



Audit Committee Financial Expertise and Financial Reporting Timeliness in Emerging Market: Does Audit Committee Chair Matter?

Saeed Rabea Baatwah¹
Hadhramout University, Yemen

Norsiah Ahmad
Universiti Zaenal Abidin, Malaysia

Zalailah Salleh
Universiti Malaysia Trengganu, Malaysia

Abstract

This study examines whether audit committee chair with financial expertise enhances the audit committee role in financial reporting quality in emerging market. We investigate this influence by employing the direct effect and moderating effect of audit committee chair with financial expertise on financial reporting timeliness. By using Omani data and the panel data method for two proxies for financial reporting timeliness, we find that audit committee chair with financial expertise enhances the timeliness of financial reporting through making the disclosure of annual reports timely. Further, we report evidence showing that both accounting and non-accounting financial expertise on the audit committee have a positive and significant influence on the timeliness of financial reporting. We also document that the association between financial expertise and the timeliness of financial reporting is more pronounced when the chair of the audit committee has accounting expertise. This study is among the comprehensive evidence prove that audit committee chair with accounting expertise contributes to the quality of financial reporting in emerging market.

Keywords: *Audit Committee, Chair with Accounting Expertise, Timeliness of Financial Reporting*

Introduction

Well known scandals, for example, Enron and WorldCom in the US had shredded investors' confidence in capital markets and corporate management. Regulators and professionals mostly agreed that sound corporate governance was not incorporated and practiced by these companies. Thus, more rigorous legislation was enacted that mainly aims to attract and protect investors and other stakeholders, and enhance company value (e.g. SOX 2002). One main focus of the legislation was to improve the audit committee role because it is the most and first governance mechanism responsible for financial reporting quality and oversight of the audit process (Beasley et al. 2009). Given such a responsibility, the legislation required audit

¹ e-mail: sbaatwah@yahoo.com

committees to have at least one director with financial expertise². In fact, these reforms were initiated by more developed countries and adopted by most emerging countries, such as Oman.

While financial expertise is perceived to be relevant to the audit committee, researchers and policy makers are debating this issue. The main theme of this debate is that whether financial expertise should be defined broadly (accounting or general financial expertise) or narrowly (accounting expertise). This debate motivated prior research (e.g. DeFond et al. 2005; Krishnan and Visvanathan 2008; Dhaliwal et al. 2010) to investigate which financial expertise is associated with high quality financial reporting. The findings from a review of the literature mostly supported that financial expertise should be defined narrowly. However, the broad definition was considered by most regulations around the world (e.g. SOX 2002).

Importantly, it is observed a trend in assigning the chair position of the audit committee to someone with financial expertise. DeFond et al. (2005) contended that companies can increase the monitoring role by charging the audit committee chair responsibility to accounting expertise and found that 53 per cent of appointed accounting expertise assigned audit committee chair. Further, Engel et al. (2010) considered audit committees chaired by financial experts as high quality audit committees and reported that the audit committee chair receives higher compensation compared to other directors on the audit committee and compensation committee chair. Recent survey research confirmed such arguments and found that audit committee chairs are held by directors who are more likely to be accounting experts (e.g. Beasley et al. 2009; Salleh and Stewart 2012a; Engel et al. 2010)³. This suggests that the audit committee chair constitutes one significant input of audit committee effectiveness.

The main objective of this study is to examine the role of audit committee chair with accounting expertise in enhancing the timeliness of financial reports in a unique setting such as emerging market. We are motivated to conduct the current study as follows. First, there is a very little attention given by archival studies on the role of audit committee chair with accounting expertise in the quality of financial reports (Bédard and Gendron 2010). More recently, Schmidt and Wilkins (2013), Abernathy et al. (2014) and Tanyi and Smith (2015) have examined the influence of audit committee chair with accounting expertise on the financial reporting quality proxies and provided an empirical evidence on this influence. However, this literature focused on data from US where the legal system is very strict and the power of shareholders, managers and directors is diluted. Further, only one study among this literature considered such effect on financial reporting timeliness and failed to find consistent significant association (Abernathy et al. 2014). We attributed the results of this study to that the effectiveness of other mechanisms in US setting could offset the effect of audit committee chair with accounting expertise or that audit committee chairs and auditors are more sensitive for litigation risk from financial reporting fraud than from financial reporting delay. Therefore, extending this literature to other settings would increase the reliability of their findings.

Second, the evidence in this study is based on emerging market in which financial reporting timeliness is a great interest of stakeholders, and regulatory bodies currently pay a great attention to the characteristics of audit committee chair. However, companies in such setting still delay the publication of annual reports to public (Afify 2009; Wan-Hussin and Bamahros

² In addition to financial expertise, SOX and other capital markets authorities (e.g. Oman capital market authority) require that the audit committees of listed companies be chaired by an independent director.

³ This trend of assigning the chair position to accounting experts may be a result of corporate scandals. Beasley et al. (2009) report that the audit committee chair at Hollinger Company was heavily reliant on management advice and information on issues relating to the financial reporting process because he lacked the required accounting knowledge. Furthermore, Batson (2003) and Breeden (2003) find that senior management at Enron and WorldCom were responsible for preparing the agendas for the audit committee and determining the type of information that they want to review before meetings whereas these responsibilities are primarily charged to the audit committee chair (Sharma et al. 2009).

2013) and audit committees in these companies are only required to be chaired by an independent director which is insufficient characteristic guaranteed a good oversight on the quality of financial reports (Gendron and Bédard 2006; Beasley et al. 2009; Mustafa and Youssef 2010). Therefore, providing empirical evidence from such setting constitutes an imperative need. Finally, audit committee financial expertise and financial reporting timeliness literature is an emerging literature conducted mostly in emerging market (e.g. Mohamad-Nor et al. 2010; Wan-Hussin and Bamahros 2013). This literature provided no association with one exception study (Baatwah et al. 2015). We could argue that financial experts in audit committee are given insufficient power to discharge their responsibilities and, in these settings, power is concentrated in few people in the boardroom (e.g. ruling family and/or major shareholders). Audit committee chair is one source of the power of audit committee (Udueni 1999; McNulty et al. 2011). Therefore, the findings of this study would provide an extensive explanation and analysis to depict how an audit committee chair with accounting expertise contributes to audit committee financial expertise and to audit committee effectiveness.

In this study, we expect that an audit committee chair with accounting expertise will enhance the financial reporting timeliness. First, the chair of the audit committee may have the authority to access company accounts and invite auditors, CEO, CFO, and others to discuss the issues in auditing and financial reporting. Based on his expertise, this authority may allow him to discover and address any misconduct in a timely manner. Second, the accounting chair will pay significant attention to the accounting and internal audit departments and develop accounting policies that embody high accounting information quality because these aspects are in keeping with their tendencies and preferences. Third, a chair with accounting expertise will induce the integrity of senior management (e.g. CEO, CFO) to maintain high quality financial reporting because irregular accounting practices will be easily discovered and addressed in a timely manner. Fourth, the audit committee chair is the first person in the audit committee responsible to determine the company's audit team and review the audit scope. Therefore, we expect a high audit quality auditor to be chosen to audit the accounts of companies with a chair with financial expertise. Finally, there is research suggesting that audit committee financial expertise needs further power to play the desirable role. Audit committee chair is one of the upper echelon positions in a company and this hierarchical position represents a strong source of power (Hambrick and Mason 1984; Sharma et al. 2009). Therefore, we expect the chair with accounting expertise to enhance the role of financial expertise on the audit committee.

Our empirical test is based on data from listed companies in Omani Capital market because Oman is among the first countries from emerging market adopted and applied best practise corporate governance and it is a setting for the exception paper that provides significant association between audit committee financial expertise and audit report timeliness. Accordingly, based on the longitudinal research model, our results indicated that audit committee chair with accounting expertise enhances the timeliness of financial reporting. More specifically, we found a significant and negative association between audit committee accounting expertise chair and the lag of the audit report. However, the proposed association between audit committee chair with accounting expertise and total financial reporting timeliness was not supported. More surprisingly, we found non-accounting expertise has a significant and negative association with both proxies for financial reporting timeliness, and that accounting expertise is only significantly and negatively related to audit report lag.

Further results indicated that using multiple moderator analysis, chair with accounting expertise moderates the negative association between both types of financial expertise and total reports lag. Specifically, audit committee accounting chair enhances the role of accounting expertise and non-accounting expertise in the early disclosure of annual reports. We further supplemented these results by using a subsample moderator analysis and found that both types of financial expertise are only negatively and significantly associated with the total reports lag for companies with audit committees chaired by individuals with accounting expertise. We found no significant role for audit committee chair with accounting expertise in moderating the

association between both types of financial expertise and audit report lag. Furthermore, we conducted sensitivity analysis by changing the measures of the variables and concluded that our results are robust and not driven by the endogeneity problem. In this analysis, we further found results showing that audit committee chair with accounting expertise could substitute the overall governance quality as it was found that governance quality does not have a moderating effect on the association between audit committee financial expertise and the timeliness of total reports.

Our paper contributes to the existing literature in several ways. First, to the best of our knowledge, we offer first comprehensive evidence showing that audit committee chair with financial expertise significantly improves the timeliness of financial reporting in emerging market. This study responded to the recent trend of assigning accounting experts as audit committee chair (Beasley et al. 2009; Salleh and Stewart 2012a) and to the recent call for exploring the role of audit committee chair in facilitating effective audit committee performance (Carcello et al. 2011). Second, we found results supporting that using multiple power dimensions enhance the power of directors (Kalbers and Fogarty 1993; McNulty et al. 2011; Udueni 1999). We found that audit committee chair with accounting expertise moderates the association between audit committee financial expertise and the timeliness of financial reporting. This result may suggest that enhancing the power of the audit committee can substitute the overall corporate governance quality. Overall, this study extends prior literature that found audit committee chair with accounting expertise is a crucial input for audit committee effectiveness in general and timely financial reports in particular.

Third, we found strong evidence showing that non-accounting expertise contributes to the financial reporting quality, which supports recent evidence that suggested that other expertise is no less important than accounting expertise in audit committee (e.g. Dhaliwal et al. 2010; Krishnan et al. 2011). Finally, our results may have implications for the regulators and auditors in emerging markets. For example, most regulators require audit committees to have an independent chair. This requirement may not guarantee the effectiveness of such a director particularly in settings with shortages in expertise and lack of true independence. Given the accounting nature of audit committee responsibility, our results suggest that the regulations should extend the requirements for the audit committee chair. Further implications for regulators from our study results suggest that the regulations should clearly differentiate between accounting and non-accounting expertise and require companies to collectively have the necessary expertise. Also, auditors can benefit from this study by highlighting the importance of such director in signalling the quality of financial reports and audit/client negotiation.

The remainder of the paper is organized as follows. The next section reviews the prior literature and develops the hypotheses. Section three describes the research method and sample selection. Section four presents the empirical results, which is followed by the conclusion.

Previous Literature and Hypothesis Development

Timeliness of Financial Reporting and Audit Committee characteristics

Given the manifold advantages of timely information, researchers worldwide have been motivated to investigate the factors that influence or determine the timeliness of financial reporting (e.g. Dyer and McHugh 1975; Davies and Whittred 1980; Ashton et al. 1989; Ettredge et al. 2006; Bamber et al. 1993)⁴. While this literature was extensively focusing on

⁴ This literature has identified a number of factors that could influence the timeliness of financial reporting and mainly focused on factors, such as company-specific factors (e.g. company size, industry type, leverage, profitability, internal control system and company ownership) and audit-specific factors (e.g. auditor size, audit fees, complexity, audit structure, audit risk, specialization, tenure and non-audit services).

company and auditor characteristics as main determinates, this literature has recently used corporate governance factors as determinants of the timeliness of financial reporting (e.g. Abdullah 2006; Afify 2009; Yaacob and Che-Ahmad 2012; Wan-Hussin and Bamahros 2013). This literature mainly adopted agency perspective that argues corporate governance mechanisms are means to reduce the conflicts between principles (owners) and agent (management) (Fama 1980; Fama and Jensen 1983). In agency theory context, principles have a little chance to directly access information about their company compared agents. Accordingly, it is argued that corporate governance mechanisms, for example, board of directors and audit committee should promote the timeliness of financial reporting because providing information to users does not imply a transparent company if such information is not provided to principles in a timely manner. However, the empirical results of this analysis provide inconsistent conclusions (Baatwah et al 2013).

With more relevant mechanism to financial reporting process, that is audit committee, the evidence does not far from conclusive results. Afify (2009) reported that companies with audit committee experience better audit report timeliness than their counterparts. Wan-Hussin and Bamahros (2013) revealed that audit committee independence has a negative association with the lag of financial reporting, while other studies reported no evidence supporting that audit committee independence improves the timeliness of financial reporting (Abernathy et al. 2014; Abdullah 2006). The same mixed results were reported in respect of audit committee size and meetings (e.g. Wan-Hussin and Bamahros 2013; Mohamad-Nor et al. 2010; Abernathy et al. 2014). Ika and Ghazali (2012) comprehensively found that audit committee effectiveness prompts the timeliness of financial reporting through reducing the lead time of preparing, auditing and releasing the annual reports.

Recently, Abernathy et al. (2014) divided audit committee financial expertise into three groups – accounting expertise, non-accounting expertise and non-financial expertise – to investigate whether prior evidence on audit committee expertise is attributed to accounting expertise or other types of expertise. Excitingly, this study only reported a significant association between the presence and the proportion of accounting experts on the audit committee and the decrease in audit report delay. Similarly, Baatwah et al. (2015) found a decrease in audit report lag for Omani companies with high proportion of financial expertise on audit committee. Contrary to this result and to prior literature that supported the importance of accounting expertise in improving the effectiveness of audit committee, Mohamad-Nor et al. (2010) and Wan-Hussin and Bamahros (2013) reported no association between audit committee accounting/auditing expertise and audit report timeliness. Despite the mixed evidence, we infer that corporate governance characteristics, and, particularly, audit committee expertise, could have a significant influence on the timeliness of financial reporting.

Audit Committee Financial Expertise

Prior agency theory literature argued that audit committees are an important part of the decision control system for internal monitoring by the board of directors (Fama 1980; Fama and Jensen 1983) and identified a number of audit committee responsibilities that mainly focus on enhancing company performance and shareholders' wealth (DeZoort et al. 2002). This literature, however, posited that audit committee responsibilities cannot easily be discharged unless such committees have independent directors and relevant expertise. Knechel et al. (2012) noted that poor audit committee characteristics (independence; expertise) weaken audit committee oversight, and, consequently, the quality of financial reporting. Further, it was argued that having an independent mind and strong incentive do not guarantee good oversight unless the relevant expertise is presented (Mustafa and Youssef 2010). Accordingly, it was contended that audit committee expertise enhances the power of the audit committee and financial reporting quality because this power limits management power over a variety of financial reporting processes (Kalbers and Fogarty 1993).

Many researchers investigated the influence of audit committee financial expertise on a variety of financial reporting quality and audit quality measures. However, the initial empirical evidence on the contribution of financial expertise did not differentiate between accounting and non-accounting expertise and reported that audit committee financial expertise has a positive influence on the quality of financial reporting (Saleh et al. 2007; Abbott et al. 2004; Abbott et al. 2003; Carcello et al. 2006; Xie et al. 2003). Recent growing evidence considered the positive impact of directors with financial expertise, which was reported by previous literature as being exclusively attributed to accounting and auditing expertise and not to other financial expertise (e.g. DeFond et al. 2005; Krishnan and Visvanathan 2008; Dhaliwal et al. 2010; Goh 2009; Schmidt and Wilkins 2013). Therefore, we could posit that audit committee accounting expertise is among the relevant expertise for timely reporting.

Recent audit report timeliness literature examined the association between audit committee accounting expertise and financial reporting timeliness (e.g. Mohamad-Nor et al. 2010; Wan-Hussin and Bamahros 2013; Abernathy et al. 2014; Baatwah et al. 2015). This literature assumed that audit committee accounting expertise is associated with timely reports because such expertise is associated with improved internal control system and financial reporting quality which are important determinants for audit work. Although the results of this literature is inconsistent, we predict that audit committees with members possessing accounting and auditing knowledge could effectively contribute to better financial reporting timeliness, because their knowledge will help to reduce and timely correct errors and mistakes in preparation of financial reporting, and, consequently, the external audit starting time and the required work and time for accomplishing external auditing. In other works, audit committee accounting expertise is associated with short financial reporting lag. Thus, we propose the following hypothesis:

H1: Audit committee accounting expertise is positively related to the timeliness of financial reporting.

Recent literature extended audit committee expertise beyond accounting expertise arguing that risk evaluation and industry knowledge are important roles for audit committees, and that having the right experts on the audit committee has a vital input on the effectiveness of the audit committee (Bédard and Gendron 2010). Dhaliwal et al. (2010) indicated that the most positive impact of audit committee effectiveness on accruals quality is explained by a combination of both accounting and finance experts on the audit committee. Krishnan et al. (2011) reported that legal expertise on the audit committee enhances the quality of financial reporting and this quality is more obvious if accounting and legal expertise are combined. More recent evidence showed that audit committee industry expertise is associated with less financial reporting restatements (Cohen et al. 2014) and played a greater mediating role in auditor and client disagreement (Salleh and Stewart 2012a). Based on the existing definitions of financial expertise, non-accounting expertise may include such expertise, and this literature suggested that such expertise complements accounting expertise. Further, Baatwah et al. (2013) contended that financial (accounting) expertise is not the only relevant expertise contributing to timely reports because financial reporting timeliness is also affected by issues other than accounting issues. In fact, there is very limited literature examined the effect of audit committee expertise other than accounting expertise on the timeliness of financial reporting timeliness. Therefore, we expect an influence of non-accounting expertise on the timeliness of financial reporting since there are many factors (e.g. proprietary cost) beyond the accounting aspects that affect the timeliness of financial reporting. Hence, we propose the following hypothesis:

H2: There is an association between non-accounting expertise and the timeliness of financial reporting.

Audit Committee Chair with Accounting Expertise

Management literature suggested that leaders embed their tendencies and preferences into their organization and pay more attention to aspects that coincide with their preferences and tendencies (Barker and Mueller 2002; Schein 2004). The core role of the audit committee is to ensure the quality of financial reporting and oversight of the audit process (Beasley et al. 2009), and this responsibility can be accomplished by directors with extensive financial knowledge and experience (Bédard et al. 2004). Thus, we expect that chairs with accounting expertise will pay significant attention to accounting and internal audit departments through closely developing and overseeing the tasks performed. Consistent with this, DeFond et al. (2005) posited that audit committee chair with accounting expertise improves the monitoring role of audit committee over the quality of financial reports. This is because the audit committee chair is the first person responsible in accomplishing various and major duties of the committee (e.g. Beasley et al. 2009; Sharma et al. 2009). For example, it was noted that audit committee chair should determine the priorities for the company's audit team and oversee the evaluation of the personnel, quality, frequency and scope of the company's financial reports and internal audit functions (Chookaszian, 2007 cited by Morrow and Pastor 2007). Beasley et al. (2009) found that the audit committee chair sets the audit committee meeting agendas. These agendas usually include financial reporting issues (for details see Beasley et al. 2009) and that their preparation requires a knowledgeable person.

Furthermore, the literature concerning power suggested that having many power dimensions increases the personal power influencing in strategic decisions (Finkelstein 1992; Udueni 1999; McNulty et al. 2011). Audit committee chair is one of the upper echelon positions of a company and this position may increase the role of financial expertise on the audit committee. Consistent with this, Schmidt and Wilkins (2013) recently reported the restatement dark period is shorter for audit committees chaired by director with accounting expertise and Abernathy et al. (2014) predicted and found improvement in audit report lag for committees headed by accounting expertise. Although the above literature was US data based, we could consistently predict that audit committee with accounting chair would improve the timeliness of financial reporting for the given reasons. First, his authority and expertise ease the discovering and treating errors and misconducts in timely manner. Second, accounting expertise of audit committee chair would improve the work of accounting and internal audit departments and enforce the integrity of senior management, which in turn, increase the quality of pre-auditing financial reports. Third, as a person responsible for selecting and monitoring the auditors, and avoidance reputation destroy, big-4 audit firms would be selected as such auditor are associated with high quality and timely financial reports (e.g. Schmidt and Wilkins 2013). Thus, we propose the following hypothesis:

H3: Audit committee chair with financial expertise has a positive effect on the timeliness of financial reporting.

Conversely, a strand of research shows no influence from audit committee financial expertise on the financial reporting quality. For example, Lin et al. (2006) found that financial expertise on the audit committee for US companies has no effect on the quality of financial reporting. Carcello et al. (2011b) reported the involvement of CEO in the selection of directors constraining the role of financial expertise in preventing the incidence of financial reporting restatement. Lisic et al. (2012) revealed that the role of audit committee financial expertise on increasing the quality of financial reporting is constrained by powerful CEOs and that their positive role in increasing the quality of financial reporting becomes insignificant or negative. Further evidence was provided by the literature concerning timeliness, which showed no association between audit committee financial expertise and timeliness of the audit report (e.g. Mohamad-Nor et al. 2010; Wan-Hussin and Bamahros 2013).

Prior literature argued that power is a crucial condition for audit committee to discharge its responsibilities (Kalbers and Fogarty 1993) and using multiple source of power increases the power of the committee (Baatwah et al. 2013). This suggests that audit committees with expertise and position powers would perform the responsibilities of audit committee more effective than their counterparts. Consistent with this, Baatwah et al. (2013) concluded that audit committee chair with accounting expertise could complement audit committee financial expertise in producing more timely financial reporting. Therefore, drawing on the preceding literature pertaining to financial expertise and financial reporting timeliness, we argue that audit committee accounting experts who also chair the audit committee may improve the monitoring role of audit committee financial expertise over financial reporting quality, timeliness. This presumption could offer justification for prior findings that indicate financial expertise on audit committee is not associated with timely reports. We can test this proposition by using the moderating effect. Hence, we predict the following hypothesis:

H4: Audit committee chair with accounting expertise moderates the association between audit committee financial expertise and the timeliness of financial reporting.

Research Design and Sample Selection

Measures of Financial Reporting Timeliness

We followed prior literature and used audit report lag and total reports lag as a proxy for the timeliness of financial reporting (e.g. Al-Ajmi 2008; Lee et al. 2008). The lag of audit report measures the number of days employed by the external auditor to verify and examine the company accounts. Most prior literature considered the number of days spanned between the year-end and the date of auditor report signature as an appropriate measure for audit report lag. Further, we employed the lag of total financial reports (Ika and Ghazali 2012) because the high value of accounting information can be considered if such information reaches the various decision makers and not only the management and board of directors. This measure captures the time taken by the auditor and management to provide the verified annual reports to the public. As defined by most prior literature, this time is calculated as the number of days that elapse between the date of year-end and the date of disclosing the annual reports to the public either in formal journals or on the capital market website .

Measures of Audit Committee Financial Expertise

Prior literature (e.g. DeFond et al. 2005; Dhaliwal et al. 2010; Krishnan and Visvanathan 2008) divided financial expertise into two components, accounting and non-accounting, and argued that the main responsibility of audit committees is financial reporting and that this duty can only be effectively discharged by accounting experts. Thus, we employed these two proxies for audit committee financial expertise. This literature considered a director who obtains education and experience in accounting and auditing (e.g. public accountant, CFO or treasury) as an accounting expert. On the other hand, a director with financial and general financial experience, such as a CEO or president of companies, was considered as a non-accounting expert . Following this literature, both proxies are measured by the proportion of such expertise which obtained by dividing the total number of accounting (non-accounting) experts by the total number of directors on the audit committee.

Measure of Audit Committee Chair with Accounting Expertise

Prior literature found an increase in appointing accounting experts as committee chair (e.g. DeFond et al. 2005; Salleh and Stewart 2012b) and that only accounting expertise on the audit committee enhances the quality of financial reporting (e.g. Dhaliwal et al. 2010; Krishnan and Visvanathan 2008; Schmidt and Wilkins 2013). Thus, we defined audit committee chair with accounting expertise as a chair who is an accounting expert, as defined previously. We follow

Schmidt and Wilkins (2013) and Abernathy et al. (2014) in operationalizing audit committee chair with accounting expertise by assigning one to a committee chaired by accounting expert and zero otherwise.

Methods of Empirical Testing

We used panel data analysis to examine the interests of this study⁵. Using this method, we first investigated the unconditional effect of audit committee financial expertise on the timeliness of the proxies for financial reporting. In these models, we controlled for corporate governance variables, such as board independence, board size, audit committee independence, audit committee size and audit committee meetings. These variables have been found to contribute to corporate governance effectiveness, and, hence, financial reporting quality (e.g. Klein 2002; DeZoort et al. 2002; Xie et al. 2003). Further, we controlled for other variables, such as company size, profitability, type of auditor and ownership structure. These variables were previously found to influence the timeliness of financial reporting (e.g. Bamber et al. 1993; Al-Ajmi 2008; Afify 2009; Habib and Bhuiyan 2011). These models can provide evidence for examining the first three hypotheses.

$$\text{ARL}_{it}(\text{TRL}_{it}) = \beta_0 + \beta_1 \text{ACAFEX}_{it} + \beta_2 \text{ACNAFEX}_{it} + \beta_3 \text{ACFEXC}_{it} + \beta_4 \text{BID}_{it} + \beta_5 \text{BSZ}_{it} + \beta_6 \text{ACID}_{it} + \beta_7 \text{ACSZ}_{it} + \beta_8 \text{ACM}_{it} + \beta_9 \text{ADFSZ}_{it} + \beta_{10} \text{LNCOSZ}_{it} + \beta_{11} \text{PROF}_{it} + \beta_{12} \text{OWCO}_{it} + \beta_{13} \text{it} \quad (1,2)$$

To examine whether the audit committee chair enhances the role of audit committee financial expertise on the financial reporting timeliness, we employed moderating regression method to tests the following models. This method is more appropriate for providing an explanation for the contingency effect of third variable on existence direct relationship between two variables. Our fourth hypothesis is interesting to provide an explanation for the inconsistent findings between audit committee financial expertise and financial reporting timeliness. In doing so, we interact audit committee financial expertise proxies, after centring, with audit committee accounting chair. Therefore, we include in these models variables similar to previous models except we add interaction terms and their components.⁶ Thus, the following models examine the fourth hypothesis.

$$\text{ARL}_{it}(\text{TRL}_{it}) = \beta_0 + \beta_1 \text{ACAFEX}_{it} + \beta_2 \text{ACNAFEX}_{it} + \beta_3 \text{ACFEXC}_{it} + \beta_4 \text{ACAFEX}_{it} * \text{ACFEXC}_{it} + \beta_5 \text{ACNAFEX}_{it} * \text{ACFEXC}_{it} + \beta_6 \text{BID}_{it} + \beta_7 \text{BSZ}_{it} + \beta_8 \text{ACID}_{it} + \beta_9 \text{ACSZ}_{it} + \beta_{10} \text{ACM}_{it} + \beta_{11} \text{ADFSZ}_{it} + \beta_{12} \text{LNCOSZ}_{it} + \beta_{13} \text{PROF}_{it} + \beta_{14} \text{OWCO}_{it} + \beta_{15} \text{it} \quad (3,4)$$

In these analyses, we reserve our prediction regarding the relationship between corporate governance variables and some control variables with the timeliness of financial reporting because recent literature on timeliness provides inconsistent evidence showing the significant impact of corporate governance mechanisms on the timeliness of financial reporting (e.g. Abdullah 2006; Afify 2009; Wan-Hussin and Bamahros 2013). Further, for the two control variables, auditor type and ownership structure, there are competing arguments or inconsistent evidence that makes the predication of their influence a difficult task. Therefore, Table 1 presents the definition of all the variables included in the study models.

⁵ Prior literature argues the usefulness of using panel data analysis in social science analysis, in general (Baltagi 2008; Wooldridge 2010), and in accounting analysis, in particular (e.g. Henderson and Kaplan 2000; Jager 2008).

⁶ We centre the continuous variables before multiplying them by the moderator variable to reduce the possible high multicollinearity between these variables and interaction terms and to maintain interpretability of interaction term components.

TABLE 1: Variables Definitions

Variable Name	Variable Measurement
<i>ART</i>	The number of days between the company year-end date and the audit report date.
<i>TRT</i>	The number of days between the company year-end date and the date of public disclosure.
<i>ACAFEX</i>	The proportion of directors on AC with accounting expertise.
<i>ACNAFEX</i>	The proportion of directors on AC with general financial expertise.
<i>ACFEXC</i>	1 if the chair of AC is accounting expert and 0 otherwise.
<i>BID</i>	The proportion of independent directors on the board.
<i>BSZ</i>	The number of directors on the board.
<i>ACID</i>	1 if all the directors in AC are independent and 0 otherwise.
<i>ACSZ</i>	The number of directors in AC.
<i>ACM</i>	The number of meetings held by AC during the year.
<i>ADFSZ</i>	1 if the audit firm is Big 4 and 0 otherwise.
<i>LNCOSZ</i>	The natural log of total assets.
<i>PROF</i>	The ratio of net income to total assets.
<i>OWCO</i>	The percentage of company shares held by substantial shareholders ($\geq 10\%$).
<i>ACAFEX*ACFEXC</i>	Interaction term between AC accounting expertise and AC accounting expertise chair.
<i>ACNAFEX*ACFEXC</i>	Interaction term between AC non-accounting expertise and AC accounting expertise chair.

(3,4)

Sample Selection and Data Collection

Our sample selection process starts with all the companies listed on the Omani capital market during the years 2007–2011. The reason for choosing this period is mainly because the global financial crisis occurred within this period, and, therefore, we expect more lessons to have been learnt.⁷ During this period, our primary sample is 603 company-year observations. However, we exclude 158 observations for financial companies because they are subject to more strict regulations and have a sophisticated accounting system (Bamber et al. 1993). Furthermore, we eliminate 106 observations with insufficient data for the dependent and independent variables. Therefore, the final sample for analysis is 339 observations⁸. The main sources of our study data are capital market websites, company annual reports and the OSIRIS database. These sources are used to collect data for the proxies for timeliness, financial information, ownership structure and directors' profiles. Further, we use additional sources, such as companies' websites, directors' website pages and other databases, such as Markets data and Businessweek⁹.

⁷ A further reason is that in 2002 and 2005 Oman implemented significant changes in the regulations (e.g. enacting code of corporate governance; changing deadline of financial disclosure 90 to 75 days) and these changes can be effectively understood and implemented with the passage of time (Peng 2004; Abdullah 2006).

⁸ We should note that this study employs panel data analysis; therefore, all these observations are based on companies with data for at least two years.

⁹ Mustafa and Youssef (2010) note that using one source for director information is problematic and leads to misclassification.

Empirical Results

Descriptive Statistics and Univariate Analysis

Table 2 provides summary statistics for the variables of interest for the 339 company observations. The statistics showed that the means (medians) for audit report lag and total reports lag are 52 (54) and 60 (61) days, respectively. With respect to the variables for audit committee expertise, the results reported that the proportion of accounting expertise and non-accounting financial expertise on the audit committee are, on average, 22 per cent and 57 per cent, respectively. These statistics also revealed that 26 per cent of the study sample has an audit committee chair who qualified as accounting expert.

For corporate governance variables, the statistics showed that for the board variables, the proportion of independent directors is 87 per cent and the number of directors on the board is seven directors. For audit committee variables, the results indicated that 86 per cent of the study sample has a fully independent audit committee and has three directors on the audit committee. Regarding audit committee meetings, on average, four meetings were reported as being held during the sample observations. The results for the control variables also indicated that Big 4 audit firms audited 65 per cent of the study sample. Further, on average, the natural log of total assets was found to be 17.61. Furthermore, it was found that company profitability is five per cent to total assets, and company ownership structure is 60 per cent of total issued shares indicating a concentrated ownership structure.

For brevity, unreported univariate correlations coefficients indicated that the correlation coefficients of the proxies for timeliness (ARL and TRL) and ACAFEX showed a negative correlation -.24 and -.27, respectively. On the other hand, the correlation coefficients for ACNAFEX with ARL and TRL indicated weak positive correlations of .5 and .14, respectively. More interestingly, ACFEXC was found to have a negative correlation with both proxies for timeliness – ARL and TRL. Further, the univariate correlations and variance inflation factor (VIF) provided us with information pertaining to the multicollinearity problem and report no concern for multicollinearity.

TABLE 2: Descriptive Statistics for 339 Company Observations

Variable	Mean	S.D.	Min	0.250	Median	0.750	Max
ART	52.34	12.74	12	45	54	60	77
TRT	60.03	10.59	13	55	61	68	81
ACAFEX	0.21	0.23	0	0	0.25	0.33	1
ACNAFEX	0.57	0.30	0	0.33	0.67	0.75	1
ACFEXC	0.26	0.44	0	0	0	1	1
BID	0.86	0.19	0	0.75	1	1	1
BSZ	7.01	1.51	4	6	7	8	12
ACID	0.79	0.41	0	1	1	1	1
ACSZ	3.29	0.69	1	3	3	4	6
ACM	4.82	1.41	0	4	5	5	9
ADFSZ	0.65	0.48	0	0	1	1	1
LNCOSZ	17.61	1.45	14.36	16.50	17.56	18.62	21.34
PROF (%)	4.67	11.12	-64.71	1.30	5.37	11.42	31.19
OWCO	60.10	21.31	10	45.15	59.67	77.20	99.49

See Table 1 for variable definitions

Multivariate analysis

Our multivariate analysis is panel data analysis¹⁰. Table 3 showed the results of two regressions. First, ARL was regressed against audit committee financial expertise (chair and directors) and the other variables. In column three, the results indicated that ACAFEX is negatively and significantly associated with ARL ($p < .10$). In other words, companies with accounting expertise directors on the audit committee have timely audit report. This result confirms our prediction and prior evidence which indicated that accounting expertise on the audit committee enhances the quality of financial reporting (Dhaliwal et al. 2010; Krishnan and Visvanathan 2008) in general and financial reporting timeliness in particular (Abernathy et al. 2014; Baatwah et al. 2015). Further, ARL regression reported a negative and significant association between ARL and ACNAFEX ($p < .5$). This result is consistent with recent evidence that suggested expertise rather than accounting expertise improves the monitoring role of the audit committee (Dhaliwal et al. 2010; Krishnan et al. 2011). We should mention that the size effect of audit committee accounting and non-accounting expertise directors on audit report timeliness in this study is very large, reduction in the lag by approximately 11 days and 8 days respectively. This reduction is economically significant compared by prior literature

With the variable of most interest, ACFEXC, the result revealed that ARL is negatively and significantly associated with ACFEXC at p-value less than .10. This result is consistent with our expectation and with prior audit committee accounting expertise results that suggested that an audit committee chair who is an accounting expert improves the monitoring role of the audit committee (DeFond et al. 2005; Schmidt and Wilkins 2013). This result contradict with

¹⁰This analysis contains the three most popular panel data models – pooled model, fixed effect model and random effect model. To decide which one suits our study, we conduct the Hausman test, which indicates that the fixed effect model is more appropriate for our study. We check the linearity of the independent and control variables and find that LNCOSZ has a curvilinear correlation. Therefore, we dichotomize this variable, 1 for big size and 0 for small size, by using the variable median because only dichotomy variables can have a linear relationship (Tabachnick and Fidell 2013), and prior research found that large companies have short financial reporting timeliness. Further analysis reports the presence of heteroscedasticity and autocorrelation problems. Therefore, we use robust standard errors, clustered at the company level, to control these problems (White 1980).

recent evidence (Abernathy et al. 2014) who found inconsistent evidence on the effect of audit committee chair with accounting expertise on audit report lag. We attributed this result to the nature of the setting, US, where the quality of governance is very high and the legal system is more sophisticate. Further, the economic significant of our results is significant because reduction in audit report lag is four days which is mater from financial reports' users (Abbott et al., 2012). Regarding other corporate governance variables, the ARL showed a significant and negative association with BSZ and ACSZ, $p < .5$ and $p < .10$, respectively. These results are consistent with prior evidence (e.g. Mohamad-Nor et al. 2010; Baatwah et al. 2015). On the other hand, BID, ACIN and ACM show an insignificant association with ARL. These results are also consistent with prior research (e.g. Mohamad-Nor et al. 2010; Wan-Hussin and Bamahros 2013; Baatwah et al. 2015). Further, all control variables were found to have an insignificant correlation with ART ($p > .10$).

Second, TRL was regressed on the same variables included in the ARL model. The results of this regression, in column 4, revealed that ACAFEX and ACFEXC are negative but insignificantly associated with TRL ($p > .10$). These results are inconsistent with prior results for the ARL model and for recent evidence (Schmidt and Wilkins 2013). The regression result reported a negative and significant correlation between ACNAFEX and TRL at p-value less than .5. This result is consistent with the result of the ARL model. In respect of other governance variables, the results almost reported similar results for ARL model except for BID and ACSZ. With regard to the control variables, ADFSZ had a positive and significant association with TRL ($p < .01$), while OWCO had a negative and significant correlation with TRL ($p < .01$). For the other two control variables, it was found that LNCOSZ and PROF are negative but insignificantly correlated with TRL.

It should be noted that the preceding results indicated that a chair with accounting expertise and accounting expertise directors on the audit committee only significantly affected ARL, while non-accounting financial expertise significantly affects both ARL and TRL. Therefore, we provide plausible explanations for these findings. First, the timeliness of financial reporting is significantly affected by the competition costs within an industry (Leventis and Weetman 2004) and this effect requires directors with sufficient industry and company business knowledge in addition to accounting expertise. This knowledge may be possessed by directors who were/are CEO, senior managers or finance experts. Further, this knowledge can be provided by the audit committee chair because he has the authority to access and extract important information from insiders who have a deep understanding of company business and industry knowledge. This explanation supports the complementary role of corporate governance mechanisms suggested by prior literature. The second explanation may be related to audit committee power. The audit committee chair occupies a high position in the company, which makes the committee chair more powerful than other directors. Thus, having expert and hierarchy powers, the auditor may perceive that clients with accounting expertise in the position of audit committee chair will lead to a more powerful audit committee, and, such a perception is significantly associated with less audit effort. Finally, our findings were based on data from emerging market, Oman, where the power in the boardroom is in hands of major shareholders and/or ruling families. These parties may have less incentives to provide timely financial information to public for self-interest or careless reason. These explanations show the importance of moderating analysis that was reported subsequently.

TABLE 3: Main Effect Regressions for 399 Company Observations

Variable	Expected Sign	(1)	(2)
		ART	TRT
ACAFEX	-	-11.210* (-1.97)	-7.823 (-1.30)
ACNAFEX	?	-8.379** (-2.15)	-6.524** (-2.13)
ACFEXC	-	-3.709* (-1.71)	-1.006 (-0.57)
BID	?	-8.563 (-1.39)	-11.060* (-1.98)
BSZ	?	-1.975** (-2.57)	-0.911 (-1.30)
ACID	?	0.639 (0.39)	1.185 (0.72)
ACSZ	?	-2.906* (-1.91)	-0.985 (-1.19)
ACM	?	0.050 (0.11)	0.204 (0.79)
ADFSZ	?	1.396 (0.87)	2.466*** (2.75)
LNCOSZ	-	-1.161 (-0.43)	-0.529 (-0.40)
PROF	-	-0.031 (-0.57)	-0.031 (-0.80)
OWCO	?	-0.098 (-1.40)	-0.124*** (-3.25)
_cons		96.370*** (10.65)	89.260*** (13.78)
<i>F-value</i>		3.72	3.71
<i>R-square within</i>		.128	.105
<i>N</i>		339	339

*p<.10; **p<.05; ***p<.01

See Table 1 for variable definitions

Table 4 shows the results of the moderating analysis¹¹. In this analysis, our main interest is whether ACFEXC enhances the role of financial expertise on the audit committee through moderating the association between audit committee expertise and financial reporting timeliness. In column three, the ARL model showed that the coefficients of ACAFEX*ACFEXC and ACNAFEX*ACFEXC are negative but insignificant ($p>.10$). These results suggested that ARL is similar for companies that have audit committee chaired by accounting expert or by non-accounting expert or non-financial expert. These results are inconsistent with our expectation and further confirmed our previous results that suggested that financial expertise by itself contributes to shorten the audit reporting timeliness. For other governance and control variables, the results are similar to the prior ARL model that only showed BSZ and ACSZ have a negative and significant association with ARL ($p<.01$; $p<.10$).

¹¹ To identify the moderating effect, we use the interaction term coefficient instead of using the changes in R square (See Sharma et al. 1981, for more details).

In column four of Table 3, the results of the TRL model were presented. These results showed that the coefficient of $ACAFEX*ACFEXC$ is negative and significantly associated with TRL ($p < .10$). This result suggests that the TRL of companies with accounting expertise is short and that this trend is more obvious if the audit committee is chaired by an accounting expert. This result is consistent with our expectation, which argued that a chair with accounting expertise enhances the effectiveness of the audit committee. Similarly, the coefficient of $ACNAFEX*ACFEXC$ shows a negative and significant correlation with TRL ($p < .5$). This result indicates that $ACFEXC$ enhances the role of $ACNAFEX$. This result is also consistent with our expectation mentioned above. Interestingly, the economic significant of audit committee accounting (non-accounting) expertise is significantly increased from 8(7) days to 11(13) days when interacted with audit committee chair with accounting expertise. Regarding the other variables, the results showed similar evidence that only BID and $OWCO$ are significantly and negatively associated with TRL ($p < .10$ and $p < .01$) and $ADFSZ$ is positively and significantly related to TRL ($p < .01$).

Additional Tests

Alternative Measures of Tested Variables

Our results showed that some governance variables (e.g. $ACAFEX$; BID ; BSZ ; $ACSZ$) have significant influence on the timeliness of financial reporting while others have no influence. However, prior literature questioned the effectiveness of these practices in eliminating the agency problem in countries other than Anglo-Saxon countries (Chen et al. 2011). Further, it was posited that a different research method, for example, variables definitions and measurements, significantly contributed to the mixed results of corporate governance studies (Cohen et al. 2008; Pomeroy and Thornton 2008). Therefore, our results may not be consistent if we use other measures for governance variables. To check this possibility, we followed prior literature (Krishnan and Visvanathan 2008) by categorizing the continuous governance variables and regressing them against the proxies for financial reporting timeliness. Unreported results mostly showed similar findings reported in Table 3 with the exception for the dummy variables for accounting expertise and audit committee size, which showed a significant and negative association with TRL. Thus, we can conclude the robustness of our findings and that the differences in measurement did not significantly drive our results.

Subsample Analysis Method for Testing the Moderator

In analysing our moderating effect, we used multiple moderator regression, which provided evidence that $ACFEXC$ significantly and negatively moderates the association between audit committee financial expertise ($ACAFEX$ and $ACNAFEX$) and TRL. However, this method can be threaten by multicollinearity problem caused by the high correlation between the interaction term and its components (Frazier et al. 2004; Hofmann and Gavin 1998). The untabulated results revealed that after centring the continuous variables of the interaction term, the interaction terms are moderately highly correlated with their components, for example, the correlation between $ACFEXC$ and both interaction terms are .75 and .76, respectively. This suggests that our results may be driven by the multicollinearity problem. To eliminate the effect of this problem and to confirm the robustness of our results, we used subsample analysis to check the presence of the moderating effect of $ACFEXC$ ¹².

¹² This method is used to test the moderating effect by many prior literatures (e.g. DeFond et al. 2005; Dhaliwal et al. 2010).

Given the importance of this result, we presented the regression results in Table 5. In this method we partitioned the full sample into two groups based on the ACFEXC, 1 if committee chaired by accounting expert and 0 otherwise, and then we conducted multiple regression for each group. For audit committees chaired by accounting expert subgroup, the results showed that ACAFEX and ACNAFEX are significantly and negatively associated with TRL ($p < .10$). On the other hand, ACAFEX and ACNAFEX were negative but insignificantly related to TRL for audit committees not chaired by accounting expert subgroup ($p > .10$). These results suggested that ACFEXC moderates the association between audit committee expertise and the timeliness of financial reporting and confirms our previous results. Further, this analysis reported that ADFSZ and OWCO have a significant influence on the TRL for committees with ACFEXC ($p < .5$; .01), and BID, and that ADFSZ has a significant influence on TRL for committees with ACFEXC. These results confirmed our previous results in respect of these variables.

TABLE 4: Moderator Effect Regressions for 399 Company Observations

Variable	(3) ART	(4) TRT
ACAFEX	-8.426 (-1.56)	-4.553 (-0.68)
ACNAFEX	-5.436 (-1.37)	-3.222 (-0.90)
ACFEXC	-4.755 (-1.41)	-2.064 (-0.90)
ACAFEX*ACFEXC	-8.886 (-0.98)	-10.730* (-1.68)
ACNAFEX*ACFEXC	-11.650 (-1.57)	-13.00** (-2.16)
BID	-8.616 (-1.26)	-11.210* (-1.80)
BSZ	-1.963*** (-2.65)	-0.889 (-1.34)
ACID	0.455 (0.26)	1.004 (0.60)
ACSZ	-2.941* (-1.83)	-1.013 (-1.25)
ACM	0.068 (0.15)	0.227 (0.86)
ADFSZ	1.565 (0.98)	2.649*** (3.18)
LNCOSZ	-1.183 (-0.43)	-0.538 (-0.42)
PROF	-0.030 (-0.55)	-0.031 (-0.77)
OWCO	-0.098 (-1.30)	-0.124*** (-3.14)
_cons	94.070*** (10.99)	86.620*** (13.70)
<i>F-value</i>	4.72	4.97
<i>R-square within</i>	.143	.131
<i>N</i>	339	339

* $p < .10$; ** $p < .05$; *** $p < .01$

See Table 1 for variable definitions

Strong Governance

Prior evidence reported that an environment with strong governance enhances the role of audit committee expertise on financial reporting quality (DeFond et al. 2005; Krishnan and Visvanathan 2008). Therefore, we posit that audit committee chair with accounting expertise could substitute for strong governance. For testing this proposition, we followed prior literature to construct the governance measure, SGOV (DeFond et al. 2005), and we interacted SGOV with both ACAFEX and ACNAFEX¹³. We ran equations 3 and 4 after excluding the variables used to construct the governance measure and ACFEXC. The untabulated results indicated that SGOV negatively moderates the association between ACAFEX and ACNAFEX and ARL ($p < .5$). On the other hand, we also reported the insignificant moderating role of SGOV on the association between ACAFEX and ACNAFEX and TRL ($p > .10$). These results partially confirmed our expectation in respect of the substitution role of audit committee chair with accounting expertise to the strong corporate governance.

Table 5: Subsample Analysis Results

Variable	TRT	TRT
	ACFEXC=1	ACFEXC=0
ACAFEX	-16.390* (-1.99)	-1.791 (-0.21)
ACNAFEX	-15.380* (-1.84)	-3.143 (-0.74)
BID	0.841 (0.09)	-19.010** (-2.65)
BSZ	2.859 (0.83)	-0.761 (-1.21)
ACID	-2.677 (-0.74)	2.655 (1.17)
ACSZ	4.041 (1.50)	-1.592 (-1.57)
ACM	0.319 (0.52)	0.292 (0.89)
ADFSZ	3.624** (2.40)	2.451** (2.44)
LNCOSZ	-3.368 (-1.09)	0.672 (0.37)
PROF	0.074 (1.12)	-0.047 (-1.11)
OWCO	-0.322*** (-3.31)	-0.076 (-1.38)
_cons	51.800 (1.47)	89.790*** (14.99)
<i>F-value</i>	8.40	6.25
<i>R-square within</i>	.305	.103
<i>N</i>	87	252

* $p < .10$; ** $p < .05$; *** $p < .01$

See Table 1 for variable definitions

¹³ We use audit firm size instead of G-index to proxy for the external governance mechanism because there is no data for the G-index for Oman. Further, Fan and Wong (2005) found that the external auditor in developing markets is an effective external governance mechanism

Endogeneity effect

Prior accounting research suggested the threat of endogeneity on the consistency and unbiased estimates of regression (e.g. Dhaliwal et al. 2010; Krishnan and Visvanathan 2008; Krishnan et al. 2011). This problem is usually caused by one or more of three elements – omitted variables, measurement error and simultaneity (Wooldridge 2010). In accounting research, as reported by previous literature, this problem was usually caused by the correlation between the independent variable and unobserved omitted variables. Therefore, researchers should be aware of this problem and address it to avoid an erroneous conclusion (Brown et al. 2011). The econometrics literature proposed two methods that can be used to solve this problem – fixed effect model and instrumental variable (Baltagi 2008; Wooldridge 2010). The instrumental variable method requires a strictly exogenous instrument variable and performs two stage regressions. In other words, the instrument variable must be strongly correlated with the endogenous variable and strictly uncorrelated with the error term.¹⁴ On the other hand, the fixed effect model controls for the unobservable effect by including dummy variables for each observation. This model assumes that the strict exogeneity of the independent variable is conditional on the unobservable effect. In other words, the correlation between the error term and the explanatory and cross sectional dummy variable is zero. Interestingly, in this study, fixed effect model was employed. Thus, we can conclude that, to some extent, our results are robust and control for the possible effect of the endogeneity problem.

Conclusion

In this study, we have investigated the most recent interesting issue in the literature concerning audit committee expertise and financial reporting quality. The audit committee is the first internal governance mechanism responsible for financial reporting and audit. Authoritative agencies and academicians around the world agree that this committee should comprise financial experts to effectively discharge its responsibilities. Despite the disagreement of what constitutes financial expertise, there is a trend for appointing financial experts on the audit committee and assigning the position of chair to such a director. However, empirical evidence shows that the role of audit committee chair with financial expertise on financial reporting quality is scarce.

Our results generally indicated that chair with accounting expertise is associated with financial reporting timeliness. Thus, our study is among the first comprehensive evidence concerning this issue in emerging markets. Further, we found that audit committee accounting financial expertise is partially associated with financial reporting timeliness while non-accounting financial expertise is significantly related to financial reporting timeliness. We further reported results suggesting that audit committee chair with accounting expertise enhances the association between both types of financial expertise and the financial reporting timeliness. Our findings add to the growing literature by extending the recent empirical evidence that showed audit committee chair with accounting expertise significantly contributes to the timeliness of financial reporting though providing the same evidence from emerging markets. Second, our results contribute to the audit committee power literature in that using multiple power dimensions enhances the power of directors. Finally, in accordance with our results we recommend that the regulators and auditors should seriously consider the composition of the audit committee to have accounting and non-accounting expertise and chair with accounting expertise.

¹⁴ Larcker and Rusticus (2010), and Brown et al. (2011) provide extensive guidelines concerning how to use the instrumental variable method. They also prefer to use this method over the fixed effect method.

We should acknowledge that our findings should be carefully interpreted for the following reasons. First, our setting is characterized by less developed regulations and capital markets. Although we believe that our findings can be extended to many of developed and emerging markets with similar characteristics, generalizing these findings to all settings needs careful considerations. Further, we use fixed effect model to conclude that our results are robust to endogeneity problem. However, this method is impractical because corporate governance practice is stickiness (Brown et al. 2011). Finally, our study implicitly assumes that a chair with accounting expertise lacks industry knowledge and his position allows him to access to such information. This assumption may not be correct if the chair possesses both types of expertise and he can contribute to the financial reporting quality without using such authority. Therefore, measuring the effect of audit committee chair with accounting expertise by distinguishing between holding both types of expertise and only accounting expertise may be provide a future research opportunity.

References

- Abbott, L. J., S. Parker, and G. F. Peters. 2004. Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory* 23 (1):69-87.
- Abbott, L.J., Parker, S. & Peters, G.F. 2012. Internal audit assistance and external audit timeliness. *Auditing: A Journal of Practice & Theory*, 31 (4):3-20.
- Abbott, L. J., S. Parker, G. F. Peters, and K. Raghunandan. 2003. The association between audit committee characteristics and audit fees. *Auditing: A Journal of Practice & Theory* 22 (2):17-32.
- Abdullah, S. N. 2006. Board composition, audit committee and timeliness of corporate financial reports in Malaysia. *Corporate Ownership & Control* 4 (4):33-45.
- Abernathy, J. L., B. Beyer, A. Masli, and C. Stefaniak. 2014. The association between characteristics of audit committee accounting experts, audit committee chairs, and financial reporting timeliness. *Advances in Accounting* 30 (2):283-297.
- Afify, H. A. E. 2009. Determinants of audit report lag: Does implementing corporate governance have any impact? Empirical evidence from Egypt. *Journal of Applied Accounting Research* 10 (1):56-86.
- Al-Ajmi, J. 2008. Audit and reporting delays: Evidence from an emerging market. *Advances in Accounting* 24 (2):217-226.
- Ashton, R. H., P. R. Graul, and J. D. Newton. 1989. Audit delay and the timeliness of corporate reporting. *Contemporary Accounting Research* 5 (2):657-673.
- Baatwah, S. R., Z. Salleh, and N. Ahmad. 2013. Whether audit committee financial expertise is the only relevant expertise: A review of audit committee expertise and timeliness of financial reporting. *Issues in Social and Environmental Accounting* 7 (2):86-101.
- Baatwah, S. R., Z. Salleh, and N. Ahmad. 2015. Corporate governance mechanisms and audit report timeliness: Empirical evidence from Oman. *International Journal of Accounting, Auditing and Performance Evaluation* 11 (3/4):312-337.
- Baltagi, B. H. 2008. *Econometric analysis of panel data* 4th ed. New York: John Wiley & Sons, Ltd.

- Bamber, E. M., L. S. Bamber, and M. P. Schoderbek. 1993. Audit structure and other determinants of audit report lag: An empirical analysis. *Auditing: A Journal of Practice & Theory* 12 (1):1-23.
- Batson, N. 2003. Final report of Neal Batson, court-appointed examiner in re: Enron Corp.(Chapter 11 case no. 01-16034) (November).
- Beasley, M. S., J. V. Carcello, D. R. Hermanson, and T. L. Neal. 2009. The audit committee oversight process. *Contemporary Accounting Research* 26 (1):65-122.
- Bédard, J., and Y. Gendron. 2010. Strengthening the financial reporting system: Can audit committees deliver? *International Journal of Auditing* 14 (2):174-210.
- Blue Ribbon Committee (BRC). 1999. Report and recommendations of the Blue Ribbon Committee on improving the effectiveness of corporate audit committee. New York: New York Stock Exchange and National Association of Securities Dealers.
- Breeden, R. C. 2003. Restoring trust. Report to the Honorable Jed S. Rakoff — The United States District Court for the Southern District of New York — on corporate governance for the future of MCI, Inc., August.
- Brown, P., W. Beekes, and P. Verhoeven. 2011. Corporate governance, accounting and finance: A review. *Accounting & Finance* 51 (1):96-172.
- Carcello, J. V., D. R. Hermanson, and Y. Zhongxia. 2011. Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions. *Auditing: A Journal of Practice & Theory* 30 (3):1-31.
- Carcello, J. V., C. W. Hollingsworth, A. Klein, and T. L. Neal. 2006. Audit committee financial expertise, competing corporate governance mechanisms, and earnings management. Available at: <http://ssrn.com/abstract/14887512>.
- Chen, V. Z., J. Li, and D. M. Shapiro. 2011. Are OECD-prescribed "good corporate governance practices" really good in an emerging economy? *Asia Pacific Journal of Management* 28 (1):115-138.
- Cohen, J. R., U. Hoitash, G. Krishnamoorthy, and A. M. Wright. 2014. The effect of audit committee industry expertise on monitoring the financial reporting process. *The Accounting Review* 89 (1):243-273.
- Cohen, J. R., G. Krishnamoorthy, and A. M. Wright. 2008. Form versus substance: The implications for auditing practice and research of alternative perspectives on corporate governance. *Auditing: A Journal of Practice & Theory* 27 (2):181-198.
- Davies, B., and G. P. Whittred. 1980. The association between selected corporate attributes and timeliness in corporate reporting: Further analysis. *Abacus* 16 (1):48-60.
- DeFond, M. L., R. N. Hann, and H. U. Xuesong. 2005. Does the market value financial expertise on audit committees of boards of directors? *Journal of Accounting Research* 43 (2):153-193.
- DeZoort, F., D. Hermanson, D. Archambeault, and S. Reed. 2002. Audit committee effectiveness: A synthesis of the empirical audit committee literature. *Journal*

of Accounting Literature 21 (1):38-75.

- Dhaliwal, D. A. N., V. I. C. Naiker, and F. Navissi. 2010. The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research* 27 (3):787-827.
- Dyer, J. C., and A. J. McHugh. 1975. The timelessness of the Australian annual report. *Journal of Accounting Research* 13 (2):204-219.
- Engel, E., R. M. Hayes, and X. Wang. 2010. Audit committee compensation and the demand for monitoring of the financial reporting process. *Journal of Accounting and Economics* 49 (1-2):136-154.
- Ettredge, M. L., L. Sun, and C. Li. 2006. The impact of SOX section 404 internal control quality assessment on audit delay in the SOX era. *Auditing: A Journal of Practice & Theory* 25 (2):1-23.
- Fama, E. F. 1980. Agency problems and the theory of the firm. *Journal of Political Economy* 88 (2):288-307.
- Fama, E. F., and M. C. Jensen. 1983. Separation of ownership and control. *Journal of Law and Economics* 26 (2):301-325.
- Fan, J. P. H., and T. J. Wong. 2005. Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research* 43 (1):35-72.
- Frazier, P. A., A. P. Tix, and K. E. Barron. 2004. Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology* 51 (1):115-134.
- Gendron, Y., and J. Bédard. 2006. On the constitution of audit committee effectiveness. *Accounting, Organizations and Society* 31 (3):211-239.
- Goh, B. W. 2009. Audit committees, boards of directors, and remediation of material weaknesses in internal control. *Contemporary Accounting Research* 26 (2):549-579.
- Habib, A., and M. B. U. Bhuiyan. 2011. Audit firm industry specialization and the audit report lag. *Journal of International Accounting, Auditing and Taxation* 20 (1):32-44.
- Hambrick, D. C., and P. A. Mason. 1984. Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review* 9 (2):193-206.
- Henderson, B. C., and S. E. Kaplan. 2000. An examination of audit report lag for banks: A panel data approach. *Auditing: A Journal of Practice & Theory* 19 (2):159-174.
- Hofmann, D. A., and M. B. Gavin. 1998. Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management* 24 (5):623-641.
- Ika, S. R., and N. A. M. Ghazali. 2012. Audit committee effectiveness and timeliness of reporting: Indonesian evidence. *Managerial Auditing Journal* 27 (4):403-424.

- Jager, P. D. 2008. Panel data techniques and accounting research. *Meditari Accountancy Research* 16 (2):53-68.
- Kalbers, L. P., and T. J. Fogarty. 1993. Audit committee effectiveness: An empirical investigation of the contribution of power. *Auditing: A Journal of Practice & Theory* 12 (1):24-49.
- Klein, A. 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics* 33 (3):375-400.
- Knechel, W. R., D. S. Sharma, and V. D. Sharma. 2012. Non-audit services and knowledge spillovers: Evidence from New Zealand. *Journal of Business Finance & Accounting* 39 (1-2):60-81.
- Krishnan, G. V., and G. Visvanathan. 2008. Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism. *Contemporary Accounting Research* 25 (3):827-857.
- Krishnan, J., W. Yuan, and Z. Wanli. 2011. Legal expertise on corporate audit committees and financial reporting quality. *Accounting Review* 86 (6):2099-2130.
- La Porta, R., F. Lopez, A. Shleifer, and Robert W. Vishny. 1998. Law and finance. *Journal of Political Economy* 106 (6):1113-1155.
- Larcker, D. F., and T. O. Rusticus. 2010. On the use of instrumental variables in accounting research. *Journal of Accounting and Economics* 49 (3):186-205.
- Lee, H.-Y., V. Mande, and M. Son. 2008. A comparison of reporting lags of multinational and domestic firms. *Journal of International Financial Management & Accounting* 19 (1):28-56.
- Leventis, S., and P. Weetman. 2004. Timeliness of financial reporting: Applicability of disclosure theories in an emerging capital market. *Accounting & Business Research* 34 (1):43-56.
- McNulty, T., A. Pettigrew, G. Jobome, and C. Morris. 2011. The role, power and influence of company chairs. *Journal of Management & Governance* 15 (1):91-121.
- Mohamad-Nor, M. N., R. Shafie, and W. N. Wan-Hussin. 2010. Corporate governance and audit report lag in malaysia. *Asian Academy of Management Journal of Accounting & Finance* 6 (2):57-84.
- Mustafa, S., and N. B. Youssef. 2010. Audit committee financial expertise and misappropriation of assets. *Managerial Auditing Journal* 25 (3):208-225.
- Peng, M. W. 2004. Outside directors and firm performance during institutional transitions. *Strategic Management Journal* 25 (5):453-471.
- Pomeroy, B., and D. B. Thornton. 2008. Meta-analysis and the accounting literature: The case of audit committee independence and financial reporting quality. *European Accounting Review* 17 (2):305-330.
- Saleh, N. M., T. M. Iskandar, and M. M. Rahmat. 2007. Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Review of Accounting* 15 (2):147-163.

- Salleh, Z., and J. Stewart. 2012a. The impact of expertise on the mediating role of the audit committee. *Managerial Auditing Journal* 27 (4):378-402.
- . 2012b. The role of the audit committee in resolving auditor-client disagreements: A Malaysian study. *Accounting, Auditing & Accountability Journal* 25 (8):1340-1372.
- Schmidt, J., and M. S. Wilkins. 2013. Bringing darkness to light: The influence of auditor quality and audit committee expertise on the timeliness of financial statement restatement disclosures. *Auditing: A Journal of Practice & Theory* 32 (1):221-244.
- Sharma, S., R. M. Durand, and O. Gur-Arie. 1981. Identification and analysis of moderator variables. *Journal of Marketing Research (JMR)* 18 (3):291-300.
- Sharma, V., V. Naiker, and B. Lee. 2009. Determinants of audit committee meeting frequency: Evidence from a voluntary governance system. *Accounting Horizons* 23 (3):245-263.
- Tabachnick, B. G., and L. S. Fidell. 2013. *Using multivariate statistics*. 6th ed. Boston: Pearson Education.
- Tanyi, P. N., and D. B. Smith. 2015. Busyness, expertise, and financial reporting quality of audit committee chairs and financial experts. *Auditing: A Journal of Practice & Theory* 34 (2):59-89.
- Udueni, H. 1999. Power dimensions in the board and outside director independence: Evidence from large industrial UK firms. *Corporate Governance: An International Review* 7 (1):62-72.
- Wan-Hussin, W. N., and H. M. Bamahros. 2013. Do investment in and the sourcing arrangement of the internal audit function affect audit delay? *Journal of Contemporary Accounting & Economics* 9 (1):19-32.
- Watts, R. L., and J. L. Zimmerman. 1978. Towards a positive theory of the determination of accounting standards. *Accounting Review* 53 (1):112-134.
- White, H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48 (4):817-838.
- Wooldridge, J. M. 2010. *Econometric analysis of cross section and panel data*. 2nd ed. Cambridge: MIT Press.
- Xie, B., W. N. Davidson, and P. J. DaDalt. 2003. Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance* 9 (3):295-316.
- Yaacob, N. M., and A. Che-Ahmad. 2012. Adoption of FRS 138 and audit delay in Malaysia. *International Journal of Economics and Finance* 4 (1):167-176.