 2007) *Factors that influence risk-fraud assessments* (Gramling and Schneider 2018; Munsif et al. 2013; Trotman and Wright 2012; Argyrou and Andreev 2011; Kanagaretnam et al. 2010; Huang et al. 2009; Naiker and Sharma 2009; Wolfe et al. 2009; Krishnan 2005) *Balance between internal control and audit effort and pricing* (Bhaskar et al. 2019; Lee 2018; Ji et al. 2018; Knechel et al. 2009; Hunton et al. 2008; R. Hoitash et al. 2008; Pae and Yoo 2001) *Importance of auditing for internal control* (Oussii and Taktak 2018; Schroeder and Shepardson 2016; Haislip et al. 2016; Holm and Laursen 2007; K. L. Jensen and Payne 2003)
Disclosure of internal control weaknesses and its effect on the quality of external reporting	*Relationship between firm characteristics and internal control deficiencies* (Baker et al. 2018; Chernobai et al. 2011; Goh and Li 2011; Petrovits et al. 2011; Ashbaugh-Skaife et al. 2009; Feng et al. 2009; Ashbaugh-Skaife et al. 2008; Leone 2007; Bronson et al. 2006) *Influence of SOX 404 and 302* (C. H. Chen et al. 2019; Clinton et al. 2014; Gupta et al. 2013; Bedard and Graham 2011; J. B. Kim et al. 2011; X. Wang 2010; U. Hoitash et al. 2009; Y. Kim and Park 2009; Shapiro and Matson 2008; Beneish et al. 2008; Patterson and Smith 2007; Ogneva et al. 2007) *Effects on different stakeholders* (W. Li et al. 2019; Lai 2019; Darrough et al. 2018; Lenard et al. 2016; Su et al. 2014; Costello and Wittenberg-Moerman 2011; Lopez et al. 2009; Schneider and Church 2008) *Importance of qualified employees* (Y. Chen et al. 2016; U. Hoitash 2011; Maas and Matějka 2009) *Effects on financial reporting* (Ashfaq and Rui 2019; Wilford 2016; Holder et al. 2016; Marinovic 2013; Dhaliwal et al. 2011; Doyle et al. 2007a, 2007b) *Importance of regulation and competition* (Khlif et al. 2019; Garg 2018; S. M. Kim and Kim 2017; Bauer 2016; Marshall and Cali 2015; Abrahamsen and Aven 2012; van de Poel and Vanstraelen 2011; Altamuro and Beatty 2010; Rothenberg 2009)

Internal control in interorganizational relationships and different regulatory environments	*Influence of power* (Kraus and Strömsten 2016) *Importance of national regulation* (Soltani 2014; Crilly 2011) *Local implementation* (Bure and Tengeh 2019; Grace and Davis 2019; Elder and Yebba 2017; Armour 2000)
Financial and corporate innovation	*Interaction & learning between private and public actors* (Faerman et al. 2001) *Control of speculation/ hedging* (Géczy et al. 2007) *Discipling* (Marciukaityte et al. 2006; Scholten 2005) *Mitigation of stock price crash risk* (J. B. Kim et al. 2019; J. Chen et al. 2017) *Corporate innovation* (P. Li et al. 2019)

Table 2 *Overview over the identified research streams in the field of internal control*

Besides the fact that internal control is divided into different research streams in the literature, it is also certain that there is no agreement on a single definition of the concept. This appears to be mainly due to the fact that internal control has been strongly influenced by institutional pressures related to such developments as the introduction of the Sarbanes-Oxley Act and the implementation of the EU Audit Directive, as well as continuously updated versions of the COSO framework, the modernized shareholder rights directive and regulations on sustainable finance. Hence, the literature on the concept, and perhaps that of internal control as such, has developed in different directions in different geographical regions. Studies in the research streams of auditing and external reporting, for instance, are largely influenced by researchers from the United States. Here, the common agreement concerning the definition of internal control appears to be *internal control over financial reporting (ICFR)*, meaning 'the policies, processes, and procedures intended to ensure financial statements are reliable' (e.g. Ashbaugh-Skaife et al. 2013, p.91). The Sarbanes-Oxley Act required managers of companies in the United States are required to attach a report on their personal perception of the current internal control situation of the company and whether there are any weaknesses that stakeholders should be aware of. This has meant that internal control is mostly seen as a way to ensure that the financial statements that are reported by management are correct. Interestingly, there is a great variety in the use of actual terms related to internal control in the literature that has its setting in the US. Some studies do strictly adhere to the term *internal control over financial reporting* or *ICFR* (e.g. Kanagaretnam et al. 2010). Others perceive internal control as a way to have control over the reporting of financial statements, but are more liberal in their choice of terms, which may include *internal control*, *internal control mechanism*, or *internal control system* (e.g. Marinovic 2013; Doyle et al. 2007a; Scholten 2005).

However, while an agreement on the meaning of internal control as ICFR appears to be true for private and publicly listed companies that need to report according to SOX 404, there are indications that this might not be true for organizations in the US that do not report. For instance, writing about the issue of how internal controls might be controlled in a public sector environment, Roberts and Candreva (2006) use the much broader definition of the US Government Accountability Office (GAO) (1999). Here, internal control is defined as 'an integral component of an organization's management that provides reasonable assurance that the following objectives are being achieved: effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations.' Internal control in the public sector is thus not only concerned with the simple control over financial statements, but has a much more strategic aspect as it is also concerned with both the operations of the organization and compliance with current laws and regulations. Similarly, Petrovits et al. (2011) use an updated version of this definition, that exchanges 'an integral component' with 'a process,' for the analysis of internal control in nonprofit organizations. Again, in this type of organization, internal control is concerned with compliance with rules and regulations, efficiency in operations, and the reliability of financial statements.

While the literature in the United States is strongly affected by the Sarbanes-Oxley Act (2002), this is definitely not the case for the literature from authors outside of the US, where the Act does not apply. Here, internal control is rarely perceived as being solely responsible for the correct reporting of financial statements. On the contrary, the literature from the rest of the world appears to assume a much broader perspective toward the concept. While the objectives of internal control that are outlined by international frameworks, such as the COSO framework, are the same as defined by GAO, it appears that they are still broader in scope. This is due to the fact that internal control, according to COSO, concerns the whole control environment, and that a major aspect of the concept internal control is the assessment of risks. Internal control is thus closely connected to risk management. This is clearly observable from the way authors from countries outside of the US perceive internal control in their studies.

Writing about the history of internal control, accountability, and corporate governance in the UK, Jones (2008) shows that internal control is among the most important features for ensuring accountability in organizations, as well as for monitoring and controlling an organization's operations. The author further points out that the specifics of an internal control system include both financial and non-financial controls, highlighting the holistic nature of internal control, which is closely connected to the ideas of enterprise risk management (ERM) (see also e.g. Mikes 2009). Correspondingly, from the perspective of internal auditing, Sarens et al. (2009) refer to internal control as *internal control and risk management systems*, indicating that the ideas of internal control and enterprise risk management (ERM) are essentially the same in practice. Similar terms have been used by Chernobai et al. (2011), who frequently refer to the concept as *risk management controls* or *internal risk management systems*.

However, while most authors from geographical regions outside of the US perceive internal control as a holistic concept that concerns the efficiency of whole organizations, exceptions to this do exist. Argyrou and Andreev (2011) argue that IT systems that companies implement to support their internal control mechanisms should be built in such a way that they ensure 'the completeness, accuracy, and timeliness of a company's financial reporting,' thus stressing ICFR as the most important feature of internal control.

Interestingly, while research on internal control in the United States appears to be strongly influenced by the introduction of SOX in 2002, a similar development is now apparent outside the US, as well. Recent institutional developments, such as the integration of the EU audit directive in the national laws of its respective member states, as well as the modernized directives on shareholder rights and regulations on sustainable finance, seem to have shifted the focus of researchers outside the US toward a sense of internal control more closely related to ICFR. The following figure depicts this change of understanding over time.

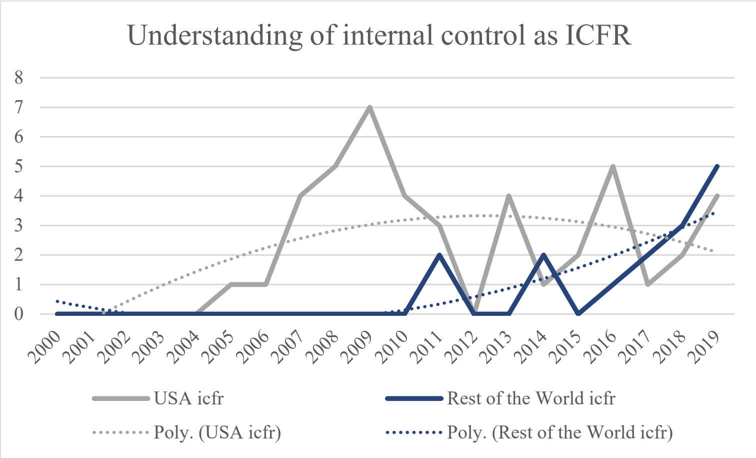

Fig. 5 *Understanding of internal control as ICFR*

For instance, analyzing the effect that regulatory changes for internal control certification have on earnings management, Garg (2018) utilizes a unique data set from Australia. At the same time, however, the study builds on prior US studies that have their focus on financial reporting rather than a holistic understanding of internal control.

4.2 Institutionalization of internal control at the micro level

Based on these findings, it is clear that the previous literature perceives internal control from mainly two perspectives: it is used either to ensure reliable financial reporting or as a holistic mechanism that ensures the efficient operation of the whole organization. On the other hand, Woods (2009) argues that practice requires responsible actors to work with an application of the chosen control systems on a day-to-day basis. She thus states that it must be assumed that in this day-to-day application there are deviances between what the control system does in theory and how it is used in real life. In the following section, therefore, I look more closely at what we can learn from the previous literature about the practice of internal control and how individuals work with it.

4.3 Who are the actors?

4.3.1 Board of Directors

In a classic paper on the failure of internal controls, M. C. Jensen (1993) states that the ‘problems with corporate control systems start with the board of directors,’ as it ‘has final responsibility for the functioning of the firm’ (p. 862). Indeed, researchers have found evidence for the importance of boards for internal control systems. Marciukaityte et al. (2006), for instance, show that if a control system has failed, restructurings in the composition of the board, e.g., through the addition of external directors, can have a positive effect on the organization's reputation. Fresh directors give the image of a different and perhaps better corporate governance. Also Scholten (2005) finds that boards hold an important position for the institutionalization of internal control, because they can act as 'disciplinary agents' who can adapt the salaries and bonuses of managers, and dismiss those who do not comply with corporate policies.

In addition to that, both Monem (2011) and Y. Chen et al. (2016) find that diversity on the board has an immediate influence on the performance of the internal control system. Discussing the importance of the board during the collapse of the Australian mobile operator One.Tel., Monem (2011) states that a major problem was a lack of diversity of opinion on the board. Instead of asking questions that might have uncovered underlying issues in the company, the board followed the management of the CEO and the organization subsequently collapsed. Y. Chen et al. (2016) has suggested a potential solution to this problem. The author states that companies with at least one female member on the board have significantly fewer material weaknesses and more efficient operations. While the study does not identify an optimal number of female board members or determine whether male members have a positive influence at all, it suggests that females are more likely to ask the uncomfortable questions, as they tend to be fiscally more conservative and less tolerant of opportunistic behavior than their male counterparts.

At the same time, studies by Fernandez and Arrondo (2005) and Deakin and Konzelmann (2004) suggest that while the board constitutes a major actor that will be often blamed for failures, the board is not alone in the internal control system. In fact, Fernandez and Arrondo (2005) show that other internal controls can substitute for the board and that the existence of many alternatives mitigates the potential issues of one faulty type of control in the organization. Deakin and Konzelmann (2004) similarly argue that responsibility for Enron's collapse was pinned on its board based on false merits. The authors suggest that, being non-executives, the board members were never correctly informed about the operations at the company and they lacked both knowledge and experience to be meaningfully held responsible for Enron's fall.

However, while this indicates the importance of the *board of directors* as actor for the institutionalization of internal controls, the literature analyzed here indicates that several additional actors also significantly affect the internal control systems in the firm: namely, (*top) management*, *internal auditors*, and the *audit committee,* as well as *external actors*.

4.3.2 Top Management

Analyzing the literature, it becomes evident that internal control is perceived to be largely influenced by the actions of a firm's top management, including the CEO and the CFO of the firm. Writing about how internal controls should be controlled in a public setting, Roberts and Candreva (2006) point out that the management of an organization is 'not only responsible for implementing internal controls to provide reasonable assurance that the agency is meeting its intended objectives, it is also responsible for self-assessing, correcting, and reporting on the efficacy of those controls' (p. 463). Several authors highlight the importance of the whole top management team (e.g. Pernsteiner et al. 2018; Petrovits et al. 2011; Chernobai et al. 2011; Huang et al. 2009; Mikes 2009; Ashbaugh-Skaife et al. 2008; Patterson and Smith 2007; Roberts and Candreva 2006), since it possesses the necessary executive power to implement or deny changes in control systems. Moreover, top management is said to have unique interests in a firm's well-being, especially if a significant amount of wealth is bound up in stock holdings (Chernobai et al. 2011). While this might have positive effects on the internal control system of a firm, Campbell et al. (2016) are concerned about the fact that 'executives still make decisions whether or not to comply with reporting standards, best practices, industry norms and legislation' (p. 271).

Other authors highlight the importance of single top managers. X. Wang (2010), for instance, points out that chief financial officers are likely to have superior knowledge of a firm's internal control systems. The author posits that this poses a danger to the firm, because CFOs of organizations with weak internal control systems supposedly receive lower salaries and experience higher turnover rates than CFOs in firms with strong internal controls. CFOs are thus likely to withhold private information on internal control deficits.

More recent strands of literature discuss the CFO's role in internal control in light of their occupational community. Campbell et al. (2016) argue that the occupational community has a positive influence on the internal control system as it relaxes the hierarchical relationship between the CEO and the CFO. They argue that CFOs may often be pressured by their hierarchical superiors and therefore tend to do things that they might perceive to be unethical. When they have a community surrounding them that faces similar issues, however, they are less likely to feel pressured. This would in turn be positive for the performance of the company and particularly the reporting of its financials. Yu et al. (2019) also show that CFOs in the high-tech industry (which is characterized by a comparably high amount of material weaknesses), the occupational community can play a decisive role in the functioning of the internal control system. These authors suggest that the CFO is actually an under-researched concept and that people holding that position should be perceived as a loosely defined group whose only common characteristic is their title. The CFO is therefore more of a role than a profession, and not all CFOs are professionals in the area of accounting. The occupational community is thus highly important for them, as they might discuss issues outside of the firm's environment and are therefore more likely to do the right thing.

4.3.3 General Management

In addition to top management, several authors (J. Wang and Hooper 2017; Kraus and Strömsten 2016; Su et al. 2014; Argyrou and Andreev 2011; Maas and Matějka 2009) point out the importance of other types of management. Writing about the control mechanisms in interorganizational relationships, for example, Kraus and Strömsten (2016) mention the importance of operational managers and how internal controls should be 'systematically' related to them (p. 70), as they are the personnel that work with the controls on a daily basis. In addition to that, J. Wang and Hooper (2017) show that, in the context of Chinese hotels, medium-level managers are able to simply outmaneuver any internal controls that are put into place by the organizational headquarters. According to the authors, this is possible because of the unique Chinese cultural context, in which it is assumed that lower-level staff will keep silent about any misconduct on the part of management. Middle managers are thus free to conduct business any way they want, including to potentially change or implement new internal controls to ensure successful business without the guidance of corporate policy.

Pernsteiner et al. (2018) explore another interesting issue: the effect of ERP systems on the internal control system of organizations. They find that managers often have to implement workarounds because the initial ERP system does not allow for special requests. Due to the system's high costs, top management can decline improvements to the ERP system and general managers then have to find manual alternatives to solve the problem. These workarounds often lead to further workarounds and, in the end, the company is in fact using the customer as a final step of the internal control system. Such a situation can happen, for example, when a customer cancels an order. The process of billing goes through several steps in the ERP system in addition to several manual workarounds and if it is not correctly executed by the staff, the customer might be billed for a product they did not receive. If the customer notices that they have been wrongly invoiced, they then notify the company and the mistake will be fixed. The customer would thus become part of the internal control system.

4.3.4 Internal Auditors

Another important actor in the institutionalization of internal control in organizations is the internal auditor. In a recent study of the impact of the internal audit function on the quality of internal control, Oussii and Taktak (2018) find that improving the technical competence and efficiency of the work of internal auditors has an immediate positive influence on the internal control system and contributes to more reliable financial reporting. One of the reasons for this finding is provided by Pae and Yoo (2001), who show that there is a constant tradeoff between investments in the internal control mechanisms by the owners of a given firm and the effort that is spent by auditors. The authors suggest that owners need to invest less in internal control if auditors have high legal liability and spend more effort to find any issues themselves. On the other hand, if auditors expend less effort, then owners should invest more in their internal control systems, in order to prevent irregularities. Similarly, Hunton et al. (2008) argue that a firm’s control system profits significantly from increased monitoring efforts by the internal auditing function—though the increased costs of such continuous monitoring efforts could hinder the owners of the firm from stepping up those activities.

Woods (2009) also highlights the importance of the internal audit function for internal control. Analyzing the activities that the local government in Birmingham has applied to safeguard its operations against potential risks, she mentions that *risk management experts,* as part of the internal audit function, were responsible for the implementation and maintenance of all of the internal control activities that the council applied. In another case study concerning four different companies in Belgium, Sarens et al. (2009) acknowledge the role of internal auditors in the functioning of internal control systems, showing that they can offer advice to both the operational staff and the audit committee. They thereby act as ‘comfort providers to the audit committee,’ which is otherwise not closely involved in the daily operations of middle management.

4.3.5 The Audit Committee

The audit committee has control over the financial reporting process, selects internal auditors, and oversees the work of both internal and external audits at a company. It should therefore have an important role in the functioning of the internal control system. Yet the evidence for this importance is twofold. On the one hand, some researchers study the effectiveness of the audit committee in light of the growing concern that the main reason for the existence of such committees is symbolic compliance with regulations, rather than fundamental oversight of the financial operations. Lisic et al. (2019), Lisic et al. (2016), and Bruynseels and Cardinaels (2014), for example, suggest that the expertise of audit committees does not automatically make the quality of the reporting process more reliable, that is, it does not mean that there will be fewer cases with reported material weaknesses. In addition to that, Lisic et al. (2016) criticize the way boards and their subcommittees (such as the audit committee), are organized in the United States. They further argue that the United States is the only country in the world that allows a CEO to be simultaneously the chairman of the board. The authors suggest that this structure allows CEOs to adversely impact the work of the boards and audit committees and to make their efforts superficial.

While previous studies indicate a rather passive role for the audit committee, there is, on the other hand, evidence that the committee holds an important function for the successful functioning of internal control systems. Krishnan (2005) found that companies with independent audit committees and great financial expertise were significantly less likely to experience internal control problems than firms with lower-quality audit committees. Naiker and Sharma (2009) also analyze the significance of the composition of the audit committee, finding that it is important to have former audit partners on the committee, even if those partners are affiliated with the firm's external auditor. Because such former partners have significant knowledge of the operations of the firm, they are in a position to evaluate the reliability of its internal control and monitoring activities better than 'novice auditors' who have less knowledge of the firm.

4.3.6 External Actors

While the previous studies stress the importance of internal actors for the institutionalization of internal control, there is also evidence for the relevance of external actors and cooperation between different actors. Analyzing interorganizational cooperation for internal control regulation in a US governmental environment, Faerman et al. (2001) find that public actors profit significantly from cooperation with managers from the private sector. The authors argue that such cooperation between the different actors has the advantage of enabling public actors to focus on the interests of the public, while relying on the greater 'technical expertise' of private business managers. In addition to cooperation between public-sector and private-sector actors, the authors also mention cooperation between different instances of the public sector, such as senators and the SEC, as well as guidance from union leaders who understand the practice. From the perspective of the private market in the US, Rothenberg (2009) shows that external competitors and customers can also be additional important actors. The author contents that customers will discipline a company for having weak internal controls by switching to competitors with stronger internal controls. This is inherently only possible in the United States, where management is required to report weaknesses to the public. This indicates, however, that the efforts of the US government have a very positive indirect influence on the institutionalization of strong internal controls.

One might also assume that external auditors—given that they work closely with and oversee companies—would have a significant impact on those companies' internal control efforts. But Holm and Laursen (2007) show that internal auditors are increasingly taking over functions that used to be executed by external auditors and that the potential influence of the latter on an organization's strategy is now largely reduced. Yet while the corporate governance debate has strengthened the internal auditor in strategic terms, there is also evidence that external auditors have an indirect influence on internal control systems. K. L. Jensen and Payne (2003), for example, show that in the setting of municipalities there is often a tradeoff situation between investing in and training an organization's preexisting the personnel or simply hiring external auditors instead.

4.4 How is internal control created, maintained, or disrupted?

In their framework for institutional work, T. Lawrence and Suddaby (2006) suggest that actors possess a certain amount of reflexivity about and awareness of the institutions around them and are thus able to adapt them in a new and potentially better direction by either creating, maintaining, or disrupting the existing institutions. The literature on internal control describes these reflexive and purposive actions in several ways.

4.4.1 Creation of Internal Control Practices

Su et al. (2014) make the case that it is difficult for actors in the current business environment to create internal control. The authors agree that actors, such as firm management, can beneficially adopt ideas from available frameworks like COSO and the more technically oriented CoBIT. Adopting ideas from these frameworks would be what T. Lawrence and Suddaby (2006) describe as *mimicry*, since they are widely adopted and using ideas from the frameworks can facilitate the adoption of new practices. However, there is a concern that on the practical level these frameworks do not give sufficient guidance for the actual application and design of specific tools. The actors thus need to engage in other types of work to make the institutionalization of internal control systems successful.

Given that the actors already have sufficient background knowledge about the creation of internal controls, the literature points toward some important concepts that enable actors to create successful practices. Kraus and Strömsten (2016), for instance, highlight the importance of power. In their study of the interorganizational relationship between Ericsson and Vodafone, these authors show that managers on the Vodafone side were able to coerce the supplier, Ericsson, to adopt formal internal control practices. Being one of the largest Ericsson's largest customers, Vodafone was able to exercise a significant amount of power by threatening to switch suppliers if Ericsson did not comply with their standards. This enabled the company to transform Ericsson's informal control system, which focused mostly on engineering, into a formal, financially oriented control system. This kind of institutional work can be related to what T. Lawrence and Suddaby (2006) describe as *constructing normative networks*. It is clear in the study that the actors on the Vodafone side showed intentionality, especially with respect to the projective future-oriented perspective, since Vodafone's managers knew right from the start in which direction Ericsson's the internal control system needed to develop. Through normative sanctions and compliance, they reached their goal of constructing a network with complementary internal control systems.

Other research argues that responsible actors do not need detailed knowledge for the implementation of good internal controls. From the perspective of nonprofit organizations, Petrovits et al. (2011) show that managers can receive 'in-kind support' from companies that donate their services to nonprofit organizations. This allows technical difficulties and questions regarding the internal control systems of an organization to be easily resolved. This kind of institutional work corresponds to T. Lawrence and Suddaby (2006) concept of *advocacy*, which involves obtaining external support 'through direct and deliberate techniques of social suasion' (p. 221). Petrovits et al. (2011) show that the managers of nonprofit organizations can only receive support if they can reasonably outline the need for help in improving the internal control systems. It is thus clear that the actors in this case possess intentionality both with respect to the present—since they question their current position and see the need for change—as well as with respect to projective intentionality.

4.4.2 Maintenance of Internal Control Practices

One of the maintenance actions the literature describes internal control actors taking is disciplining managers. Marciukaityte et al. (2006) and Scholten (2005) both perceive internal control from the perspective of corporate governance. Marciukaityte et al. (2006) argue that actors are able to maintain the internal control mechanism of the firm by making regular changes in the composition of the board of directors. It is apparent that such changes have a positive effect on the reputation of the firm, since customers perceive fresh directors as a positive strengthening of internal control practices. Scholten (2005) similarly describes how corporate boards are able to strengthen the internal corporate governance mechanism of the firm by disciplining managers who are not complying with corporate policy. An actor can strengthen the corporate governance and internal control system of the firm by adjusting salary and bonus levels, as well as by firing any managers who pose a potential risk to the system. This kind of institutional work corresponds to what Lawrence and Suddaby (2006) identify as *policing*, that is, 'ensuring compliance through enforcement, auditing and monitoring' (p. 231).

Another important means of maintaining the internal control practices of an organization is the work of the internal audit function. In one of the cases outlined by Sarens et al. (2009), an internal auditor argues that top management is taking a more reactive than proactive approach to the internal control practices of the organization and therefore depends on the work of the internal auditor. The internal auditor meets various individuals whose work involves similar activities, but who all employ different procedures. The internal auditor needs to find a way for internal control to keep control over these. In addition to having different procedures, it also becomes apparent that several employees in that case have no real idea of internal control and risk management. Here, the internal auditor has the important function of informing the employees about the controls that are in place. Because the internal auditor acts as an *authorizing agent* in this case and has the role of ensuring the survival of the institution of internal control, I would argue that the kind of institutional work that the internal auditor performs can be seen as *enabling work*.

One way to improve the flow of information and control over various procedures is through the introduction of new IT software. Sarens et al. (2009) describe how the internal audit function was successfully able to be integrated into a formal system that was developed within the company. The system is updated on an annual basis and draws on information from several functions, including internal audit, the audit committee, and top management. In the case outlined in Woods (2009), the internal control practices were similarly maintained and gradually formalized through the introduction of a professional IT system that could process internal control and risk management issues more efficiently (see also Huang et al. (2009) for an example of a possible detecting mechanism that can aid internal control). Pernsteiner et al. (2018) likewise show that the introduction of an ERP system shifts the work of management accountants away from routine processes that can be completed by the system toward more strategic work. At the same time, their study also shows that if the ERP system is not thorough enough and top management decides to avoid pricey updates of the system, the management accountants will have to go back to their own manual ways of controlling the processes through spreadsheets. The lower-level management accountants thus need to exercise a great deal of reflection on the process that is imposed on them and find solutions to make the process work. Unfortunately, Pernsteiner et al. (2018) clearly show that the solution of having both an ERP system that is known to be faulty throughout the organization, and workaround solutions on the local level, led to a situation of chaos in the company. This highlights the importance of routinely updating the IT system in order to avoid internal control flaws. Correspondingly, Roberts and Candreva (2006) highlight the importance of constant 'self-assessing, correcting, and reporting on the efficacy of those controls' (p. 463), a process that the authors call 'controlling internal controls.' In order to achieve such 'control over internal controls,' the authors show that the responsible actors are constantly updating their policies and procedures. In addition to that, there is a need to train employees who are involved in the internal control process but do not possess sufficient previous knowledge on internal control (see also Woods 2009).

Both the implementation of professional IT software that improves the flow of information for internal control and risk management and the process of controlling the internal controls correspond to the institutional work of *embedding and routinizing*. Here, the actors introduce the 'normative foundations of an institution into the participants' day-to-day routines and organizational practices' (T. Lawrence and Suddaby 2006, p.233) in order to stabilize and facilitate the practice of internal control. These actors (here especially the internal auditors) show the necessary purposiveness, since the introduction of professional software as well as the process of continuous controls is not cheap for the organizations and there must be a good reason for them to engage in this kind of institutional work.

4.4.3 Disruption of Internal Control Practices

Managers are able to disrupt existing internal control practices, in certain circumstances, as J. Wang and Hooper (2017) establish clearly. These authors, mentioned above, demonstrate that the hotel where the first author was employed and that belonged to a larger chain with corporate policies, in practice deviated strongly from these policies. The managers thus saw it as appropriate in certain instances to allow practices that are not tolerated by the corporate code. The authors argue, however, that due to the specific culture of the Chinese hotel industry, managers on a higher level do not have to fear that staff will mention any breach of conduct to the corporate headquarters. This is because lower level staff can be easily replaced and is therefore encouraged to keep quiet. Since the managers in this context have the belief that their actions are appropriate, this kind of action relates to the institutional work of *disassociating moral foundations*. Interestingly, while T. Lawrence and Suddaby (2006) did not find many examples of this kind of work, they believed that it is performed by elites. J. Wang and Hooper (2017) show, however, that in the Chinese cultural context it is possible even for operational managers, who are not part of any elite.

Rather surprisingly, similar evidence is also found in the setting of the strongly regulated US market. Patterson and Smith (2007), as well as Campbell et al. (2016), Yu et al. (2019) and Lisic et al. (2016) highlight the issue that top managers could simply 'override the system of internal controls' (Patterson and Smith 2007, p.428), if they had the intention to commit fraud. These authors thus suggest that actors with fraudulent intentions have an inherent interest in designing weaknesses into their internal control systems. Sarbanes-Oxley punishes firms for having internal control weaknesses because such weaknesses have to be reported to the public. However, if the standards become unattainable it becomes more attractive for the firms to choose control systems that are of weaker quality. This issue is summed up in a nutshell by Soltani (2014), who analyzed the similarities between six high-profile corporate scandals in the US and Europe. The author states that 'the ethical dilemma has been coupled with ineffective boards, inefficient corporate governance and internal control, accounting irregularities, failure of external auditors, dominant CEOs, greed and a desire for power and the lack of a sound "ethical tone at the top" policy within the organization' (p. 270).

5. Conclusion

This literature review set out to systematically structure the literature on the topic of internal control through the application of institutional work as theoretical framework. One of the issues that was addressed is the problem of the term *internal control* having many different definitions, making the concept difficult to study. It was therefore my goal to find out how internal control might be defined in terms of how it is used in practice. My findings suggest that internal control currently has two different meanings based on the geographical division between the United States and the rest of the world. Strong institutional pressures in the US market (that is, the introduction of the Sarbanes Oxley Act in 2002) has led US scholars to commonly define internal control as *a mechanism to control the reliability of financial reporting, that is, internal control over financial reporting* (ICFR). In markets that have experienced less regulatory pressure, internal control has developed into a broader concept that has many commonalities with related concepts such as enterprise risk management, or corporate governance. This review has thus shown that internal control in settings outside of the United States is generally perceived as *a system that ensures compliance with rules and regulations and efficiency in operations, as well as assessing risk and determining the reliability of financial statements.* At the same time, recent institutional changes, such as the implementation of the EU Audit Directive into the national laws of the respective member states—as well as a modernized shareholder rights directive and regulations on sustainable finance—appear to have had an impact on international research on internal control. An analysis of the time dimension also showed that researchers from outside of the US have in recent years started to focus more intensively on ICFR in the context of internal control. This leaves open the question of whether there is indeed a need for a unified holistic definition of the concept with two substantially different conceptualizations of the term. However, the fact that the term *internal control* or *internal control system* is often used interchangeably with an assumed definition of it as ICFR raises the concern that there may be potential misinterpretations in research and practice. Hence, while ICFR is a part of a holistic internal control system, it should be more clearly differentiated and identified as such.

The previous discussion on the term *internal control* shows the importance of strong external institutions for the development of internal control in practice. At the same time, companies need to make sure that their internal control efforts are not purely an act of formal compliance, but that they become an asset that leads to more efficient and sustainable operations. Hence, internal control is also institutionalized within organizations through the daily work of practitioners. By analyzing the literature through the theoretical lens of institutional work, I have been able to define various actors that are in practice responsible for internal control and its institutionalization within organizations. The literature on institutional work suggests that these actors institutionalize work in three ways, by *creating*, *maintaining*, and *disrupting* institutions. In the case of internal control, the findings indicate that these actors *create* the practice of internal control through the institutional work of *mimicry*, *advocacy*, and *constructing normative networks*. Internal control practices are *maintained* through *policing*, and *enabling work*. *Disruption* of internal control is possible for managers in organizations with weak internal control systems, or unique cultural backgrounds, where the relevance of internal control is questionable, through the institutional work of *disassociating moral foundations*.

This review has shown that the actors working with internal control clearly possess the purposiveness to adapt internal control practices in their specific contexts. However, several of the types of institutional work that are suggested by T. Lawrence and Suddaby (2006) could not be identified in the review. Hence, it must be assumed that while the actors in the field of internal control are reflexive and purposive, their actions are largely limited by their institutional embeddedness. At the micro level, the actors can adjust internal control so that it represents an activity that creates value for the organizations. Yet major changes in the understanding and application of internal control are achieved through institutional pressures, such as changes in legislation, which the involved actors cannot significantly influence.

The study contributes to the research on internal control in several ways. The paper presents one of the first attempts to synthesize knowledge from multiple research streams in the field beyond the conceptualization of internal control as internal control over financial reporting (ICFR). In addition to that, the application of the theoretical perspective of institutional work allowed for more in-depth analysis of the articles and therefore better insights into the actual practice of internal control. As such it adds significant new insights to the practice of internal control, in comparison with previous literature reviews on the topic, which seek to structuring the field systematically (see e.g. Chalmers et al. 2019). From a practical point of view, the study presents an aggregated understanding of the term *internal control* and therefore has significant practical implications, as it can supplement the efforts of regulators and practitioners to create and implement internal control procedures and frameworks that add value in the corporate governance of organizations.

5.1 Suggestions for Future Research

The review has shown that there is a great mixture of definitions for the concept of internal control. Several studies (e.g. Schroeder and Shepardson 2016; Marinovic 2013; Ge and McVay 2005) use the term *internal control system* to describe ICFR. But ICFR is only one aspect of internal control; it does not represent the entire system of controls that go into the concept. Future research should be more careful in defining the scope of research, in order to avoid false conclusions about the conceptualization and practice of internal control. At the same time, the differing conceptualizations of internal control prompt several suggestions for future research. For example, it would be interesting to investigate in greater detail why the Sarbanes-Oxley Act, as well as more recent European legislation, has been so narrowly focused around internal control over financial reporting, instead of including more holistic ideas of internal control. In addition to that, several of the papers analyzed here, which have a focus on the US market, question the role of the audit committee for the effectiveness of internal control due to the possibility of having a CEO that can simultaneously be the chairman of the board. This research could be extended in a more international context to evaluate, for example, whether audit committees are perceived as similarly superficial in jurisdictions outside of the US. This would be relevant, for example, in light of the EU Audit Directive, which requires audit committees to monitor the effectiveness of internal control, especially with regard to internal control over financial reporting.

In addition to that, the review has identified several actors in organizations who directly impact the internal control system of organizations. But we lack research on external actors who are potentially able to institutionalize the development of internal control systems in organizations. Given the identified importance of internal auditors for the institutionalization of internal control in practice, it could, for example, be interesting to explore in more detail the extent to which professional organizations such as the Institute of Internal Auditors (IIA) influence the development of internal control practices for actors at the micro level.

During the course of this research, several additional themes emerged that could be relevant to explore in future research projects. For instance, there appear to be major differences between the way compliance to internal control is perceived in certain markets, such as in China (see e.g. J. Wang and Hooper 2017), implying that the topic of culture holds significant value in the conceptualization and institutionalization of internal control. In this regard, it would be particularly interesting to analyze the ways cultural differences prevent organizations from implementing efficient internal controls. This review has shown that evidence is scarce for how internal controls are disrupted and how organizations can recover from situations when internal control systems have failed. Given the current development of globalization, many organizations could, in practice, profit from an increased understanding of why the same internal controls that are efficient in some regions tend to fail in others.

5.2 Limitations of the Study

Like other systematic literature reviews, this study entails certain limitations. While the aim of the research methodology is to 'comprehensively identify' articles in the field of internal control, it needs to be acknowledged that the highly interdisciplinary nature of the field makes comprehensiveness implausible. Moreover, to limit the study to articles in the field of management control, all studies that were based on technical internal control in a medical, biological, or engineering environment were excluded. Articles that were published in languages other than English were also excluded to avoid a potential language bias. However, it is possible that the inclusion of articles in other languages would have resulted in another geographical distribution of the authors and could possibly have changed the conclusions of the study.

In addition to that, the study is limited by its methodological focus on high-quality journals ranked level 3 or higher according to the 2018 ABS list of journals or level B or higher according to the 2019 ABDC journal quality list. While the inclusion of journals that have been ranked by either the British or the Australian rankings mitigates possible regional biases, it is possible that the inclusion of more articles from journals that are ranked lower would allow for new conclusions and insights. Further literature reviews in the area of internal control with a holistic approach to the concept are thus still needed. While the current study includes professional journals in the area of financial accounting and auditing, there is room for further analysis of the potential differences between the conceptualization and institutionalization of internal control in the professional literature as compared to the academic literature.

Conflict of Interest: The author declares that he has no conflict of interest.

6. List of References

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One-size-fits-all? The role of internal control for identifying and mitigating risks of interorganizational relationships

Internal control has received much attention in the academic literature as well as in public policy debates in both corporate governance and auditing. However, the focus of those debates in both practice and theory has been on the antecedents and consequences of internal control in single organizations. This is compelling since many firms operate in cooperation with other firms or have other interorganizational relationships (IOR) that shift their locus of control away from the single firm perspective. This particular issue of internal control in IORs is addressed in the thesis through a literature review and three empirical case studies from the (1) fishery sector, (2) healthcare sector, and (3) the accounting industry.

The thesis finds that internal control is largely context dependent and normative approaches towards the implementation and execution of internal control in IORs are therefore not suitable. The reasons for this are threefold: 1. The normative ambition of internal control present ignores a potential misalignment of the internal control activities between different organizations; 2. Organizations that are part of the IOR can be embedded in different institutional environments and the actors that are involved in the relationship are guided by different and potentially conflicting institutional logics; 3. Organizations need to be aware of both their level of interdependence with the other organization(s), and their level of institutional embeddedness to find the appropriate internal controls that can help them to identify and mitigate potential risks from the IOR.

The thesis contributes to both theory and practice by showing that different partners of IORs might be influenced by conflicting or mutually exclusive institutional logics. This suggests the need for firms to have well-established and efficient internal control systems in place that enable them to mitigate risks stemming from misunderstandings and misinterpretations among the different involved actors.

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