

The different shades of audit quality: A review of the academic literature

Dominic Detzen, Anna Gold

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Abstract

This paper reviews the academic literature on the different conceptualizations of audit quality. We argue that these discussions are rooted in the historical development of the audit profession, which has shown the need for audit quality indicators. However, we also demonstrate that audit quality means different things to different people, such that different conceptualizations of audit quality may lead to conflicts, as these views meet and need to be reconciled. The literature largely recognizes the multi-faceted nature of audit quality, which cannot be simply measured by a focus on adverse outcomes, such as restatements or fraud incidents. Instead, it is the combination of process, people and motivation that drives the quality of audit services provided by firms. Finally, the qualitative audit literature emphasizes that audit practice needs to be understood as a set of social interactions, which are embedded in a diverse set of organizational and contextual factors that together determine audit judgments and auditor behavior.

Relevance for practice

Our literature review is relevant for audit practice by highlighting that definitions of, and efforts to improve, audit quality need to pay heed to its versatile drivers, rather than adhere to stark or reductionist understandings of the concept.

Keywords

audit quality; audit quality indicators; literature review

1. Introduction

“Audit quality is much debated, but little understood” (Knechel et al. 2013, p. 385). In this paper, we aim to provide an overview of various perspectives on audit quality and its determinants in the academic auditing literature. We begin our synopsis by exploring the historical development of key themes associated with the audit profession and audit quality. Next, rather than embarking on our own comprehensive review, we summarize two existing seminal review papers (Knechel et al. 2013; DeFond and Zhang 2014), which in turn have reviewed the results of key archival and experimental review papers on audit quality. We do this to illuminate the different aspects and indicators of audit quality. Finally, we also explore the views of the qualitative literature on

auditing, which provides important academic insights into understanding audit quality and practice.

Overall, our review leads us to the following conclusions. First, there is a rich history of debates about the shortcomings of the audit profession, which resonate well with contemporary debates and attempts to change auditing (section 2). Second, audit quality means different things to different people, which may lead to conflicts when these views meet or need to be reconciled (section 3). Third, academic conceptualizations of audit quality recognize the multi-faceted nature of auditing, where attention needs to be paid to process, people and motivation, rather than an exclusive focus on for example adverse outcomes (e.g., restatements, accounting

scandals) (section 3). Finally, qualitative research highlights that audit judgments need to be understood as a set of social interactions, which are embedded in a range of organizational and contextual factors that together determine auditor behavior (section 4).¹

Before proceeding we emphasize that ‘audit quality’ constitutes a rather broad topic in the auditing literature, and different streams tend to conceptualize it in vastly different manners. As such, it is a challenge to synthesize the literature in a compact and coherent way. Hence, we largely refrain from citing individual academic studies for the sake of brevity (esp. in section 3); instead, we refer the reader to the respective review articles for the relevant sources. Per definition, a literature synthesis includes some level of interpretation by the authors to be informative. Further, much of the research cited focuses on countries other than the Netherlands, which means that the institutional contexts and regulatory environments differ. Nevertheless, it is believed that the findings of those studies apply by extension also to the Dutch audit environment, especially given their focus on the relatively universal concept of ‘audit quality’.

2. From professionalism to commercialism: The need for audit quality indicators

Auditing as a self-regulated activity can be traced back to the emergence of the regulatory framework of financial reporting and securities regulation. In the United States (on which most of the research focuses), this occurred in the 1930s, when the Securities Acts emerged following the stock market crash of 1929. Legislators adopted a model of “participatory regulation” (McCraw 1984). This meant that auditors would fulfill the public task of controlling companies’ financial statements. Auditing thus became a private-sector regulatory instrument, as the newly established Securities and Exchange Commission (SEC) required all financial statements of listed companies to be audited.

Yet this setup relied strongly on the independence of auditors, so attempts were made early on to eliminate conflicts of interest, arising for example from financial relationships between auditor and client (Moore et al. 2006). Over the decades, regulators and the audit profession have countered many crises by “tweaking” auditors’ appearance of independence (rather than independence in fact). This “has tended to increase the so-called expectations gap between (1) the expectation that companies with upbeat financial reports and “clean” audit opinions are free of the risk of short-term business failure and (2) the reality of sudden collapse among firms whose reports make them look healthy” (Moore et al. 2006, p. 14). This culminated in the accounting scandals at Enron (2001) and WorldCom (2002), and the subsequent demise of Arthur Andersen in the early 2000s, which triggered the

Sarbanes-Oxley-Act (SOX) to address many deficiencies in the accounting and audit framework.

In the aftermath of these accounting scandals, academics engaged in a historical-critical analysis of ‘what went wrong’ (e.g., Humphrey 2008). Zeff (2003a; 2003b) and Wyatt (2004) largely agree that the profession’s values had gradually declined beginning in the early 1970s: As audit markets became saturated, competition increased considerably (as also instigated by legal changes in the U.S., e.g., the ban on advertising was repealed). This implied declining profits for the firms’ audit practices. To counter this trend, the firms began to grow their tax and consulting services, starting in the 1970s and especially in the 1980s/90s. This in turn emphasized revenue, growth, profitability, and global reach in the firms, thus instilling a business mindset into the firms, partners and audit staff, at the expense of professional values. This trend is said to have impaired auditors’ independence, as firms could not ‘afford’ to lose clients anymore. Audit partners thus became less willing to take a stand against their clients, who in turn faced increasing pressures from capital markets to show ever-growing earnings (Moore et al. 2006). This may have introduced a shift from focusing on what is morally right to what is technically legal, with the implications also being felt in auditing.

It is thus largely accepted in the academic literature that, over time, commercial values have emerged as a significant factor in the audit firms, where they potentially conflict with professional values (Cooper and Robson 2006; Malsch and Gendron 2013). Carter and Spence (2014, p. 968) confirmed that, in the race to become an audit partner, “technical competence plays second fiddle to [generating new business]”. The literature suggests that the shift towards commercial attitudes in audit firms seems to have been universal and has taken place across different jurisdictions.

Notably, several issues and debates in auditing are recurring and seem to reflect tensions in the fundamental construction of the audit function (Humphrey 2008). Specifically, Chandler and Edwards (1996) refer to the role and scope of the audit, auditor independence, the audit report, competition between auditors, the level of litigation against auditors, audit regulation, and the lack of skills. They argue that these issues “were the subject of intellectual inquiry and public debate 100 years ago” (p. 4). In a similar manner, Humphrey et al. (1992) argue that the audit expectation gap has largely remained unchanged over time, even though the audit profession has repeatedly tried to educate the public and has shown willingness to address these concerns. Hence, the expectation gap seems to be an inevitable feature of the audit function, and likely continues to exist, because ‘audit quality’ is highly unobservable.

In sum, this brief historical review implies that the increased emphasis of commercial attitudes in audit firms has resulted in several scandals that triggered the need to focus on and measure audit quality to safeguard the audit function. In the next section, we provide a summary

of how the auditing literature defines and conceptualizes audit quality and its indicators.

3. Audit quality: A conceptualization based on the academic literature

As Knechel et al. (2013) argue, conceptualizing audit quality means to integrate different parties' differing points of focus: For example, while users of financial statements may focus on the absence of material misstatements in their understanding of audit quality, the auditor may define high audit quality as meeting the goals of their firm's audit methodology. This becomes evident in Aobdia's (2019) comparison of academic proxies of audit quality with audit firms' internal reviews and PCAOB inspection findings. Only three out of fifteen academic measures of audit quality were significantly associated with audit process deficiencies as identified by practitioners, suggesting limited agreement between these parties as to what constitutes audit quality. Similarly, Brivot et al. (2018) demonstrate two different conventions of audit quality: Auditors of publicly traded (i.e., listed) firms understand audit quality as resulting from a technically flawless audit, highly formalized judgment, a perfectly documented audit file, and the absence of inspection findings. By contrast, auditors of private (i.e., non-listed, e.g., family owned) companies point to the need of tailoring the audit to a client's need, a high degree of judgment, and the client's assessment that the audit has "added value". The authors spell out the tensions between these two conventions and argue that regulatory interventions might actually hurt audit quality.

Academic research on auditing began in earnest in the early 1980s with Linda DeAngelo's (1981) article on auditor size and audit quality, which defined audit quality as follows (p. 186): "The quality of audit services is defined to be the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach."

This definition is still widely used by most academics because it incorporates the two key elements of (1) auditor *competence/ability* (to "discover a breach") and (2) auditor *independence/objectivity* (willingness to "report the breach"); and it also hints at (3) the importance of the financial statement user's *perceptions* of these attributes ("market-assessed probability").

More recent audit quality frameworks agree that the concept of audit quality is best understood by conceptualizing auditing as a *process* and examining factors belonging to the various elements of this process. These factors are often labeled *audit quality indicators* (Gaynor et al. 2016), which are concrete measures that can be used to assess audit quality (Knechel et al. 2013). To illustrate, an audit quality indicator at the audit input stage of the audit process would be the range of audit team characteristics, such as the team members' level of industry expertise, or the involvement of a specialist. At the output stage, an example of an audit quality indicator would be the type of audit opinion issued by the auditor.

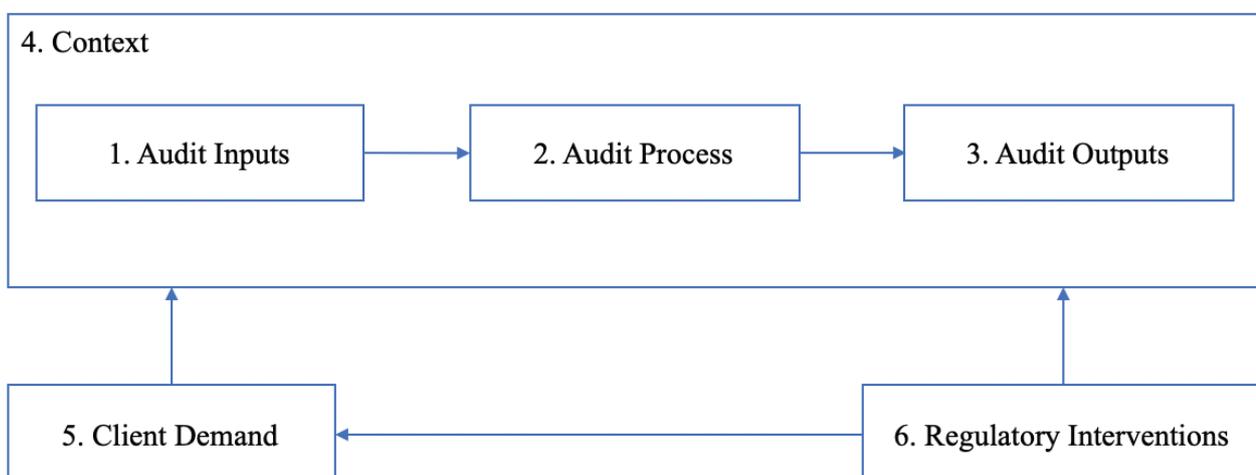
In the following, we first summarize the four audit process elements (3.1- audit inputs, 3.2- audit process, 3.3- audit outputs, and 3.4- context) and their respective audit quality indicators, closely following Knechel et al. (2013).² We further borrow from similar frameworks (i.e., Francis 2011; DeFond and Zhang 2014) to add relevant indicators to each of Knechel et al.'s (2013) category.³

Next, we extend Knechel et al.'s (2013) conceptualization by adding two additional elements from DeFond and Zhang (2014). As such, we add the element of client demand (section 3.5 in our overview) to illustrate how varying client demands have been found to affect audit quality. Further, we add the element of regulatory intervention (section 3.6 in our overview). Our conceptualization of the resulting six elements containing the audit quality indicators discussed below is summarized in Figure 1.

3.1 Audit inputs

Each audit client is unique ("idiosyncratic"), as is the level of risk associated with each engagement. Hence,

Figure 1. Conceptualization of audit quality (adapted from Knechel et al. (2013) and DeFond and Zhang (2014)).



the resources required to audit a given client and obtain reasonable assurance by definition vary per engagement. What goes into the audit (audit inputs or auditor supply) will obviously affect the quality of the audit (Knechel et al. 2013; DeFond and Zhang 2014).

Knechel et al. (2013) conclude that auditors' judgments are influenced by a variety of *pressures and incentives*, such as the perceived risk of losing their clients (e.g., Blay 2005), fee pressures (Houston 1999), incentives to retain clients (e.g., Kim and Park 2014), but also engagement-related pressures such as superior preferences (e.g., Church and Schneider 1993) and time or budget pressures (see DeZoort and Lord 1997 for review). Meanwhile, several powerful countervailing incentives are expected to promote high audit quality, such as regulatory enforcement, potential reputation and litigation costs (e.g., Nelson 2009). Archival research reviewed by DeFond and Zhang (2014) is inconclusive on the conjecture that higher litigation risk and reputation incentives lead to higher audit quality (measured by for example audit fees or issuance of going concern opinions).

Recent behavioral research in auditing has focused on auditors' *professional skepticism* as an important indicator of audit quality in the input phase, documenting a positive association between professional skepticism and audit quality (e.g., Nelson 2009). Hence, behavioral research shows that greater auditor skepticism leads to a greater willingness to confront a client, performance of more additional procedures, higher detection of fraud, higher-quality assessments of evidence, lower trust in a client, and more investment in high levels of audit effort.

Not surprisingly, Knechel et al.'s (2013) review shows that auditor *knowledge and expertise* positively impact audit quality. Such knowledge can be general (e.g., as reflected in higher audit ranks), but particularly client- and industry-specific knowledge have been found to matter for audit quality (e.g., Beck and Wu 2006).

3.2 Audit process

An audit consists of several predefined phases, ranging from client acceptance, through audit planning and audit testing, to audit completion and reporting. Based on Knechel et al. (2013) we highlight a number of elements which academic research reveals to be of particular importance to audit quality during the audit process.

Generally, auditing research has established that a variety of factors influence the nature of the *audit production process*, which is typically assessed by the nature and extent of testing, assignment of expert staff or specialists to the audit etc. Research concludes that the interaction of risk factors and circumstances (e.g., client attributes, audit team structure, etc.) determines the auditor's production plan.

The auditor's **assessment of risk** is an important determinant of the nature, extent and timing of audit procedures, which in turn have a direct influence on the delivered audit quality. Prior research demonstrates that the approach used to assess risks (e.g., holistic versus

decomposed) results in different assessments (e.g., Wilks and Zimbelman 2004) and that auditors sometimes struggle with adequately modifying their audit plans in response to risk assessments (e.g., Hammersley et al. 2011).

Just as any human being, auditors are subject to *heuristics and biases* in their decision-making, some of which can serve as barriers to the quality of an audit. The behavioral auditing literature has indeed documented that auditors are susceptible to variety of judgment biases (e.g., confirmation, anchoring, etc.). One audit phase in which biases have received extensive attention is the application of analytical procedures, during which auditors tend to anchor on "inherited" information rather than developing their own expectations (see Messier et al. 2013 for a review). Mechanisms that appear to alleviate such biases are experience, expertise, group decision making, and inducing a sense of accountability.

Audit firms have powerful *control and monitoring mechanisms* in place to ensure high audit quality, and much research demonstrates such positive effects. However, some research also points to adverse effects on judgment quality. For example, while the purpose of the review process is to detect auditor errors and make timely corrections and to increase auditor accountability (and hence effort), research finds that reviewees are sometimes biased when made aware of their reviewers' preferences (e.g., Shankar and Tan 2006).

Finally, a large body of research has examined the *negotiation between auditor and client*, and the factors that lead to superior auditor negotiation performance, such as interpersonal factors, auditor characteristics, client characteristics, but also the negotiation strategies that are used (see Brown and Wright 2008 for a review).

3.3 Audit outputs

Examining the output of an audit is arguably the most direct indicator of audit quality. While most of the research discussed thus far entails experimental efforts to examine audit quality by looking at auditor judgments, there is considerable archival research on audit outcomes based on a variety of publicly available proxies. The most important proxies are audit failures, financial reporting quality, and audit reports.

First, researchers can approximate audit failures by measuring binary indicators for extreme, negative audit quality outcomes (or *audit failures*), such as (1) the presence of an accounting restatement, (2) litigation against an auditor, (3) regulator (e.g., SEC) enforcement action against an auditor or audit firm, and, more recently, oversight inspection results. In summary, the overall evidence points to a very low audit failure rate. However, it is unclear how high the "true" failure rate is, since not all cases are reasonably observable.⁴ As a result, Francis (2011) recommends conceptualizing audit quality as a continuum, rather than a binary concept.

One way to measure audit quality on a more continuous scale is to turn to the *client's audited financial statements*.

The premise is that the production of the financial statements is a joint product by clients and their auditors; hence their quality also reflects the quality exerted by the auditor (Behn et al. 2008). There is an abundance of research using earnings quality (employing discretionary accruals models) as a measure for audit quality, with the argument that a high-quality auditor is more likely to restrict aggressive accounting than a lower-quality auditor.

A third way to assess audit quality is to directly examine the *audit report* issued by the audit firm. While most report modifications are rare, researchers have primarily turned to the issuance of going-concern audit reports (which is not a modification in the strict sense, but rather an emphasis of matter; see Carson et al. 2013 for a review of research on auditors' going concern opinions). One stream of research classifies the issuance of a going-concern opinion as an indication of higher audit quality or, more specifically, auditor independence, and has examined a battery of factors that influence such reporting behavior. Another line of research focuses on the accuracy of going concern opinions, distinguishing between type I errors (opinion issued with no subsequent bankruptcy) and type II errors (no opinion issued despite subsequent bankruptcy; this is sometimes labeled an audit failure). Interestingly, particularly type II error rates tend to be high (for the period 1995–2002 around 55 percent, according to Lennox 1999), although error rates have decreased after SOX.

3.4 Context

Knechel et al. (2013) group a number of potential quality indicators under the header of “context”. First, limited evidence suggests that *audit partner compensation* (e.g., client significance) affects audit quality, but the direction of the relation is not consistent across studies. For example, a recent study by Asare et al. (2019) shows that auditors are more likely to waive a client's material misstatements as their economic incentives (e.g., abnormally high audit fees, provision of non-audit services) increase. Second, literature suggests that both *abnormally* high and low *audit fees* can be associated with financial reporting problems (e.g., Hribar et al. 2014; Krishnan and Zhang 2014), but Knechel et al. (2013) discuss several reasons for being cautious when using abnormal audit fees as a meaningful quality indicator. Similarly, an abundance of research has examined whether *non-audit services* create an economic bond between auditors and clients, impairing independence and audit quality. However, the empirical evidence regarding non-audit fees is mixed, with many studies, finding either no relationship or a positive association, suggesting a “knowledge spillover”, dominating potential independence concerns (see Bedard et al. 2008 for a review). Third, research suggests that larger (Big N) audit firms (e.g., Francis and Yu 2009) and industry specialists (e.g., Carson 2009) are able to command an *audit fee premium*, which in turn leads to superior audit quality. Fourth, research results with respect

to *auditor tenure* are mixed, documenting both a positive (e.g., Chi et al. 2009) and negative relation (e.g., Carey and Simnett 2006) between audit firm/partner tenure and audit quality. Finally, there is also a stream of literature examining *market perceptions of audit quality*, which suggests that the market rewards companies that employ higher quality auditors (e.g., Causholli and Knechel 2012). There is also evidence that users respond to some of the factors raised as problematic by regulators (e.g., non-audit services and tenure), while their actual effect on audit quality is limited, potentially suggesting that some indicators may affect independence in appearance, while independence in mind remains unaffected.

3.5 Client demand

While the elements discussed thus far concern the indicators of audit quality related to the auditor, a range of studies have examined the exogenous demand for auditing. In theory, “the value of auditing arises from its ability to assure that the financial statements faithfully reflect the client's underlying economics. These assurances reduce information risk, which ultimately improves resource allocation efficiency, including contracting efficiency” (DeFond and Zhang 2014, p. 292). Examining under what circumstances clients demand higher audit quality suggests that agency costs explain the choice of audit quality; hence, higher agency conflicts increase the demand for greater assurance by a third party. Another stream of research finds that strong corporate governance (e.g., independent and high expert audit committees) demand higher audit quality.

Client demand for audit quality was clearly affected by the introduction of SOX. For example, stricter audit committee requirements (e.g., increased independence from client management) changed how auditors were selected, retained and fired. Research finds that more independent audit committees indeed are more likely to hire industry specialists, pay higher audit fees, purchase less non-audit services, and hire fewer former audit employees.

While auditing is mandated for a large range of clients, DeFond and Zhang (2014) examine whether auditing adds value in the *absence* of regulation. Accordingly, voluntary audits reduce the cost of debt, improve credit ratings, reduce the number of audit adjustments, and generally signal higher financial reporting quality (a signaling value that is lost when auditing is mandatory). Another stream of research examines market reactions to going concern opinions, suggesting that indeed such audit reporting is valued by the market, which again suggests that auditing has value for the client. The same holds for evidence from market reactions to internal control opinions (in the U.S.) and auditor changes.

More recently, Knechel et al. (2020) emphasize the notion of financial statement audits resulting from a process of co-creation between auditor and client, which has substantial implications for how audit quality should be conceptualized. While regulation has focused

primarily on increasing independence and standardizing the audit process to improve audit quality, the authors draw attention to the fact that quality is contingent on a dyadic relationship between service provider (auditor) and client, emphasizing once more the importance of the idiosyncratic nature of an audit.

3.6 Regulatory intervention

The regulation of audit markets intends to improve audit quality by aligning auditors' and clients' market-based incentives and competencies (DeFond and Zhang 2014). Throughout history, regulators have intervened following high-profile audit failures, when market-based incentives and competencies had seemingly failed (DeFond and Francis 2005). A fundamental research question relates to whether regulatory intervention has improved audit quality, specifically in the areas of major reform efforts: auditor independence, the role of audit committees, and audit oversight and inspections.

First, *auditor independence* entails avoiding, or mitigating, the conflicts of interest that auditors are subject to. Both Gramling et al. (2010) and DeFond and Zhang (2014) conclude that most research finds that neither provision of non-audit services nor excessive auditor tenure impair audit quality, but may even improve it, due to knowledge spillover and expertise effects. While literature is not very extensive, Gramling et al. (2010) confirm that regulatory changes have achieved to increase investors' assessment of auditors' independence (i.e., in *appearance*).

Second, the position of audit clients' *audit committees* has been strengthened by recent reforms, such that these committees now formally appoint the auditor in companies, which has direct consequences for client demand (see section 3.5). While a range of studies have documented benefits of effective audit committees for *financial reporting* quality (Cohen et al. 2007), the relation with auditing is more ambiguous (Cohen et al. 2010; Dhaliwal et al. 2015), although investors seem to value a strong audit committee that takes its auditor appointment powers seriously (Gold et al. 2018). Of note is the field study by Fiolleau et al. (2013), who investigated a company's auditor selection decision, finding that management remains the dominant party that hires the auditor, thus "potentially rendering proposed audit firm rotation ineffective" (p. 867).

Third, a major change in the audit framework occurred when, starting with the PCAOB in 2002, audit oversight bodies were installed that conducted *independent inspections* of audit files. Early archival findings as to the efficacy of the PCAOB inspection regime are somewhat inconclusive (e.g., Gunny and Zhang 2013), particularly for larger audit firms (DeFond and Zhang 2014), while more recent studies indicate that firms consistently improve their quality in response to inspections (e.g., Lamoreaux 2016).

Notably, however, markets and decision-makers have remained skeptical of the audit profession as well as such inspections (Löhlein 2016). DeFond and Zhang

(2014) also offer critical views on inspections, referring to inspectors possibly lacking current auditing expertise and being under pressure to identify problems (see also Aobdia 2019). Recent qualitative studies raise some further concerns as to the role of such inspection bodies (e.g., Johnson et al. 2018; Westermann et al. 2019), pointing to an overall antagonistic environment, in which powerful regulators impose their views on auditors, who comply due to fear of enforcement.

Regulatory intervention thus tends to have an uncertain outcome for audit quality (Humphrey et al. 2011), mainly for three reasons. First, while reforms place unwarranted trust in regulation, little is known about the nature and effectiveness of regulatory practices and regimes. Importantly, regulation is the outcome of a political process, involving a range of parties that further influence its implementation and interpretation in practice (Cooper and Robson 2006). Second, reform initiatives do not necessarily work as intended, because the respective institutions may lack the legitimacy or authority to effectively regulate (Canning and O'Dwyer 2016). Third, practical implementation may not be in line with the spirit of the regulation, thus eroding these changes (Fiolleau et al. 2013). Beyond these findings, the key risk of regulatory intervention seems to be that such initiatives make audit practice overly standardized, curtailing the professional judgment and discretion of auditors. Finally, inspection findings may also be due to differing views on audit quality, such that adverse audit outcomes may not be a sufficiently strong reason for further regulatory interventions in auditing.

4. Insights from qualitative auditing research

This section provides additional insights from the qualitative auditing literature, which tends not to explicitly use the term "audit quality". Yet, given its prevalent use of case/field study, interview, or observation methodologies, this literature stream seems highly suited to shed light on the process, people and motivation, which have been revealed as contributing to the services provided by audit firms. Accordingly, this literature understands auditing as a social practice, which is influenced by social interactions (section 4.1), and examines how individual auditors are embedded in the organizational context of audit firms (section 4.2), all of which affect the work of auditors, their judgments and their behavior, and hence also audit quality.

4.1 Auditing as a social practice

Auditing can be viewed from a micro-perspective as a set of practices and routines. Such notions point to the affective or emotional dimension of auditing, which is hence constituted of micro-rituals that, once completed, give 'comfort' to the auditor (Pentland 1993). This comfort is "a signal that hunch and intuition are formed from

repeated collective interactions within the audit team”, which over time teaches auditors the intuitions necessary for their work (Power 2003, p. 385). Team interactions, audit procedures, individual judgments, documentation and work papers, as well as ‘signing off’ are all elements of audit practice that go beyond rational cognition, but are social interactions that establish ‘order’ and ‘stability’, and produce legitimacy at the micro-level (see also Carrington and Catasús 2007; Guénin-Paracini et al. 2014).

Likewise, there is a perennial debate as to how much audit practice should be standardized and how much room for judgment should be given to auditors (Power 2003). Over the years, audit firms have attempted to structure the audit process into a set of routines, which has minimized the potential of individual auditors to exercise professional judgment. This debate has affected audit programs, where firms “try to balance a formal, defensible, economic and manageable structure for the audit process with the autonomy of auditor judgement” (Power 2003, p. 382). Increased structure may simplify quality control and help in litigation cases, but the downside is constrained judgment. One example is the historical emergence of statistical sampling, which has shifted certain responsibilities to the audit client, and thus contributed to widening the expectation gap (Carpenter and Dirsmith 1993).

Related to this is the question of understanding auditing as a business, where cost controls and quality objectives push audit firms in different directions. This trade-off is visible in time budgeting, planning and reporting processes, and is embedded in the management control system of the firms, where it is (invisibly) imposed on individual auditors and resolved on the spot (i.e. on individual audit engagements). Arguably, this has given rise to a business risk audit approach (e.g., Robson et al. 2007).

Based on these insights, Power (2003, p. 389) argues that “audit quality is defined procedurally rather than in terms of the constantly asserted but elusive output of added assurance. From this point of view, the quality of audit resides only in part in the judgement processes of individual auditors; it is also a function of what gets accepted, stabilized and institutionalized as a way of doing things.”

4.2 Individual auditors and the organizational context of audit firms

Another (qualitative) literature stream outlines the ways in which the organizational context of audit firms affects the behavior of individual auditors and conceptions of what it means to be a professional. Much of this literature is about how newcomers are socialized into audit firms, i.e. how they are made familiar with what is expected of them by the environment they just joined (e.g., Anderson-Gough et al 2000; 2001; Grey 1998). Yet, rather than focusing on technical knowledge and audit procedures, audit trainees largely describe what it means to be a professional in terms of demeanor, conduct and appearance. These studies have also documented

that most knowledge is learned on-the-job, rather than in the classroom (Westermann et al. 2015), and that this learning is “similar to learning to riding a bike, i.e. not an intellectual process” (Power 1991, p. 340). As a result, the audit credential is considered a “hurdle” that needs to be passed to become an audit professional, rather than conveying essential skills necessary in practice.

Once auditors advance through the ranks, other aspects of audit practice need to be incorporated in auditors’ understanding of their work. As such, managers need to navigate and manage a complex network that includes supervision of juniors and interactions with clients, and being an essential link to audit partners (Kornberger et al. 2011). This network, however, is temporary and managers are “in a constant repair mode to minimize potential damage and to ensure a smooth flow of information across the network” (p. 531). Audit partners, on the other hand, are considered “organizational entrepreneurs”, leaving technical expertise mostly to subordinates, while having to successfully manage a client portfolio and represent the firm (Carter and Spence 2014). Partners learn these skills via informal communication, mentoring and management practices (Covaleski et al. 1998), resulting in a conception of ‘professional autonomy’ that auditors strive to maintain.

It is thus the organizational environment that weaves “a web of control” around audit firm members (Ladva and Andrew 2014) and that transforms auditors into a certain type of professional. This professional tends to be a white male auditor (Anderson-Gough et al. 2005), as “the barriers to entry and ascension [to partner level] appear to be all but insurmountable for females and ethnic minorities” (Carter and Spence 2014, p. 977). Since professionals want to gain status and recognition, they readily adapt to the rules of the game (Lupu and Empson 2015).

5. Summary and conclusions

This paper has argued that many of auditing’s intricate dilemmas, such as the expectation gap, the trade-off between professionalism and commercialism, or auditor independence, are in fact inherent in the audit function and have persisted in different forms throughout the decades. Whereas auditing was initially considered to be part of the regulatory solution to safeguard investors’ trust in firms’ financial statements, it soon was at the receiving end of regulation. For a long time, the audit profession managed to deflect fundamental regulatory intervention, thus preserving its status quo. As some of the more critical voices in the academic literature argue, this became more problematic over the decades, as commercialism increased in the firms, leading up to the accounting and audit scandals in the early 2000s. Since then, a range of regulatory changes have been enacted, but the academic literature casts doubt on the effectiveness of regulatory intervention, that is its ability to resolve these longstanding problems of the audit function (Humphrey et al. 2011).

We have also demonstrated the multi-faceted nature of audit quality, implying that there is no one superior way to measure and assess it. Notably, the academic literature consistently highlights a procedural conceptualization of audit quality, and we concur with Knechel et al.'s (2013, p. 407) conclusion that "a 'good' audit is one where there is execution of a well-designed audit process by properly motivated and trained auditors who understand the inherent uncertainty of the audit and appropriately adjust to the unique conditions of the client." In addition, we note that audit quality is not solely influenced by the auditor and the audit firm, but also by dynamics related to the client, market, and regulation. We also note that regulatory bodies and institutions around the world have come up with their own audit quality frameworks (e.g., IAASB 2014; PCAOB 2015; NBA 2017), which consistently recognize the different shades and process orientation of audit quality. Yet the question remains whether and to what extent such a multifaceted approach is indeed reflected in the work of regulators: Not only does Aobdia (2019) conclude that PCAOB findings are a noisy measure of audit quality, academic research also documents that regulators and inspection bodies focus on different aspects of audit quality than auditors, and thus hold different understandings of the concept. As such, concurrent debates related to the different views of different parties on what constitutes "good" audit quality inevitably create conflict.

We also outlined two qualitative research streams that have a bearing on audit quality. On the one hand, it is suggested that auditing is a social practice that consists of human interactions in a social context. In their daily practice, auditors face the difficult task of balancing structure against judgment, as firm policies and procedures may dictate one thing, while their

professional judgment may guide them elsewhere. Likewise, practice is based on a set of routine interactions that auditors have come to appreciate as part of creating sufficient 'comfort' to approve a client's financial statements. On the other hand, the qualitative literature points to the organizational context of auditing, where the values, rules and norms embedded in the audit firms are conveyed to individual auditors by a range of (more or less subtle) social control mechanisms. Compliance with these norms has been documented to have a strong impact on auditors' career trajectories. In sum, this literature argues that the social and organizational context of auditing has a strong impact on the work of auditors, their judgments and their behavior, and thus also on audit quality, however defined.

In sum, our literature review has been targeted at raising awareness of the multi-faceted nature of the concept of audit quality. Despite its widespread and conversational use, the term escapes a simple definition. Following our review, we believe that efforts to improve audit quality should devote attention to the entire audit function, that is, the process, people and motivation that together affect the services provided by auditors and the quality thereof. While research and practice may prefer a simple set of measures or dials that can be turned to 'improve' audit quality, we caution against such a simplistic and reductionist understanding of the concept. This may make reform efforts more cumbersome and complex, but it reduces the fuzziness of discussions and prevents the binary labeling of audit quality as 'high' or 'low'. As such, we advocate a holistic understanding of the audit function, which may increase appreciation of auditing as a people's business, a social practice that is integral to the functioning of capital markets and wider business processes.

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- **Dr. Dominic Detzen** is associate professor of accounting at Vrije Universiteit Amsterdam.
 - **Prof. dr. Anna Gold** is full professor of auditing at Vrije Universiteit Amsterdam and adjunct professor at Norwegian School of Economics (NHH).
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Notes

1. The current paper is an abbreviated and slightly adjusted version of the report written for the Commissie Toekomst Accountancysector (CTA). The CTA used our report in the development of their recommendations on the future of the auditing profession in the Netherlands (CTA 2020).
2. Per category, we refer to a selection of relevant extant papers reviewed by Knechel et al. (2013) and sometimes review papers; however, for a more complete listing of studies we recommend consulting Knechel et al.'s (2013) review paper itself.

3. DeFond and Zhang's (2014) element of 'auditor supply' overlaps with Knechel et al.'s (2013) element of 'audit inputs,' so we merge these two categories.
4. For example, the majority of lawsuits against auditors are settled outside the court; the SEC may not have the resources to pursue all cases.

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