MAB

MAANDBLAD VOOR
ACCOUNTANCY EN
BEDRIJFSECONOMIE
90E JAARGANG NUMMER 9
SEPTEMBER 2016
WWW.MAB-ONLINE.NL

SPECIAL ISSUE

What do we know about audit quality?

This special issue of MAB has been developed in collaboration with the Foundation for Auditing Research and is based on papers and discussions at the FAR conference at Nyenrode University (May 2016).

Editors:

- Dr. O.P.G. Bik RA (guest editor)
- Prof. dr. J.F.M.G. Bouwens (guest editor)
- Prof. dr. Ph. Wallage RA
- Dr. C.D. Knoops

MAB

[NUMMER 9 2016]

INHOUD

SPECIAL ISSUE

What do we know about audit quality?

What practitioners and academics want to know about audit quality

Jan Bouwens

What do we know about audit quality? An intriguing question for which society seems to have a ready-made answer, while to the audit industry is much less clear about what it takes to get there. Society would seem to impose a zero-mistake tolerance on the audit industry. Surely society does not want to pay the price that would take audit quality to a level where quality is irreproachable. For that matter, it is not even clear that auditees who pay a premium fee get better quality. For instance, while industry specialization tends to have a positive effect on audit fees (Numan & Willekens, 2012a), competitive pressure may inflict a negative effect on quality. Numan and Willekens (2012b) report a negative impact on audit quality delivered by an auditor who faces competitive pressure from competitors who resemble the focal auditor in its range of activities. These results seem to suggest that society varies the price it is willing to pay for an audit. To the extent that audit fee is associated with the quality of the audit, it would appear that audit quality is not uniform across audit engagements. If that is the case how should we interpret the expectations of society with regard to audit quality? What determines audit quality? When is audit quality (in) sufficient? However, before we can even begin to answer that question we first need to agree on what exactly is audit quality. Is it possible to measure audit quality?

During its first conference, the Foundation for Auditing Research[1] (FAR) takes issue with exactly this topic: "What do we know about audit quality?" At the conference academics as well as practitioners gave their take on what makes audits good. This issue of MAB elaborates on these topics and gives the floor to the discussants of the papers that Jere Francis, Marleen Willekens, Suraj Srinivasan and Robert Knechel presented at the FAR conference, May 9 and 10, 2016. Liesbeth Bruynseels, Christine Nolder, Jeroen van Raak, and Joost van Buuren discussed their papers during the conference. An exciting feature of the FAR conference was the contribution of auditors from practice, an auditee, as well as the audit oversight body. They took the floor in the panel, as presenters in front of the class room or as an interested auditor present in the class room.

This MAB issue opens with a paper by Liesbeth Bruynseels and Herman van Brenk that presents a discussion of the presentation Jere Francis gave. Jere's discussion at the conference focused on his study (Francis, Pinnuck, and Watanabe, 2014) that reveals that auditors have a particular style of auditing leading to the observation that (1) two companies in the same industry and year indeed have more comparable earnings when they are audited by the same Big 4 firm, and (2) that companies audited by the same Big 4 auditor will have more comparable earnings than companies audited by the same Non-Big 4 auditor. The first finding is according to Bruynseels and Van Brenk's discussion at odds with the idea that firms differ and that therefore similarities in their financial statements should not be observed. Francis, Pinnuck and Watanabe (2014) attribute the second observation to the fact that Big 4 auditors have more resources to standardize their audits. However, in their discussion Liesbeth Bruynseels and Herman van Brenk, propose that auditees may select auditors with particular styles.

Marleen Willekens presented her working paper co-authored with Ann Gaeremynck and Robert Knechel (Gaeremynck, Willekens & Knechel, 2016). She took issue with the (efficient) production of audits. What is efficient in this regard? This is by no means a straightforward question to ask unless one assumes that quality is fixed. While we know that assumption is not fulfilled in reality answering what is efficient pertains to two important dimensions: efficient at the micro-economic level and at the societal level. Willekens examines audit efficiency from the micro-economic level. The paper demonstrates that partner tenure is positively affecting audit efficiency. Interestingly it appears that the work clients execute in preparation of the audit work has a negative relation with efficiency. One wonders how and whether this finding extends to how well the auditee has organized its internal controls. After all, the auditor can more or less depend on these internal controls in designing its audit conditional on how well the controls operate. Willekens et al. (2016) have also examined that question and find that "no efficiencies are realized by relying on internal controls". Christine Nolder and Sytse Duiverman discuss in this issue the pa-

per Marleen Willekens presented and pay specific attention how future research can build on the work of Gaeremynck, Willekens and Knechel (2016) to enhance our knowledge of efficiency. Among other recommendations they advise future researchers to pursue a research agenda that takes issue with office levels factors to enhance our understanding of what are the underlying forces that determine efficiency.

Suraj Srinivasan presented a paper on audit quality co-authored with Shiva Rajgopal and Xin Zheng (Srinivasan, Rajgopal & Zheng, 2016). The central topic of their paper is to examine how well empirical audit quality measures stand validity and reliability tests. Their paper provides a rather bleak picture of how well the existing measures stand the tests. Jeroen van Raak and Ulrike Thürheimer propose that the way ahead is using data researchers collect from the audit firms, rather than using data that is publicly made available. They present in their paper some important examples of how this can be accomplished. Their paper will help future researchers in their endeavors to capture the phenomenon of audit quality.

Robert Knechel presented his paper co-authored with Carlin Dowling and Robin Moroney (Knechel, Dowling & Moroney, 2016) at the conference where he asked: Does tougher enforcement by regulators entail higher quality? Knechel argues that clear limits exist as to the extent that enforcements can help improve audit quality. Joost van Buuren and Annie Wong examine these limits in their discussion. They suggest that the authors further examine how cooperation between regulators and audit may affect audit quality.

In a panel consisting of Deloitte partner and Head of Audit Marco van der Vegte, AFM director Barbara Majoor, Non-executive director Jan Nooitgedagt and researcher Marleen Willekens it is discussed what each of these stakeholder believe what it takes to enhance the meaning of the audit function. Philip Wallage summarizes this discussion. Marco van der Vegte focuses in his discussion on the importance of extending our knowledge of the audit process, i.e., opening the "black box" of the audit. By studying how the attention of audit work is distributed over the processes and the care with which the processes are accomplished we can extend our knowledge of whether and how the structure of the auditing processes affects the use of information. Barbara Majoor focused her attention on the organization cultural dimension. She argues there is much to learn about how culture is related to audit quality. Culture may pertain to auditor and auditee. Jan Nooitgedagt calls for innovation in the profession. He has yet to see how automation is going to affect the audit function. Marleen Willekens believes that we need to learn much more about input-output models to understand what determines the quality of the audit. In fact the call of Marleen comes very close to the call of Marco van der Vegte where he referred to the audit process. The panel is also asked to comment on the role of audit committees. It appears that audit committee members often have no accounting/financial background. This comes at a cost!

During the conference the auditing industry took the floor to elaborate on what it expects to learn from research and how it sees their own role in strengthening the bridge between practice and science. To this end the industry was represented by Egbert Eeftink (KPMG), Michael de Ridder (PwC), and Marco van der Vegte (Deloitte). Olof Bik provides a summary of the ideas they put forward. Michael de Ridder argued that there can be no doubt, the audit industry has to change. While the sector has its own ideas of what steps to take, it would be important to know what measures (do) not work and why. For instance what does it mean if auditors get more involved with non-executive directors and untie their relation with managing directors?

Marco van der Vegte believes that the communication on what an audit and its quality entails should be studied so as to provide auditors guidance to meet the expectations of financial statement users. Egbert Eeftink believes that auditing research could fill the gap between disciplines. Research can help to identify areas that auditors may want to emphasize.

This special issue closes with a remarkable observation made by Willem Buijink. He states that the profession is not so much in trouble, but that stakeholders seem to *feel* that audit is in trouble. That said, Buijink does believe that auditing has a great future ahead and that the profession would benefit a lot if we extend our knowledge of auditing!

As the work by Numan and Willekens (2012a and b) suggests users and producers of audited statements alike may have alternating opinions of what is good audit quality. The discussion that we had at 9 and 10 May 2016 at Nyenrode University has confirmed this idea. In fact during the conference it became clear that a third group has alternating opinions as well: the academics. That said all of the participants agree that we can extend our knowledge significantly if academics and the audit industry join forces in examining audit practices. This issue of MAB demonstrates the large array of opportunities lying ahead of us. ■

Prof. dr. J.F.M.G. Bouwens is professor of Accounting at the University of Amsterdam. He is member of the management board of the Foundation for Auditing Research.

Notes

1 See: http://foundationforauditingresearch.org/

References

- Francis, J., Pinnuck, M., & Watanabe, O. (2014). Auditor style and financial statement comparability. *The Accounting Review, 89*(2): 605-633.
- Gaeremynck. A., Willekens, M., & Knechel, W.R. (2016). Auditor-client co-production of the audit and the effect on production efficiency. Working paper presented at the 2016 Foundation for Auditing Research Conference.
- Numan, W., & Willekens, M. (2012a). An empirical test of spatial competition in the audit market. *Journal of Accounting and Economics, 53*: 450-465.
- Numan, W., & Willekens, M. (2012b). Competitive pressure, audit quality and industry specialization. Working paper KU Leuven. Retrieved from https://www.ou.edu/dam/price/accounting/files/quality_competition_Oklahoma_May2012.pdf.
- Knechel, W.R., Dowling, C., & Moroney, R. (2016). Public oversight of audit firms: The slippery-slope of enforcing regulation. Working paper. An earlier version of this paper is available at http://ssrn.com/abstract=2678828.
- Rajgopal, S., Srinivasan, S., & Zheng, X. (2015). Measuring audit quality. Working paper. Retrieved from https://www.scheller.gatech.edu/academics/conferences/Rajagopal-Srinivasan-Zheng.pdf.

If auditors are like Belgian beers, which style would you prefer?

Discussion of "Auditor style and financial statement comparability" by Francis, Pinnuck, and Watanabe (2014)

Liesbeth Bruynseels and Herman van Brenk

SUMMARY Recent research by Francis, Pinnuck, and Watanabe (2014) has shown that financial reporting outcomes are influenced by the audit firm's unique audit style. They argue that audit firm styles are driven by their "unique set of internal working rules that guide the auditor's application of accounting and auditing standards" (Francis, Pinnuck & Watanabe, 2014). In our discussion, we zoom in on this study and call for further research on the factors that determine audit styles. Specifically, we emphasize the importance of extending this research from the audit firm level to the level of the audit office, audit team, and individual auditor. We conclude with the notion that intense collaboration between audit firms and academia is instrumental in opening the black box of audit styles to extend our knowledge on the root causes and drivers of audit quality.

PRACTICAL RELEVANCE Extending our knowledge on the factors that shape audit styles as well as their effects on the audit process and audit quality is important to improve (or safeguard) audit quality. Specifically, a deeper understanding of audit styles at the level of the audit firm, audit team or individual auditor and its implications for the audit process and audit quality might assist audit firms in optimizing their client-firm matching, audit methodology, audit team compositions as well as audit staff hiring, performance appraisal, and promotion decisions.

1 Introduction

In their paper "Auditor Style and Financial Statement Comparability", Francis, Pinnuck, and Watanabe (2014) (hereafter: FPW) investigate whether financial reporting outcomes are influenced by the audit firm's unique audit style. They measure style at the audit firm level, assuming that differences in audit styles are a consequence of firm-specific working rules, guidelines, and templates (i.e., audit methodology) that influence the interpretation and application of auditing standards. FPW examine the effect of audit style differences by analysing earnings comparability of clients audited by the same auditor in the same industry and fiscal year (i.e., the closeness of two firms' reported earnings). The findings of this study, and his ongoing research, were presented by Jere Francis at the Foundation for Auditing Research (FAR) Conference on May 9, 2016. FPW's findings indicate that, despite the existence of general auditing standards, each audit firm has its own unique audit style and, as such, they provide evidence of "a new channel through which auditor characteristics affect audited financial statements" (Francis, Pinnuck & Watanabe, 2014, p. 607). This interesting finding generates numerous opportunities for future research on the drivers and consequences of different audit styles.

In our discussion, we zoom in on FPW's research question and findings, and call for further research on the factors that shape and define audit styles. Throughout this article, we use the analogy with Belgian beers, as they can be categorized in style groups according to colour, flavour, strength, ingredients, production method, recipe, history, or origin (Wikipedia, n.d.). Just like there is no single ingredient that determines a beer's aroma, appearance, and flavour, there are numerous factors at the level of the audit firm, office, audit team and individual auditor that shape and define audit styles. We argue that a thorough understanding of the drivers and financial reporting consequences of these unique styles is important as audit firms may use these insights to improve and safeguard audit quality. Specifically, audit firms may optimize their style by changing the ingredients (e.g., the audit team, the individual audit partner) or production process (e.g., audit methodology) in order to improve their audit quality. Therefore we need to dig deeper into the specificities of audit styles at various levels of analysis (firm, office, team, individual auditor) and its influences on financial reporting and audit quality.

We structure our article as follows. In section 2, we dis-

cuss recent research on audit styles at the level of the audit firm and office, and call for research that investigates audit styles at the audit team and individual level. In this section, we provide a summary of FPW's findings as well as a discussion of their study. Based on prior research, we also provide insights into contextual factors that are likely to influence individual audit styles. In section 3, we provide suggestions to open the black box of audit styles and highlight the need for a strong collaboration between the auditing profession and academia. Finally, we conclude our article in section 4.

2 Audit styles at various levels of analysis

2.1 Summary of FPW's findings on audit styles at the audit firm level

FPW examine the effects of audit styles on financial statement comparability at the audit firm level. They assume that each Big 4 firm has its own audit style as a result of unique in-house working rules (i.e., firm-specific audit methodology) that guide the auditors in interpreting and applying auditing and accounting standards. As such, they expect a pair of companies audited by the same Big 4 firm to have more comparable earnings than a pair of companies audited by two different Big 4 firms. Using U.S. data from 1987 through 2011, FPW measure accounting comparability in three ways. First, they examine cross-sectional similarities of total and abnormal accruals for firm-pairs in the same industry using the same Big 4 auditor versus firm-pairs with two different Big 4 auditors. Second, they measure the degree to which earnings of a pair of companies in the same industry and audited by the same Big 4 auditor, covary across time. Third, they test whether audit firm indicator variables are helpful in explaining the level of accruals reported by each individual client firm. In a nutshell, FPW's findings show that two companies in the same industry and year indeed have more comparable earnings when they are audited by the same Big 4 audit firm, which suggests that audit clients are subject to specific audit firm styles.

In the second part of the study, FPW test whether companies audited by the same Big 4 auditor have more comparable earnings than companies audited by the same Non-Big 4 auditor. FPW expect that Big 4 audit firms have a greater capacity to incur the fixed costs associated with developing and implementing in-house standardized rules for implementing auditing and accounting standards compared to Non-Big 4 firms. Moreover, as a result of their larger and more dispersed staff, Big 4 firms are also likely to have a greater need for controls that guide professionals in interpreting these standards than Non-Big 4 firms. Consistent with this line of reasoning, FPW report weak but significant evidence that audit styles at Big 4 firms indeed have a greater effect on accounting comparability, compared to audit styles at Non-Big 4 firms.

2.2 Discussion of FPW's findings

Overall, FPW's findings are important for our understanding of the role of large audit firms in producing financial statement comparability. Although FPW provide some insights into the term "audit style", many questions are spurred by their findings, providing opportunities for future research. For example, 'what is an audit style?', 'why would an audit style occur at the firm level given that auditors and audit engagements are unique?', 'what are the drivers of audit styles?', 'what are the differences in audit styles between audit firms?', 'do audit styles influence the audit process and ultimately audit quality?', 'how do different styles between audit partner and engagement team members interact with the style of the client (e.g., negotiation strategy)?', 'are audit styles observable for the client and do they influence auditor retention decisions or audit fees?', 'how can audit firms mitigate any adverse effects of audit styles?'. Following our analogy between audit styles and Belgian beers, we call for further research into the ingredients, processes, and circumstances that lead to specific flavours, types, and styles as well as variations in the level of quality of the delivered product.

On a more critical note, the finding that financial reporting outcomes are influenced by audit firm style seems to be at odds with the idiosyncratic nature of audit engagements. The outcome of an audit is not only influenced by audit firm policies and internal working rules, but also by client characteristics, audit teams, and the timing and extent of planned audit procedures (Knechel, Krishnan, Pevzner, Shefchik & Velury, 2013). One of FPW's robustness tests provide support for this view by showing that the audit style effect does not apply to non-routine transitory transactions. Hence, future research may zoom in on the factors that shape audit styles at the level of the audit team and individual auditor, and on identifying specific (decision-making) contexts where style effects are most likely to occur and influence audit quality.

The results of FPW also indicate that companies audited by the same Big 4 auditor have more comparable earnings than companies audited by the same Non-Big 4 auditor. Although their explanation for this finding seems logical (i.e., the greater capacity of Big 4 auditors to incur the fixed costs in developing in-house standardized rules), there might be alternative explanations for this effect, such as differences in team composition and client acceptance decisions between firms or self-selection of certain types of professionals and clients into different types of audit firms.

Following up on the issue of self-selection, FPW acknowledge that clients are not randomly assigned to

an auditor, rather, they choose one. In their study, this issue is addressed by considering motives for a client choosing a particular auditor based on its accounting production function. Specifically, they removed firm-pairs that were audited by industry specialist auditors from the sample, as well as firm-pairs that constituted of close competitors. Although the main results remained unchanged, these tests did not consider other audit firm-specific factors that might influence auditor-client matching. As mentioned previously, audit firms are likely to attract auditing professionals with a certain profile and set of skills and traits (i.e., individual style) and have their own policies regarding client acceptance. Furthermore, as suggested by participants at the FAR conference, client-partner matching is an important quality monitoring tool for audit firms. That is, in assigning audit clients to audit partners, firms take the profiles of both the client and the audit partner into consideration (e.g., personality, expertise, past experience) when assessing the appropriateness of a specific match. This view is consistent with prior research on auditor-client negotiating (Fu, Tan & Zhang, 2011; Brown & Wright, 2008; Hatfield, Agoglia & Sanchez, 2008), showing that potential effectiveness and efficiency gains are achieved when there is a match between auditor negotiating experience and client negotiating style. Overall, this line of thought supports our call for further research on audit style effects at the team and individual auditor level. Indeed, future research is needed to explore various audit styles and its relationships with client-partner matching decisions, the audit process, and audit quality.

Finally, although FPW assume that firm-specific audit styles are shaped by standardized interpretations and applications of auditing and accounting standards, the study remains silent on the various types of audit styles, the specific aspects of audit styles that are most likely to influence financial statement outcomes, and how audit styles differ among audit firms. A reason for the difficulty in addressing these issues might be that audit styles are not readily observable. This is consistent with the view that a financial statement audit is considered a credence good where outcome quality (and hence also audit style) is unobservable (Knechel et al., 2013; Causholli & Knechel, 2012). Unlike Belgian beers where style differences are apparent, it is hard to define and observe variations in audit styles and audit outcomes among the Big 4 firms because they all use the same language in their audit reports and have the reputation of a high quality global accounting service provider. Of note, the recent development of disclosing key audit matters in the auditor's report creates opportunities for large audit firms to show their audit style (IAASB, 2015), providing new avenues to study such style differences.

2.3 Audit styles at the office level

Kawada (2014) extends the research of FPW by analysing the effects of audit styles on earnings comparability at the *local office level*. He shows that two companies in the same industry and year have more comparable earnings when they are audited by the same local Big 4 office compared to firms audited by different offices of the same audit firm. These results suggest that the audit firm style effects documented by FPW are (at least partially) attributable to practices at the audit office level. Kawada (2014) explains the existence of audit styles at the office level by referring to localized training (i.e., conducted by each practice office) on the implementation of the firm's overall audit methodology. Although the study by Kawada (2014) does not consider audit styles at the audit partner level, he points at the importance of the individual auditor in the context of financial statement comparability. This is consistent with some archival auditing studies (Hardies, Breesch & Branson, 2016; Aobdia, Lin & Petacchi, 2015; Knechel, Vanstraelen & Zerni, 2015; Gul, Wu & Yang, 2013; Chen, Sun & Wu, 2010), which show that an analysis of audit partner characteristics provides a stronger test in explaining audit quality differences compared to analysing auditor characteristics measured at the office or audit firm level. Hay, Knechel, and Willekens (2014, p. 351) similarly emphasize the importance of the individual auditor and state that "because the audit is a human activity conducted by individual auditors, the quality of a specific audit is conditional on individual auditor characteristics and the incentives that auditors face". This is also consistent with prior research, which usually focuses on the individual auditor as a unit of analysis when investigating auditor judgement and decision making (Bonner, 2008; Nelson & Tan, 2005; Libby & Luft, 1993; Wallman, 1996). Therefore, as we will argue, the audit is likely influenced by audit styles at the individual or team level, perhaps even more heavily than audit styles at the firm or office level.

2.4 Audit styles at the team and individual level: A fruitful avenue for future research

Although factors at the firm and office level are important in determining audit styles, we argue that it is equally (if not more) important to also consider factors at the team and individual level. As with Belgian beers, it is not just the brewery (i.e., the audit firm) that determines the style but also the ingredients (e.g., the client, the audit team, and the individual audit partner) and the production method (i.e., audit methodology). At the team level, review styles and team leadership styles are important factors that influence the audit process and ultimately audit quality. Review styles refer to individual differences in working practices and preferences regarding the review of audit

working papers. Prior research shows that there is substantial variation in review styles at the audit partner level (Pierce & Sweeney, 2005; Gibbins & Trotman, 2002), and that audit partners and managers change their review style based on the contextual factors of the audit engagement (e.g., client risk, time budget pressure, experience, goals of preparers). As Rich, Solomon, and Trotman (1997) argue, junior auditors even anticipate the manager's review style and ex-ante stylize the content and format of their working papers by choosing the type of audit evidence, how it is gathered and interpreted, selecting documentation type, and determining the order and frame in which the evidence is presented. Overall, these findings indicate that review styles are different at the team level and that team members respond to the style of the reviewer by changing the extent and documentation of the audit work which potentially affects audit quality.

Team leadership styles refer to differences in the way the (senior) manager or audit partner leads the audit team. Prior research in management shows that team leaders play an important role in team performance and effectiveness by composing the team, structuring the work, providing feedback, challenging team members, and managing relationships within the organisation (Morgeson, DeRue & Karam; 2010; Burke et al., 2006). Similarly, prior research in auditing highlights the importance of audit team leadership (e.g., Pierce & Sweeney, 2005; Otley & Pierce, 1996; Kelley & Margheim, 1990), and the role of the auditor-in-charge (e.g. Bik and Hooghiemstra 2016; Gold, Gronewold & Salterio, 2014; Sweeney, Arnold & Pierce, 2010; Jenkins, Deis, Bedard & Curtis, 2008). For example, Otley and Pierce (1996) show that a leadership style characterized by high levels of consideration towards junior auditors is associated with less dysfunctional audit behaviour (an example of dysfunctional audit behavior is the superficial review of documents) as it generates mutual trust, respect, and motivation. Given that these studies provide evidence of the influence of team leadership styles on the behaviour of team members, we expect team leadership as well as characteristics of the auditor-in-charge to have a substantial effect on audit styles, and subsequently on audit quality.

At the individual level, audit styles are likely to be determined by factors such as personality and cognitive styles. Cognitive styles refer to individual differences in the acquisition, processing, storing, and transmission of information (Fuller & Kaplan, 2004; Gul, 1984) and are typically influenced by specific task attributes, personality traits, and experience (Bryant, Murthy & Wheeler, 2009; Pincus, 1990; Bernardi, 1994; Gul, 1984). Examples of cognitive style aspects that have been shown to have an effect on the audit process and audit outcomes are moral development (Bernardi, 1994), focus on facts and details versus intuition, internal versus external locus of control (Bryant et al., 2009), and receptiveness of ambiguous information (Pincus, 1990; Gul, 1984). Also personality traits such as risk tolerance, integrity, moral development, overconfidence, and level of professional scepticism are likely to feed into audit style differences at the individual level (Knechel et al., 2015; Quadackers, Groot & Wright, 2014; Gul, 1984). In a Dutch context, research by Vaassen, Baker, and Hayes (1993) indicates that there are differences in cognitive styles between individual auditors, and that firms tend to hire auditors whose cognitive style is aligned with the structuredness of the firm's audit approach (i.e. audit style at the firm level). On the whole, the results of studies in this research area suggest that personality and cognitive styles are important factors in differentiating the behaviour of individual auditors, their audit style, and potentially audit quality.

2.5 Contextual factors that influence audit styles

In addition to the drivers of audit styles at the various levels as described above, the development of individual audit styles is likely to be influenced by contextual factors, such as client type, regulatory enforcement or the nature of accounting rules (e.g., principles-based versus rules-based). Indeed, future research on audit styles should consider potential moderating factors that influence audit styles, because financial auditing is in nature characterised by interactions between the auditor and several stakeholders (e.g., clients and regulatory inspectors) (Trotman, Bauer & Humphreys, 2015; Nelson & Tan, 2005). At the regulatory level, audit styles are likely to be influenced by the way external regulators exercise power in their oversight of audit firms. Although external oversight is a factor outside the audit engagement, the auditor's perception about the intensity and strictness of regulatory oversight is likely to affect auditor behaviour. In this respect, recent research by Dowling, Knechel, and Moroney (2015) emphasizes the importance of a regulator's enforcement style as a determinant of how audit firms manage inspection risk (see also discussion by Van Buuren & Wong, this issue). Their findings show that audit partners generally perceive the regulator's enforcement style as coercive (i.e., formalistic) rather than collaborative (i.e., facilitative). As an unintended consequence, audit firms tend to increase the visibility of compliance (i.e., form over substance, documentation stylization), potentially reducing audit quality (Dowling et al., 2015). Thus, the regulator's enforcement style has an influence on the way audits are conducted (i.e., the audit process), indicating the need to consider its effects when examining audit styles.

Further, the nature of accounting rules and the extent to which these are "rules-based" versus "principles-based" may also have an effect on the extent to which

individual audit styles develop and translate into specific financial statement outcomes. Therefore, it would be interesting to study audit styles in an international context and relate observed audit style effects to differences in accounting standards as well as regulatory enforcement. This would shed more light on the extent to which these contextual factors stimulate or hamper the development of audit styles at the various levels (firm, office, team, and individual auditor).

3 Opening the black box of audit styles

Opening the black box of different audit styles and increasing our understanding of the factors that influence audit styles (and hence the audit process and audit quality) is important for auditing practice. Specifically, considering the demand side, clients may use their understanding of various audit styles when selecting the audit firm and office that best fits their needs and preferences. From the perspective of the supply side, audit firms may use these new insights into various audit styles when composing audit teams and deciding on team-client combinations that decrease audit risk and safeguard audit quality. Making audit styles observable and transparent also creates opportunities for audit firms to invest in or reward certain behaviours and traits that are consistent with their firm's culture, philosophy, and strategy (i.e., styles at the firm and office level). This would also promote more efficient self-selection of professionals into the various audit firms (i.e., individual level). Overall, further knowledge on audit styles and its potential mechanisms to mitigate adverse effects is important for the audit profession to enhance audit quality.

Of course, opening the black box of audit styles and their effects on the audit process and audit quality would require an intense collaboration between the auditing profession and academia. The initiative of the Dutch audit firms, organized in the FAR, has the potential to enable researchers to gain unique understanding of the auditing profession since one of its missions is to facilitate data collection for projects that require proprietary data from audit firms. Until now, most auditing research was restricted to publicly available resources, which limited the possibilities of archival research to focus on the specificities of audit inputs and processes and the effects on audit quality (Knechel et al., 2015, 2013). In this section, we provide our thoughts on how audit firms can assist in opening the black box of audit styles and their effects on the audit process and audit quality.

Specifically, in order to gain insight into the various factors that shape audit styles at the firm, office, team, and individual level, academics need access to "inside" audit information (e.g., audit working papers) and insiders (e.g., by interviews, surveys, experiments). Interviews with practitioners may be helpful in exploring the different styles auditors use in current practice and the different factors that play a role in "shaping" these audit styles. In these interviews, researchers should not only focus on the individual auditor, but also on factors at the audit team, office, and firm level. As explained, it is also important to consider contextual factors at the client and regulatory level. Based on the outcomes of such exploratory research, further research may engage in more detailed mapping and defining of auditors' different styles, for example by administering surveys to audit staff in different levels, teams, and firms. These questionnaires may focus on the different ingredients or factors that potentially drive audit styles.

Close collaboration with audit firms would not only allow academics to shed more light on the factors that shape audit styles and their effects on the audit process and audit quality, it would also allow researchers to refine and expand their measures of audit quality. Indeed, most studies focusing on audit quality use publicly available audit output measures to assess audit quality, such as restatements, going-concern opinions, and abnormal (DeFond & Zhang, 2014). However, there are important limitations associated with these audit quality proxies, such as high measurement error (i.e,. abnormal accruals), applicability to financially distressed clients only (i.e., going-concern opinions) or infrequent occurrence (i.e., restatements and going-concern opinions) (DeFond & Zhang, 2014; Van Raak & Thürheimer, this issue). Therefore, access to proprietary data is desirable, such as internal quality review findings, partner performance evaluations, violations of independence requirements, adjusted/unadjusted audit differences, and pre-audited earnings. Furthermore, access to firm personnel is beneficial for conducting interviews and administering surveys. This would allow researchers to gain much deeper insight into the drivers and root causes of audit quality and potential control mechanisms firms can use to enhance audit quality.

4 Conclusion

The research of FPW addresses an interesting and innovative research question and is the first to show that financial statement comparability is affected by unique "style" differences between audit firms. Although FPW provide some insights into the potential drivers of audit styles, many questions remain unanswered. We propose extending this research from the audit firm and office level to the audit team and individual level in order to unravel the multitude of factors that shape audit styles. Following our analogy with Belgian beers, we call for further research into the various ingredients (individual auditor and firm/office characteristics, team composition), processes (firm and office-specific methodologies and working rules) and circumstances (accounting standards and regulatory enforcement) that lead to specific flavours, types, and styles.

An increased understanding of the factors that jointly influence audit styles and their effects on the audit process and audit quality is important as it might assist audit firms in optimizing client-firm matching, audit team compositions, and the firm's hiring, performance appraisal, and promotion decisions. We believe that the initiative of the Dutch audit firms organized in the FAR is instrumental and promising in allowing researchers to gain a unique insight in the auditing profession and to increase our understanding of the factors that influence audit outcomes and hence audit quality. But let's take a beer first. Cheers! ■

Dr. L.M.L. (Liesbeth) Bruynseels is an associate professor of Accounting at KU Leuven. Her research interests are corporate governance, auditor judgement and decision making, determinants of audit quality, and financial reporting quality.

H.M. (Herman) van Brenk MSc RA is a PhD student in Auditing & Assurance at Nyenrode Business University. His research has a behavioural focus and relates to compensation incentives, personality traits, auditor judgement and decision making, and audit quality indicators.

We thank the editors for their comments and suggestions.

References

- Aobdia, D., Lin, C., & Petacchi, R. (2015). Capital market consequences of audit partner quality. *The Accounting Review, 90*(6): 2143-2176.
- Bernardi, R. (1994). Fraud detection: The effect of client integrity and competence and auditor cognitive style. *Auditing: A Journal of Practice & Theory, 13*(Supplement): 68-84.
- Bik, O., & Hooghiemstra, R. (2016). The effect of national culture on auditor-in-charge involvement. *Auditing: A Journal of Practice & Theory*, forthcoming.
- Bonner, S. (2008). *Judgment and decision making in accounting.* Upper Saddle River, New Jersey: Pearson Education, Inc.
- Brown, H., & Wright, A. (2008). Negotiation research in auditing. *Accounting Horizons, 22*(1): 91-109.
- Bryant, S., Murthy, U., & Wheeler, P. (2009). The effects of cognitive style and feedback type on performance in an internal control task. *Behavioral Research in Accounting, 21*(1): 37-58.
- Burke, C., Stagl, K., Klein, C., Goodwin, G., Salas, E., & Halpin, S. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly, 17*(3): 288-307.
- Causholli, M., & Knechel, W. (2012). An examination of the credence attributes of an audit. *Accounting Horizons, 26*(4): 631-656.
- Chen, S., Sun, S., & Wu, D. (2010). Client importance, institutional improvements, and audit quality in China: An office and individual auditor level analysis. *The Accounting Review, 85*(1): 127-158.
- DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics, 58*(2-3): 275-326.
- Dowling, C., Knechel, W., & Moroney, R. (2015). Public oversight of audit firms: The slippery-slope of enforcing regulation. *Working paper, Monash University.* Retrieved from SSRN: http://ssrn.com/abstract=2678828.
- Financial Reporting Council (FRC). (2008). *The Audit Quality Framework.* London: FRC. Retrieved from https://frc.org.uk/Our-Work/Publications/FRC-Board/The-Audit-Quality-Framework-(1)-File.pdf.
- Francis, J., Pinnuck, M., & Watanabe, O. (2014). Auditor style and financial statement comparability. *The Accounting Review, 89*(2): 605-633.
- Fu, H., Tan, H.-T., & Zhang, J. (2011). Effect of auditor negotiation experience and client negotiating style on auditors' judgments in an auditor-client negotiation context. *Auditing: A Journal of Practice & Theory, 30*(3): 225-237.
- Fuller, L., & Kaplan, S. (2004). A note about the effect of auditor cognitive style on task performance. *Behavioral Research in Accounting, 16*(1): 131-143.
- Gibbins, M., & Trotman, K. (2002). Audit review: Managers' interpersonal expectations and conduct of the review. *Contemporary Accounting Research, 19*(3): 411-444.
- Gold, A., Gronewold, U., & Salterio, S. (2014). Error management in audit firms: Error climate, type, and originator. *The Accounting Review, 89*(1): 303-330.
- Gul, F. (1984). The joint and moderating role of personality and cognitive style on decision making. *The Accounting Review, 59*(2): 264-277.
- Gul, F., Wu, D., & Yang, Z. (2013). Do individual auditors affect audit quality? Evidence from archival data. *The Accounting Review, 88*(6): 1993-2023.
- Hardies, K., Breesch, D., & Branson, J. (2016). Do (fe)male auditors impair audit quality? Evidence from going-concern opinions. *European Accounting Review, 25*(1): 7-34.
- Hatfield, R., Agoglia, C., & Sanchez, M. (2008). Client characteristics and the negotiation tactics of auditors: Implications for financial reporting. *Journal of Accounting Research, 46*(5): 1183-1207.
- Hay, D., Knechel, W., & Willekens, M. (2014). The future of auditing research. In D. Hay, W. Knechel, & M. Willekens, *The Routledge Companion to Auditing* (pp. 351-357). Abingdon: Routledge.
- International Auditing and Assurance Standards Board (IAASB). (2015). *Auditor Reporting. Key Audit Matters.* New York: IFAC. Retrieved from https://www.ifac.org/publications-resources/auditor-reporting-key-audit-matters.
- Jenkins, J., Deis, D., Bedard, J., & Curtis, M. (2008). Accounting firm culture and governance: A research synthesis. *Behavioral Research in Accounting, 20*(1): 45-74.
- Kawada, B. (2014). Auditor offices and the comparability and quality of clients' earnings. *Working paper, San Diego State University.* Retrieved from SSRN: http://ssrn.com/abstract=2510186.
- Kelley, T., & Margheim, L. (1990). The impact of time budget pressure, personality, and leadership variables on dysfunctional auditor behavior. *Auditing: A Journal of Practice & Theory, 9*(2): 21-42.
- Knechel, W., Krishnan, G., Pevzner, M., Shefchik, L., & Velury, U. (2013). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory, 32*(Supplement 1): 385-421.
- Knechel, W., Vanstraelen, A., & Zerni, M.

(2015). Does the identity of the engagement partners matter? An analysis of audit partner reporting decisions. *Contemporary Accounting Research, 32*(4): 1443-1478.
- Libby, R., & Luft, J. (1993). Determinants of judgment performance in accounting settings: Ability, knowledge, motivation and environment. *Accounting, Organizations and Society, 18*(5): 425-450.
- Morgeson, F., DeRue, D., & Karam, E. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of Management, 36*(1): 5-39.
- Nelson, M., & Tan, H.-T. (2005). Judgment and decision making research in auditing: A task, person, and interpersonal interaction perspective. *Auditing: A Journal of Practice & Theory, 24*(Supplement): 41-71.
- Otley, D., & Pierce, B. (1996). The operation of control systems in large audit firms. *Auditing: A Journal of Practice & Theory, 15*(2): 65-84.
- Pierce, B., & Sweeney, B. (2005). Management control in audit firms - Partners' perspectives. *Management Accounting Research, 16*(3): 340-370.
- Pincus, K. (1990). Auditor individual differences and fairness of presentation judgments. *Auditing: A Journal of Practice & Theory, 9*(3): 150-166.
- Quadackers, L., Groot, T., & Wright, A. (2014). Auditors' professional skepticism: Neutrality versus presumptive doubt. *Contemporary Accounting Research, 31*(3): 639-657.
- Rich, J., Solomon, I., & Trotman, K. (1997). The audit review process: A characterization from the persuasion perspective. *Accounting, Organizations and Society, 22*(5): 481-505.
- Sweeney, B., Arnold, D., & Pierce, B. (2010). The impact of perceived ethical culture of the firm and demographic variables on auditors' ethical evaluation and intention to act decisions. *Journal of Business Ethics, 93*(4): 531-551.
- Trotman, K., Bauer, T., & Humphreys, K. (2015). Group judgment and decision making in auditing: Past and future research. *Accounting, Organizations and Society, 47*, 56-72.
- Vaassen, E., Baker, C., & Hayes, R. (1993). Cognitive styles of experienced auditors in the Netherlands. *The British Accounting Review, 25*(4): 367-382.
- Wallman, S. (1996). The future of accounting, part III: Reliability and auditor independence. *Accounting Horizons, 10*(4): 76-97.
- Wikipedia. (n.d.). *Beer style*. Retrieved May 3, 2015, from https://en.wikipedia.org/wiki/Beer_style.

A discussion of "Auditor-client co-production of the audit and the effect on production efficiency"

Sytse Duiverman and Christine Nolder

SUMMARY This article provides a reflection on the paper and presentation during the FAR Conference of 9 and 10 May 2016 of "Auditor-client co-production of the audit and the effect on production efficiency" by Gaeremynck, Willekens, and Knechel (GWK). The authors examine the effect of auditor-client co-production on the efficiency of an audit, a topic relevant to the whole audit-client financial reporting and assurance supply chain. Using a sample of working papers from a Belgium Big 4 firm, the authors explore the controllable (i.e., managerial) and non-controllable (i.e., environmental) factors that contribute to variations in audit efficiency within the auditor-client co-production of financial reporting quality. The results suggest that partner tenure positively contributes to the efficiency of the audit engagement, but the audit work prepared by the client, interim-work by the auditor, and the final audit work performed during off-peak season negatively affect audit efficiency. While this may be surprising from an efficiency standpoint, it may be that such measures add to the audit effectiveness to an extent that outweighs any efficiency loss. Audit quality or audit production, after all, is a matter of efficiency and effectiveness. GWK offer a number of important insights for practitioners interested in the delicate balance of managing efficiency and effectiveness. In the paragraphs that follow, we aim to both summarize the GWK research and highlight the importance of the findings to practice.

PRACTICAL RELEVANCE GWK lay the foundation for future advancements in audit efficiency research in a number of ways. Academics and practitioners can work together to refine the audit efficiency model to include additional variables (e.g., number of subjective accounts, number of critical accounting policies, senior/manager tenure) that significantly affect audit efficiency. When inefficient audits are identified both within a firm office (e.g., Boston office) and across offices around the globe, the model can inform managing partners at both the local and global level about potential root causes of engagement inefficiencies. Moreover, academics can work with practitioners to develop audit efficiency models on an account level basis to identify when too much time is being spent on low risk areas. Future research opportunities include extending the model to identify audits that are perhaps, too efficient. For example, overly efficient audits may represent a red flag that a particular audit team may be cutting corners and not adhering to firm methodology.

1 Introduction and background

What do we know about the production process of the audit? Production is the process of converting a set of inputs into a set of outputs that have economic value (Shepherd, 1970). Production efficiency is generally defined in terms of minimizing the inputs to a production process for a given level of output (Fried et al., 2002). Up until now, only a few studies have examined audit production efficiency, in part, because of a lack of accessible data from firms (Causholli, De Martinis, Hay & Knechel, 2010). Despite this limitation, a scarce number of studies on audit production have provided valuable insights regarding the efficiency of the audit process.

Dopuch et al. (2003) use Stochastic Frontier Analysis (SFA)[1] and Data Envelopment Analysis (DEA) to estimate audit efficiency. Both of these techniques are benchmark techniques which compare individual audits to an "efficient frontier". The most efficient audit is deemed a 100% efficient audit, all other audits are considered to be inefficient, meaning that they could potentially reach the same output using fewer audit hours. Dopuch et al. (2003) use client characteristics as inputs and audit hours as outputs in their DEA approach. In doing so, they assume the output of the audit process (i.e., assurance) to be constant when in practice, reasonable assurance may vary across audits. Dopuch et al. (2003) find that audit efficiency has room for improvement, and inefficiencies are costly. However, many of the client characteristics in the model are not controllable and therefore, cannot be managed by audit firms to improve efficiency. As such, Dopuch et al. (2003) increased the level of interest in the examination of auditor-client co-production.

Knechel et al. (2009) extend this line of research by letting go of the "fixed level of assurance" assumption to accommodate the variation in reasonable assurance across audits. Like Dopuch et al. (2003), they utilize DEA to measure audit production efficiency. However, the inputs and outputs used by Knechel et al. (2009) are different. Audit costs per staff level are used as the inputs of the production function. The number of hours

spent on assurance increasing activities (such as audit planning, internal control evaluation and substantive testing) are used as an output measure since these activities would presumably lead to a higher level of assurance. Knechel et al. (2009) find that audits are more efficient for (1) larger clients, (2) clients with a December year-end and (3) clients who are more automated. Audits are less efficient when auditors (1) rely on internal controls, (2) provide non-audit services and (3) when clients have subsidiaries. However, after the publication of Knechel et al. (2009) it was still unclear to what extent firms could control variations in audit efficiency.

2 Summary of Gaeremynck, Willekens and Knechel (2016)

In practice, it is generally assumed that more intensive client co-operation leads to more efficient audits. GWK seek to assess how the joint decisions (e.g., reliance on internal audit or the timing of the audit work) made by the auditor and client influence the efficiency of audit engagements. They begin by suggesting that different audit approaches yield different levels of assurance even though the final output for each audit is unitary (i.e., audit opinion). That is, the audit approach is based on the professional judgement of the auditor and is reflected in the risk assessment, the level of materiality, and the extensiveness of the planned audit procedures.

Unlike previous studies, GWK measure the variation in assurance by using the engagement's final materiality level. They explain that because lower materiality requires more extensive audit work, one can assume that different levels of materiality lead to relatively different levels of assurance (assuming all else equal). Therefore, GWK use materiality as their output measure (i.e., dependent variable) for measuring the efficiency of the audit process.

In general, the audit process is a complex service which is highly dependent on the unique characteristics of both the client and the auditor. Inefficiencies in the audit process may stem from auditors' choices in the production process and client specific characteristics. GWK develop a model to disentangle the controllable factors from the non-controllable client specific factors. This distinction is important to elucidate potential strategies for improving the efficiency of audits.

The study was conducted on 158 diverse audit engagements for the year ends 2006 or 2007. GWK's data includes publically available client data and data from a Belgium Big 4 audit firm (i.e., audit team information, client information, hours performed per staff level, deadline information, engagement specific information and deliverables).

To disentangle managerial from non-controllable efficiency, GWK's model includes a three-stage DEA analysis to determine the level of managerial and non-controllable efficiency:

Stage 1: DEA-analysis with fundamental inputs (labor) and outputs (materiality) to determine preliminary efficiency.

Stage 2: Apply DEA to inefficiencies (slack) of stage 1 and environmental factors to isolate environmental or non-controllable inefficiencies.

Stage 3: Apply DEA to fundamental inputs and outputs after adjusting for environmental factors isolated in step 2 to assess managerial or controllable inefficiencies.

The estimated managerial and non-controllable inefficiencies were thereafter incorporated in a regression analysis to determine which aspects of the auditor-client co-production are associated with more or less managerial controllable inefficiency. Variables in the regression include controllable characteristics of an audit such as composition of the audit team, partner tenure, manager tenure, substantive testing before year end, interim audit, audit report lag, internal audit benefit and auditor's use of work prepared by the client.[2]

GWK found that partner tenure positively contributes to audit efficiency, but that preparation of the audit work done by the client, interim work and final audit work done during off-peak season negatively affects efficiency. The evidence for a negative relationship between interim-work and preparations made by the client are surprising because they contradict the assumption that these factors contribute to audit efficiency. Furthermore, contrary to expectations, the results suggest that no efficiencies are realized by relying on the client's internal audit department, providing non-audit services to the client, and having a higher qualified audit team. The authors do not hypothesize about the reasons for the unexpected findings. However, with respect to the internal audit department, it is possible that client delays in deliverables disrupt the scheduling of the field work and thus, affect the efficiency of the engagement.

3 Recommendations, implications, and considerations for science and practice

3.1 Audience

In the current version of the paper, it is unclear which audience (e.g. academics, practitioners, regulators) is being targeted and who are the primary beneficiaries of the research. Statements in both the introduction and conclusion suggest that academics are the target audience since the research challenges the assumptions underlying traditional techniques for analyzing production efficiency used by academics. That is, GWK's research does not assume assurance is fixed and proposes materiality levels as a new proxy for the output measure in audit efficiency models studied and tested

by academics. Moreover, the authors appeal to academics by introducing a new approach to measuring audit efficiency using their three-stage process.
Besides academics, it stands to reason that practitioners have the most to gain from scientific advances in audit efficiency (and effectiveness) research. That is, improving our understanding of how firms can measure, monitor, and thus, manage audit efficiency within and across firms are of great importance to practitioners. In the next section, we further elaborate on the significant contribution of audit efficiency research to practitioners.

3.2 Importance

The importance of the research is currently described in terms of demonstrating how to separate out the controllable (i.e., managerial) factors from the uncontrollable (i.e., environmental) factors so that firms can focus on what is in their control. Based on the framing and the tone of the writing, readers may infer that the uncontrollable factors are not informative and thus, can be set aside to focus on what is controllable. However, isolating the relationship between the uncontrollable factors and audit efficiency is of significant value to firms. That is, knowing how to measure the uncontrollable factors and their relationship with the number and mix of audit hours within and across offices has the potential to significantly improve the firm's operations. Currently, firms have systematic models (or at the very least, benchmarks) for how many hours and what mix of rank hours are necessary based on client factors such as size, risks, complexity, controls, etc. Firms can benefit from audit efficiency research by measuring the actual hours and mix for each audit and comparing the efficiency scores of each to determine the extent to which audits appear to be improperly staffed when controlling for managerial factors. As such, GWK's research disentangling the controllable and uncontrollable factors has the potential of benefiting practice to a much greater extent than presently described.

3.3 Contribution/implications

The contribution/implications of this research extends beyond the newly introduced statistical approach suggested by the authors. The research offers a means for examining the relationship between audit efficiency and audit quality. To illustrate, imagine a firm that calculates the audit efficiency scores for all audits inspected by regulators each year. Over time, the firm can identify a relationship between audit efficiency and audit quality. The firm can then calculate the audit efficiency scores for all audits and preemptively identify the audits that have a greater likelihood of containing audit deficiencies. Further investigation may reveal these audits may be indicative of cultural differences across offices or perhaps training issues in one or more locations. As such, the identified audits may warrant remediation such as greater supervision or an alternative mix of staffing.

4 Conclusion

In short, GWK add to our understanding of the drivers and impediments of audit efficiency. Moreover, their model provides a means for isolating uncontrollable client factors, which may lead to strategies for monitoring and managing engagement compliance with firm methodology. Such advancements may lead to measured improvements in the standardization of audit quality within global network firms. In conclusion, GWK exemplify the advantages of a close cooperation between researchers and practitioners and how such cooperation can lead to new insights that will move relevant audit research forward. ∎

Drs. S.J. Duiverman RA is PhD at Tilburg University.
Dr. C. Nolder CPA is an Assistant Professor at Suffolk University, Boston.

Notes

1 Stochastic Frontier Analysis is a method of economic modeling. Further explanation of this method is beyond the scope of this paper.

2 Non-controllable characteristics of an audit were purposely not included in the regression but include measures such as size, industry, and financial risk.

References

- Causholli, M., De Martinis, M., Hay, D., & Knechel, W.R. (2010). Audit markets, fees and production: towards an integrated view of empirical audit research. *Journal of Accounting Literature, 29*: 167-215.
- Dopuch, N., Gupta. M., Simunic, D., & Stein, M. (2003). Production efficiency and the pricing of audit services. *Contemporary Accounting Research, 20*(1): 79-115.
- Fried. H.O., Lovell, C.A.K., Schmidt, S.S., & Yaisawarng, S. (2002). Accounting for environmental effects and statistical noise in Data Envelopment Analysis. *Journal of Productivity Analysis, 17*(1-2): 157-174.
- Gaeremynck.A., Willekens, M., & Knechel, W.R. (2016). Auditor-client co-production of the audit and the effect on production efficiency. *Working paper presented at the 2016 Foundation for Auditing Research Conference.*
- Knechel, W.R., Rouse, P., & Schelleman, C. (2009). A modified audit production framework: evaluating the relative efficiency of audit engagements. *The Accounting Review, 84*(5): 1608-1638.
- Shepherd, R.W. (1970). *Theory of cost and production functions.* Princeton NJ: Princeton University Press.
- Simunic, D. (1980). The pricing of audit services: theory and evidence. *Journal of Accounting Research*, 18(1): 161-190.

Opportunities to improve the measurement of audit quality: a call for collaboration between the profession and academics

Jeroen van Raak and Ulrike Thürheimer

SUMMARY Audit research relies on a wide range of publicly available measures to examine which factors influence the quality of financial statement audits. While research to date has to rely largely on remote proxies due to a lack of access to proprietary data, there is considerable doubt about the validity of these proxies and the inferences drawn based on these proxies. In order to provide insight into the reliability of these measures, Rajgopal, Srinivasan & Zheng (2015) investigate whether commonly used proxies for audit quality (i.e. auditor size, abnormal audit fees, accrual quality, and the propensity to meet and beat analyst targets) are associated with deficiencies reported in SEC investigations and class-action lawsuits. Such alleged deficiencies reflect how external stakeholders assess audit performance. Their study indicates that the use of such proxies is highly problematic and that the performance of these measures, with the exception of auditor size, is poor.

PRACTICAL RELEVANCE This paper discusses the study by Rajgopal et al. (2015) and provides implications for research and practice. Specifically, we argue that failure to reliably measure audit quality harms the capability of academic researchers to assist the auditing profession in safeguarding and enhancing audit quality. Access to proprietary engagement data is thus essential for researchers to examine the key drivers of audit quality and to propose practically relevant recommendations.

1 Introduction

The ability to correctly assess and measure audit quality is of importance to audit firms, users of financial statements, regulators, standard-setters and society at large. This is reflected in various recent initiatives on audit quality indicators by regulators and oversight bodies (IAASB, 2014; CAQ, 2014; PCAOB, 2015), and changes to the auditor report (ISA 701). Academic research has contributed to the discussion about audit quality, largely relying on publicly available data to measure and infer audit quality. However, these publicly available measures of audit quality may not capture actual audit quality. In fact, commonly used audit quality proxies in audit research are not associated with alleged audit deficiencies in investigations by the Securities and Exchange Commission (SEC) and class-action lawsuits against auditors which reflect how external stakeholders assess audit performance. Extant proxies of audit quality may thus not adequately reflect audit quality. This is the key message of Professor Suraj Srinivasan's talk at the Foundation for Auditing Research conference which took place on May 9 and 10, 2016 at Nyenrode Business University. Suraj Srinivasan is a professor of Accounting and Management at Harvard Business School. His presentation was based on his working paper titled "Measuring Audit Quality", which is joint work with Shivaram Rajgopal (Professor of Accounting and Auditing at Columbia Business School) and Xin Zheng (doctoral student at Emory University).

The purpose of this paper is twofold. We first shed some light on the current body of academic knowledge on the measurement of audit quality by discussing the study of Rajgopal, Srinivasan & Zheng (2015) (hereafter RSZ). Building on this, we elaborate on how a collaboration between practice and academia can improve the measurement of audit quality and thus allow researchers to assist practice in enhancing and safeguarding audit quality. Specifically, we point to the necessity for researchers to gain access to engagement-specific, granular audit data in order to make practically relevant recommendations for the audit profession and work towards a joint goal of high audit quality.

The remainder of this paper is organized as follows. The next section describes how audit quality is defined and how extant research has measured audit quality using publicly available data. Section 3 provides a summary of the study by RSZ. Section 4 discusses the contributions and limitations of RSZ. The paper concludes with a discussion on how measurement of audit quality can be improved through a collaboration between practice and research.

2 Defining and measuring audit quality

It is difficult to define what encompasses audit quality as perceptions of audit quality vary across stakeholder groups (see e.g. Knechel, Krishnan, Pevzner, Shefchik & Velury, 2013). Investors and society at large may consider audits to be of high quality if the financial statements are free from material misstatements and expect auditors to provide a warning signal in case of a client's impending bankruptcy, in the form of a going concern opinion (Carson et al., 2013). Regulators and oversight bodies might instead consider audits as high quality if they have been conducted and documented in line with auditing standards and if auditors obtained sufficient competent audit evidence to support their audit opinion (GAO, 2003). Finally, audit professionals may deem audits to be of high quality if risks have been sufficiently considered and incorporated into an effective audit plan, and if the audit has been performed according to the audit plan and audit auditing standards (see e.g. Christensen, Glover, Omer & Shelley, 2015 and PwC, 2015).

Prior academic literature has provided various definitions of audit quality. The most frequently cited definition of audit quality is the one by DeAngelo (1981). She defines audit quality as "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" (p. 186). Hence, audit quality can be seen as a function of an auditor's perceived competence and independence (Watts & Zimmerman 1981). DeAngelo's (1981) audit quality definition essentially characterizes audit quality as dichotomous, i.e. failure or non-failure to detect and report violations. The definition does not reflect the fact that audit quality can be defined as a continuum ranging from low to high (Francis, 2004, 2011). Taking this into account, DeFond and Zhang (2014, p. 276) define higher audit quality as "greater assurance that the financial statements faithfully reflect the firm's underlying economics, conditioned on its financial reporting system and innate characteristics". This definition of audit quality is related to clients' financial reporting quality and reflects a regulatory view of audit quality that higher audit quality is necessarily better (Donovan et al., 2014). Donovan et al. (2014), in their discussion of DeFond and Zhang (2014), however, suggest a more client/auditor-centric view with audit quality being determined by client preferences and audit firm's efficient provision of services for which they hold a competitive advantage. Thus, Donovan et al. (2014) propose that auditors' competitive advantages and institutional features of the audit process should be integrated in the definition of audit quality. Overall, a multitude of definitions of audit quality exist, and none may be complete, partly because different stakeholders hold different opinions about what encompasses audit quality.

While audit quality is difficult to define and no universally accepted definition exists, it is even more challenging to measure audit quality reliably. Audits are labor intensive and require a lot of judgment, while the outcome of the audit (i.e. the level of assurance over financial statements) is not directly observable. Hence, a financial statement audit can be classified as a credence good[1] (Causholli & Knechel, 2012). In fact, audit failures might not be revealed until years after an audit has taken place, or not at all.

The measurement of audit quality is further complicated by the fact that audit researchers and external stakeholders typically need to rely on publicly available information. Therefore, audit research uses various alternative, but sometimes distant and indirect proxies for audit quality. The most commonly used proxies for audit quality are a Big N indicator (assuming higher audit quality if an audit is conducted by one of the larger audit firms), discretionary accruals (i.e. the part of accruals which are assumed to be used by management for earnings management purposes), the propensity to issue a going concern opinion, (abnormal) audit fees, meeting or beating analyst forecasts, restatements, accounting conservatism, auditor litigation, and perception-based measures, such as PCAOB inspections, cost of capital, and the earnings response coefficient as a means of analyzing market reactions to unexpected earnings (see DeFond & Zhang, 2014, for a comprehensive list). It goes without saying that, taken at face value, these publicly available measures of audit quality are at best indirect and seem disconnected from audit practice. Since researchers without access to better data must measure audit quality in such an indirect way, large measurement error may result and some measures may reflect client effects rather than auditor effects (e.g. discretionary accruals likely reflect within-GAAP earnings management which is to a large extent at the discretion of management). Clearly, these measures suffer from limitations. Testing the reliability of these measures is at the heart of RSZ's analysis and these issues are further detailed below.

Researchers examine the association between these audit input or outcome proxies of audit quality and underlying audit characteristics or contextual factors to examine a wide variety of research questions. The audit-

ing literature for example examines how audit quality is affected by factors such as: auditor independence (e.g. DeFond, Raghunandan & Subramanyam, 2002), industry expertise (e.g. Reichelt & Wang 2010), auditor tenure (e.g. Myers, Myers & Omer, 2003), mandatory or voluntary firm and partner rotation (e.g. Lennox, Wu & Zhang 2014), fee pressure (e.g. Choi, Kim & Zang, 2010), office size (e.g. Choi, Kim, Kim & Zang 2010), voluntary audits (e.g. Lennox & Pittman, 2011), and joint audits (e.g. Zerni, Haapamäki, Järvinen & Niemi, 2012). However, prior research finds only limited or mixed evidence for many of these research questions which curbs the potential for practically relevant recommendations for audit practice and standard-setting.

This point is illustrated by the diverging findings on whether high (abnormal) audit fees, an input to the audit, enhance or reduce audit quality, and whether fees serve as a direct proxy of audit or financial reporting quality. High fees can be attributed to a) economic bonding between the client and the auditor which would reduce audit quality, b) a risk premium paid by the client, or low audit efficiency which would not impact audit quality, or c) high audit effort which would increase audit quality (DeFond & Zhang, 2014). Another complicating factor is the fact that audit fees are an input to the audit, but that (abnormal) audit fees are used as proxies for both audit input (i.e. risk premium, efficiency and effort explanations, see for example Doogar, Sivadasan & Solomon, 2015) and output (i.e. fees as a proxy for audit quality and financial reporting quality, see for example Hribar, Kravet & Wilson, 2014). Since researchers have to rely on publicly available data and are thus unable to clearly distinguish between these alternative explanations, it is not surprising that various different findings are reported in the audit fee literature.

The mixed findings in prior audit fee literature and audit research in general might thus be attributed to the use of imperfect measures of audit quality. These studies may at best fail to assess the real impact of audit characteristics or contextual factors on audit quality or at worst make erroneous inferences and provide inappropriate recommendations for audit practice and regulation. This clearly illustrates the need for better measures of audit quality for the sake of enhancing knowledge about audit quality and its determinants, and ultimately contributing to the improvement of audit quality in practice. Practical recommendations on how audit quality can be improved may be enabled through access to audit firm data, thus bridging the current disconnect between science and practice.

3 Validity of currently used audit quality measures

In order to verify how well the commonly used proxies for audit quality reflect actual audit failures, RSZ examine in their current study whether the most frequently used audit quality proxies reflect alleged audit deficiencies in the SEC's Accounting and Auditing Enforcement Releases (AAERs) against auditors and class-action lawsuits in which auditors appear as defendants. The content of AAERs and lawsuits reflect how external stakeholders, the SEC and private law firms, assess audit performance on a granular level. The audit deficiencies mentioned by the SEC and private law firms may reflect impaired reporting quality, violations of auditing standards, and provide a strong indication of poor audit quality.

Specifically, RSZ assess whether these detailed deficiencies are associated with the following audit quality measures: Big N, discretionary accruals (the part of accruals which reflect management choices and earnings management), accrual quality (the extent to which accruals map into operating cash flows), (abnormal) audit fees, and the likelihood of meeting or beating analyst forecasts. Using hand-collected data on non-dismissed class-action lawsuits and AAERs, they examine the extent to which the deficiencies specified within these documents explain variation in audit quality proxies. For this purpose, they collect data from 1978 to 2011, including 34 AAERs (87 firm-years) and 135 lawsuits (382 firm-years)[2]. A wide range of deficiencies are mentioned within these documents. RSZ extract the following issues: lack of independence from the client, a failure to exercise due care, an insufficient level of professional skepticism, an inadequate planning and supervision, an inadequate assessment of fraud risks, a failure to gather sufficient audit evidence, a failure to express an appropriate audit opinion, and a failure to evaluate the adequacy of disclosures. The authors classify these deficiencies into a number of broad categories and subcategories which are in line with generally accepted auditing standards (GAAS).

Specifically, RSZ regress each of the aforementioned audit quality proxies on the number of allegations mentioned or on specific audit deficiencies mentioned in the AAERs and class-action lawsuits, controlling for commonly defined factors. The evidence they present provides limited support for the reliance on measures of audit quality used by prior research. The authors report that the total number of allegations is negatively associated with the presence of a Big N audit firm, which in turn seems to be driven by the fact that Big N audit firms are less likely to be accused of failure to exercise due care. Big N auditors are, however, not associated with any other specific audit deficiencies (i.e. those described in the previous paragraph). This suggests that Big N as a proxy for audit quality may reasonably reflect audit quality as perceived by external stakeholders in the US setting. The authors furthermore note that abnormal audit fees are on the one hand negatively associated with failure to adequately

plan the audit, the failure to state whether the financial statements are presented according to Generally Accepted Accounting Standards (GAAP), and inadequate considerations of fraud risks. On the other hand, abnormal audit fees are positively associated with the total number of violations and the number of other allegations of deficiencies. This makes it hard to interpret the findings. Moreover, as explained above, the use of (abnormal) audit fees as an indicator of audit quality is generally speaking rather complicated, as higher fees can reflect more effort, but could also reflect a risk premium (in case of increased client risks) or even poor planning or economic bonding and thus impaired auditor independence. Regardless of the difficulty associated with the interpretation of the effect of audit pricing on audit quality, it is also a difficult measure to act upon (i.e. it is hard to argue that increasing/decreasing fees could improve audit quality). The other measures of audit quality, i.e. discretionary accruals, accrual quality and the likelihood of meeting or beating earnings targets, are not (consistently) associated with allegations of deficiencies. In summary, only one of the proxies provides a consistent (negative) association with the number of alleged deficiencies reported by the SEC and lawyers, which is audit firm size (Big N). RSZ therefore suggest that Big N can be used as a reasonable proxy for audit quality. At the same time, the authors urge future research to refine or develop new audit quality proxies, for example through access to better data.

We concur with RSZ's conclusion that refinement of audit quality proxies is needed, and point to at least four reasons why the Big N measure which is consistently negatively associated with allegations in AAERs and lawsuits in RSZ, is not uncontested: a) auditor choice is endogenous and based on client characteristics (see e.g. Lennox, Francis & Wang, 2012 for a discussion on selection bias); b) the measure is not engagement specific, hence it is impossible to examine variations in audit quality across clients within the same auditor type[3]; c) it is an input, not an outcome variable, making it impossible to verify how differences in for example audit process factors, such as adopted audit methodologies, affect audit quality; and d) there is mixed support for audit quality differentiation of large audit firms in settings outside the US, such as in continental Europe (Vander Bauwhede & Willekens, 2004). Thus, it is not sufficient to rely on the Big N measure as a proxy for audit quality if research is to inform practice and standard-setting in the future.

4 Contributions and limitations of RSZ

RSZ make at least three important contributions to the auditing literature. First, by providing evidence which highlights the issues with commonly adopted proxies for audit quality, they show that these measures hardly reflect any of the deficiencies pointed out by the SEC or lawyers. The only proxy which RSZ recommend and which does not seem to suffer from construct validity problems is auditor size (a Big N dummy). This paints a gloomy picture of audit research of the past 35 years, since it appears that audit research has not made significant advancements beyond the proposition in DeAngelo (1981) that auditor size and audit quality are positively associated. This is further problematic as it raises serious concerns with respect to the validity of prior research using the common audit quality proxies under investigation in RSZ. This is evidenced by the fact that various inconsistent findings on the same research questions have been produced over the years, sometimes without reaching consensus[4].

Secondly, the findings of RSZ add to the literature by providing detailed descriptions and examples of audit deficiencies. By classifying the deficiencies in line with GAAS standards RSZ provide a foundation for future research on this topic.

Finally, RSZ provide insights into how external stakeholders evaluate audit deficiencies and the differences in focus between regulatory agencies (i.e. the SEC) and lawyers. For example, they show that lawyers typically focus on a greater number of violations, and violations of sub-standards. Furthermore, lawyers mostly sue the largest audit firms. This is in line with deep-pockets hypothesis.[5] In contrast, most of the investigations by the SEC target the smaller audit firms. The SEC typically also mentions a smaller number of deficiencies. Potential explanations for the SEC's behavior are that auditors might be too big to fail or the revolving door phenomenon[6] (Kedia, Khan & Rajgopal, 2015).

While the study by RSZ clearly points to the limitations of commonly used audit quality measures, we also note a number of limitations of the paper itself. First of all, and as acknowledged by RSZ, AAERs by the SEC and class-action lawsuits reflect audit deficiencies as perceived by external stakeholders. Whereas these are relatively objective and detailed measures of audit deficiencies, the measure might suffer from selection bias. While lawyers are more likely to pursue large audit firms with deep pockets in class-action lawsuits, the SEC is less likely to go after large audit firms. This selection bias might impact the results of the study, and little can be done to effectively control for the bias since selection of audit firms by the SEC and lawyers is based on factors unobservable to academics.

Second, and as mentioned by RSZ, the lawsuits and SEC investigations in their sample are always settled outside of court. This makes it unclear to what extent an audit was actually insufficient in the sense that allegations would hold up in a court of law and to what extent a settlement relates to reputation protection by the auditor. We do point out that this is probably less

of an issue for SEC investigations as the SEC has access to issuer data and thus better insight into any violations. However, the sample is comprised of a larger number of lawsuits than AAERs, which potentially affects the validity of results.

Third, auditors are only sued if there is very strong evidence of financial statement fraud. This implies that the approach used by the authors to identify audit failures might only capture the most extreme and rare cases. As pointed out by Francis (2004), less than 1 percent of all audits represent outright audit failures.

Fourth, we note that the majority of AAERs and class-action lawsuits relate to the period from 1997 to 2004, which is in line with other research which shows that the tendency to sue auditors has decreased in the period after the passage of the Sarbanes-Oxley Act (see e.g. Fuerman, 2012). This may impact the ability of future research to assess audit quality through the use of deficiencies reported in lawsuits or AAERs. More generally, audit research in settings outside the US cannot rely on such deficiencies to assess audit quality, since inspection reports and data on lawsuits are typically not publicly available outside of the US.

Fifth, while we concur with the notion that currently used audit quality proxies are imperfect, we raise the question whether one would actually expect an association between these proxies and the deficiencies reported in AAERs and class-action lawsuits. For example, the amount of discretionary accruals (a measure of accrual quality) picks up within-GAAP earnings management, whereas the AAERs and class-action lawsuits are related to severe audit deficiencies. Thus, the lack of significant associations between extant audit quality measures and deficiencies noted in AAERs and class-action lawsuits may not completely invalidate these audit quality constructs. Nevertheless, we agree with the authors that developing new audit quality proxies or refining the existing ones through access to more granular data is paramount if research is to inform and assist practice in its ambition to improve audit quality.

As a suggestion for future research we believe that it could be useful to cluster the various reported deficiencies and focus on those deficiencies which actually impair audit quality. This is important because the reported deficiencies are interdependent. For example, the selection of an engagement team that lacks required industry specific expertise might fail to exercise sufficient professional skepticism, which could lead to an insufficient evaluation of audit evidence, which subsequently can cause the auditor to issue an inappropriate audit opinion.

Finally, we want to point out that it could be insightful for future research to examine, based on the alleged deficiencies, if there are specific settings in which particular traditional audit quality measures do provide reliable indications of audit quality (see Lennox, Wu & Zhang, 2016, for evidence that discretionary accruals and earnings characteristics reflect higher audit quality in the Chinese setting). More over, it is important to recognize that each measure has both advantages and disadvantages (for example with regard to reliability and timeliness), making it important for researchers to assess which proxy is best used to answer a particular research question.

5 Conclusion

Academic research, using publicly available data, may have provided a starting point for understanding audit quality and its various determinants and levels. However, as pointed out by RSZ, audit research largely relies on publicly available, but quite imperfect measures of audit quality. In order to enable researchers to assist the auditing profession and financial statement users in understanding the drivers of audit quality and the root causes of audit failures, it is of key importance to provide researchers with access to more insightful internal audit firm data and potential audit quality indicators (see also Francis, 2011 and Knechel et al., 2013). Some recent literature provides first insights into audit quality using engagement-specific proprietary audit firm data, for example internal assessments of engagement quality (Bell, Causholli & Knechel, 2015). Bell et al. (2015) provide additional insights into the audit process and quality and shed light on issues for which previous literature had found mixed results[7]. These papers provide a promising start and show that a collaborative approach between the profession, regulators or oversight bodies and academics, as initiated in the Netherlands by the Foundation for Auditing Research, is the only way forward for academics to truly contribute to safeguarding and enhancing audit quality and for practitioners to gain relevant insights into factors affecting audit quality.

Since the quality of an audit depends on inputs to the audit, the audit process, and outputs that arise from the audit process (IAASB, 2014), the availability of audit firm data on these input, process, and output factors, as well as client characteristics and contextual factors is the key to enhance our understanding about audit quality, its determinants and consequences.

Possible examples of audit output data which could be of use in academic research, are internal quality review reports, waived misstatements, the size of required adjustments to be made by the client, and inspection reports to audit firms by oversight bodies (such as the Dutch AFM and the US PCAOB). This would provide researchers with more direct and accurate indicators of audit quality than the currently used proxies and enable researchers to answer important research questions that inform audit firms, regulators, and society at large.

Audit research could further enhance our understanding by not only providing insight into the outcomes of an audit, but also by providing insight into the audit process, such as chosen audit techniques and methodologies and the development of new tools, such as those related to Big Data analysis. Access to audit input data, such as audit team composition, auditor characteristics and behavioral aspects of the audit will be vital for gaining an understanding of the drivers and root causes of audit quality. hese insights will allow academics to assess which resources, techniques, methodologies, and tools lead to the highest impact on audit effectiveness and efficiency across different clients and will help to understand the determinants of audit quality.

It is paramount to base audit research on internal audit firm and engagement-specific data to provide findings, unconfounded by measurement issues, on the factors that improve or harm audit quality. Researchers' access to proprietary audit firm data promises to not only clarify mixed previous findings but will also help to shed light on previously unexplored research questions that are of importance to audit firms, regulators, and users of financial statements. These insights can enhance our knowledge about audit quality, help audit firms in planning and conducting audits and decrease the expectation gap between auditors and external stakeholders. Ultimately, this will allow researchers to make valuable and practically-relevant recommendations to audit practice about how audit quality can potentially be improved. There is a lot to gain from collaboration between audit firms and accounting scholars. ■

Dr. J.J.F. van Raak is an Assistant Professor at Utrecht University, School of Economics.
U. Thürheimer, M.Sc. is a PhD student at Maastricht University, School of Business and Economics.
We thank the editor, Chris Knoops, the editors of this special issue, Jan Bouwens, Olof Bik and Philip Wallage, for their helpful comments. We also appreciate the comments and suggestions of Ann Vanstraelen.

Notes

1 The economics literature defines a credence good as a good whose qualities are not observable before or after the purchase of the good and whose need is difficult to know ex ante. This makes it difficult for the buyer of the credence good to assess its utility (Emons, 1997). Causholli and Knechel (2012) examine the audit as a credence good since the quality is not known by the client (or other stakeholders), ex ante or ex post.

2 All lawsuits and SEC AAERs in RSZ's sample are settled outside of court.

3 It is also important to acknowledge that the Big4 are not a homogenous group and that there are differences in audit quality between large audit firms. For example, inspection reports (e.g. by the Dutch AFM or the PCAOB) indicate quality differences between the Big4. Furthermore, audit quality likely varies within a Big4 firm, for example, across audit offices (Francis & Yu, 2009).

4 The findings in RSZ clearly show that results of previous studies using these noisy audit quality proxies may not be relied upon, which is further corroborated by the fact that studies using the same proxies find different results. Nevertheless, it is important to acknowledge that there are settings for which the commonly used proxies for audit quality form relatively consistent and logical results over time.

5 Larger auditors with more wealth are at higher risk from litigation since the rewards for plaintiffs will be higher when targeting auditors with deep pockets. Dye (1993) suggests that large auditors thus have an incentive to issue more accurate reports so as to avoid the risk from litigation.

6 The revolving doors phenomenon implies that the SEC is less likely to pursue large audit firms since the SEC's (enforcement) staff is lenient towards potential future employers such as the large audit firms. This suggests regulatory capture of the SEC (Kedia, Khan & Rajgopal, 2015). The second potential phenomenon that can explain why the SEC is less likely to pursue large auditors is that the audit firms have become too big to fail and that the audit market would suffer from the exit of a Big4 audit firm (Kedia, Khan & Rajgopal, 2015).

7 Bell, Causholli and Knechel (2015) investigate how auditor tenure and the provision of non-audit services impact audit quality, measured as quality indicated through internal quality reviews. They show that tenure has no impact on audit quality for SEC registrants, but decreases audit quality for private clients. They further show that non-audit service fees are positively associated with audit quality for SEC registrants and negatively associated with audit quality for private clients. This sheds light on previous mixed findings on whether audit quality improves or declines with tenure, and the provision of non-audit services.

References

- Bell, T.B., Causholli, M., & Knechel, W.R. (2015). Audit firm tenure, non-audit services, and internal assessments of audit quality. *Journal of Accounting Research, 53*(3): 461-509.
- Carson, E., Fargher, N.L., Geiger, M.A., Lennox, C.S., Raghunandan, K. & Willekens, M. (2013). Audit reporting for going-concern uncertainty: A research synthesis. *Auditing: A Journal of Practice and Theory, 32*(1): 353-384.
- Center for Audit Quality (CAQ). (2014). *CAQ Approach to Audit Quality Indicators*. Washington, D.C.: CAQ. Retrieved from http://www.thecaq.org/docs/reports-and-publications/caq-approach-to-audit-quality-indicators-april-2014.pdf?sfvrsn=2.
- Causholli, M., & Knechel, W.R. (2012). An examination of the credence attributes of an audit. *Accounting Horizons, 26* 4): 631-656.
- Choi, J.H., Kim, C., Kim, J.B., & Zang, Y. (2010). Audit office size, audit quality, and audit pricing. *Auditing: A Journal of Practice & Theory, 29*(1): 73-97.
- Choi, J.H., Kim J.B., & Zang, Y. (2010). Do abnormally high audit fees impair audit quality? *Auditing: A Journal of Practice & Theory, 29*(2): 115-140.
- Christensen, B.E., Glover, S.M., Omer, T.C., & Shelley, M.K. (2015). Understanding audit quality: insights from audit professionals and investors. *Contemporary Accounting Research*. Advance online publication. DOI: 10.1111/1911-3846.12212.
- DeAngelo, L.E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics, 3*(3): 183-199.
- DeFond, M.L., Raghunandan, K., & Subramanyam, K.R. (2002). Do non–audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research, 40*(4): 1247-1274.
- DeFond, M.L., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics, 58* (2): 275-326.
- Donovan, J., Frankel, R., Lee, J., Martin, X. & Seo, H. (2014). Issues raised by studying DeFond and Zhang: What should audit researchers do? *Journal of Accounting and Economics, 58*(2): 327-228.
- Doogar, R., Sivadasan, P., & Solomon, I. (2015). Audit fee residuals: costs or rents? *Review of Accounting Studies, 20(4)*: 1247-1286.
- Dye, R. A. (1993). Auditing standards, legal liability, and auditor wealth. *Journal of Political Economy, 101(5)*: 887-914.
- Emons, W. (1997). Credence goods and fraudulent experts. *RAND Journal of Economics, 28(1)*: 107-119.
- Francis, J. (2004). What do we know about audit quality? *The British Accounting Review, 36*: 345-368.
- Francis, J. (2011). A framework for understanding and researching audit quality. *Auditing: A Journal of Practice & Theory, 30*(2): 125-152.
- Francis, J., & Yu, M.D. (2009). Big4 office size and audit quality. *The Accounting Review, 84*(5): 1521-1552.
- Fuerman, R.D. (2012). Auditors and the post-2002 litigation environment.*Research in Accounting Regulation, 24*(1): 40-44.
- Government Accountability Office (GAO) (2003). *Mandated Study on Consolidation and Competition*. GAO Report 03-864. Washington, DC: Government Printing Office. Retrieved from http://www.gao.gov/new.items/d03864.pdf.
- Hribar, P., Kravet, T., & Wilson, R. (2014). A new measure of accounting quality. *Review of Accounting Studies, 19*(1): 506-538.
- International Auditing and Assurance Standards Board (IAASB) (2014). A Framework for Audit Quality. New York: International Federation of Accountants (IFAC). Retrieved from www.ifac.org.
- Kedia, S., Khan, U. & Rajgopal, S. (2015). The SEC's enforcement record against auditors. *Working paper*. Retrieved from https://www0.gsb.columbia.edu/mygsb/faculty/research/pubfiles/13983/KKR_july%2031%20sr.docx
- Knechel, W.R., Krishnan, G.V., Pevzner, M., Shefchik, L.B., & Velury, U.K. (2013). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory, 32* (Suppl. 1): 385-421.
- Lennox, C.S., Francis, J.R., & Wang, Z. (2012). Selection Models in Accounting Research. *The Accounting Review, 87(2)*: 589-616.
- Lennox, C.S., & Pittman, J.A. (2011). Voluntary Audits versus Mandatory Audits. *The Accounting Review, 86*(5): 1655-1678.
- Lennox, C.S., Wu, X. &, Zhang, T. (2014). Does mandatory rotation of audit partners improve audit quality? *The Accounting Review, 89*(5): 1775-1803.
- Lennox, C.S., Wu, X., & Zhang, T. (2016). The effect of audit adjustments on earnings quality: Evidence from China. *Journal of Accounting and Economics, 61*(2-3): 545-562.
- Myers, J.N., Myers, L.A., & Omer, T.C. (2003). Exploring the auditor-client relationship and the quality of earnings: a case for mandatory auditor rotation? *The Accounting Review, 78*(3): 779-799.
- PriceWaterhouseCoopers (PwC) (2015). *Audit Quality. Can it be measured?* Point of View. Retrieved from https://www.pwc.com/us/en/cfodirect/assets/pdf/measuring-audit-quality-indicators.pdf.
- Public Company Accounting Oversight Board (PCAOB) (2015). Concept Release on Audit Quality Indicators. *PCAOB Release No. 2015-005*. Washington, D. C.: Public Company Accounting Oversight Board. Retrieved from https://pcaobus.org/Rulemaking/Docket%20041/Release_2015_005.pdf.
- Rajgopal, S., Srinivasan, S., & Zheng, X. (2015). Measuring audit quality.*Working paper*. Retrieved from https://www.scheller.gatech.edu/academics/conferences/Rajagopal-Srinivasan-Zheng.pdf.
- Reichelt, K.J., & Wang, D. (2010). National and office-specific measures of auditor industry expertise and effects on audit quality. *Journal of Accounting Research, 48*(3): 647-686.
- Vander Bauwhede, H., & Willekens, M. (2004). Evidence on (the lack of) audit-quality differentiation in the private client segment of the Belgian audit market. *European Accounting Review, 13*(3): 501-522.
- Watts, R.L., & Zimmerman, J.L. (1981). The markets for independence and independent auditors. *Working paper*. Retrieved from http://hdl.handle.net/1802/4864.
- Zerni, M., Haapamäki, E., Järvinen, T., & Niemi, L. (2012). Do joint audits improve audit quality? Evidence form voluntary joint audits. *European Accounting Review, 21*(4): 731-765.

Debate on Public Audit Oversight enforcement: it is all about procedural justice?

Joost van Buuren and Annie Wong

SUMMARY This article provides a reflection of the paper as presented and discussed at the FAR conference of 9 and 10 May 2016 "Public Oversight of audit firms: the slippery slope of enforcing regulation" written by Robert Knechel, Carlin Dowling and Robyn Moroney (hereafter KDM, 2016). KDM describe the perceptions of auditors from the Big 4 audit firms and the regulator[1] in Australia regarding the correlation between regulatory enforcement style and its perceived impact on audit quality. We believe the paper is relevant and timely, because it documents well the current divergence of perceptions between auditors and regulators on how to continue their pursuit for higher audit quality. We argue that the paper could be strengthened by offering the authors' views on what is required from both parties to realign their expectations.

PRACTICAL RELEVANCE The external oversight of auditors has been operational for nearly a decade. Although the interviewed auditors seem positive about the effects of regulation on audit quality in the past years, the current enforcement style is perceived to be coercive and appears to trigger unintended effects. We argue that an increase of procedural justice might help to align mutual expectations between auditors and regulators. In our view, an important first step in this process is to clearly define audit quality, because enhancing audit quality was the motivation of establishing audit oversight. In all, the paper by KDM fuels the need for a dialogue on the effectiveness of auditor oversight.

1 Audit quality and supervisor enforcement styles

1.1. Research objective

First, we will provide a summary of the paper by KDM. After a series of corporate accounting scandals between 2000 and 2005, the oversight of the audit profession was considered insufficient and the need was identified to strengthen oversight. As a consequence, regulatory bodies around the world started playing a more active role and regulations were tightened. Among the implemented measures are audit firm inspections, through which regulators aim to improve the quality of public audits. The purpose of these inspections is to identify weaknesses and deficiencies in how an audit is conducted. The findings of the investigations along with suggestions for improvements are then communicated to the audit firms through (publicly available) inspection reports (see FRC, 2016; PCAOB, 2016). To examine the effectiveness of these inspections, Church and Shefchik (2011) examined the number of deficiencies found in PCAOB's inspection reports in the years 2004 to 2009 and found a decline in deficiencies over the years, suggesting that inspections indeed improve audit quality. Yet, it is also possible that audit firms become better in anticipating on inspections. To gain a better understanding of how audit firms manage inspections, Knechel et al. (2016) interviewed audit partners from Big 4 firms, mid-tier firms and regulators in Australia. More specifically, using the slippery framework (Kirchler, Hoelzl & Whal, 2008) as a theoretical lens the authors examine how the enforcement style of an oversight body affects how audit firms react to inspections.

1.2 The slippery-slope framework

The slippery-slope framework describes how regulatees behave and comply with regulations (Kirchler et al., 2008). The main idea of the framework is that compliance behavior depends on *how a regulator exercises power* on the one hand and *the amount of trust* between regulator and regulatee on the other.

Power refers to the likelihood that the regulator will detect and punish non-compliance with the objective to adjust behavior of the regulatee (Kirchler et al., 2008). A regulator that conducts frequent inspections and punishes misbehavior with high penalties is seen as having high power. In contrast, a regulator that is negligent with inspections and rarely imposes sanctions on noncompliance has low power.

In the slippery-slope model by Kirchler et al. (2008), a regulator is considered to exercise power on a continuum from a full-coercive approach to a full-collaborative approach. The coercive approach refers to the use of full power to enforce compliance. Consequently, the coercive authority imposes fear and uses punishments to enforce compliance. In contrast, in the collaborative approach the regulator takes a low power, facilitative enforcement role; the regulator educates and supports the regulatee in making the right choices. Thus, the regulator-regulatee relationship in the collaborative enforcement style is not built on exercising power, but instead on trust.

Further, the slippery-slope model suggests that a regulator can achieve full compliance regardless of the enforcement style: either by exercising high power in the coercive enforcement style or by increasing trust in the collaborative style.

1.3 Audit quality and enforcement style

In their study, KDM report that the Australian audit partners perceive the enforcement style of the Australian regulator, the Australian Securities and Investment Commission (ASIC), as predominantly coercive; the publicly available inspection reports and media headlines are examples of the coercive use of the regulator's power. This coercive enforcement style renders a lot of power to the ASIC, but at the same time impedes the development of perceived trust between the two parties. The results as presented in the paper suggest a mismatch between the perceptions of auditors and audit authorities regarding the effectiveness of enforcement styles to enhance audit quality. The regulator's perception is that with an increase in enforced compliance, audit quality improves: rules and standards establish an understanding of audit firm responsibilities and inspections are important to identify hazards for corrective action. Auditors however believe that an abundance of rules is not beneficial to audit quality and might even lead to unintended effects, such as ticking-the-box and form over substance approaches. For instance, KDM report that auditors spend extra time on areas that the regulator considers important, even when in their view it adds little value to the audit. This finding suggests that audit firms anticipate inspections by addressing issues solely in order to satisfy the inspectors' expectations, and not for reasons of audit quality. KDM argue that the implementation of rules is important to safeguard against audit failures, but the audit regulator must be careful that it does not exceed the so-called 'tipping-point': the threshold where enforced compliance starts having adverse effects on audit quality. Hence, KDM advocate that regulators should reflect on their prevailing enforcement style and consider whether it actually improves audit quality or gives rise to unwanted effects.

In the next section, we will provide some feedback on the assumptions made in the paper and provide suggestions on how to strengthen the relevance of the paper.

2 Discussion

2.1 Concerns regarding the slippery slope framework

We appreciate that the authors try to theoretically explain why and how enforcement styles can trigger higher compliance, but we doubt whether the slippery slope framework by Kirchler et al. (2008) is appropriate for this purpose. Our main concerns include the validity of the (implicit) assumptions in the slippery slope model for the public auditing context and the appropriateness of the concept of 'trust'.

2.1.1 Validity of assumptions

First of all, we argue that a high level of compliance can only be reached if there are clear, unequivocally interpreted compliance rules. For example, in the case of the determination of income taxes - for which the slippery slope was originally developed -, a lot of detailed rules are developed. Consequently, in most cases, there will be no discussion on how to determine the taxable income and the amount of taxes to be paid. In the case of disagreement, the company is able to appeal against the tax assessment and the court will decide on how to interpret a tax rule. Because the rules are clear and strict, the tax authorities are able to enforce tax compliance to a high level. In other words, the concept of 'clarity of the rules' is missing in the framework. Without clear rules, the tax authorities cannot effectively enforce compliance, whatever strong powers the tax authorities have (like fines, jail, etc.). Thus, clear rules are an essential condition to be able to comply in the first place. As discussed later, we argue that the current public auditing context does not (always) meet this condition.

Second, the slippery slope model assumes that a 100% compliance is possible, independent of the selected enforcement strategy. Achieving a 100% compliance score is a strong assumption, even for rules-based tax frameworks. Moreover, because the model suggests that a 100% compliance can be achieved regardless of the selected enforcement style, the selection of the enforcement style is reduced to a simple equation of costs and benefits; hence the tax authority or regulator should select the cheapest strategy. Although the model is only used as a 'theoretical lens' by KDM, we believe the assumptions used in the model are possibly too strong to be valid in a real life tax enforcement situation it tries to describe.

Third, besides concerns regarding the external validity of the slippery slope model itself, we question

whether this model is appropriate as a theoretical lens to describe the perceptions of the effectiveness of enforcement strategies of audit supervision authorities by auditors and regulators. As mentioned before, the slippery slope framework is developed for the context of the rules-based tax compliance context. The tax compliance context is quite different from the public auditing context. First, the objective of the tax rules are clear: determine the taxable income and the amount of taxes to be paid. In the case of auditing, the objective is open for different interpretations: assurance should be delivered on whether the financial statements represent a 'true and fair view'. Besides that the concept of a 'true and fair view' does not result in black and white accounting solutions (e.g., think of a valid range of fair value estimates), there is no commonly accepted definition of audit quality (IAASB, 2015c; DeFond & Zhang, 2014; Knechel et al., 2012). Audit quality is not defined in the auditing standards: it is only mentioned once that the audit partner should "emphasize (a) the importance to audit quality [...] and (b) the fact that quality is essential in performing audit engagements." (IAASB, 2015a, par. A3, p.140). Furthermore, even in the Framework of Audit Quality, the IAASB refrains from providing a definition of audit quality (IAASB, 2015b, appendix 1, par. 1, p.40). If the objective of the audit and hence audit quality is not well defined, we argue that it is hard to develop measures that increase the level of audit quality, let alone how to enforce audit quality. In other words, contrary to the tax context, it is difficult to set a minimum level of audit quality, let alone the complexities of defining the highest level of audit quality possible in a context of extensive professional judgment.

Fourth, by using the slippery slope model as a theoretical lens, it is unclear whether and to which extent KDM consider self-regulation and professional virtues as an effective means to safeguard compliance of auditing standards. The paper is silent on why auditors are reluctant to comply with auditing standards resulting in the need of a regulator: is it because of a lack of professional virtues or because audit quality is too unclear and too vague?

2.1.2 Procedural justice

One alternative way to interpret KDM's research results is to apply the concept of procedural justice. In our reading of the results, there seems to be a lack of procedural justice. Procedural justice "concerns how justice is administered. Key aspects of a just legal system are that the procedures are fair and transparent." (Brooks & Dunn, 2012, p. 146). In the case of auditing supervision, the regulator's decision-making process is perceived by auditors as a black box; it may be even injustice towards auditors. Further, auditors perceive reluctance to appeal against the regulator's decisions, because the regulator represents both the supervisor role and grants the audit licenses. Moreover, the audit professionals do not appreciate the generalized conclusions in the regulators' reports, because the conclusions are based on a small, in their view not representative, sample, but they are communicated as being representative for the 'current state of audit quality delivered by the audit firms'. Such concerns by audit professionals signal low perceived procedural justice: transparency on how findings are weighted and interpreted by the regulator in its verdict regarding the audit quality and when - based on what criteria - a finding is considered representative for the audit firm or the audit profession as a whole.

We argue that the trust in the fairness of audit oversight goes beyond the performance of the audit supervisory agency and its employees: it is about 'trust in the supervisory system itself'. In other words, trust in the system of audit oversight does not only depend on whether the audit oversight inspector has experience in examining the quality of audit files properly. We argue that trust is primarily driven by the fact that an inspector followed the audit oversight procedures properly.

Let us explain the difference with the example used by KDM: speeding tickets. The rules for car-driving in western countries are developed in a democratic process based on common power sharing (trias politica): legislature (parliament), an executive (police), and a judiciary (judges). So, if parliament intends to make society safer, it authorizes a traffic law. In a good traffic law and associated implemented acts, the principles and rules are described in terms of what is allowed in traffic (which vehicles are allowed on the public roads), what is prohibited (maximum speed limits), the enforcement process (allowed speed detection methods including calibrating of speedometers and training of officers) and the enforcement power (stopping of cars, proportionate punishment, including transparent and consistent determination of fines, when drivers should be prosecuted, who is allowed to impose fines and right of appeal, etc.). Imagine a car driver who is stopped by a police officer for speeding. The trust of the car driver in the enforcement regime will not be primarily based on whether the police officer acts in a nice manner or his or her high personal experience with enforcing speed limits, it will be based on the validity of the enforcement action;

a. There should be a valid reason: the correctly calibrated speedometer objectively detected speeding;
b. Based on the formal procedure and the use of the formal tables (preferably an automated decision) the punishment is determined: a fine based on a formally authorized tables, given the circumstances;

c. The car driver will receive a formal speeding ticket and preferably pays it the to the fine governmental collecting agency, not to the police officer directly;
d. The car driver is informed about the right to appeal and how and to which extent privacy procedures apply.

Similarly, in the case of enforcing compliance of auditing standards, we argue that procedural justice is the driver of perceived trust in the supervisor. In order to satisfy the procedural justice in the audit oversight context, the supervisor should - in our view - meet the following requirements:

a. Valid reasons to accuse an auditor of delivering improper audits. This requirement includes a validated and transparent process of (1) assessing audit quality and (2) decision-making regarding the final conclusion: acceptable or not-acceptable audit quality. Note that 'assessing audit quality' requires an appropriate benchmark of what audit quality is, i.e., a clear and comprehensive definition of audit quality, a validated measurement instrument of audit quality, a review team with sufficient knowledge and experience, and a process in which review quality is safeguarded. The decision-making process requires at least a proper *audi alteram partem* ('hear the other side too') and checks and balances to safeguard a well-balanced and objective decision-making process by the regulator;
b. Based on the conclusion of the review outcome, the punishment should be determined in a transparent and consistent manner and in such a way that auditors will not be surprised by the sanction. Consistent and transparent determination of sanctions requires formally authorized and publicly available categories of auditor misconduct and the related sanctions;
c. The destination of the fine payments should be transparent and, to ensure objectivity, not be beneficial to the supervisor itself. Preferably, the fines should be beneficial to supporting the objective of increasing the level of audit quality, like research projects;
d. A transparent procedure is adopted for the right of appeal against a decision by the supervisor and a complaint procedure in the case of inspector misconduct;
e. A transparent procedure with checks and balances on how and which review findings are communicated to the public and how the quality of such reports is safeguarded. An important aspect in this respect is how, i.e., based on what criteria, the findings of a small inspection sample are generalized to the quality delivered by an audit firm or the auditing profession as a whole.

In the paper by KDM, there are a lot of quotes suggesting frustrations by audit partners related to the requirement of 'validity' of the accusation of auditor misconduct regarding audit quality. We argue that the lack of a proper definition of audit quality and hence the lack of an objective measurement of audit quality, can be an important source of these frustrations. In the paper, there are also findings regarding the generalizations and tone of the supervisor's report on audit quality.

2.2 Relationship between enforcement-styles, compliance and perceived audit quality

2.2.1 Positive effect of auditor oversight

The results as reported by KDM suggest that about 80% of the maximum level of audit quality is already met and that the current debate between the auditors and the regulator concerns the last 20%. Interestingly, KDM suggest that the regulator believes that an even stronger coercive enforcement style will enable a 100% audit quality level. However, in the paper, no information is provided on what kind of audit quality the regulator is envisioning. The auditors, however, believe that a stronger coercive enforcement style is likely to result in a lower level of audit quality. Unfortunately, in the current version of the paper, no information is provided on what this 20% actually represents and why the perceptions of the regulator and the auditors differ significantly. Some quotes in the paper seem to point into the direction that different views exist between the regulator and the auditor what audit quality actually represents.

2.2.2 Agreement is seemingly a possibility

Interestingly, the results as reported by KDM suggest that during the period in which the auditors and the regulator perceived a positive effect of auditor oversight, both auditors and regulator also perceived the then applied collaborative enforcement style as 'effective'. The paper however, is relatively silent on this period and focuses on the shift towards the coercive enforcement style. The quotes in the paper clearly suggest the coercive enforcement style renders a lot of frustration among the auditors. However, it could be interesting to address the question why and when the discrepancy between the two parties started. Would different expectations regarding audit quality help explain this phenomenon? Or due to differences in ambition regarding the level of audit quality to be achieved? Why did the supervisor change its enforcement style or is this 'style change' a misperception by the auditors? Finally, it would be interesting to further elaborate on why the supervisor started to use a communication style with generalizations that are only based on small samples.

3 Conclusion and research opportunities

In all, the paper addresses an important and emerging topic in the auditing profession. With the focus on examining the perceived effectiveness of auditor oversight enforcement styles on audit quality, the authors initiate an important debate: are the auditing profession and the oversight body heading in the right direction? In our view, this debate should lead to the development of an effective auditing oversight enforcement model, supported by both the public and the auditing profession.

In order to achieve this, we would like to suggest the following. First, future research may consider the theoretical analysis of the results from the perspective of procedural justice, because it may be an explanation for the frustration voiced by the audit partners in the quotes in the KDM-paper. Second, future research can examine why and when the perceptions regarding the effectiveness of the enforcement style started to differ between auditors and regulators. Further, in our view it would be relevant for future research to consider what is needed to align mutual expectations between auditors and inspectors again. Possibly, examining how other industries, such as education and medicine, cope with inspections might be an interesting starting point. Finally, we emphasize the importance to prioritize the development of a clear and comprehensive definition of audit quality. ■

Dr. J. van Buuren RA is an associate professor of Auditing and Assurance at the Nyenrode Business Universiteit.
A. Wong MSc is a PhD candidate in Accounting at the Vrije Universiteit Amsterdam

Notes

1 Note that we use (audit) regulator, audit supervisor and audit authority interchangeably.

References

- Brooks, L.J., & Dunn, P. (2012). *Business and professional ethics.* International Edition, 6th edition, South-Western Cengage Learning.
- Church, B.K., & Shefchik, L.B. (2011). PCAOB inspections and large accounting firms. *Accounting Horizons, 26*(1): 43-63.
- DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics, 58*(2): 275-326.
- Financial Reporting Council (2016). *Audit Quality Review.* Retrieved from https://www.frc.org.uk/Our-Work/Audit/Audit-Quality-Review.aspx.
- International Auditing and Assurance Standards Board (2015a). *Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements - Volume I.* IAASB: New York. Retrieved from https://www.ifac.org.
- International Auditing and Assurance Standards Board (2015b). *Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements - Volume II.* IAASB: New York. Retrieved from https://www.ifac.org.
- International Auditing and Assurance Standards Board (2015c). *Supplement to the Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements - Volume III.* IAASB: New York. Retrieved from https://www.ifac.org.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology, 29*(2): 210-225.
- Knechel, W.R., Krishnan, G.V., Pevzner, M., Shefchik, L.B., & Velury, U.K. (2012). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory, 32*(1): 385-421.
- Knechel, W.R., Dowling, C., & Moroney, R. (2016). Public oversight of audit firms: The slippery-slope of enforcing regulation. Working paper. An earlier version of this paper is available at http://ssrn.com/abstract=2678828.
- Public Company Accounting Oversight Board (2016). Firm Inspection Reports. Retrieved from https://pcaobus.org/Inspections/Reports/Pages/default.aspx.

Panel discussion: A multi-stakeholder perspective on audit quality and audit research

Philip Wallage

On May 9, 2016, the first day of the FAR conference, a panel discussion was chaired by professor Henriëtte Prast (Chair of the FAR Board). Four stakeholders - an audit practitioner, an academic, a non-executive director, and an audit regulator – presented and discussed their thoughts about the following issues

- how to improve audit quality,
- the importance of collaboration between academics and practitioners (and the role of FAR therein),
- the oversight and regulatory climate, and
- the stakeholder expectations of auditors.

Participants welcomed the opportunity to discuss these issues with Marco van der Vegte (Head of Audit of Deloitte the Netherlands and FAR Board member), Barbara Majoor (on behalf of Authority Financial Markets (AFM, the Dutch auditor oversight body), Jan Nooitgedagt (non-executive director), and Marleen Willekens (audit researcher at the University of Leuven). In the following narrative report the interactive debate on a multi-stakeholder perspective on audit quality and audit research is presented.

Marco van der Vegte, partner at Deloitte and member of the FAR Board.

Q: What do expect from FAR as the "love baby" of the audit industry and academics?

I have high expectations because a good relation between the profession and the academic world can really add value. In this respect I would like to share some thoughts about what encompasses audit quality from the following four perspectives:

1. audit team and audit firm;
2. audit client and the supervisory board;
3. the regulator;
4. the public.

In my view we need a broader concept of audit quality also encompassing the audit process and users' experiences instead of a narrow compliance quality perspective. This is important because the quality of our work is at the core of our existence and determines our societal relevance. Audit quality is affected by audit firms, the profession, audit clients, the regulators, the public and our employees not to forget. Being a role model of quality, integrity and being able to positively adopt to change is key. It is also important that auditors recognize relevant matters and take the opportunity to make an impact and create what I would call an exceptional experience. The moment that "matters" could be an event or irregularity at the client where the auditor steps up, informs the supervisory board and if needed the regulator and public at large.
In other words, a relevant characteristic of audit quality is "a unique client experience". If we agree that an audit is a process or a project, unique client experiences should be of a consistent high level as quality should be consistent. We should also recognize that culture and behavior are the primary drivers of audit quality improvements. In this respect I emphasize that rewarding people who deliver consistently high quality positively, is a basic fundament for enhancing audit quality.

The following issues are relevant from a quality perspective for both audit firm and team:

- assessing the culture as audit firm;
- a portfolio analysis of business risks of the audit firm;
- a deep understanding of clients' business;
- targeted response to risk assessment;
- identify and act on moments that matter most;
- demonstrate professional skepticism;
- increased transparency for example by including Key Audit Matters in the auditor's report. But as an audit firm we have to consider how to further increase transparency on what we have been doing and how we integrate technology and analytics in the audit process;
- finally, how we can provide a meaningful experience for talent and at the same time organize good team spirit and effort.

If we look from an audit client and supervisory board perspective, quality encompasses a thorough audit process, no surprises and meeting deadlines. But quality also means that firm and auditor are able to deliver valuable insights and also use latest technology. Someone who is able to early identify issues and offers solutions at reasonable costs. The question is if clients are interested in the findings of inspections by regulators. Based upon US and UK experiences, it is still unclear whether the supervisory boards will choose a specific audit firm based on findings of inspections by regulators. There are also clients that just want a painless process, a smooth audit and nothing more.

My observation is that regulators assess firm culture and behavior as drivers of audit quality but at the same moment test compliance of the audit process with the applicable auditing standards, relevant laws and regulation.

Finally, audit quality from the perspective of the public. They see an audit firm as a role model for integrity, objectivity and executing audits that, unless indicated otherwise, confirms the going concern of the company and identifies all areas of non-compliance.

Q: Culture is something relatively static, it slowly changes over time. However, the audit sector nowadays acknowledges that culture is important and has to change. You have people in business for longer periods of time who are part of the culture. Don't you need new influx if you want to change culture in your firm?

It starts with realizing that we are a regulated business. Having that recognition starts with our own management and supervisory boards. We should be aware that, being a regulated profession, we have to meet the expectations of the public and that we had to change our mindset in the last couple of years of what we believe is quality. Our audit partners and external auditors have to realize again that audit quality really matters and drives our performance and remuneration. Therefore we have to be sure that a balanced set of performance measures is in place. The bar for audit partners has been raised in recent years and some of them were not able to meet this bar left the firm. Changing the tone of our accountants is more difficult than changing the tone of a new student. You need new students who are capable to change the culture of the firm. The influx of the last three to four years already has a totally different background than people that are in for twenty years. That is a change in itself. Involving young people with six to eight years of experience in your audit quality program has a great impact.

Q: Do you think something has to change in the curriculum of the students who want to become auditors to enable them to contribute to a cultural change?

What can help improving culture - and there is already a lot of effort taken there – is for example team building and looking for new ways to set the tone of audit staff. We can positively influence mindsets at university as well as at firm level. However, compared with twenty years ago, the mindset is probably not that different. In my view the impact of regulators, media as well as of the public changed significantly partly caused by audit failures.

The second speaker is **Barbara Majoor.** Barbara is professor at Nyenrode University. She has been partner at KPMG and Deloitte and is currently working with the AFM, which is the Auditors Oversight Body in the Netherlands.

I would like to share some thoughts about audit quality from the perspective of the regulator. A regulator in fact defines audit quality as having sufficient appropriate audit evidence to justify the audit opinion. In the Netherlands we apply a relatively simple system. An audit file could have sufficient audit evidence or insufficient audit evidence. In the past (2014) the publication of our inspection report confirmed the need for improvement of audit quality. The establishment of FAR is one of the measures taken by the profession. We think a thoroughly root cause analyses is of great importance. Researchers could help us to develop methods to perform such analyses systematically to understand the real drivers for audit quality.

I will share some further thoughts about audit quality from a regulatory perspective. The quality of the audit is depending on the view and perception of other important stakeholders like investors and audit committees as well. This is an important area for further research. We think that one of the important drivers is the culture within an audit firm as culture can shape individual behavior. Behavior of partners, staff and other employees determine audit firm culture. We think that the introduction of new governance measures within audit firms will improve audit quality. In the Netherlands all big audit firms already introduced supervisory boards to monitor the board, having a specific role in driving audit quality. Last but not least, the expertise and experience of the individuals (partner, staff etc.) drive audit quality. In other words, knowledge and competence of the partner, culture-oriented factors like leadership and team composition contribute to audit quality. Culture also embraces softer capabilities that affect audit quality, such as the system of evaluation, appraisal and remuneration of individ-

uals. And of course audit quality is supported by up to date auditing standards and methodology. It won't surprise that the oversight strategy of the Dutch regulator focuses on inspection of audit files but also on monitoring culture, behavior and whether firms are implementing improvement measures to maintain and strengthen audit quality. In our regulatory system we use both instruments and they should interact in our strive to improve audit quality.

Q: Given the fact that your employer (regulator) has concluded that several audits did not meet standards, does that mean that auditors lack expertise and competence? Other question, when talking about culture, rewards and good behavior, do you suggest that there should not be focus on intrinsic motivation but good behavior should be triggered by external incentives like money?

We don't believe that, if an audit file is not up to standards, the root cause is always pointing towards a lack of competence. Auditors could have the right competences but they were not or incorrectly applied in a specific audit. There could be other "root causes" like time pressure, unbalanced team composition, teams not being challenged enough, etc. As mentioned before, academic research could help understanding this kind of root causes and drivers of audit quality.
Regarding your second question, we believe that in the end auditors are most of the time motivated to do a good audit but you can help them in shaping their behavior. We would be happy if all auditors were intrinsically motivated to deliver high quality but we have to be realistic as we don't live in an ideal world.

Jan Nooitgedagt is former CFO of Aegon NV and is currently member of several supervisory boards and audit committees. He has been an auditor in public practice for thirty years.

Q: I was just wondering, what went wrong the last 20 years?

Your question reminds me of an experience in my early years as junior staff member. A senior partner visited one of our clients in a bad financial condition and said to the director that his car was too big and too expensive. He said if you don't change your car, I don't want to audit the financial statements anymore. That kind of behavior created a memorable impression. The partner was able to say what you probably, can't say to a company director anymore. I think something went wrong over the last 20 years. The FAR should research the reasons thereto.

I have a couple of statements to share with you that could give some further insights. One of my observations as auditor and board member is that the profession should be more proud of the services being offered. The audit profession is key for all stakeholders, including investors, regulators, board members and so on. I really appreciated my auditor when I was CFO who told me what went well and what went wrong anywhere in the world. And don't forget, information from the business units upwards is always filtered as they want to please you as they depend upon you. I became more aware of the importance of the auditor's role after leaving the profession. Again, we have to restore the trust of all stakeholders.

One of my concerns is that I feel, and I might be wrong, that there have not been major developments in audit techniques, methods, software. Recently a US colleague told me that the whole audit profession can be automated. I have not seen it yet, but it would not surprise me if at least testing and checking would become fully automated processes. But of course a lot has changed in a positive way. In my view audit firm rotation is a positive development, the extended auditor's opinion will add value and also the role of the auditor in shareholders meetings is improving and adding value. These have been positive changes, but as said before changes in audit techniques have been insufficient. I also feel that auditors should more and more challenge the board and discuss techniques, risk assessment and controls. In this respect I would welcome research into the quality of discussions between auditors and boards as a very relevant research topic.

Already from the early days of the profession, the big issue is that the auditor will be paid by the auditee. I know it's still true but I don't hope that it will ever change. I don't see a net positive effect if a supranational government body will decide who will be the auditor and pay the bill. But given the size of the big 4 and opportunities for growth, you have to ask yourself: is the audit the core product or is it a by-product? I think this question should be central in future discussions. Do we really need to have audit-only firms? I think that won't be easy as consultancy services are in general much more profitable than audits. I remember in my time as Chair of the Board of EY we had to fight to keep our large financial audit clients because we could sell a lot of consultancy services instead. In my view, audit should be at least the key product of the audit firms including the big four. It won't surprise but you as researchers could also help answering this important question.

Q: You just shared that your children don't want to become an auditor. Could you tell us what were their mean objections?

They probably haven't seen their father that much. Being an auditor is a tough job. You have to work also

during weekends. I remember we were not allowed to go skiing between January and May. Lot of young people want to go skiing and spend their time alternatively. Another reason could be that accountancy is probably not that sexy anymore.

Q: You were saying that your experience is that there was some pressure on doing other things like consultancy instead of audit services. At least in the minds of the employees this could make audits less interesting. Could that also affect the culture of the firm?

In my experience it is very difficult to have different disciplines who have different business models and profit profiles. It is almost impossible that one discipline is twice as profitable as other disciplines. In the end people don't want to share profits or losses with each other. What is helping is that the audit is becoming more profitable again. I hope that auditors will be as profitable again as other services being offered. If not, than it will become difficult for firm leadership to keep all professionals satisfied.

Marleen Willekens is professor of accounting and auditing at the University of Leuven.

I would like to reflect on audit quality and the link between practice and academia. When I was preparing for this talk some issues came up in my mind. First what is audit quality but also what have we learned, what do we not know about audit quality. There is a lot we do not know but a lot has been discussed already today [and reflected in this MAB issue]. One of the reasons we lack understanding, is that a lot of relevant data are not available for researchers. There are probably other reasons too. In this respect I would like to ask our colleagues here why regulators are not always interested in what we find in audit research. I remember for example the EU Green Paper[1] about the audit profession that included rather extreme statements that were not really backed up by available research findings. What can we do about this?
Over the years I have felt that a lot of the people in practice are also not that interested in what we study. I can actually understand that to a large extend, but why is practice than not using us more often? We are free and independent researchers. We can tell you things about your organization if we get the right data. Why has that not happened in the past? I am sure there is an explanation for all that we could talk about together.

Now, let us go back to the concept of audit quality. There are a number of audit quality frameworks out there. Basically if we look into the audit quality framework of the International Auditing and Assurance Standards Board (IAASB), it says that input is important, output is important, there is context and there is also interaction between the stakeholders involved.
When we zoom in on inputs and outputs, what they also say in that framework is that there are different levels that matter. The auditors level, the engagement, the audit firm, national level, or office level and I can even think of more levels. We have to take the level into account as researchers. To link this to research we are going to look at all these elements at the different levels that have been specified in the framework. That means that we need data on that and in general terms the data that could be used are available within the firms. Data about engagements teams, background of team members, independence codes, how competencies are stimulated, education. But also on firm level, what is the governance structure, quality control systems and so on.

When we look at the input level, we don't know much because of lack of data. We know more about the output because more information is available in the public domain, like audit reporting, earnings quality but also transparency reports. Here we have done a lot more academic work. Now moving on, if we want to open the audit firm black box, what relevant questions could we try to answer? One question is 'what is the effect of the variable audit firm level control and quality mechanisms on the quality of audit engagements?' Another question we could address is about human resource practices of different audit firms and how to link that to style elements as recognized in prior archival work. Another question is how audit team composition affects audit quality. Most current research studies still have an implicit audit firm constant quality assumption. We can investigate the impact of such characteristics on audit quality in future research.
I also think that the incremental effect of auditing on the quality of financial information is something that we haven't explored a lot because relevant data about the audit and its effect on the financial statements is not available up to now. If this data is made available to academics, the incremental effect could be studied as well as how the primary attributes of an audit effect the various indicators that have been specified in the frameworks. So getting more data about attributes like audit methodology and audit process steps.

We have seen in several studies that "one size does not fit all". In the study we presented earlier today [as included in the paper of Nolder and Duiverman in this MAB issue] we had different types of clients in our sample.
Different stakeholders had different expectations and different types of organizations may value audit quality differently. We still know very little about this kind of differences.

Finally, a lot of interesting experimental work in auditing research is already available that have looked at judgmental issues. What we could label archival judgment research and actually based on working papers and information that we get from audit firms, validate some or several of these studies and see whether those results that have been obtained from experimental studies are actually holding when we are doing them again with archival data. This was in a nutshell what I wanted to share with you and let's hope that we make progress here together.

Further questions

Q. Is it hard for audit committees to assess audit quality and what can be done to improve that?

Jan Nooitgedagt: Most audit committee members are not auditors by education. They don't exactly know what audit techniques are and how an audit is performed. It all starts with risk assessment of the company, what you do internally as audit committee and what the auditor is doing, comparing that and having discussions about the main issues and the audit approach. But there are huge differences in audit committees in understanding of what auditors exactly do and of what methods and techniques auditors apply.

Barbara Majoor: It is hard for audit committees to really understand the audit process of gathering audit evidence. What kind of techniques the team is applying, how they assess the information and how they draw their conclusions is difficult to understand. In my view audit quality indicators can help to solve this problem. Further research should make clear which indicators are linked to audit quality in practice.

Q. Why are regulators not so much interested in research and why didn't they do more with research results?

Barbara Majoor: A regulator has to deal with many stakeholders, politicians for example. I think regulators don't always have time to take research into account, because in case of incidents politicians want to respond very quickly by taking measures. It would be great if research could help to evaluate incidents including taking measures.

Q: The focus of the audit are the financial statements but more than once a client said that there is much more next to the financial statements. Audits could help to improve clients internal control system as well. For academics it may be an important question: what is the value of an audit?

Marleen Willekens: The added value of the audit is much more than just checking the financial statements. What comes out of the process can lead to recommendations that may improve various systems but also other suggestions. I also think that this is very much dependent of the type of organization you are auditing.

Marco van der Vegte: There are a lot of things that come with the audit like for example we do culture assessment at clients. As part of understanding the tone-at-the-top, which is also a key driver for a company for their own quality. What's their tone at the top and what drives the mentality and the mindset of a company? We do culture assessments as part of the audit. So I can give numerous examples of things we do in an audit that are not visible to the public but which can also sell the audit as a service much better.

Jan Nooitgedagt: I must admit that nobody is talking about audit quality during the selection process of a new auditor. That is an interesting research question, why is the selection of an auditor not based on audit quality?

Q: what is the role of audit clients in this regard? Why don't audit committees understand what the auditor really does? Is this because the auditor and the company don't talk about the engagement at all or is this completely dealt with by the CFO, instead of the audit committee?

Jan Nooitgedagt: The latest development is that we need persons with a finance background in an audit committee but I also see more and more people like myself with an audit background. I think that there is a difference if you do or don't understand the language of an auditor. I don't believe that it is a lack of communication any more, the auditor is always attending the meetings of audit committees. The issue is that the discussions become more and more technical and difficult to follow for non-auditors.

Marco van der Vegte: What we have been seeing is that auditors were extremely busy with the team to make sure that they were compliant with the standards to be tested by peers and by regulators. Now we see improvements, it is time again to think about what is the value of the audit. For example, I had a session last week for two days with professionals from ten countries to do role plays from the perspectives of the audit committee, the CEO, the controller and others versus the audit team. We concluded there are some communication issues. For example, we concluded that our assumption that the CEO does not have time for us and is less interested because we are irrelevant to him is incorrect. In the end the CEO also wants to talk to the auditor. Playing these role games can help understand our stakeholders in such a way that we as auditors can

become proud and enthusiastic again and regain public trust.

Q: we talk a lot about the supply side of auditing how to improve audit quality but I think that the question is on the demand side of audit quality. What are the demand side issues and where is the demand for audit quality coming from? Who is the customer for audit quality?

Jan Nooitgedagt: We have to admit that if we wouldn't have the oversight body of accountants (AFM) I don't know if we would have discussed this topic this serious today.

Marco van der Vegte: That is also a difference if we look at how we are being regulated in the Netherlands and in the US versus countries very close nearby. The mindset is really different. The openness and the discussions that we have here are different from those when I talk to my component auditors in Germany. For example because they do have a different mindset on what is audit quality and what drives audit quality.

Q: do you think that investors in other countries care about audit quality?

Marco van der Vegte: I am sure they care about audit quality. In the end they want assurance that the financial statements are free of material misstatements.

Jan Nooitgedagt: I have to disappoint you here. I did many road shows in my role as CFO but nobody ever asked me about the auditors' opinion.

Barbara Majoor: I think when everything is going well nobody talks about audit quality while in case of an incident everybody will be talking about audit quality and asking for further regulation and oversight. Interest for audit quality is always there.

Marleen Willekens: Actually you could reverse that; if everybody talks about it, why would we need a regulator if everybody asks for it?

Barbara Majoor: If we go back in history, the consequence of some of the incidents is that people ask for institutional measures like independent oversight.

Jan Nooitgedagt: I think that researchers should try to answer this question.

Closing remarks by Henriëtte Prast: I've seen a lot of the research on audit quality and the regulator's perspective on audit quality seems to adopt the view that each additional hour spend on an audit can contribute equally to audit quality. And I hear that the point that was made earlier; why should regulators care about audit inefficiency? However, we should recognize that a lot of profitability that we see from audits today have been realized on the back of junior auditors who have been asked to work extensive hours. My own anecdotal data as a professor is that my best and brightest students are no longer attracted to the profession because of the incredible demands. They say they don't want to be an auditor because in today's world the busy season lasts for 12 months a year. They want to join a CPA firm but they want to work in the consulting branch of the CPA firm. I think this has a direct impact on audit quality but I don't have the research to support it but I think further studies that assess the human factor and how the human factor can contribute to audit quality are welcome. All panelists confirm the need to pay attention to this issue and expect FAR to support this kind of studies. ■

Dr. Ph. Wallage RA is professor of Auditing at the Vrije Universiteit Amsterdam/Universiteit van Amsterdam.

Notes

1 See special issue of MAB, 86(5), 2012.

A view from practice – What audit firm leaders expect from audit research and how they see their role in strengthening the bridge between practice and science

Presentations by Egbert Eeftink, Michael de Ridder, and Marco van der Vegte (all FAR Board members and audit firm Assurance leaders)

Olof Bik

1 Introduction

The eight largest audit firms in the Netherlands (Deloitte, EY, KPMG, PwC and Baker Tilly Berk, BDO, Grant Thornton and Mazars jointly) have taken the initiative to establish the Foundation for Auditing Research (FAR) by providing the necessary research funds and research data. Stichting Accountantsfonds has recenty joint them. Affiliation with FAR is furthermore open for all audit firms and departments, both large and small, public audit firms as well as internal audit functions and government audit departments. With that, FAR provides for a unique collaboration between practice and science, strengthening the learning curve of the audit industry and its stakeholders, feeding accountancy education, and bolstering the accountancy research community in the Netherlands and abroad. The affiliated firms will arrange access to relevant audit firm data for well-defined research projects. Audit firms have agreed to open up the "black box" of the audit in order to make significant steps forward.

In return, what do audit firms expect from auditing research in general and of the FAR more specifically? How do they define audit quality? Which conditions, determinants, and root causes do they deem important in driving audit quality in daily life? What are their main (research) questions? And how do they view their contribution in strengthening the bridge between practice and science in auditing? The heads of audit of three of the eight affiliated audit firms spoke during the FAR conference to share their view on the relevant research agenda: Egbert Eeftink, Michael de Ridder, and Marco van der Vegte (the latter also as part of the panel discussion as reflected elsewhere in this MAB issue), all three also being members of the FAR Board.

This article proceeds to cover these questions as follows. First in section 2, the view from practice on the need for and goals of FAR is detailed, followed by the role of the firms themselves in FAR's objectives in section 3. Section 4 covers the firms' view on how they see audit quality and section 5 the areas for research strengthening this quality. This article concludes with the audit practice's expectations of the research community and FAR in section 6.

2 The need for FAR

The ultimate reason for establishing FAR was what in the Netherlands was called "Freaky Thursday" with the publication on September 25, 2014 of three important reports on the status and plans for improvement of the auditing profession. Michael de Ridder illustrates:

> *"The trusted auditor was no longer trusted. And that really struck at the heart of what makes us relevant. (...) But it was also the day when the accountancy profession really came to recognize the need for change. Never before had the intrinsic motivation been so powerful to work with full conviction on improving and strengthening our profession."*

It was the Working Group on the Future of the Profession (2014) proposing 53 measures to strengthen the audit profession. One was the establishment of the autonomous research institute that FAR now is. A number of other important steps have been taken since, amongst which the installation of external members in the supervisory boards of firms, changes in the remuneration policies to focus on quality, and the introduction of audit quality indicators. However, as Michael de Ridder continues: "*We have set a new course, but the road to change is still full of challenges. Embedding a quality- and learning-oriented culture will take time. It's not just a switch that you can turn on or off.*"

The heads of audit support deepening of (root cause) analyses as well as putting academic rigor behind potentially effective interventions to improve audit process and audit quality, validating and expanding the audit quality indicators that really matter to better monitor and steer audit quality, and enriching the "story of the audit" geared towards better public understanding of the nature, extent, and value of the audit. In other words of Michael de Ridder: "*Getting to know the causes of mistakes and entering into real discussion on those causes – both internally and externally – aims to put an end to an approach that amounts to no more than treating the symptoms.*"

3 The role of the firms in auditing research

In the meantime the firms have held promise – FAR is established – but more importantly, firms are in good spirits to structurally contribute to auditing research by providing data and financial support. That is a distinct change compared to the last two decades. That relevance and rigor are two sides of the same coin, was not always recognized by both practice and the academia. Where academics said that researchers need access to new and better proprietary firm data on drivers of audit quality to take the research on audit quality to the next level (e.g., Knechel et al., 2013, pp. 405, 407)[1], practitioners did not always view existing research as being relevant and useful and gave little importance to research in developing auditing practices and regulatory policies. To date, however, empirical audit quality research has been inherently limited as researchers have to rely on indirect measures of audit quality due to a lack of internal firm data (see the paper of Van Raak and Thürheimer in this issue of MAB). This lack of collaboration may be due to "the focus by practitioners on short-term problems rather than more fundamental and long-term issues, and the research incentives of academics to pursue topics that may not necessarily be of interest or relevance to practice" (Francis, 2011, p. 144).

Why is it that only now a research institute as FAR has been established? The Dutch firms also point the finger to themselves. Michael de Ridder:

> *"It is largely the fault of the audit industry itself that top-class research on the auditing process was discontinued in the nineteen-nineties due to a lack of data from the firms. That we, as the founding firms, really are serious this time, is clear from the fact that we are making our data available. That data is probably more important than the money that we are investing in FAR."*

Hence, FAR provides for a unique opportunity to reconcile these seemingly contradictory perspectives, boost collaboration between practice and science, and present a research agenda that is both relevant and rigorous. Challenges enough, of course, such as getting the right data in a reliable way within the boundaries of client confidentiality, personnel privacy, and firm liability risk management. But firms are committed and up for a well-intended effort to keep their promises to the academic community, their stakeholders, and to themselves. After all, it are the audit firms that are the first to reap fruits from FAR's endeavors to improve audit practices.

4 What is audit quality?

Practitioners acknowledge the fact that there is no universally agreed definition of what audit quality is. Marco van der Vegte, however, presents a clear ambition for the auditing profession: "*Being the organizations and the profession that clients, regulators, the public, and talent hold up as a role model of quality, integrity, and positive change*". The sheer challenge for audit firms to deliver a "high quality audit" is the question: high quality to whom? That even becomes more apparent at the level of the audit partners in whose personal judgement and decision making the different stakeholders' perspectives come together and need to be weighted. Marco van der Vegte postulates what could be called a multi-stakeholder perspective on audit quality, from four stakeholder perspectives:

- From the perspective of the audit team and the audit firm: driving smarter and more effective audits, focusing attention on the areas that matter most. This includes, amongst other aspects, a deeper understanding of the client's business, a targeted

response to risk assessment, and increased transparency through enhanced auditor reporting;
- From the perspective of the audit client and its supervisory board: a thorough process, without surprises, and meeting deadlines. I.e., a painless audit, with early identification and fast resolution of issues, at reasonable cost;
- From the perspective of the regulators: executing an audit performed in accordance with applicable standards and in compliance with law and regulation, and firms' management focusing on culture and behavior in driving audit quality; and
- From the perspective of the public: an audit as a role model for integrity and executing an audit that, unless indicated otherwise, confirms the going concern of a company and identifies all areas of non-compliance.

Egbert Eeftink concurs, but also notes that "*now more than ever, we as practitioners need to be able to articulate clearly and consistently what audit quality means to us as practitioners and to our stakeholders*". He continues by saying: "*Even if we do not exactly know what audit quality is, we need a common language, we need audit quality indicators and we need an overall quality framework. This should help us talk about the right things, to monitor how we are doing, and to help us steer into the right direction.*" From a practical stance, he details four fundamental needs in driving audit quality:
- First of all, auditing contributes to the effective functioning of capital markets by reducing information risk. With the globalization of capital markets, auditing is increasingly an international service – *so we need a large degree of consistency in what we do;*
- Second, in an international setting, we communicate about audit quality across a widespread network organization, involving teams and audit clients in over 100 different countries – *so we need a common language when we talk about audit quality;*
- Third, even if we do not exactly know what audit quality is, we need to be able to monitor how we are doing and what we can do to steer and improve our performance – *so we need audit quality indicators; and*
- Fourth, to safeguard the quality of the complex service we provide, we need to be able to demonstrate how we do this. If not directly to investors or other stakeholders, then at least to our regulators on the basis of International Standard on Quality Control 1 (ISQC1) or its US-equivalent – *which means we need an overall audit quality control system.*

At the same time, Egbert Eeftink warns for what he appealingly calls the "fatal attraction" of audit quality indicators:

> *"There is currently a huge and diverse activity in this area; at standard setters, regulators and within audit firms. This is an important development and I see the potential in this area. But I am also somewhat concerned about the fatal attraction it may have: we should not end up with an overload of audit quality indicators that may become a goal in itself."*

He points to outcome-based indicators that may be the easiest for monitoring of and reporting on audit performance. But what the profession needs are "smart"indicators on input and process factors to steer on the underlying elements of audit quality. Michael de Ridder underlines this need for better diagnoses, by saying: "*All too often we still find ourselves unable to say why defects remain in an audit. That can result in incorrect assumptions about what constitutes an appropriate intervention and/or what is required in a new piece of legislation or regulations*". In other words, it is essential to gain a better understanding of the deeper-lying root causes. To start off with the question: what makes a root cause analysis an effective one?

5 Areas for research

FAR believes that audit quality can be studied from three perspectives, following the definition of audit quality by DeFond and Zhang (2014)[2]:
- Clients' control environments, reporting systems and innate characteristics: Firms are becoming increasingly complex, in terms of business models, systems of control, and how the audited firms' underlying economics are reflected in their financial statements;
- Audit firms' organizational settings and conditions for creating an organizational culture and architecture that increases the likelihood of audit staff achieving greater assurance and that strengthens incremental learning; and
- Stakeholders and environmental forces, which may include auditors' communication (effectiveness of auditors' reporting), audit quality from multiple stakeholder perspectives, the environmental context of the audit (e.g. in terms of audit industry and markets), and the external supervision and regulatory environment.

Hence, FAR's focus encompasses the entire financial reporting and assurance supply chain. FAR believes that research has the potential to identify those factors that influence audit quality in daily practice. More specifically potential interesting areas for research, as underscored by the heads of audit in their speeches, are:
- Audit inputs, such as audit team composition and interaction, the personal characteristics of audit partners and staff, their workload, and the knowledge, skills, and experience of auditors in relation to the complexity and context of the audits they are currently performing;
- The audit process of planning, collection, and interpretation of audit evidence, which may include risk assessment, audit methodologies and tools, the intrinsic quality of audit evidence, the nature, timing,

and extent of audit procedures, and time and budget (pressures);
- Auditors' intentions and behaviors, such as judgment and decision making, professional skepticism, partner involvement throughout the audit, dysfunctional auditor behavior, and auditor-client negotiations regarding audit findings;
- Audit outcomes, which may include communication, such as the usefulness of audit reporting and the economic consequences of audit outcomes;
- Audit firm organization, governance, and culture, which may include governance structures, benefit schemes, quality control systems and indicators, firm and team culture, and the roles of firm networks.

Moreover, practitioners call for a comprehensive view on the auditing practice, rather than singling out and looking at certain elements in isolation, modelling out other variables that may impact the phenomenon of study. Egbert Eeftink, in this regard, sees auditing as a ball game "*which needs to take place in a field with at least three (and perhaps more) boundaries*". In his view, these are:

1. the boundary of functionally appropriate performance – i.e. audit quality and audit relevance (or audit value);
2. the boundary of viable economics – this is where production efficiency comes in; and
3. the boundary of an acceptable HR workload, including talent attraction and development – this includes the attractiveness of auditing for the next generation.

He continues: *"So I ask myself: should audit research focus on one of the boundaries of the field separately, such as audit quality or efficiency? Or should audit research try to look at the field more widely, and try to understand how and due to which forces the ball moves between the different boundaries?"* In other words, academics are invited to contribute to the demystification of the auditing profession with clients, stakeholders, and the public at large. As was noted by Michael de Ridder: "*The tragedy of our profession is that our hard work takes place – for the most part – out of sight of the public*".

6 Expectations of FAR and the research community

One of the tasks of FAR is to make current academic knowledge and new findings from FAR commissioned research accessible for professionals, standard-setters, legislators, regulators, and other stakeholders. All affiliated audit firms hope to continue strengthening the bridge between science and practice by proactive interaction through conference, round-table discussions, master classes, and above all, intensive collaboration on the research projects FAR wishes to commission. Through that, the firms believe the Dutch profession to lead the way internationally. Expectations from practice on the contribution of FAR and the research community are thus high, as Michael de Ridder summarizes:

> *"Our intentions are good, but we need research for the next step. Quite simply because you researchers can strengthen and improve our profession. Because you provide us and our stakeholders with the independent observations needed for an honest and factual discussion. What we want are facts!"*

And why wouldn't research surprise, or even confuse audit practitioners? That may really add to breakthrough changes in the profession. Is the profession prepared to embrace research outcomes that undermine generally held assumptions and paradigms on which the current audit practice is build? That the Dutch audit firms are open for the challenge, is clear from a closing remark of Egbert Eeftink:

> *"I think FAR can bridge different scientific disciplines to ensure we are looking at audit quality from different functional angles. (...) If we do not learn, we lose our relevance and become obsolete. Research by distinguished academics can help lift our beautiful profession, provide us with better insights into how we work and how we learn. And be a better and a proud auditor."* ∎

Dr. O.P.G. Bik RA is Associate Professor at Nyenrode Business Universiteit. He is member of the management board of the Foundation for Auditing Research.

Notes

1 Knechel et al. (2013, p. 404), for example, note: "Archival research related to inputs and processes requires access to proprietary data in the possession of the insiders, while experimental, survey, and qualitative research requires access to insiders within the audit process (audit teams, management, and inspectors)."

2 "We define high audit quality as greater assurance of high financial reporting quality. (…) [i.e.,] greater assurance that the financial statements faithfully reflect the [audited] firm's underlying economics, conditioned on its financial reporting system and innate characteristics" (DeFond & Zhang, 2014, pp. 275-276). This definition "reflects audit quality's continuous nature, encompasses the auditor's broad responsibilities, and recognizes audit quality as a component of financial reporting quality that is bounded by the [audited] firm's reporting system and innate characteristics" (DeFond & Zhang, 2014, p. 313).

References

- DeFond, M., & Zhang. J. (2014). A review of archival auditing research. *Journal of Accounting and Economics, 58*: 275-326.
- Francis, J.R. (2011). A framework for understanding and researching audit quality. *Auditing: A Journal of Practice & Theory, 30*(2): 125-152.
- Future Accountancy Profession Working Group (2015). *In the public interest. Measures to improve the quality and independence of the audit in the Netherlands*. Amsterdam: Nederlandse Beroepsorganisatie van Accountants. Retrieved from https://www.accountant.nl/globalassets/accountant.nl/toekomst-accountantsberoep/in_the_public_interest.pdf.
- International Federation of Accountants. International Standard on Quality Control 1: *Quality controls for firms that perform audits and reviews of financial statements, and other assurance and related services engagements*. Retrieved from www.ifac.org.
- Knechel, W.R., Krishnan, G.V., Pevzner, M., Shefchik, L.B., & Velury, U.K. (2013). *Auditing. A Journal of Practice and Theory, 32*(Suppl. 1): 385-421.

Puzzle

Willem Buijink

A continuing puzzle, in any case to me, is why most observers, regulators, journalists, academics, and indeed often audit practitioners as well, consider statutory corporate auditing to be in trouble; deep trouble. To these observers, statutory auditing has major quality problems and statutory audit failures are a major problem. These concerns exist in the Netherlands and in most advanced economies. In fact, the only country that appears to be unaffected is Belgium. In Belgium statutory auditing is seen to do just fine. I live in Belgium.

The puzzle surfaced again during the first FAR Conference that this MAB issue is devoted to. The point I will make here is that, in effect, the Belgians see this mostly correctly: corporate statutory auditing in the world is doing fine most of the time. Audit quality is a very worthy object of research and attention, but not because of an audit quality crisis.

One of the nice results of auditing regulation in the European Union, the Auditing Directive, is that it has led to a common terminology. That Directive defines the statutory audit, the statutory auditor and audit firm, engagement partner, public interest entity, regulatory oversight of the corporate statutory audit and so on. The Directive starts off with a list of these definitions. The Directive is the 'Statute'. It is a written law about corporate statutory audits passed by the European Parliament. It regulates the auditing of the financial statements of EU companies: corporations to be more precise. The Directive is part of EU Company Law, hence its existence explains which corporations in the EU need to undergo a statutory audit. The financial statements themselves are regulated in a companion EU Company Law Directive: the Accounting Directive. I explain this in some detail because I find that Dutch students, being taught often using US textbooks, sadly are often unaware of this set-up. Students form a sizeable, and loyal, part of the MAB's readership. So, hopefully, the description of this simple set-up, will help them. One more point, enlightening hopefully to the students as well: the IFRS regulation, mandating EU listed corporations to use IASB IFRS, is part of emerging EU Securities Law, not of EU Company Law.

Why did I just say 'puzzle'? What is puzzling about this widespread belief, but not in Belgium, that statutory corporate audits in the EU have a serious quality problem? The puzzle is this: a careful look at the facts does not produce a truly important statutory audit quality problem in the EU and elsewhere.

Let us focus on the Netherlands to substantiate this proposition. I could do the analysis for other developed economies as well. The same result would follow. Indeed, also in Belgium.

It is very helpful that there is so much information available about the Dutch market for statutory audits these days in the Netherlands. That is also a convenient consequence of the Auditing Directive and its precursors. I will use somewhat rounded numbers. It will be straightforward to do the analysis in, almost, exact numbers. These days there are 18.5 thousand active auditors in the Netherlands. About half of them run their own businesses. That is, they are in private practice. The other half are 'auditors in business or in government'. Of the auditors in private practice, 1800 are the Dutch statutory auditors. They are the auditors that can sign off on the quality of Dutch audited corporate financial statements. There are, these days, somewhat less than 400 registered audit firms. They are registered with the Netherlands Authority for the Financial Markets (AFM). This registration also 'creates' the registration of the 1800 statutory auditors working for these firms. A small number of Dutch audit firms are, also by the AFM, allowed to audit the financial statements of the most prominent, 'systemically' important, Dutch companies: listed corporations, financial institutions and, in the near future, even a number of important non-corporate entities (regulated health insurers for instance). These companies are, in Auditing Directive terms, Public Interest Entities (PIEs). All this forms the supply side of the Dutch audit market.

Note that we can also, these days, observe, on the supply side, the engagement audit partners by name. This is again a consequence of audit regulation. We know who they are and from where they work, for which audit firm. We could indeed quite easily find out who these 1.800 individuals, the statutory auditors in the Netherlands, are. It is about the quality of their work that we are having a discussion. It is important to keep that in mind. This is not an abstract exercise. For instance, the 2015 AkzoNobel statutory auditor was E.H.J. van Leeuwen RA, KPMG Accountants NV. Googling will then provide additional information easily. Again, it is possible to do this in other EU member states as well.

The demand side of the audit market in the Netherlands looks as follows. Some 22 thousand Dutch corporations are mandated to be audited every year. These are the large and medium-sized Dutch corporations (Accounting Directive defined). Among them are, and this is a number that proved somewhat difficult to precisely establish, 1100 PIEs. There are also voluntary (statutory audit based) financial statement audits. We know that there are 'larger' small Dutch corporations that purchase them. How many of these voluntary audits there are is not well known.

How can statutory financial statement audit quality

be observed in the Dutch audit market in the aggregate? I will use a simple effective approach to giving an answer to that question, initiated by Jere Francis (2004). Francis, by the way, also spoke at the FAR Conference, but about something else. The obvious answer is to look for the number of statutory audit failures observed in the audit market over a period of time and compare that number with the total number of statutory audits carried out during the same period. Suppose we do that for the 2005 to 2014 period. A ten year period means that the '10 year' number of statutory audit failures should be compared with the 220 thousand statutory audits carried out in the period (or with 11 thousand PIE audits) to determine audit quality in the aggregate. There is no 'register' of audit failures. But, it is obvious that the number of statutory audit failures in that period dwarfs in comparison to the 220 thousand audits carried out, and to the 11 thousand PIE audits. Even if we somehow weighed the audit failures, in terms of value destroyed, that is, of consequences, that conclusion would still hold. It could be objected that zero audit failures is the only acceptable outcome, but that is not a serious objection. Failures will occur. The important thing is to keep its number low.

Why then is there this strong feeling of a general statutory audit quality problem in the Netherlands? One important reason is that observed audit failures are magnified. The press does this. Other observers, even practitioners, can be seen to do this as well. It is important to see that this magnifying behavior is very effective. It does indeed create a sense of crisis. That crisis feeling then leads to political, regulatory reactions and the audit profession reacting to those reactions. The recent NBA (Koninklijke Nederlandse Beroepsorganisatie van Accountants - The Royal Netherlands Institute of Chartered Accountants) recommendations list, over 50, for a reform of the Dutch audit industry and market is particularly a strong example. And of course, creating the FAR is the result of one of these recommendations.

Furthermore, a serious additional audit failures magnifying voice in the Netherlands, surprisingly, is that of the Dutch audit market supervisor: the AFM. The AFM in recent years has carried out Dutch audit engagement quality investigations and has chosen to publicize its finding prominently in the Dutch financial and general press. Having an active oversight body is good of course. Provided that its field research is impeccable. Several observers, myself included, have criticized the AFM's research methods regarding this issue. So far these critical remarks have been blown away by the storm of criticism battering the Dutch audit industry, that also the AFM has created. That 'storm' should be seen in perspective, and I provided that perspective above. The statutory audit quality problem in the Netherlands is not a large problem seen in that perspective. So the AFM's behavior presents a puzzle in itself.

It would be interesting to find out how the AFM's statutory audit quality research was received by the other 28 EU audit market regulators. That would provide yet another perspective on the seriousness of the audit quality issues in the Netherlands. As I said, in Belgium, calm reigns on the statutory audit quality front. That observation alone provides a valuable perspective on the Dutch audit quality 'storm'. How can there be this difference between two adjacent countries?

As I explained, FAR can certainly be seen as a product of the audit quality 'storm'. The atmosphere at the FAR conference as well. Much discussion was devoted to the 'root causes' of audit quality problems. Not so much by the speakers, but certainly by the audience. Audit quality concerns loomed large.

I think it is wise to 'fight back' against the 'storm' and those that created it. I counsel, also to the FAR, a different, optimistic, positively spirited, approach to auditing research and the need for such research. Statutory auditing, despite its name, was not invented by regulators. Audit demand originates from the creation, also not invented by regulation, of the corporation as a fundamental business contract in a market economy. Given that auditing is an important 'administrative technology', it is important that it continues to improve. It is that which creates the fundamental demand for audit quality improvement and innovation. This is true for both audit firm 'technology' and audit regulator 'technology'. Careful research into audit quality, and innovative design for audit quality, both within audit firms and within audit oversight bodies, should be the driving force of auditing research. A force that comes from within. As well as, and I am an academic educator, a driving enlightening force for the teaching of auditing and its techniques.

I was involved in an earlier attempt to do just that: the Maastricht (Accounting and) Auditing Research Center (MARC). That was in the early 1990's. The FAR is a much more substantial attempt, this time deeply involving the audit firms themselves. This represents important progress, which holds a lot of promise for the future of auditing research and audit technology innovation and design in the Netherlands. ■

Prof. dr. W.F.J. Buijink is Professor of Accounting at the Open Universiteit and Professor Emeritus of Business Economics at the Universiteit Tilburg. He is also a member of the board of FAR. This column expresses his personal opinions.

References

■ Francis, J. (2004). What do we know about audit quality? The British Accounting Review, 36: 345-368.

COLOFON

MAB
Uitgegeven in opdracht van de Redactie van het Maandblad voor Accountancy en Bedrijfseconomie door Pubsolutions.

Hoofdredacteur
Dr. C.D. Knoops *
telefoon 010-4081324
e-mail: knoops@ese.eur.nl

Redactiesecretariaat
De Boer Management Support
Mevr. H.P. de Boer
Postbus 8075
9702 KB Groningen
telefoon 050-5274061
e-mail: deboer@dbms.nl

Auteursinstructie
Auteurs die overwegen een bijdrage in te zenden, wordt verzocht kennis te nemen van de aanwijzingen voor auteurs, te downloaden via www.mab-online.nl.
Het indienen van een conceptartikel wordt geacht in te houden:
- dat de auteur het volledige auteursrecht op het werk bezit;
- dat het artikel niet eerder, in welke taal dan ook, is gepubliceerd;
- dat met publicatie geen geheimhoudingsplicht wordt geschonden;
- dat het - na publicatie - niet zonder toestemming van de redactie elders, al dan niet in vertaling, zal worden gepubliceerd.
Boeken ter recensie en alle andere stukken voor de redactie zende men aan het redactiesecretariaat.

Vormgeving
COLORSCAN BV, www.colorscan.nl

Advertenties
Pubsolutions
Fruitweg 70
3981 PA Bunnik
e-mail: cvd@pubsolutions.nl

Abonnementen
Wij verzoeken u alle correspondentie met betrekking tot de abonnementenadministratie, zoals adreswijzigingen enz., te versturen aan:
Pubsolutions
Fruitweg 70
3981 PA Bunnik
Claudia van Dijk
e-mail: cvd@pubsolutions.nl
telefoon 030-820 12 45

Men abonneert zich voor de gehele jaargang. Dat kan via www.mab-online.nl.
Verschijnt 10x per jaar.
Jaarabonnement folio + digitaal € 104,00 incl. btw.
Jaarabonnement digitaal € 97,77 incl. btw.
De verzendtoeslag voor België bedraagt € 6,00, voor Europa € 33,60 en voor de rest van de wereld € 66,24. Studentenabonnement folio + digitaal € 46,80 incl. btw, mits men is ingeschreven bij een universiteit.
Studentenabonnement digitaal € 41,60 incl. btw.
Losse nummers € 15,60 incl. btw.

Een abonnement wordt aangegaan voor de duur van minimaal één jaar. Abonnementen worden na afloop van de abonnementstermijn telkens stilzwijgend verlengd met een periode van twaalf maanden tenzij afnemer het abonnement tenminste 30 dagen vóór het einde van de lopende abonnementstermijn schriftelijk heeft opgezegd.

ISSN 0924-6304

Het nieuwe Migrainefonds zet de aanval in op migraine.

2 tot 2,5 miljoen volwassenen in Nederland hebben migraine – en dan hebben we kinderen en jongeren als Marinske nog niet eens meegeteld. Ook vandaag weer hebben 70.000 mensen een aanval. Hoogste tijd dat daar verandering in komt.

Daarom ziet nu een nieuw fonds het daglicht: het Migrainefonds. Om geld in te zamelen voor baanbrekend onderzoek om migraine de wereld uit te helpen. En voor projecten die bijdragen aan een betere kwaliteit van leven. Want migraine dreunt door, maar jouw bijdrage helpt.

Migraine fonds

HET MIGRAINEFONDS IS OPGERICHT DOOR DE NEDERLANDSE VERENIGING VAN HOOFDPIJNPATIËNTEN.

Ga vandaag nog naar migrainefonds.nl en steun het onderzoek.