

## Context matters

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## Chapter 5 – Conclusion

### *5.1 Summary of main findings*

Multiple different engagement-specific, audit firm-specific and contextual factors, as well as incentives, affect auditors' supply of audit quality and other audit outcomes (IAASB [2014]). In this dissertation I focus on engagement-specific and contextual factors, including inputs to the audit, auditor incentives, and the institutional environment. In the three studies of this dissertation, I examine how audit outcomes are associated with the extent of component auditor involvement in group audits, the commencement of public oversight worldwide, as well as the interaction between regulatory and litigation risk.

In the first study (Chapter 2), I investigate the determinants of component (network and/or unaffiliated) auditor involvement in MNE group audits, and the association between the involvement and audit quality and fees. To explore this question, I make use of the Australian disclosures of audit fees paid to component (network and/or unaffiliated) and principal auditors in annual reports of listed companies. I find that principal auditor characteristics, and MNE complexity and internationalization are associated with likelihood and extent of involvement of component auditors. I further find that likelihood of network (unaffiliated) component auditors is positively (negatively) associated with Big 4 and large non-Big 4 principal auditors, and that size, and degree of internationalization of MNEs are only associated with network component auditors. I then find that component auditor involvement is negatively associated with audit quality and positively associated with audit fees, regardless of type of component auditor. Lastly, while I find that unaffiliated component auditor involvement decreased after the revision of the group audit standard ISA 600, audit quality or audit fees did not change in response.

In the second study (Chapter 3), I investigate the association between audit quality and the commencement of national inspections of public oversight bodies worldwide. To examine this question, I use a large international sample of publicly listed companies audited by audit firms that are subject to inspections of national public oversight boards of 50 countries. Using a difference-in-differences design exploiting the staggered adoption of inspections internationally, I find that audit quality increases after inspection commencement. I further find that the increase in audit quality after inspection commencement is higher for large (Big 4) auditors, compared to small (non-Big 4) auditors. Since different public oversight boards were designed with different working approaches to inspections, disclosure of inspection results and enforcement ability, I document these differences. Based on these descriptives, I find that the

effect of inspection commencement on audit quality is conditional on public oversight boards disclosing inspection results.

In the third study of this dissertation (Chapter 4), I investigate how two auditor incentives, litigation and regulatory risk, are jointly associated with auditor conservative reporting behavior and audit pricing. I measure differences in litigation risk for auditors across different U.S. states, and regulatory risk as the start of PCAOB inspections for the different audit firms. I exploit the U.S. setting which features variation in auditor litigation risk across different U.S. states, both in terms of third-party and damage apportionment standards which capture different dimensions of litigation risk. Further, regulatory risk increased during the sample period 2001-2009 with the introduction of public oversight over the audit profession, and specifically the introduction of inspections of audit firms at different time periods. Using these empirical proxies for litigation and regulatory risk, I find evidence these risks jointly increase audit fees, and conservative auditor reporting. Further, this effect is attributed to non-global audit firm networks (non-GAFN). This suggests that litigation and regulatory risks reinforce each other, rather than acting as substitutes.

## *5.2 Contribution and implications*

Overall, the three chapters of this dissertation contribute to the body of knowledge about engagement-specific and contextual factors that influence audit outcomes. The research questions and settings that I examine in this dissertation are timely and of concern to the audit profession, regulators and standard-setters, and the public at large. The contribution of each study is discussed in the respective chapters in detail. I reiterate the important points here.

The first study (Chapter 2) is a very timely topic since regulators, standard-setters and practitioners worldwide are concerned with the level of audit quality of multinational group audits (e.g., IFIAR [2018], PCAOB [2016], [2017], IAASB [2015a], [2015b], [2019]). These audits are of particular concern when component auditors, especially foreign or unaffiliated, are involved. While this is clearly a topic of concern, there is to date only scant empirical research on group audits, primarily due to data constraints. This study is one of the first studies that documents audit quality and fee consequences of group audits. This is particularly interesting for regulators and standard-setters who are under pressure to address this issue. Our study shows that despite the IAASB's attempt to increase the work of the principal auditor with the revision of ISA 600, audit quality problems remain even though the involvement of unaffiliated (but not network) auditors decreased. These results can be informative for the PCAOB and IAASB as they aim to revise their group audit standards (see footnotes 11 and 12

of this dissertation for current initiatives of these standard-setting bodies). This study, based on public disclosures of component auditor involvement, also shows that users of group financial statements in settings outside Australia might benefit from more public disclosure on component auditor involvement.

Study two (Chapter 3), is the first comprehensive investigation into the effect of inspection commencement in settings outside the U.S., where PCAOB inspections have been investigated widely. I collect descriptives on the design of public oversight boards that show vast differences. Since public oversight boards have varying working approaches, inspection disclosure decisions and enforcement ability, it is unclear whether the U.S. findings can be extrapolated to other settings. This study generalizes the findings of the various U.S. studies that audit firm inspections by independent public oversight boards improve audit quality, however, it is contingent on inspection disclosure decisions of public oversight boards. These findings and descriptives can be useful for regulators that have ongoing discussions about mutual recognition of public oversight across countries, as well as for the (re)design of public oversight boards to increase their effectiveness in safeguarding the public interest. This study is also of interest to investors who can benefit from understanding the effectiveness of different public oversight designs.

In the third study (Chapter 4), I investigate the interaction between two auditor incentives (litigation and regulatory risk) and the association with audit outcomes. While the literature has investigated various different auditor incentives separately, there is little knowledge about how different risks interact, and which contextual factors or institutions determine auditor behavior and outcomes (Francis [2011]; Minutti-Meza [2014]). I find that litigation and regulatory risks reinforce each other and affect auditor reporting conservatism and audit fees jointly. However, increased conservatism, rather than improved audit quality, and higher audit fees, which are not necessarily reflective of higher audit effort, are not socially desirable. While more research is needed, this finding should be of interest to investors, regulators and society. Further, this study can be seen as exploring the settings (i.e. litigation environment) under which PCAOB inspections are more or less effective. This should further be of interest to regulators and investors.

### *5.3 Limitations and future research*

As with any study, this dissertation is subject to certain limitations, which are also discussed in each of the separate studies. In this section, I briefly discuss the common limitations of each study, and how these limitations give rise to future research opportunities.

First, all three studies rely on empirical proxies for various theoretical constructs which are inherently difficult to measure or can be noisy. First and foremost, the measures of audit quality used in study one and two (earnings and revenue management and timely loss recognition), only capture certain aspects of audit quality (DeFond and Zhang [2014]). However, in the international settings in which these two studies are conducted, other measures are either not available or are not comparable across settings. Both studies use a number of different measures to account for the fact that there is likely some measurement error in each one of these measures. Furthermore, the measure of auditor conservatism in study three is restricted to financially distressed firms only.

Second, while the research design of each study has been carefully constructed, isolating the effect of the variables of interest on audit outcomes is challenging. In each study, I attempt to rule out confounding effects in different ways. In study one, I address this by investigating changes in component auditor involvement and address selection bias using a Heckman model. In study two, I apply a difference-in-differences analysis exploiting the staggered commencement of inspections. In study three, I identify changes in regulatory risk through the introduction of inspections. However, I can only identify cross-sectional differences in litigation risk which poses a research design challenge.

Third, for each study, I choose a specific setting that allows me to investigate the research question. For example, in study one, I focus on the Australian setting that allows me to observe component auditor disclosures. In study three, I focus on the US setting where differences in state liability regimes can be observed, while abstracting away from other litigation risks. For these two studies, generalizability of results to other settings and institutional environments can be questioned. In study two, I use the international setting to investigate the effect of commencement of inspections worldwide, including the effect of differences in inspection regimes. While I find an overall effect of inspection commencement on audit quality, the effect is subject to, for example, differences in inspection characteristics. Hence, the findings might not fully generalize to all settings.

Future research can address these different limitations as more data become available. For example, as data on group audits become available in other settings, such as is the case in the U.S. with component auditor identification available on the PCAOB's Form AP since 2017, more research can be conducted on the relationship between group audits and audit quality. These other settings might also allow the use of different audit quality measures when investigating the relation between group audits and audit quality. Further, while the second study generalizes the finding that inspections increase audit quality to a large international

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sample, we only find that this holds for public oversight boards with certain characteristics. Future research can further investigate the effects of the different oversight regimes in different jurisdictions (country-by-country). In this way, the studies could also take into account the results of inspections, if this is public knowledge, rather than the effect of inspection commencement. Further, study three can be extended by considering the interaction between different auditor incentives, other than litigation and regulatory risk, or by considering other sources of litigation and regulatory risks and how these affect audit outcomes.