

RESEARCH ARTICLE

A Conceptual Framework for the Mediating Effect of Audit Quality on the Relationship Between Audit Committee Attributes and Financial Reporting Quality

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Prior studies have documented that the complementary functions of audit committees (ACs) with respect to audit quality (AQ) is complex and goes beyond a direct relationship. This paper aims to propose a framework consistent with the complementary hypothesis to show the mediating effect of AQ on the relationship between AC attributes and financial reporting quality (FRQ). To achieve this, we reviewed the literature regarding ACs, AQ, and FRQ and found that studies on AC and FRQ presented mixed results. We also found that there was little evidence regarding the influence of legal experts and AC public accounting expertise in ACs. Consequently, this warrants further research. There is a need for future studies to examine our proposed framework further. Future research should also explore the effects of internal audits and whistle-blowing policy on firms' ACs and FRQ.

Keywords: Audit committees, Audit fees, Big 4 auditors, Financial reporting quality, Audit quality

JEL Classification- M41, M42, M49

Financial reporting is a dual process in which the suppliers of the financial information make it available to users who, subsequently, use it with the expectation that it will help them improve their financial decision-making (Tasios & Bekiaris, 2012). The objective of financial reporting is to prepare financial statements about the firm that are relevant to stakeholders for decision-making in their positions as capital providers (International Accounting Standards Board, 2008). Financial reports are, therefore, vital for managers to communicate a company's performance and governance to external investors (Healy & Palepu, 2001). Financial reporting quality (FRQ) has been a subject of debate for many years, and it has received serious attention from regulators as well as researchers (Hermanns, 2006). Therefore, providing high-quality financial reporting is imperative because it significantly affects stakeholders in terms of generating investment, credit, and similar resource allocation decisions to enhance overall market productivity.

Consequently, corporate governance mechanisms have been introduced to aid investors, in terms of aligning the interests of managers with those of shareholders that endorse the reliability and integrity of financial reports (Watts & Zimmerman, 1983). Some of these corporate governance mechanisms are the audit committee (AC) and external auditors. Agency theory proposes that the primary duty of the AC is to ensure that managers act in the best interests of shareholders. Agency theory postulates that, due to the separation between management and owners, investors need protection as managers have agendas that differ from those of investors and that they might not, therefore, always perform in the stockholders' best interests (Fama & Jensen, 1983; Jensen & Meckling, 1976). To combat this, there is a need to hire independent auditors to offer their independent opinions on the truth and fairness of firms' financial reports. This serves as a complementary method of monitoring processes that can improve FRQ and is a requirement for listed companies.

More attention has been devoted to FRQ and its relationship with audit quality (AQ) since the downfall of several high-profile corporations due to the financial misdemeanors of their managers (Abdulmalik & Che-Ahmad, 2016; Osemeke & Adegbite, 2016). Consequently, regulators and investors have frequently questioned the role of both ACs and external auditors because the audited financial reports have been confirmed to be illusive in several recent financial scandals (Alves, 2013). Thus, there is a need to employ a more advanced technique to examine the direct and indirect influence of AQ on AC attributes in relation to FRQ. This is because it has been contended that the complementary functions of ACs concerning AQ are complex. It goes beyond a direct relationship and warrants further research to fully explore the effect of AC and AQ to FRQ (Goodwin-Stewart & Kent, 2006).

However, it is somewhat difficult to predict whether the AC is related to higher or lower audit fees due to two conflicting perspectives: demand-based and risk-based. The demand-based perspective argues that firms with strong governance demand external auditors to increase audit efforts, leading to higher audit fees; whereas the risk-based perspective contends that firms with weak governance are more likely to engage Big 4 auditors and thus incur higher audit fees because external auditors assess that the firms have higher control risks (Kim, Kwak, Lim, & Yu, 2017; Krishnan & Visvanathan, 2009). Both perspectives co-exist in practice and require higher audit efforts (Kim et al., 2017). The demand-based perspective also proves the complementary functions of ACs with respect to AQ. Thus, consistent with the demand-based perspective, it is expected that an effective AC would demand high-quality audit services from an external auditor for better financial reporting processes.

Therefore, this study adds value to the agency theory by providing initial insight into how the complementary effects of ACs and AQ can reduce agency conflicts and enhance FRQ. The literature on the relationship between AC, AQ, and FRQ was,

therefore, reviewed. Based on this review, we propose a framework in line with the complementary hypothesis and exhibit how AQ can mediate the association between AC characteristics and FRQ. This is an issue that has received limited attention in prior literature. Our proposed framework is expected to be tested using mediation analysis advanced in prior studies in the social psychology literature (Baron & Kenny, 1986; Hayes & Rockwood, 2017; Holmbeck, 1997; Sobel, 1982; Wu & Zumbo, 2008).

Review of Previous Literature and Hypotheses Development

Agency Theory

Agency theory originated from the study of Berle and Means (1932) and was advanced by Jensen and Meckling (1976). Agency theory has been broadly employed in managerial studies and seems to be the dominant paradigm in several aspects of corporate governance research (Dedman, 2004; Davis, Schoorman, & Donaldson, 1997). Agency theory has been used by prior literature to link AC and FRQ as well as AQ and FRQ (DeFond & Zhang, 2014; Menon & Williams, 1994). Agency theory proposes that the primary duty of the AC is to confirm that managers are acting in the best interests of shareholders. DeFond and Zhang (2014) argued that higher AQ provides better assurance of higher FRQ.

It has been argued that external auditors play a significant role in corporate governance, which serves as a complementary mechanism for enhancing the legal protection of shareholders (Choi & Wong, 2003). This will, in turn, reduce agency, complicit between management and stakeholders because shareholders depend heavily on external auditors' monitoring efforts. Complementary hypothesis suggests that individuals are attracted to those who are likely to provide them with maximum satisfaction, which implies that a weakness or need of an employee is remunerated by the strength of the company, or vice versa (Kausel & Slaughter, 2011). Consistent with the complementary hypothesis of AQ, this study proposes that effective ACs demand better audit assurance from external auditors to provide enhanced FRQ. The proponents of the complementary hypothesis have argued that independent ACs and AQ are two complementary monitoring mechanisms (Al-dhamari, Almagdoub, & Al-gamrh, 2018; Goodwin-Stewart & Kent, 2006;

Yasin & Nelson, 2017). Thus, effective ACs may demand greater assurance for FRQ because they are more cautious regarding their reputation and litigation risks (Al-dhamari et al., 2018; Barua, Rama, & Sharma, 2010). Goodwin-Stewart and Kent (2006) contended that an effective AC plays a complementary role with respect to AQ. However, they argued that this association is complex and warrants further research.

AC Characteristics and FRQ

AC has been considered as one of the essential facets of directors in supervising management decisions vis-à-vis financial reporting (Firoozi, Magnan, Fortin, & Nicholls, 2016). Prior studies on AC and FRQ have, however, presented mixed results (Abdullah & Ku-Ismail, 2016; Abernathy, Beyer, Masli, & Stefaniak, 2014; Al-Shaer, Salama, & Toms, 2017; Badolato & Donelson, 2014; Baxter & Cotter, 2009; Bédard, Chtourou, & Chtourou, 2004; Carcello & Neal, 2003; Dhaliwal, Naiker, & Navissi, 2010; Hamdan, Mushtaha, & Al-Sartawi, 2013; Klein, 2002). These mixed results may be due to environmental differences and the methodologies adopted by these studies. Even when using similar methodologies, these studies have focused primarily on direct relationships. There is, therefore, a need to employ a more advanced methodology, for example, mediation to investigate the direct and indirect influence of AC attributes in relation to FRQ.

Moreover, AC attributes vis-à-vis FRQ have been explored in prior studies by applying several constructs such as AC size (Haji & Anifowose, 2016; Jizi & Nehme, 2018; Miko & Kamardin, 2015; Xie, Davidson, & Dadalt, 2003), frequency of AC meetings (Beasley, Carolina, Hermanson, & Neal, 2009; Sultana, 2015) 668 Australian firm-year observations from 2004 to 2012, a positive association is found between accounting conservatism and: (a, AC independence (Kibiya, Che-Ahmad, & Amran, 2016; Klein, 2002; Madawaki & Amran, 2013; Yang & Krishnan, 2005), AC expertise (Badolato & Donelson, 2014; Cohen, Hoitash, Krishnamoorthy, & Wright, 2014; Bédard et al., 2004), and female representation in ACs (Abdullah & Ku-Ismail, 2016; Eze, 2017; Lara, Osma, Mora, & Scapin, 2017; Zalata, Taurigana, & Tingbani, 2018).

It has also been observed that there is little evidence regarding the influence of legal experts and AC public accounting expertise in ACs. Consequently, this warrants further research. Krishnan, Wen, and

Zhao (2011), for example, argued that “changes in regulations regarding the appointment of financial experts to company’s AC have stimulated more studies on the relationship between audit committee expertise and financial reporting quality” (p. 2100). Hence, more attention needs to be given to other areas of expertise, such as legal expertise and public accounting expertise rather than financial accounting expertise alone. This is because legal directors are more familiar with litigation and legal liability threats relating to financial reporting (Baxter & Cotter, 2009). Moreover, it has been argued that AC public accounting experts facilitate timelier financial reporting, thus resulting in better FRQ (Abernathy et al., 2014).

Mediating Effect of AQ on the Relationship Between AC and FRQ

AQ represents a greater assurance of high FRQ. For instance, DeAngelo (1981) defined AQ as the “market-assessed joint probability that a given auditor will both detect a breach in the client’s accounting system, and report the breach” (p. 186). Better AQ is linked to an independent assurance of the reliability of financial reports, which enhances investors’ protection and confidence. Thus, AQ improves FRQ by enhancing the credibility of the financial reports (DeFond & Zhang, 2014; Gaynor, Kelton, Mercer, & Yohn, 2016). DeFond and Zhang (2014) contended that AQ is a necessary construct of FRQ and also argued that FRQ is a function of AQ. This suggests that AQ and FRQ are mutually observable outcomes. Consequently, many proxies have been adopted by various studies as measures of AQ. However, there are inconclusive arguments about which measures are superior; therefore, there is limited methodical direction regarding the comparability of one proxy versus another (DeFond & Zhang, 2014; Gaynor et al., 2016). However, DeFond and Zhang (2014) categorized AQ into input-based, output-based, and perception-based measurements. Perception-based measures are comprised of earnings responses, Big N auditors, non-audit services fees, and stock market reactions. Input-based measurements consist of audit firm size proxy, such as Big N membership and audit fees. In contrast, output-based measurements include accounting conservatism, restatements, audit opinion, accruals quality, Big N auditors, audit fees, and market reactions. However, some of

these dimensions have been criticized because they fail to capture poor AQ, for example, restatement.

We, therefore, suggest audit fees and Big 4 auditors as surrogates for AQ because Big 4 auditors appeared in all of the above three classifications. Audit firm size, measured by Big 4 membership, is a robust proxy for AQ because larger auditors are expected to be strongly motivated and more able to deliver high-quality auditing (DeAngelo, 1981). It also has greater construct validity (DeFond & Zhang, 2014). Audit fee is a good surrogate because it considers audit efforts that are obviously related to AQ (DeFond & Zhang, 2014; Gaynor et al., 2016). Audit fee is also a good surrogate as it is an outcome of both demand and supply hypotheses, that is, an auditor cannot raise audit fees for extra work without a corresponding rise in AQ (Cohen et al., 2002; DeFond & Zhang, 2014). These arguments have been empirically confirmed by most of the prior literature on AQ and FRQ, which has indicated that high audit fees and employing Big N auditors are connected to lower earnings management and higher FRQ (Abdullah & Ku-Ismail, 2016; Abidin & Ahmad-Zaluki, 2012; Abdulmalik & Che-Ahmad, 2016; Abernathy et al., 2014; Alves, 2013; Khalil & Ozkan, 2016). Thus, it is expected that companies that engage Big 4 auditors and pay higher audit fees will be less likely to engage in earnings management.

ACs play a pivotal role in corporate governance practices by overseeing audit quality. Thus, an effective AC that has pertinent expertise is presumed to improve approaches to audits, which improves AQ and, in turn, enhances FRQ (Cohen et al., 2002; DeFond & Zhang, 2014; Sulaiman, 2017). Hence, better audits are imperative for the reliability of the financial reports and are believed to protect the interests of investors and other stakeholders (Sulaiman, 2017). Prior literature has recommended that internal governance devices and external audit can partially substitute for each other, which indicates that better internal control will lead to lower audit fees (Goodwin-Stewart & Kent, 2006). However, empirical results have not supported this opinion (Abbott, Parker, Peters, & Raghunandan, 2003; Carcello, Hermanson, Neal, & Riley, 2002; Cohen, Krishnamoorthy, & Wright, 2002; Hay, Knechel, & Ling, 2008). In contrast, previous literature on the causal effects of internal governance and external audit has consistently found that they are complementary, that is, enhancing internal governance mechanisms is related to higher AQ (Alves, 2013; Miettinen, 2008).

Consistent with the complementary hypothesis, it has been contended that effective ACs achieve better monitoring, which produces more audit coverage and results in paying higher audit fees. This further suggests that larger ACs, composed of at least one member with financial expertise, comprising independent directors, and frequently meeting each year, demand greater audit efforts by engaging Big 4 auditors and paying higher audit fees (Goodwin-Stewart & Kent, 2006; Boo & Sharma, 2008). This is due to the increase audit coverage required by such ACs to improve AQ. Therefore, as the AC chooses the external auditor; hence, there is a possibility that both monitoring devices may operate jointly to limit earnings manipulation and improve FRQ (Alves, 2013). A more active, expert, and independent board may demand a higher quality audit to safeguard its reputation and capital. This provides greater assurance, decreases legal liability, and encourages investors' interest (Carcello et al., 2002). Thus, it is expected that ACs will demand higher AQ, which will, in turn, enhance FRQ.

In light of the preceding arguments about the complementary functions of ACs with respect to AQ, we, therefore, anticipate that AQ can stand as an intermediate variable (mediator) that can be influenced by the AC, which, in turn, enhances FRQ. This is because a mediator variable serves as a middle variable that signifies the productive device through which the predictor variable is able to account for the outcome variable (Baron & Kenny, 1986; Hayes & Scharkow,

2013; Wu & Zumbo, 2008). Thus, a simple mediation model is assumed when the predictor variable is premised to affect the mediator and, in turn, the mediator affects the outcome variable (Wu & Zumbo, 2008). This implies that a change in AC will bring about a change in AQ, and a change in AQ will bring a change in FRQ. This is clearly shown in our proposed framework. It is based on the sequence of relationships that represent the conditions of mediation. According to Baron and Kenny (1986) and Hayes (2009), the following conditions ought to be met before mediation occurs: (i) the outcome variable Y must be significantly correlated with the predictor variable X; (ii) the mediator variable M ought to be significantly correlated with the predictor variable X; (iii) the outcome variable Y ought to be significantly correlated with the mediator variable M; (iv) the effect of the predictor variable X (the parameter) on the outcome variable Y should be less in absolute terms compared to the effect in (i). These conditions underpin the proposed framework of the study, as shown in Figure 1.

Thus, the conceptual framework depicts the mediation effect of AQ proxied by audit fees and big 4 auditors. It has been developed from the complementary effect hypotheses, which proposes that AC characteristics are likely to improve AQ proxy, which subsequently promotes FRQ. This assumption signifies that external auditors enhance the monitoring of FRQ performance of AC. The complementary hypothesis clarifies the demand aspect of the audit, which is aligned to agency theory, that assumes that

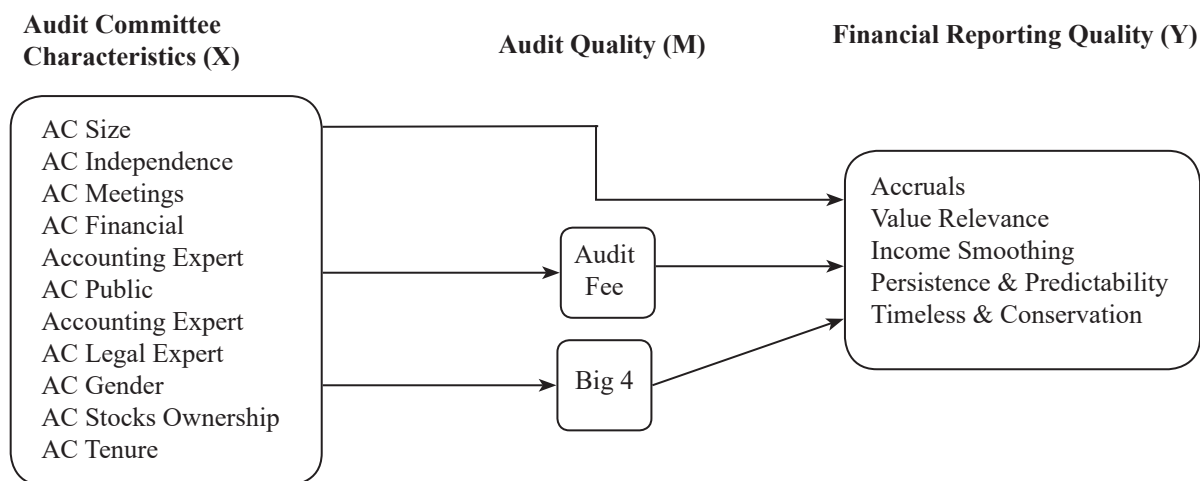


Figure 1. Proposed conceptual framework

audit efforts are required to lessen agency conflicts arising from the interests of owners and management (Menon & Williams, 1994; Watts & Zimmerman, 1983). Consequently, it is expected that more powerful boards will hire better auditors who, in turn, will possibly be more active monitors of managerial actions and ensure proper financial reports and disclosure (Carcello et al., 2002).

A mediation analysis assists in the better understanding of whether AQ complements (complementary hypothesis) the oversight function of ACs on FRQ. The consequence of the mediation might either be a partial mediation (complementary mediation) or full mediation (Hair, Tomas, Christian, & Sarstedt, 2016; Baron & Kenny, 1986). Baron and Kenny (1986) and Holmbeck (1997) suggested that a full mediation occurs when the mediator eliminates the effect of the predictor variables on the dependent variable, whereas a partial mediation (complementary mediation) occurs when the mediator significantly reduces the effect of the predictor variables on the outcome variable. Consequently, a complementary mediation of AQ could mean that quality plays a complementary role in the influence of AC on FRQ. However, this presumption can only be examined through a mediation analysis, not a moderation, because a moderator explains when a predictor variable most strongly or weakly causes an outcome variable, whereas a mediator explains the process of why and how a cause-and-effect occurs (Baron & Kenny, 1986; Wu & Zumbo, 2008).

Conclusion

This paper has reviewed the literature on AC, AQ, and FRQ. Consistent with the complementary hypothesis of AQ, we proposed a framework to exhibit how AQ can mediate the relationship between AC attributes and FRQ. The paper reviewed current and pioneering literature on AC and FRQ as well as AQ and FRQ. We identified some gaps in the literature and provided insight on how to fill these gaps. Our review showed that the studies on AC and FRQ had presented mixed results. The study also found that there is little evidence regarding the influence of legal experts and public accounting expertise in ACs. Consequently, this warrants further research. We finally offer some suggestions for future research.

Suggestions for Future Research

There is little evidence regarding the influence of legal experts in ACs. Future research should concentrate on some of the AC characteristics that have been given less attention by previous studies, such as AC public accounting expertise, AC legal experts, AC legal and accounting experts, and AC former audit partners. There is a need for future studies to pragmatically examine our proposed framework that aims to conceptually and theoretically explain the expected mediating effect of AQ on the link between AC characteristics and FRQ. Future research should also explore the causal links of internal audits and whistle-blowing policy on firms' ACs and FRQ.

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