AUDIT COMMITTEES AND AUDIT QUALITY:
A REVIEW OF THE LITERATURE

FAR Project 2018B03 Vanstraelen

Prepared by
Rogier Deumes
Sanne Janssen
Ganesh Krishnamoorthy
Mathijs van Peteghem
Caren Schelleman
Ulrike Thuerheimer
Ann Vanstraelen

Date
November 22, 2019

Disclaimer
The views expressed in this document are those of the authors and do not necessarily reflect the views of other involved parties.
AUDIT COMMITTEES AND AUDIT QUALITY:
A REVIEW OF THE LITERATURE

Executive summary
The purpose of this literature review is to provide an overview of the academic literature on the relationship between audit committees (ACs) and audit quality (AQ). The starting point for our review is the most recent comprehensive overview of literature on corporate governance research in accounting and auditing by Carcello et al. (2011a). We start from their findings and conclusions, and add our review of studies on the relationship between ACs and AQ for the most current period, starting with 2011. In doing so, we draw from the IAASB (2014) conceptual framework on AQ that presents the key input, process and output factors that contribute to AQ.

Our main conclusions are the following:

(1) Recent studies predominantly show that ACs complement the external audit function.
(2) In line with prior literature, recent studies generally show that “good” AC inputs like independence, financial expertise, experience, diligence and size, are associated with higher AQ.
(3) Recent studies stress the importance of AC accounting financial expertise, especially by the chair and when gained from public accounting experience. Concerning the latter, AQ seems to benefit from former partners on the AC, both affiliated and unaffiliated.
(4) Recent studies point to benefits of AC chairs or members having legal or technology expertise. With respect to the industry expertise, the evidence is somewhat mixed.
(5) Recent studies indicate that AQ benefits from AC relative status and power, tenure, litigation risk, cash compensation and gender-diversity.
(6) Recent studies point to the importance for AQ of a pro-active AC oversight approach, with the AC pro-actively getting involved and asking questions, and effective AC communication with the external auditor.
(7) Recent studies bring forward a number of undesirable characteristics for AQ, most notably the CEO being involvement in director selection, ACs with personal or friendship ties to the CEO, and backscratching between CEO and the AC. Social ties with the external auditor, AC equity compensation, busyness of AC chair and experts, and problem directors...
in the AC are also found to impair AQ. With respect to AC member-audit partner interlocks the results are mixed.

(8) Recent studies indicate that management continues to have significant influence on auditor selection and appointment, thereby potentially impairing (perceived) audit quality.

We conclude by providing a number of directions for future research. In particular we draw attention to the need for more research on processes, more specifically the impact of AC processes on external audit processes. Secondly, we see need to further investigate the relationship between AC factors and external audit factors in other settings, such as countries that follow a more principle-based approach, like The Netherlands. Third, while prior research predominantly relied on either an archival, experimental or qualitative research design, we see great potential in mixed-method designs, combining for example survey and archival data. Finally, obtaining proprietary access to external auditors and the ACs of their clients would allow to open the “black box” of the audit process and improve our understanding of the working of ACs and its impact on AQ.

**Keywords:** Audit Committees, Audit Quality
THE IMPACT OF AUDIT COMMITTEES ON AUDIT QUALITY:
A REVIEW OF THE LITERATURE

1. Introduction
The purpose of this literature review is to provide an overview of the academic literature on the relationship between audit committees (ACs) and audit quality (AQ). With increased auditor oversight responsibilities, ACs are of increasing importance for AQ. However, our understanding about whether and how ACs influence AQ is still incomplete. The starting point for our review is the most recent comprehensive overview of literature on corporate governance research in accounting and auditing by Carcello et al. (2011a). Building on prior related reviews (including DeZoort et al. 2002; Cohen et al. 2004; Turley & Zaman 2004), they discuss and synthesize related literature for the period 2003 through 2010. We start from their findings and conclusions, and add our review of studies on the relationship between ACs and AQ for the most current period, starting with 2011. In doing so, we draw from the IAASB (2014) conceptual framework on AQ that presents the key input, process and output factors that contribute to AQ. The framework further discusses the importance of appropriate interactions among stakeholders and its contribution to improved AQ.

ACs can potentially influence AQ through a set of activities related to external auditor appointment and dismissal, as well as allocating resources to, informing, supporting, and monitoring the external auditor. Following the IAASB (2014) framework, we classify external audit factors into: (1) audit inputs; (2) audit processes; and (3) audit outputs. Similarly, we classify AC factors into: (1) AC inputs; (2) AC processes; and (3) AC outputs. Figure 1 summarizes the conceptual relationships between these factors.

FIGURE 1
Conceptual framework

![Conceptual framework diagram]
As shown in Figure 1, AC inputs (e.g., independence and expertise) can influence AC processes. In turn, AC processes can influence external audit inputs, external audit processes, and external audit outputs. The latter relationships are indicated by dashed lines in Figure 1 and are of main interest in this review. Much of the research on ACs, however, has examined the relationship between AC inputs on the one hand and external audit inputs and outputs on the other hand. These relationships are not explicitly shown in Figure 1, since we consider these to be indirect relationships mediated by AC processes.

Further, with respect to external audit outputs, some of the outputs identified by the IAASB (2014) can also be viewed as AC outputs. Hence, we group them together in Figure 1. With respect to audit inputs and audit processes, we further distinguish between inputs and processes at the audit firm level and inputs and processes at the audit engagement level. We argue that ACs can influence audit inputs and audit processes on both levels.\(^1\)

While prior research on ACs investigates a broader set of AC responsibilities, including oversight of financial reporting and internal controls, we limit the scope of our analysis to AC responsibilities related to the external audit.

The remainder of this paper is organized as follows. The next section describes our method. Subsequently, we summarize some fundamental insights from Carcello et al. (2011a). We then discuss selected results from current quantitative empirical research on the relationship between AC factors and external audit factors, followed by selected insights from current qualitative studies. We conclude our review with a synthesis of the most important findings, and recommendations for future research.

2. Method
To find recent empirical research papers, we searched in 2019 for published and forthcoming empirical research papers in the EBSCO database and on the websites of leading journals. Taking Carcello et al. (2011a) as our starting point, we focused on papers from the period 2011 through 2019. Given the rather voluminous nature of recent research, we made some judgement about studies and insights to include, focusing on what we believe to be the most interesting findings. We also include in our overview the insights of a recent literature review on AC

---

\(^1\) Audit committees may also have an impact on audit input and process factors at the national level, for example by audit committees’ influence on decisions regarding a company’s country of incorporation or listing. Since we are not aware of prior studies investigating audit committee impact at the national level, we consider this a potentially interesting area for future research.
compensation (Hayek 2018) and a meta-analysis on the association between AC financial expertise and earnings quality (Bilal et al. 2018).

3. **Fundamental insights from prior literature reviews and meta-analyses**

Summarizing prior literature reviews and meta-analyses, Carcello et al. (2011a) conclude that “good” governance is associated with “good” accounting, auditing and internal controls. “Good” governance mostly means “good” boards and “good” ACs, and the latter is generally operationalized in terms of expertise and independence, where more financial expertise and more independence is assumed to be better. Carcello et al. (2011a) do note that with the advent of stricter regulation on particularly independence, less variation in this latter AC characteristic has limited researchers’ abilities to further investigate its association with accounting and auditing outcomes. “Good” accounting, auditing and internal controls are generally operationalized in terms of earnings management, restatements, or fraudulent financial reporting; auditor choice, audit fees, audit effort, audit report lag, and audit report type; and material weaknesses in internal control, respectively. Most of the studies reviewed in the literature reviews and meta-analyses that Carcello et al. (2011a) discuss, and the studies that they review themselves, are set in a US (and to a lesser extent, UK) environment, limiting the generalizability of their findings, particularly considering specific regulation that applies. Consequently, Carcello et al. (2011a) suggest that a continuing important avenue for future research is to study the above relations in non-US settings.

4. **Selected insights from current quantitative empirical research**

Many quantitative empirical studies have recently examined the relationship between AC factors and AQ. In this section, we classify the identified papers as follows: studies examining the relationship between AC factors and (a) audit inputs; (b) audit processes; (c) audit outputs (more specifically auditor reporting and audited financial statements).\(^2\) Further, we discuss

\(^2\) According to the IAASB (2014) framework for AQ, audit inputs are grouped into the following factors: (a) values, ethics and attitudes of auditors; (b) knowledge, skills, experience and time. According to Knechel (1998), the audit process consists of the following phases: (a) client acceptance and retention; (b) risk assessment; (c) planning audit procedures; (d) audit evidence gathering and interpretation; (e) audit completion; and (f) audit reporting. However, the final phase, audit reporting, is discussed in this literature review under output factors. According to the IAASB (2014) framework, audit outputs are grouped into the following factors: (a) auditors’ reports to users of audited financial statements; (b) auditors’ reports to those charged with governance, including ACs; (c) auditors’ reports to management; (d) auditors’ reports to financial and prudential regulators (e.g., providing assurance on aspects of the financial reporting process, for example, on internal control); (e) audited financial statements; and (f) reports from those charged with governance, including ACs.
some other selected insights from current quantitative empirical research on the relationship between AC factors and external audit factors.

4.1 Audit inputs

Since many recent empirical studies examine the influence of the AC on audit inputs, we further group these studies in the following audit input factors: (1) audit fees; (2) non-audit services fees; and (3) auditor selection and changes. It should be noted that most studies have focused on the influence of the AC on audit fees. Although the evidence remains somewhat mixed and open to alternative interpretations, these studies generally indicate that ACs complement the external audit function.

Audit fees

ACs strength can be positively or negatively associated with audit effort. When strong ACs demand more audit services, or if auditors exert more effort due to higher standards set by stronger ACs, ACs can be viewed as complementing the external audit function. On the other hand, if stronger ACs demand lower audit services, or if auditors supply less audit services in the presence of a stronger AC because the auditor assesses a lower risk, the AC can be viewed as a substitute for the external audit function (Sultana 2019a).

In line with the findings of Carcello et al. (2011a), recent studies continue to find somewhat mixed evidence in this area. However, most recent studies to some degree support the view that ACs complement the external audit function. In a UK setting, Zaman et al. (2011) find a positive association between a composite measure for AC effectiveness (comprising AC independence, expertise, diligence and size) and audit fees, but only for larger clients. Also in a UK setting, Ghafran & O'Sullivan (2017) find that AC financial expertise (but only non-accounting expertise) is positively associated with audit fees. Cohen et al. (2014) find that AC accounting experts who are also industry experts are associated with higher audit fees. Bruynseels & Cardinaels (2014) find that companies with ACs that have friendship ties with CEOs (assuming impairing AC independence) purchase fewer audit services. Beck & Mauldin (2014) find that during a recession, AC power relative to the CFO (proxied by AC tenure relative to CFO tenure) is associated with smaller audit fee reductions. Using data from Australia, Sultana et al. (2019a) find that AC member experience (proxied for by AC tenure, 3

3 We view audit effort as proxied for by audit fees as an audit input factor, but since auditors determine the amount of audit effort during the audit process based on risk assessment and audit planning, audit effort could also be considered a process factor.
age, and multiple-directorships) is positively associated with audit fees. Finally, Aldamen et al. (2018) and Sultana et al. (2019b) find that gender diversity on ACs is positively associated with audit fees.4

Three recent studies, however, lend some support for the view that that ACs substitute for the external audit function. Chan et al. (2013) find that AC members’ board tenure is negatively associated with audit fees. Assuming that AC members’ board tenure positively affects AC quality, the authors conclude that long board tenure AC members may have less need for increased audit effort because they can effectively oversee the financial reporting process themselves. Hanlon et al. (2019) find that so-called backscratching between the CEO and the AC (proxied by a positive correlation between excess CEO and director compensation) is positively associated with audit fees. Assuming that backscratching negatively affects AC quality, the authors conclude that backscratching may cause auditors to exert greater audit effort. Smith et al. (2019) find that data security breaches are associated with higher audit fees (breach risk audit fee premium), with more active ACs mitigating this breach risk audit fee premium.

For some other studies, it is more difficult to interpret the findings as being supportive of ACs substituting or complementing the external audit function. Hines et al. (2015) find that the presence of common members in the AC and risk committee is associated with lower audit fees. Similarly, Karim et al. (2016) find that the presence of common members in the AC and compensation committee is negatively associated with audit fees. The interpretation of their findings differs however depending on whether such committee overlap represents stronger or weaker governance (Hines et al. 2015; Karim et al. 2016). In the former case, finding a negative association between AC overlap and audit fees can be viewed as being consistent with ACs substituting for the external audit function, but in the latter case the findings can be viewed as being consistent with ACs complementing the external audit function.

Non-audit services fees
The relationship between non-audit services (NAS) and AQ is a controversial issue among academics and regulators (Beardsley et al. 2019). One view is that NAS potentially impair auditor independence (e.g., DeAngelo 1981). Another view is that NAS create knowledge

---

4 Sultana et al. (2019b) further find that the positive association between AC gender diversity and audit fees weakened after gender diversity guidelines were introduced in Australia. This supports the limited supply view that predicts that the effect of female AC members on AQ decreases after such guidelines were issued because they increased the demand for female directors without a corresponding increase in the supply of qualified persons.
spillovers, improving AQ (e.g., Simunic 1984). In their literature review, Carcello et al. (2011a) report that prior experimental work found that ACs favor joint provision (using the auditor for NAS) when this increases AQ, but less so when auditor fees are publicly disclosed. In archival studies, the results were mixed.

Recent studies provide some new insights into how ACs impact NAS. In a UK setting, Zaman et al. (2011) find, contrary to their expectations, a positive association between a composite measure for AC effectiveness (comprising AC independence, expertise, diligence and size) and the level of NAS fees. The authors suggest this may imply that effective ACs are less concerned about protecting (perceived) auditor independence and, thus, do not restrain companies in purchasing NAS. A possible reason for this could be that effective ACs believe that possible harm of economic bonding between the auditor and client is outweighed by knowledge spillovers, thereby improving overall AQ. However, Zaman et al. (2011) also find that AC financial expertise and AC independence are individually negatively associated with NAS, making the overall findings more difficult to interpret. Naiker et al. (2013) find that former audit partners on the AC (both affiliated and unaffiliated with the firm’s current auditor) reduce NAS procured from the auditor (measured as the ratio of total NAS fees to total fees paid to the auditor). One interpretation of this finding is that former audit partners on the AC are more concerned about protecting (perceived) auditor independence than other AC members. Cohen et al. (2014) find that AC accounting experts who are also industry experts are associated with lower levels of NAS.

**Auditor selection and changes**

Consistent with prior studies finding that companies with stronger governance are more likely to select and retain high-quality external auditors (see Carcello et al. 2011a), Cassell et al. (2012) find that AC independence, expertise and diligence reduce the likelihood of clients switching from Big N to non-Big N auditors. The authors conclude that this suggests that Big N auditors consider client corporate governance mechanisms when making client portfolio decisions. However, the findings also seem to support the view that stronger ACs demand higher AQ.

Dhaliwal et al. (2015) find that management continues to have a significant impact on auditor selection during the post-SOX period. Further, AC quality (proxied for by accounting expertise, meeting frequency, and size) does not seem to influence the hiring of an affiliated auditor. Yet, the authors find only limited evidence that management influence over auditor selection leads to impaired auditor independence. More specifically, while companies that hired
affiliate auditors during the post-SOX period are less likely to receive going-concern opinions, the authors find no evidence that affiliate auditors are less likely to constrain earnings management (as proxied by the company’s propensity to meet or just beat analyst forecasts and abnormal accruals). Moreover, the lower propensity of affiliate auditors to issue going-concern opinions is partially offset by ACs that are larger and ACs with accounting expertise. Thus, to the extent that management influence over auditor selection leads to impaired auditor independence, higher quality ACs seem to mitigate this problem.

Whereas Dhaliwal et al. (2015) focused on affiliated partners in management positions, Christensen et al. (2019) focus on former audit partners affiliated with the external auditor on the AC. They find that ACs with former audit partners affiliated with the external auditor on the AC are less likely to dismiss the affiliated member’s former firm as the external auditor than ACs without such affiliated member. However, they also find that affiliated, former Big 4 partners on the AC are associated with higher AQ (the study uses subsequent financial statement restatements as the primary proxy for lower AQ and the late filing of a material weakness as a second proxy). This is consistent with the view that affiliated AC members can provide the AC with a more informed perspective on the audit firm’s processes, procedures, and terminology. Such knowledge may improve communication between the AC and the external auditor.

Further investigating the influence of the AC on auditor changes, Lisic et al. (2019) find that AC accounting expertise is negatively related to the likelihood of auditor dismissal following an adverse internal control audit opinion. This suggests that greater AC accounting expertise helps to promote AQ by safeguarding auditors from dismissal following detecting and reporting internal control material weaknesses.

Finally, Lee et al. (2019) examined whether certain AC characteristics are associated with auditor selection, more specifically gender and experience of the lead audit partner. Their findings indicate that clients with gender-diverse ACs are more likely to have a female audit partner. Further, AC experience is positively associated with audit partner experience. Both audit partner gender and experience in turn are positively associated with AQ proxied for by audit fees.

4.2 Audit processes
Carcello et al. (2011a) conclude that few studies have examined the association between corporate governance and auditor risk assessment and audit planning. They note that these studies generally find that governance characteristics affect auditors’ risk assessments and planning. In line with this observation, also relatively few recent empirical studies have
examined the influence of the AC on the audit process. Overall, the findings of these studies support the view that strong ACs (i.e., AC being independent, diligent, knowledgeable, and sufficiently powerful) and ACs that effectively communicate their expectations to auditors, improve auditors’ judgments. Notably, all these studies use an experimental design.

Cohen et al. (2011) examine whether auditors take into account CEO influence over AC independence when making audit judgments. They find that when management’s incentives for earnings management are high, auditors are less likely to waive proposed audit adjustment when the CEO has less influence over the AC’s independence than when the CEO’s influence is greater. This suggest that auditors indeed consider CEO influence on AC independence in their judgment of contentious accounting issues. Brown-Liburd & Wright (2011) find that AC strength influences auditors’ judgments in the pre-negotiation planning phase. More specifically, in the context of resolving difficult subjective inventory write down issues, auditors adopt the most contending pre-negotiation position when the AC is strong.5 Also focusing on AC strength, Bhaskar et al. (2019) examine whether AC strength improves auditor judgments when companies release earnings before audit completion. They find that strong ACs mitigate the negative effect of client pressure on auditors' directional goals to accept the client’s aggressive accounting treatments. Brown & Popova (2016) investigate whether AC communication improves auditor judgment. They find that when management’s incentives to influence the auditor are relatively high, additional communication of expectations for the audit by the AC has a positive effect on auditors’ evidence evaluation and related judgments regarding inventory obsolescence issues.

4.3 Audit outputs - Auditor reporting

Several recent studies examine the influence of ACs on audit outputs, more specifically auditor reporting. In the discussion of these studies below we make a distinction between: (1) auditors’ reports to users of audited financial statements; and (2) auditors’ reports to those charged with governance, including ACs. With two exceptions (Koch et al. 2012; Fiolleau et al. 2019), all studies discussed in this section use an archival research design.

5 In the strong condition the AC is described as independent, diligent, knowledgeable, and sufficiently powerful to achieve its objectives. In the weak condition the AC meets minimal regulatory standards in form, but is weak in substance (i.e., meeting infrequently, asking few questions, having limited power to exercise authority). Consequently, in the strong condition it is more likely that the AC stands up to management in a dispute with the auditor. For more details about the description of the strong and weak condition, see Brown-Liburd & Wright (2011) and Bhaskar et al. (2019).
Auditors’ reports to users of audited financial statements
Overall, recent studies confirm prior work in this area and suggest that greater AC independence and higher accounting expertise improve the quality of audit reports to users of audited financial statements. In the German institutional setting, Koch et al. (2012) find experimental evidence that auditors with high client retention incentives and high accountability pressures, are less likely to issue an unqualified opinion if their clients are ACs preferring conservative accounting rather than if their clients are management boards preferring aggressive accounting. Bruynseels & Cardinaels (2014) find that companies with ACs that have friendship ties with CEOs are less likely to issue going-concern opinions or to report internal control weaknesses. Similarly, using data from China, He et al. (2017) find that auditors of companies with ACs that have social ties with the external auditors are less likely to issue modified audit opinions. Hossain et al. (2016) further show that audit partner’s fees generated from networked clients created by AC member-audit partner interlocks reduce the likelihood of issuing a first-time going-concern modified audit report. Finally, Lisic et al. (2019) find that AC accounting expertise is positively related to adverse internal control audit opinions.

Auditors’ reports to those charged with governance, including ACs
Providing further insight about communications between the AC and the auditor, Fiolleau et al. (2019) find that ACs that are proactive in getting involved in the issue resolution process and ACs that are proactive in asking questions, improve the level of detail of auditor communication to the AC about resolved issues with management. This indicates that a proactive AC oversight approach improves auditors’ communications with the AC.

4.4 Audit outputs - Audited financial statements
As noted before, most prior research reveals a positive relation between a variety of “good” AC characteristics and a variety of “good” financial reporting outcomes (Carcello et al. 2011a). Recent studies have addressed an even more extensive set of AC characteristics and additional measures of financial reporting quality. In the discussion below we group these studies based on the AC characteristics that were investigated.

AC expertise
Recent studies have examined the relationship between various types of expertise and financial reporting quality. Focusing on AC financial expertise, a meta-analysis study by Bilal et al. (2018) concludes that AC financial expertise has a positive association with earnings quality,
but that AC accounting financial expertise has a stronger association with earnings quality than non-accounting financial expertise. In line with this, Keune & Johnstone (2012) find that ACs with greater financial expertise are less likely to allow managers to waive material misstatements. Schmidt & Wilkins (2013) find that specifically AC accounting financial expertise is positively associated with financial reporting timeliness. This association is stronger if the accounting financial expert is the AC chair. Adding to this, Abernathy et al. (2014) find that AC (chair) accounting financial expertise is associated with financial reporting timeliness, but only if the accounting financial expertise is gained from public accounting experience. Using data from Australia, Sultana et al. (2015a) also find that accounting financial expertise is associated with accounting conservatism, rather than non-accounting financial expertise, but only when the accounting financial experts on ACs are independent.6 Bryan et al. (2013) find that earnings quality is higher for firms that optimally choose for an accounting financial expert relative to firms that choose suboptimally. Seetharaman et al. (2014) find a larger decline in non-GAAP earnings exclusions following the appointment of AC accounting (rather than non-accounting) financial experts. Lee & Park (2019) show that financial expertise also positively affects the quality of qualitative disclosures (more specially textual information in management discussion and analysis (MD&A) sections of annual reports). Finally, Glendening et al. (2019) show that AC accounting financial expertise is positively associated with quantitative critical accounting estimates.7

Other types of AC expertise that were investigated include AC legal expertise, industry expertise and information technology expertise. Krishnan et al. (2011) find that AC legal expertise enhances financial reporting quality, and moreover positively interacts with accounting expertise. Similarly, Cohen et al. (2014) find that AC accounting experts who are also industry experts are associated with higher financial reporting quality. In contrast, Brazel & Schmidt (2019) find that ACs with industry expert chairs are associated with higher fraud risk (measured as inconsistencies between reported revenue growth and growth in revenue-related nonfinancial measures). Finally, Ashraf et al. (2019) find that AC information technology expertise is positively associated with the reliability and timeliness of financial reporting (as measured by the likelihood of material restatements and information technology-related material weaknesses and timely earnings announcements).

6 Sultana (2015) and Sultana et al. (2015b) also find that financial expertise is associated with accounting conservatism and the timeliness of financial reporting, respectively.
7 The SEC recommends that firms provide MD&A disclosures that quantify the earnings effect of reasonably likely changes in critical accounting estimates.
AC independence

While previous research has generally found that AC independence and financial expertise are negatively related to restatements, Carcello et al. (2011b) find no significant association between restatements and AC independence and financial expertise when the CEO is involved in the director selection process, suggesting that CEO involvement impairs actual AC independence. Consistent with the idea that CEOs are often actively involved in the director selection process, Cassell et al. (2018) further find that the proportion of AC members who joined the board after the appointment of the current CEO is negatively associated with financial reporting quality. Bruynseels & Cardinaels (2014) further find that companies with ACs that have friendship ties with CEOs (also seemingly impairing AC independence) engage in more earnings management. In line with this, Wilbanks et al. (2017) find that AC members with personal ties with the CEO take less action to assess fraudulent financial reporting and management integrity. Hanlon et al. (2019) further find that so-called backscratching between the CEO and the AC is negatively associated with financial reporting quality.

Whereas Bruynseels & Cardinaels (2014) focused on AC members’ social ties with the CEO, He et al. (2017) examine AC members’ social ties with external auditors. Using data from China, they find that such social ties are positively associated with clients’ financial reporting irregularities. In contrast, Chen et al. (2014) find that when companies with interlocking AC members are audited by the same audit firm (assuming increasing familiarity or closer personal relationships between AC members and auditors) investor perceptions of earnings quality are higher. The authors argue that this is consistent with the notion that to the extent that AC member-auditor interlocking is perceived as compromising independence, this effect is outweighed by the positive effect on the AC’s confidence and trust in the auditor, thereby making interlocking AC members more likely to support the auditor in disputes with management. Relatedly, Christensen et al. (2019) find that affiliated, former Big 4 partners on the ACs are associated with higher financial reporting quality, suggesting that AC-audit firm affiliation improves AQ.

Lastly, Poretti et al. (2018) report for a sample of European companies from 15 countries that the proportion of independent members on the AC is positively associated with earnings credibility (as measured by the market reaction to earnings announcements), but that this association only holds in countries with weak institutions. This finding supports the idea that independent ACs can substitute for weak institutions.
AC incentives
Based on a review of the current literature on AC compensation, Hayek (2018) concludes that economic incentives affect the AC’s monitoring ability. While equity compensation (short-term and long-term AC members’ stock-option awards and shareholdings) are associated with lower financial reporting quality (Keune & Johnstone 2015; Campbell et al. 2015), cash compensation seems associated with higher financial reporting quality (Rickling & Sharma 2017). Nonetheless, Bierstaker (2012) provides experimental evidence that AC members are more likely to support the auditor in an accounting dispute when their compensation includes long-term stock options.

Other AC characteristics
Several recent studies have examined the relationship between financial reporting quality and a range of other AC characteristics. Overall, these studies suggest that AC chair tenure, experience, status, power, litigation risk, and gender-diversity are positively associated with financial reporting quality, and that busyness and the presence of problem directors on the AC are negatively associated with financial reporting quality.

Brazel & Schmidt (2019) find that AC chair tenure is negatively associated with fraud risk. Shepardson (2019) find that AC task specific experience is associated with more conservative reporting outcomes. In line with this, Sultana et al. (2019a) find that experience (measured by AC tenure, age, multiple-directorships) is negatively associated with earnings management. Badolato et al. (2014) find that the negative association between AC financial expertise and earnings management is more pronounced for ACs with high relative status. Similarly, Lee and Park (2019) find that the positive association between financial expertise and the quality of qualitative disclosures is more pronounced when AC members possess greater power or face higher litigation risks. Srinidhi et al. (2011) and Sultana et al. (2019b) find that gender-diverse ACs are associated with higher earnings quality in both the US and Australia, respectively. Introducing gender diversity guidelines, however, seems to weaken this link (Sultana et al. 2019b).

Tanyi & Smith (2015) find a significant negative association between financial reporting quality and busy AC chairs or busy financial experts. Habib & Uddin (2016) find that “problem” directors on the AC (defined as directors with prior involvement in corporate
bankruptcies, major accounting restatements, or other accounting scandals) are associated with lower financial reporting quality.8

To conclude this section, it should be noted that most archival studies relating AC characteristics and financial reporting outcomes are set in the US. The results of an experimental study by Agoglia et al. (2011) however show that strong ACs improve financial reporting decisions, but only when more precise standards apply. This suggests that the effect of ACs on financial reporting quality may be larger in a US rule-based setting compared to more principle-based settings.

4.5 Other selected insights from current quantitative empirical research

Using an experiment, Alderman & Jollineau (2019) examine whether AC member independence and financial expertise affect external auditors’ exposure to legal liability. They find that AC member independence is negatively associated with auditor liability. Moreover, when AC member independence is lower, AC financial expertise is positively associated with auditor liability. This leads the authors to conclude that in assessing litigation risk, auditors may want to take into account the independence of AC members, particularly when AC members have financial expertise.

So far we discussed studies that examine the influence of AC factors on audit factors. Using an experimental design, three recent studies examine the reverse influence, i.e., the impact of audit factors on the AC. Kang et al. (2015) find that changes to the audit environment (more specifically the introduction of an audit judgement rule, and relatedly the use of more innovative audit procedures) increases AC members’ perceived accountability in ensuring the reasonableness of the financial statements and also AC members’ perceived overall comfort regarding the accounting issue at hand. Abbott et al. (2016) find that auditor competence (favorable or unfavorable inspection results) and auditor independence (absence or presence of prior manager-auditor affiliation) increase the AC’s willingness to select an auditor. However, auditor independence only influences auditor selection decisions when auditor competence is favorable. Finally, Rummell et al. (2019) find that ACs’ support for the external auditor increases with audit firm tenure.

---

8 Relatedly, Chiu et al. (2013) find evidence supporting the view that earnings management spreads between firms via shared directors, with stronger contagion when the shared director is an AC chair or member.
5. Selected insights from current qualitative studies

Several recent studies adopted a qualitative research approach using interviews or surveys. While typically no specific relationship between AC factors and audit factors is examined in these studies, several relevant insights on the relationship between ACs and AQ emerge in the area of: (1) external auditor selection; (2) the AC’s role in resolving auditor-client disagreements; (3) AC effectiveness; and (4) communication between the AC and the external auditor. Each area is briefly discussed below.

5.1 External auditor selection

Several qualitative studies suggest that management involvement in the selection of the external auditor remains high. For example, Cohen et al. (2013) conclude that the Sarbanes-Oxley Act in the US has improved the monitoring role of the ACs, with increased interaction between the AC and AC chair and the external auditor. They find that AC members exercise influence in the auditor appointment and dismissal decision (power of ratification, i.e., decision control). At the same time though, management is still actively involved in the process of initiating and administering the process (i.e., decision management). Almer et al. (2014) confirm that management in the US continues to provide input in the process of selecting the external auditor. They report that AC members view management as an important information source in assessing the proposed partner’s reputation for matters like accessibility and timeliness. In Canada, Fiolleau et al. (2013) find that the AC’s involvement in the auditor selection decision is limited, and merely serves as a monitor for management’s selection decision. Similarly, in the Netherlands, Tros (2015) observes that management has a large role in the selection process. While responsibilities are shared among the CFO and the AC, the process is often led by the CFO, potentially lowering (perceived) independence. Further, Tros (2015) finds that the sequential nature of the auditor selection process itself likely leads to a large focus on selecting auditors based on lowest costs, thereby reducing the scope of the audit. Finally, Fontaine et al. (2017) find that AC members in Canada are opposed to mandatory audit firm rotation.

5.2 AC’s role in resolving auditor-client disagreements

With respect to the AC’s role in resolving accounting disputes, Cohen et al. (2013) observe some variation in the nature and extent of this role. In Malaysia, Salleh & Stewart (2012) find that AC’s play a mediating role when helping to resolve auditor-client disagreements.
5.3 AC effectiveness
Identifying indicators of actual AC effectiveness, Contessoto et al. (2014) find that auditors in Australia mention various AC characteristics relating to independence, diligence, resources, and expertise. The most often mentioned indicators of AC effectiveness by auditors are AC members asking challenging questions to management, and AC meetings allowing sufficient time for discussion of issues raised. According to Compernolle and Richard (2018), the AC chair’s leadership is critical to an effective AC. For French companies, they document different, but not mutually exclusive styles of AC chairing (i.e., collaborative, administrative, and rational oversight). Different leadership styles are required depending on whether the AC discussions deal with the correct application of accounting rules, or managing conflicts between the auditor and management.

5.4 Communication between the AC and the external auditor
Regarding communication between the AC and the external auditor, Beattie et al. (2014, 2015) find that ACs and AC chairs in the UK are not always engaged in financial reporting interactions, and that AC chairs play a key role in managing the relationships and communication within the triad of CFO, audit partner and AC. Compernolle (2018) further studied how external auditors in France communicate with ACs, finding amongst others that external auditors use impression management.

6. Conclusion
The purpose of this literature review is to provide an overview of the academic literature on the relationship between ACs and AQ. Our main findings and conclusions are that:
(1) Recent studies predominantly show that ACs complement the external audit function.
(2) In line with prior literature, recent studies generally show that “good” AC inputs like independence, financial expertise, experience, diligence and size, are associated with higher AQ.
(3) Recent studies stress the importance of AC accounting financial expertise, especially by the chair and when gained from public accounting experience. Concerning the latter, AQ seems to benefit from former partners on the AC, both affiliated and unaffiliated.
(4) Recent studies point to benefits of AC chairs or members having legal or technology expertise. With respect to the industry expertise, the evidence is somewhat mixed.
(5) Recent studies indicate that AQ benefits from AC relative status and power, tenure, litigation risk, cash compensation and gender-diversity.
(6) Recent studies point to the importance for AQ of a pro-active AC oversight approach, with the AC pro-actively getting involved and asking questions, and effective AC communication with the external auditor.

(7) Recent studies bring forward a number of undesirable characteristics for AQ, most notably the CEO being involvement in director selection, ACs with personal or friendship ties to the CEO, and backscratching between CEO and the AC. Social ties with the external auditor, AC equity compensation, busyness of AC chair and experts, and problem directors in the AC are also found to impair AQ. With respect to AC member-audit partner interlocks the results are mixed.

(8) Recent studies indicate that management continues to have significant influence on auditor selection and appointment, thereby potentially impairing (perceived) audit quality.

Based on our literature review, we see several possibilities for future research. First, following Carcello et al. (2011a), we see much more need for more research on processes, more specifically the impact of AC processes (what AC actually do and how they do it, not just AC input characteristics) on external audit processes (what auditors actually do and how they do it, not just external audit input and outputs). Secondly, we see need to further investigate the relationship between AC factors and external audit factors in other settings, such as countries that follow a more principle-based approach, like The Netherlands. Third, while prior research predominantly relied on either an archival, experimental or qualitative research design, we see great potential in mixed-method designs, combining for example survey and archival data. Fourth, with respect to archival data, prior research has by necessity mostly relied on data that is publicly available. While we realize that this is not an easy task, researchers could in cooperation with external auditors and their clients, increase their efforts to obtain non-public data in order to open the “black box” of the audit process and clients’ governance environments. This will further improve our understanding of the working of ACs and its impact on AQ. FAR offers in this regard a unique opportunity to do so.
References


Beardsley, E. L., Lassila, D. R., & Omer, T. C. (2019). How do audit offices respond to audit fee pressure? Evidence of increased focus on nonaudit services and their impact on audit


