Literature Review:

Management control in auditing firms and its implications for managing coexisting objectives

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Abstract

While many organisations have coexisting goals, this is particularly true for auditing firms as they focus on professional as well as commercial objectives. Many studies find that auditing firms' management control systems play a key role in the context of managing these professional and commercial objectives. While previous research increases our understanding of the relationship between the management control system and auditor behaviour, it typically only incorporates results-based controls (also referred to as output, diagnostic or cybernetic controls) such as the evaluation of financial performance. This stands in contrast to a large body of research which highlights that the management control system in auditing firms focuses relatively strongly on value-based controls (also referred to as socio-ideological or cultural controls) such as common beliefs and informal communication as well as on controls based on mentoring and training. While it is clear that these different types of management control each have an impact on auditor behaviour and decision-making, little is known about how these different types of controls together influence the behaviour of this professional group. The management control literature shows how in contexts where coexisting objectives exist, the interrelation of different control elements is important and argues that different management controls can together form a dynamic system. In this context, the Merchant and Van der Stede (2017) framework is especially suitable as it allows for a clean and unambiguous classification of different control elements. In the context of exploitation-exploration tensions, the management control literature on ambidexterity provides a theoretical foundation for studying these tensions in the auditing context and it is expected that both results-based and value-based management control elements play an important role in managing process innovations in auditing firms with a key responsibility of senior levels to actively promote innovation and learning.

1. Introduction

While many organisations have coexisting goals (e.g., Becharov and Smith, 2014; Pache and Santos, 2010; Smith and Lewis, 2011), this is particularly true for auditing firms as there is an inherent tension between professional and commercial objectives (Spence and Carter, 2014). According to their professional objectives, auditors must perform their legal obligations without any undue influence from the client firm or any other source and serve the role of a public watchdog, which implies strict adherence to the code of ethics (e.g., Jenkins et al., 2008). The interests of the client firm and revenues maximisation dictate the commercial goals and a conflict may arise with the interests of the wider public (e.g., Picard et al., 2018). Although other contexts exist where professional-commercial tensions are present, the auditing context is especially interesting. First of all, while the measurement of an auditing firm’s commercial performance is relatively easy (i.e., the revenues, costs and profits), the measurement of its professional performance (i.e., the quality of the audit) is much more difficult (e.g., Knechel et al., 2013; Sweeney and McGarry, 2011). A further complication is that the eventual user of the audit opinion (such as the investor, customer or bank) is different from the party contracting the auditing firm to give this opinion (the client company). This structure leads to auditing firms being contracted by the same party that they are required to provide an independent opinion of financial statements on (e.g., Spence and Carter, 2014) which might lead to a conflict between client loyalty and auditor independence (e.g., Bamber and Iyer, 2007; Bauer, 2015; Guénin-Paracini et al., 2015; Koch and Salterio, 2017). The coexistence of these objectives is embedded in contemporary auditing firms (e.g., Broberg et al., 2018; Guo, 2016) and while it is generally assumed that the two objectives are intrinsically related and well-able to coexist in the long-term (Limperg, 1933), it remains a challenging and important issue for auditing firms and regulators (e.g., AFM, 2017; Church et al., 2015; Lukkezen, 2020; Meckfessel and Sellers, 2017; Van Brenk and Renes, 2020).

Many studies find that auditing firms' management control systems play a key role in the context of managing professional and commercial objectives (e.g., Jeppesen, 2007; Lander et al., 2013; McNair, 1991; Otley and Pierce, 1995). According to Merchant and Van der Stede (2017), the management control system is used by management to encourage employees to behave in a way that leads to the attainment of organisational goals or objectives. Several papers empirically study the relationship between the management control system in auditing firms and dysfunctional behaviours such as manipulating time records or premature sign-offs (e.g., Buchheit et al., 2003; Nehme, 2017; Pierce and Sweeney, 2004; Pruijssers et al., 2020). While these studies increase our understanding of the relationship between the management control system and auditor behaviour, they typically only incorporate results-based controls (also referred to as output, diagnostic or cybernetic controls) such as the evaluation of financial performance. This stands in contrast to other studies which highlight that the management control system in auditing firms focuses relatively strongly on value-based controls (also referred to as socio-ideological or cultural controls) such as common beliefs and informal communication as well as on controls based on mentoring and training (e.g., Alberti et al., 2020; Andiola et al., 2020; Bobek et al., 2017; Dalton et al., 2015; Dennis and Johnstone, 2018; Dirsmith and Covaleski, 1985; Griffith et al., 2020; Jenkins et al., 2008; Pickerd et al., 2015; Pierce and Sweeney, 2005; Sweeney and McGarry, 2011). In a similar vein, several studies at the partner level reveal that partners rely on a broad spectrum of management control elements that includes cultural and informal controls (e.g., Dennis and Johnstone, 2018; Pierce and Sweeney, 2005). While it is clear that these different types of management control each have an impact on auditor behaviour and decision-making, little is known about how these different types of controls together influence the behaviour of this professional group.

Several studies in the management control literature stress that especially in organisational contexts where tensions exist between coexisting objectives, various management control mechanisms work together rather than separately (e.g., Gerdin et al., 2019; Mundy, 2010; Pfister and Lukka, 2019; Van der Kolk et al., 2020). By largely ignoring the role of other controls such as value-based controls in auditing firms, the previous literature fails to provide insight into how incorporating these other controls affects the findings. Furthermore, existing research has been unable to address the question of how results-based controls *work together* with these other controls to facilitate the pursuit of professional and commercial objectives in auditing firms. Prior management control literature also shows that the design of the management control system plays a key role in managing process innovations. However, while the importance of process innovations in auditing as well as the associated exploitative-explorative tension have been well-documented (e.g., Alles, 2015; Daglienė and Klovienė, 2019; Vasarhelyi et al., 2015), the question of how and why auditing firms use management control mechanisms in this context, both individually and jointly, is still under examined.

This document provides an overview of the literature on the role of management control in the context of coexisting objectives in auditing firms as well as relevant management control literature set in other contexts. Section 2 examines the different objectives in auditing firms and where tensions between objectives may arise. Section 3 analyses existing research on auditing firms' management control systems. Section 4 reviews the literature on management control systems in the context of organisations with coexisting objectives that has the potential to shed light on management control in the auditing context. Section 5 concludes.

2. Organisational tensions in auditing firms

According to Jenkins et al. (2008), auditing firms are driven by two coexisting objectives. The first is the professional objective and argues that auditors must perform their legal obligations correctly and independently (e.g., Church et al., 2015). The second is the commercial objective and maintains that long-term profits of the auditing firm should be maximised (e.g., Picard et al., 2018). Focusing too strongly on the first objective could make the auditing firm financially unsustainable while focusing too strongly on the second objective could compromise the quality of the audit (Spence and Carter, 2014).

Although other organisations exist with similar coexisting organisational objectives (e.g., Epstein et al., 2015; Sundin et al., 2010), the auditing context is unique. First of all, performance on the professional objective (i.e., audit quality) is difficult to measure. This difficulty in assessing audit quality is due to the limited measurability of output resulting from an audit process. The main tangible end product of an audit is the auditor report containing (or denying) a reasonable assurance that the financial statements provided by client company management are free from material misstatement and in accordance with accounting principles. Although these reports can be inspected for deficiencies, assessing the quality of this *reasonable assurance* is a complex task. This is especially the case for external parties who do not have access to internal working papers produced during the audit (e.g., Power, 2003). Only in the exceptional case where judicial investigations may find serious shortcomings in auditing firm procedures (following a client company bankruptcy) can audit quality be unambiguously assessed (e.g., McNair, 1991). The difficulty in assessing audit quality might make it more likely for auditors to compromise on quality. This can happen either deliberately (fraudulent practices) but also inadvertently, caused by the absence of a uniform method on how to assess audit quality (e.g., Knechel et al., 2013; Wyatt, 2004).

In sharp contrast to the difficulty in assessing professional performance of the auditing firm, commercial performance (i.e., the revenues, costs and profits) is almost perfectly measurable. According to Sweeney and McGarry (2011), the imbalance between the relatively perfect measurability of the commercial side and the imperfect measurability of audit quality (the professional side) results in a relatively large importance of value-based controls within auditing firm management control systems. The reason for this relative importance of value-based controls is that auditing relies heavily on professional values and norms embedded in the organisational culture; furthermore, more formal controls such as performance measurement are less effective as audit quality is difficult to quantify and thereby difficult to evaluate (Sweeney and McGarry, 2011). A further complication compared to for example most financial service firms, is that the eventual user of the audit opinion (such as the investor, customer or bank) is different from the party contracting the auditing firm to give this opinion (the client company). This structure might lead to a conflict between client loyalty and auditor independence (e.g., Bamber and Iyer, 2007; Bauer, 2015; Guénin-Paracini et al., 2015; Koch and Salterio, 2017). This conflict originates from the paradox that auditing firms work on behalf of the relevant company rather than on behalf of the third parties who demand an objective inquiry into the company’s accountability (e.g., Church et al., 2015). In other words, the auditing firm is asked to give an independent opinion about the same company that is rewarding the auditing firm (by paying client fees) to give this opinion.

Besides the more traditional professional-commercial tension, a recent development in the auditing context creates another complex tension between coexisting objectives. This development is the increased use of process innovations by auditing firms and their clients (Vasarhelyi et al., 2015). According to Stephenson (2018), these process innovations allow for the creation and analysis of vast, rapidly accumulating quantities of data that do not fit a traditional structure. In an auditing context, process innovations allow more frequent analysis of entire samples of data rather than of manually constructed subsamples. For example, 'data mining' techniques can be developed that narrow initial samples down to the highest-risk anomalies (e.g., Jans et al., 2013). On the one hand, this implies that investing in knowledge and training regarding the use of process innovations increases audit quality. On the other hand, auditors also find that methods of inquiry currently used work well which supports a more passive attitude towards process innovations, according to Alles (2015). These two forces might create a tension between exploitation of familiar techniques and exploration of new more innovative methods, which is referred to as an exploitation-exploration tension (Alles, 2015).

In conclusion, the literature on organisational tensions in auditing firms reveals that auditing firms have complex objectives and that there is an inherent tension between professional and commercial objectives. Furthermore, auditing firms are more recently also confronted with tensions between exploitation and exploration objectives arising from advances in technology and choices of investment in various process innovations with different levels of risk and innovative potential.

3. Management control systems in auditing firms

Several studies in the auditing literature have carried out interviews and surveys to gain an understanding of auditing firms' management control systems. These studies often highlight that management control systems in auditing firms are based relatively strongly on value-based controls such as common beliefs, tone at the top, informal communication and norms (e.g., Dirsmith and Covaleski, 1985; Jenkins et al., 2008; Pickerd et al., 2015). Several studies carried out at the partner level reveal that partners rely on a broad spectrum of management control elements that includes cultural and informal controls. For example, Pierce and Sweeney (2005) carried out interviews with partners at Big 4 auditing firms to study different dimensions of management control in auditing firms. They conclude that besides results-based controls (i.e., performance evaluation), audit partners also rely on ‘clan controls’ to foster a common understanding and trust. Clan controls refer to the culture within a specific firm that is shaped by socialisation processes (Pierce and Sweeney, 2005). These controls are used to supplement the traditional formal control elements and manifest in four different forms: (1) image management, (2) informal communication, (3) selection and training processes and (4) intuition of audit partners (Pierce and Sweeney, 2005). Dennis and Johnstone (2018) study the effect of partner leadership on the quality of fraud brainstorming in audit teams. They assess leadership as the degree to which a partner ‘‘(…) promotes professional skepticism and appropriately calibrated effectiveness/efficiency trade-offs [and emphasises] training/professional development’’ (Dennis and Johnstone, 2018; p. 2). They conclude that good partner leadership improves the team’s fraud risk responses. Griffith et al. (2020) study leadership by senior auditors in relation to the willingness of junior auditors to speak up to communicate potentially important audit issues and find that junior auditors who expect high quality feedback from the senior auditor are more willing to speak up. Other auditing studies highlight the role of mentoring and training (e.g., Dalton et al., 2015; Hall and Smith, 2009; McManus and Subramaniam, 2014). Dalton et al. (2015) for example find that a weak mentoring environment leads to lower job satisfaction and lower role clarity of auditors. McManus and Subramaniam (2014) conclude that especially a career development mentoring style increases professional commitment of auditors; however, Hall and Smith (2009) find that this style might also increase employee turnover. Martinov-Bennie and Pflugrath (2009) stress the importance of rules and protocols in guiding auditors in their day-to-day work and find that when ethical principles are well communicated and reinforced, they have the ability to increase the quality of the audit work performed. Furthermore, Bobek et al. (2017) conclude that auditors working in public auditing firms perceive the firm's internal regulatory environment as very strong.

Two recent literature reviews summarise existing literature on auditing firm culture (Alberti et al., 2020; Andiola et al., 2020). These two reviews define culture as a broad concept that not only includes purely value-based controls such as common beliefs but also covers control mechanisms such as rules, mentoring and training. Andiola et al. (2020) classify existing studies on auditing firm management control into seven themes (organisational control, leadership, ethical, regulatory, professionalism, commercialism and socialisation), while Alberti et al. (2020) select existing papers on auditing firm management control based on a theoretical model that distinguishes between different embedding mechanisms (the visible control elements) and cultural perceptions. Both reviews conclude that the various types of management control all play an important role in auditing firms and that their design is directly related to auditor behaviour.

Despite the informational richness of these studies, they are mostly of a descriptive nature and their understanding of the actual impact of these management controls on the pursuit of professional and commercial objectives is limited. For example, Pierce and Sweeney (2005) explicitly study how partners rely on the management control system to manage professional and commercial objectives but acknowledge that how decision-making of auditors is actually affected by the management control system is under examined. Furthermore, Andiola et al. (2020) conclude that it remains largely unclear how auditors at different levels experience management control systems and what attributes of management control systems contribute to the formation of an ethical climate.

In order to gain a deeper understanding of how different management control elements impact on decision-making of auditors, several papers empirically study the relationship between management control in auditing firms and dysfunctional behaviours such as manipulating time records or premature sign-offs (e.g., Buchheit et al., 2003; Nehme, 2017; Pierce and Sweeney, 2004; Pruijssers et al., 2020). Nehme (2017) concludes that audit teams may avoid reliance on experts in complex sections of the audit, even though this external knowledge is required, in order to perform well on financial performance measures. Similarly, Pierce and Sweeney (2004) show that the degree of dysfunctional behaviour among auditors in Big 4 auditing firms is positively related to the frequency of financial performance evaluations. Johansen and Christoffersen (2017) study performance measurement systems in international auditing firms and conclude that performance evaluation based on a client focus is likely to result in dysfunctional auditor behaviour whereas performance evaluation based on a quality focus does not induce dysfunctional behaviour. Coram and Robinson (2017) and Ernstberger et al. (2020) specifically study audit partner remuneration and conclude that the relatively large weights on certain commercial metrics could lead to dysfunctional behaviour at the partner level as well. Furthermore, Vandenhaute et al. (2020) find that these large weights on commercial metrics are more pronounced at Big 4 auditing firms compared to smaller auditing firms.

While these studies increase our understanding of the relationship between the management control system and auditor behaviour, they only incorporate results-based controls (also referred to as output, diagnostic or cybernetic controls) such as the evaluation of financial performance. This approach is rather narrow given the findings of the aforementioned more descriptive studies which describe a much broader range of management control elements in the auditing context (e.g., Alberti et al., 2020; Andiola et al., 2020; Bobek et al., 2017; Dalton et al., 2015; Dennis and Johnstone, 2018;

Dirsmith and Covaleski, 1985; Griffith et al., 2020; Jenkins et al., 2008; Pickerd et al., 2015; Pierce and Sweeney, 2005; Sweeney and McGarry, 2011). Furthermore, Alberti et al. (2020) specifically encourage future research to study the interrelations between different management control elements to gain an understanding of how the management control system should be aligned to achieve an appropriate balance between professionalism and commercial values in auditing firms.

4. Management control systems and organisational tensions in other settings

Although traditional management control literature distinguishes between different mechanisms within the management control system, the focus used to be predominantly on the individual role of each mechanism. A more recent approach, which is referred to as the 'package approach' (e.g., Malmi and Brown, 2008), acknowledges that individual control mechanisms may also have complementary or substitution effects (which refers to controls having a different impact when they are combined with other controls compared to when they operate in isolation). An example is provided by Henri (2006) who studies the coexistence of boundary controls and interactive management control and concludes that these two types of control not only play unique independent roles in the organisation, but also complement each other. According to Henri (2006), the potential benefits of interactive controls may vanish due to insufficient boundaries whereas boundary controls can lead to stagnation and declining morale without interactive use of controls; however, according to this study, a careful balance between these two types of control creates a synergy. Müller-Stewens et al. (2020) find a similar complementing relation between diagnostic controls and interactive controls. According to Müller-Stewens et al. (2020, p. 18), ''(…) diagnostic control use provides focus to the unfocused nature of interactive control use while interactive control use provides flexibility to the more rigid nature of diagnostic control use''. Other scholars have started to interpret the management control system as a 'dynamic system' (Grabner and Moers, 2013) and argue that the various elements within a management control system together form a coherent pattern of relations (e.g., Friis et al., 2015). According to Bedford (2020), these relations might include 'compensating relations' (one control element counteracting the weaknesses of another control element), 'reinforcing relations' (one control element enhancing the effectiveness of another control element), or 'enabling relations' (one control element creating the conditions for another control element to work). If not well-aligned, different control elements in a dynamic system can also compete (e.g., Friis et al., 2015).

According to Van der Kolk et al. (2020), such a dynamic system of management controls could be defined both in terms of complexity (referring to both positive and negative relations between individual control mechanisms) and in terms of dynamics (the development of this complexity over time). Dynamics can be shaped by changing internal and external contextual factors (e.g., Mundy, 2010) as well as by changing needs in different stages of a change process (e.g., Granlund and Taipaleenmäki, 2005; Tuomela, 2005). Van der Kolk et al. (2020) also distinguish between the relative presence of a control (balance), the absolute presence of a control (intensity) and the changing presence of a control over time (balance tendency).

An important focus in examining dynamic systems is on how they guide employees in simultaneously pursuing coexisting objectives that exist in the organisation. For example, Simons' (1995) Levers of control framework has been used to demonstrate the importance of a dynamic balance between the Levers of control for combining coexisting objectives in a way that is productive for the organisation (Curtis and Sweeney, 2017; Mundy, 2010). The Levers of control framework distinguishes between four different management controls, being beliefs control (core values), boundary control (limits on behaviour), diagnostic control (performance measurement systems) and interactive control (regular management involvement).

Prior management control literature set in other contexts also recognises that the use of management controls is highly relevant in the context of exploitation-exploration tensions and the creation of ambidexterity (e.g., Bedford, 2015; Simsek, 2009). *Ambidexterity* refers to the ability of an organisation to succeed in gaining a balance between exploiting familiar methods and exploring more uncertain and innovative methods with potential for more radical change (Bedford et al., 2019). For example, Pfister and Lukka (2019) study an exploitation-exploration tension at a large company in the technological sector and find that pressuring employees to constantly take risks by innovating processes (i.e., results-based controls) might lead to dysfunctional forms of stress. However, they report that when employees accept this pressure because they relate to senior executives and the company's mission (i.e., value-based controls), employees were motivated to improve and innovate. In a similar vein, Fredberg (2014) concludes that a trust culture with a clear direction is vital for operational excellence (exploitation) and innovation (exploration) to exist simultaneously. Translating these findings to the auditing context, it is expected that both results-based and value-based management control elements play an important role in managing process innovations in auditing firms with a key responsibility of senior levels to actively promote innovation and learning.

According to Lövstål and Jontoft (2017), interdependencies between control elements can be studied based on various initial categorisations. The first is a categorisation based on different types of controls, such as financial/non-financial, formal/informal and organic/mechanistic (e.g., Kraus et al., 2017; Ylinen and Gullkvist, 2014). The second categorisation focuses on the different purposes of controls, such as uncertainty reduction/goal congruence and trust building/safeguarding (e.g., Brattström and Richtnér, 2014; Long, 2018). The third categorisation originates from the different uses of controls, such as enabling/coercive and loose/tight (e.g., Englund and Gerdin, 2015; Van der Kolk et al., 2015). A disadvantage of these categorisations is that it is difficult to distinguish between types, purposes and uses of control. For example, it might be easy to classify performance evaluation relative to a benchmark as a formal (type) and tight (use) control. However, supervision and mentoring could be perceived both formal and informal or both tight and loose. Several papers that focus on interdependencies between control elements therefore build on the framework of Merchant and Van der Stede (2017). The Merchant and Van der Stede framework distinguishes between results controls, action controls, personnel controls and cultural controls. Results controls refer to the evaluation of measurable output such as meeting budgets, meeting deadlines and performance relative to quality standards. Action controls are about the specific procedures and standards. Personnel controls concern mechanisms in place to increase and disseminate knowledge and capabilities and include for example mentoring and training. Finally, cultural controls refer to for example common beliefs, tone at the top, informal communication and norms (Merchant and Van der Stede, 2017). According to Van der Kolk et al. (2020), the main strength of the Merchant and Van der Stede framework lies in the fact that different control elements are categorised according to the objects they focus on (i.e., results, actions, personnel and culture) which eliminates ambiguity and overlap in classifying controls.

The Merchant and Van der Stede framework (also referred to as the 'Object of Control' – or 'OOC' – framework) also fits well with the findings of the aforementioned literature on auditing firm control systems. Results controls in the auditing context refer to for example formal performance appraisals, meeting deadlines, respecting budgets and audit quality indicators (e.g., Johansen and Christoffersen, 2017). Action controls in an auditing context refer to internal guidelines, processes and protocols (e.g., Bobek et al., 2017) while personnel controls refer to training programmes and mentoring (e.g., Dalton et al., 2015). Lastly, cultural controls in an auditing firm refer to for example clan controls (Pierce and Sweeney, 2005), tone at the top (e.g., Pickerd et al., 2015) and beliefs and norms (e.g., Dirsmith and Covaleski, 1985; Jenkins et al., 2008). Table 1 below provides an overview of representative auditing literature for each of the objects of control (i.e., results controls, action controls, personnel controls and cultural controls).

Table 1. The Object of Control framework in an auditing context

Results controls		**Action controls**	
Representative studies	Main findings	Representative studies	Main findings
Buchheit et al. (2003); Coram and Robinson (2017); Ernstberger et al. (2020); Johansen and Christoffersen (2017); Nehme (2017); Pierce and Sweeney (2004); Pruijssers et al. (2020); Vandenhaute et al. (2020)	Performance measurement based on financial/commercial performance may lead to dysfunctional behaviour.	Bobek et al. (2017); Martinov-Bennie and Pflugrath (2009)	The internal regulatory environment in public auditing firms is perceived as very strong. Well-communicated and reinforced ethical principles have the ability to increase audit quality.
Personnel controls		**Cultural controls**	
Representative studies	Main findings	Representative studies	Main findings
Dalton et al. (2015); Hall and Smith (2009); McManus and Subramaniam (2014)	A weak mentoring environment leads to lower job satisfaction and lower role clarity. A career development mentoring style increases professional commitment but also increases employee turnover.	Dennis and Johnstone (2018); Dirsmith and Covaleski (1985); Griffith et al. (2020); Jenkins et al. (2008); Pickerd et al. (2015); Pierce and Sweeney (2005); Sweeney and McGarry (2011)	Management control systems in auditing firms are based relatively strongly on value-based controls such as common beliefs, tone at the top, informal communication and clan controls. Furthermore, good leadership promotes professional skepticism.

Mobilising the Merchant and Van der Stede framework to study how different elements within the management control system in auditing firms are interrelated (complexity) and how these interrelations develop over time (dynamics) has the potential to advance understanding of how the management control system is used to influence the way auditors pursue professional and commercial objectives in auditing firms. Examining these interrelations over time (dynamics) is especially interesting when comparing the early phases of an audit to the final period before completion where the nature of tasks and the degree of time pressure may differ. More specifically, our study tries to disentangle how the various management control elements in auditing firms work together or where they might compete when they are not well-aligned.

5. Conclusion

This literature review summarises several important tensions that exist in auditing firms. The professional-commercial tension has received most attention; however, more recent literature also starts to recognise the importance of exploitation-exploration tensions in auditing firms. Auditing research has shown that management control systems play a key role in the management of professional and commercial objectives in auditing firms while mainly focusing on results-based management control elements. Several auditing studies however also highlight the importance of studying a broader range of management controls, including value-based controls such as common beliefs and tone at the top. Management control literature set in other contexts also provides valuable insights. This literature shows how in contexts where coexisting objectives exist, the interrelation of different control elements is important and argues that different management controls can together form a dynamic system. In this context, the Merchant and Van der Stede framework is especially suitable as it allows for a clean and unambiguous classification of different control elements. In the context of exploitation-exploration tensions, the management control literature on ambidexterity provides a theoretical foundation for studying these tensions in the auditing context and it is expected that both results-based and value-based management control elements play an important role in managing process innovations in auditing firms with a key responsibility of senior levels to actively promote innovation and learning.

Applying the findings from the management control literature to the auditing context can yield important insights into how different elements within the management control system in auditing firms are interrelated (complexity), how these interrelations develop over time (dynamics), and how the management control system is used to manage tensions between coexisting objectives. Development of these insights also responds to the call from management control researchers for more empirical studies that investigate management control systems and organisational tensions in-depth and close to practice (e.g., Lewis and Smith, 2014; Merchant and Otley, 2020). Given that previous management control studies show that outcome measurability and organisational design have a considerable effect on the management control configuration (e.g., Bedford and Malmi, 2015; Bedford et al., 2016; Ouchi, 1979), studying the auditing context is expected to yield new insights regarding management control in contexts with coexisting goals and low performance clarity.

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