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AUDIT QUALITY AND AUDIT COMMITTEE EFFECTIVENESS: EMPIRICAL EVIDENCE FROM EMERGING MARKET

CALIDAD DE AUDITORÍA Y EFECTIVIDAD DEL COMITÉ DE AUDITORÍA: EVIDENCIA EMPÍRICA DE MERCADOS EMERGENTES

WADDAH KAMAL HASSAN OMER¹

ABSTRACT

This study aims to uncover how the effectiveness of the audit committee (AC) impacts audit quality (AQ). Logistic regression is employed to examine the investigation's hypothesis. The present study collects data from 773 company-year observations obtained from the annual reports of businesses listed on the Muscat Stock Exchange (MSE). The data covers the time frame from 2010 to 2019. In accordance with the complementary perspective, the findings of this study indicate a statistically significant positive relationship between the effectiveness of AC and the quality of audits. Furthermore, this study revealed that the accounting expertise of the Chief-Executive-Officer (CEO) did not serve as a moderator in influencing the connection between the audit committee's effectiveness and the audit's quality. This study contributes both practical and theoretical implications to the literature on AC effectiveness and AQ. The results hold substantial implications for companies, regulators, academics, and shareholders, specifically in an Omani setting, as part of the Asian emerging market landscape.

KEYWORDS

Audit quality; audit committee effectiveness; Oman.

RESUMEN

Este estudio tiene como objetivo descubrir cómo la eficacia del comité de auditoría (AC) afecta la calidad de la auditoría (AQ). Se emplea la regresión logística para examinar la hipótesis de la investigación. El presente estudio recopila datos de 773 observaciones del año de la empresa obtenidas de los informes anuales de las empresas que cotizan en la Bolsa de Valores de Mascate (MSE). Los datos cubren el período de 2010 a 2019. De acuerdo con la perspectiva complementaria, los hallazgos de este estudio indican una relación positiva estadísticamente significativa entre la efectividad de la CA y la calidad de las auditorías. Además, este estudio reveló que la experiencia contable del director ejecutivo (CEO) no sirvió como moderador para influir en la conexión entre la eficacia del comité de auditoría y la calidad de la auditoría. Este estudio aporta implicaciones tanto prácticas como teóricas a la literatura sobre la efectividad de AC y AQ. Los resultados tienen implicaciones sustanciales para las empresas, los reguladores, los académicos y los accionistas, específicamente en el entorno omaní, como parte del panorama de los mercados emergentes asiáticos.

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PALABRAS CLAVE

Calidad de la auditoría; eficacia del comité de auditoría; Omán

1. INTRODUCTION

Stakeholders rely on financial reports as their primary source of information (Baatwah, 2022; Boubaker et al., 2019). It is considered the most important determinant of a financial report's reliability (Ruiz Acosta et al., 2019; Gray et al., 2011). Audit demand arises to ensure confidence in the financial reports and reduce agency conflicts to safeguard the interests of the stakeholders (Hope et al., 2008). The audit, as an external monitoring mechanism of corporate governance (CG), aims to verify whether financial reporting accurately reflects a company's true financial status and operating results (Alareeni, 2019). Hence, it is logical to know that the significance of an external audit in improving financial statement credibility is contingent upon the quality of the audit services offered (Naser & Hassan, 2016). Conversely, when AQ is at a low level, it may lead to adverse consequences that affect stakeholders (e.g., investors, employees, customers, and suppliers), potentially resulting in massive losses for both companies and countries (Alareeni, 2019). Some of these negative consequences and financial losses can be decreased or avoided by enhancing audit quality.

To relieve the agency problem between management and owners, the stakeholders demand more AQ (Husnin & Nawawi, 2016; Fan & Wong, 2005), since it improves the financial report's credibility (DeFond & Zhang, 2014). AQ is vital for enhancing the confidence of stakeholders in financial reporting (Beisland et al., 2015). From a conceptual standpoint, a commonly adopted definition of AQ pertains to the circumstance when an auditor possesses the potential to identify and disclose errors inside the accounting system of their client, hence signifying a high-quality audit (DeAngelo, 1981).

Numerous aspects influencing AQ have been addressed in the literature, including internal corporate governance processes (Beisland et al., 2015; DeFond & Zhang, 2014). According to these researches, AQ is closely related to CG (Beisland et al., 2015; Lin & Liu, 2009). Furthermore, they advocate for additional research in auditing and corporate governance (DeFond & Zhang, 2014). The scholarly literature has shown a lack of emphasis on examining the association between corporate governance and AQ, as Hay et al. (2006) noted. This study examines the association between AQ and the AC, which is widely acknowledged as a pivotal internal monitoring mechanism of CG (Pozzoli et al., 2022). This research is prompted by the findings of DeFond and Zhang (2014) and Hay et al. (2006), who suggest additional investigation into CG and auditing.

As a crucial internal monitoring mechanism within CG, the AC is vital in strengthening the company's monitoring function and mitigating agency conflicts to safeguard stakeholders' interests (Hope et al., 2008; Fama & Jensen, 1983; Fama, 1980). This objective is accomplished by implementing a comprehensive system of monitoring the business financial reporting process and organizing the companies' relationships with external auditors. Therefore, it is anticipated that an AC will significantly influence the improvement of financial reporting (Alareeni, 2019; Naser & Hassan, 2016), ultimately leading to the enhancement of audit quality. Hence, the presence of specific attributes, including independence, size, meeting frequency, and experience, can significantly augment the effectiveness of the AC in ensuring AQ (Asiriuwa et al., 2018; Li et al., 2012).

It can be argued that the audit committee's effectiveness is influenced by various criteria (Dezoort & Salterio, 2001). The present study posits that the effectiveness of an AC is contingent upon the attributes of its members, specifically their independence, expertise, frequency of meetings, and the overall number of members (Janjarasjit et al.

2023; Al-tae & Flayyih, 2022; Ika & Ghazali, 2012; Lin et al., 2006; DeZoort et al., 2002). Despite the growing academic and practical interest in AQ and AC, a noticeable dearth of research has specifically investigated these matters in Oman. This is particularly significant given that Oman is considered one of the emerging economies in the Gulf Cooperation Council (GCC) area. The dearth of previous research conducted in the Omani environment substantiates the importance and relevance of this study.

An audit committee's effectiveness is greatly influenced by its characteristics, which subsequently impacts the quality of audit services provided by external auditors. Nevertheless, it is important to acknowledge that previous research examining the association between the features of AC and the quality of audits has produced inconsistent findings. Previous research has provided evidence supporting the proposition that specific attributes of an AC are associated with enhanced levels of AQ (Aljaaidi et al., 2021; See et al., 2020; Vafeas & Waegelein, 2007; Carcello et al., 2002; Abbott & Parker, 2000). Nevertheless, there have been opposing viewpoints positing that the attributes of the AC do not have a substantial impact on its effectiveness and could potentially be linked to diminished AQ (Idris et al., 2018; Zgarni et al., 2016).

The observed inconsistency may be ascribed to variations in the effectiveness of AC across different companies. Furthermore, contradictions can emerge due to the configuration of the relationship between the AC and the external audit, which serve as two distinct monitoring processes within CG. The potential relationship between the AC and AQ may exhibit complementary or substitutive characteristics, as suggested by previous studies (Beisland et al., 2015; Hay, 2013; Hay et al., 2008; Hay et al., 2006). The literature suggests a debate over the relationship between internal CG monitoring tools and AQ. Some scholars claim that these mechanisms and AQ might act as substitutes for each other (Mohamed et al., 2012; Hay et al., 2008), while others say that they are complementary (Beisland et al., 2015; Hay, 2013; Hay et al., 2006). According to Idris et al. (2018), it can be contended that the presence of more efficient AC may reduce the need for high-quality auditing if they serve as a replacement for external auditors in their supervisory capacity. From an alternative perspective, it may be argued that the presence of efficient AC may be linked to enhanced AQ, particularly when they effectively collaborate with external auditors (Vafeas & Waegelein, 2007; Carcello et al., 2002; Abbott & Parker, 2000).

This study examines the combined impact of AC characteristics on AQ in response to the aforementioned factors and per current research (e.g., See et al., 2022), emphasizing the need for such assessment. This study aims to provide empirical evidence on the impact of AC on AQ by analyzing the collective influence of various AC characteristics. This study is a valuable contribution to the existing literature on AQ and AC, explicitly focusing on addressing a research gap in Oman.

Building upon existing research, the present study aims to expand the current understanding of the determinants that impact the quality of audits. This study examines the relationship between AC effectiveness and AQ in Oman, a growing economy in Asia. Oman, one of the contexts representing developing economies in Asia, presents a compelling backdrop for investigating the impact of AC effectiveness on AQ. Three key factors support this assertion. Initially, it is worth noting that stakeholders exhibit a significant level of interest in attaining financial reporting characterized by a high degree of quality. This is primarily due to the recognition of financial reporting as a valuable and indispensable resource for making informed decisions (Al-Ajmi, 2009; Alattar & Al-Khater, 2007). According to Baatwah et al. (2014), the presence of external auditors plays a crucial role in bolstering the credibility of financial reporting in Oman. Furthermore,

the regulators and policymakers in Oman have successfully adopted a range of CG reforms. These programs comprise specific principles and recommendations to strengthen audit committees' effectiveness. The Oman Code of Corporate Governance 2016 objectives include assessing auditor independence and enhancing the external audit process to achieve optimal quality in external audits. Additionally, it should be noted that Oman stands out due to its requirement for publicly listed businesses to provide information regarding external audits and AC, which serve as crucial components of corporate governance (Baatwah et al., 2022; Baatwah et al., 2019).

Although extensive study has been conducted on the subject of AQ and its significance in the Middle East, as highlighted by Al-Ajmi (2009), there exists a discernible void in the existing body of literature concerning AQ within the specific context of Oman, as emphasized by Baatwah et al. (2014). Currently, there is a scarcity of empirical published studies on this particular subject within the context of Oman (e.g., Baatwah et al., 2018). Therefore, there remains a need for more investigation of the quality of audits within emerging economies, with a specific focus on the case of Oman. The present study aims to enhance the existing body of knowledge on AQ within the framework of emerging economies, with a particular focus on the unique situation of Oman. This study employs an aggregate test to assess the impact of AC characteristics on AQ in Omani-listed companies. The findings indicate a positive and statistically significant relationship between AC effectiveness and AQ. These results suggest that companies with highly effective AC prioritize and demand higher AQ levels. This study makes a valuable contribution by offering empirical evidence that can inform regulators, academics, shareholders, companies' management, board members, and practitioners about the effectiveness of AC and their impact on AQ. Where the efforts of regulators may be strengthened concerning the AC and external auditors? Moreover, it supports both the shareholders and the board of directors in enhancing the efficacy and efficiency of their audit selection decisions.

Following previous research, the present study employed the audit firm's size as a metric for assessing AQ (e.g., Al-Qadasi et al., 2023; Baatwah et al., 2018; Khasharmeh & Aljifri, 2010; Al-Ajmi, 2008). The expectation is that huge audit-firms will deliver high-quality audit services due to their emphasis on reputation, ample resources, and access to a substantial pool of competent specialists (Husaini et al., 2019; Kane & Velury, 2004; DeAngelo, 1981).

The subsequent sections of this study are structured as follows: Section two provides an overview of prior research and the hypothesis formulation. The third section of the paper elucidates the design employed in the investigation. The empirical findings are presented and analyzed in Section 4. The conclusion of the investigation is stated in the concluding section.

2. TESTABLE HYPOTHESIS

Within the agency theory framework, the AC is essential as a monitoring mechanism to mitigate agency problems (Hope et al., 2008; Fama & Jensen, 1983). This committee plays a crucial role in enhancing the quality of financial reporting (Alareeni, 2019; Husaini et al., 2019; Naser & Hassan, 2016) and bolstering the overall audit quality. This is due to the anticipation that companies with robust internal CG systems, such as AC, are more inclined to demand higher levels of AQ (Abbott et al., 2003; Carcello et al., 2002).

Previous research has examined the association between the AC and the external audit from two contrasting perspectives: the substitution and complementing perspectives. The substitution argument posits a negative relationship between the AC and the external

audit, as evidenced by studies conducted by Mohamed et al. (2012) and Hay et al. (2008). Conversely, the complementary argument suggests a positive link, as supported by research conducted by Beisland et al. (2015), Hay (2013), and Hay et al. (2006). Therefore, it might be posited that the need for high-quality auditing services may decline when AC demonstrate greater effectiveness and assume the role of external auditors in their oversight capacity (Idris et al., 2018; Zgarni et al., 2016). Conversely, the presence of efficient AC may be linked to enhanced AQ when they effectively supplement the efforts of external auditors (Vafeas & Waegelein, 2007; Carcello et al., 2002).

As mentioned in the introduction, the effectiveness of the AC is impacted by its inherent qualities. According to DeZoort and Salterio (2001), the effectiveness of an AC encompasses multiple dimensions and is influenced by various factors inherent to the committee. Pucheta-Martinez and Cristina de Fuentes (2007) noted that previous research on the effectiveness of AC has predominantly concentrated on specific criteria that are anticipated to influence their effectiveness. Previous empirical research has consistently demonstrated that various AC characteristics, including independence, size, diligence, and expertise, play a significant role in determining the effectiveness of AC (Asiriwa et al., 2018; Naser & Hassan, 2016; Owolabi & Dada, 2011; Habbash, 2010; Vafeas & Waegelein, 2007; Krishnan, 2005; Abbott et al., 2003). DeZoort et al. (2002) contend that a thorough comprehension of the framework for the success of AC may be attained by examining the collective influence of these specific characteristics of AC. In a recent study conducted by See et al. (2022), it has been posited that the quality of audits is subject to the influence of a confluence of AC features. Therefore, it is could be posited to assess that the attributes of the AC seem to be significant factors in determining its effectiveness. Hence, it is reasonable to evaluate the effectiveness of the AC by comprehensively examining its diverse attributes through an aggregate assessment.

In the context of AQ, there exists contradicting empirical evidence about the influence of the effectiveness of the AC on AQ. Several studies have found a positive association between the effectiveness of AC and the quality of audits (Asiriwa et al., 2018; Mustafa et al., 2018; DeFond & Zhang, 2014). This suggests that an audit committee's attributes impact its effectiveness, which subsequently leads to the assurance of high-quality audits. On the other hand, research indicates a negative relationship between AC effectiveness and AQ (Idris et al., 2018; Zgarni et al., 2016; Cottell & Rankin, 1988). Previous research findings suggest no significant association between AC and AQ, as indicated by studies conducted by Ho et al. (2017) and Chen & Zhou (2007). Based on the principles of agency theory and the research question of the impact of AC effectiveness (as a combined measure) on AQ, this study puts forth the subsequent hypothesis:

H: *There is a significant relationship between audit committee effectiveness and audit quality, all else remaining constant.*

3. RESEARCH METHODS

3.1 Empirical Model for Testing Hypothesis

The primary objective of this research is to examine the impact of AC effectiveness on the quality of audits. Thus, according to previous research (e.g., Omer, 2020), the study's hypothesis is examined using logistic regression with robust standard errors (Gow et al., 2010). To mitigate the potential impacts stemming from the issues of heteroskedasticity and autocorrelation, the present study employed logistic regression with robust standard error estimation, as Petersen (2009) recommended. Moreover, to mitigate the presence

of outliers, the continuous variables are classified into percentiles ranging from the 1st to the 99th percentile. The subsequent equation illustrates the model of the study:

$$\text{SELECT } it = \beta_0 + \beta_1 \text{ACE}_{it} + \beta_2 \text{-8} \text{CONTROLS} + \text{INDUSTRY} + \text{YEAR} + \varepsilon_{it} \quad (1)$$

Table 1: Variables Definitions and Measured

Variable	Definitions
AQ	In the event that the external auditor is a big4 audit-firm, the dummy variable will be set to 1, otherwise to 0.
ACE	The combined variable of the four AC measurements (ACIND, ACAEXPRT, ACSIZE & ACMT).
CEOEXPRT	The CEO's accounting expertise is indicated by a 1 if they possess this skill, and 0 otherwise.
OWCCO	Major shareholders' percentage (>=10%) ownership of the shares.
ROA	The ratio of a company's net-income to its total-assets.
GROTH	The formula scales the current revenues (sales) compared with the previous year's revenues (sales) to determine the changes in current revenues (sales).
BSEGM	Business segments are numerous.
COMSIZE	Total assets' natural log.
LCOMAGE	Log company-age.
INVRECR	Combined amount of company's inventory and receivables totals divided by company's total assets.
LEV	Divided company's total-liabilities to company's total-assets.

The study's model incorporates AQ as the dependent variable. Following previous research (e.g., Al-Qadasi et al., 2023; Baatwah et al., 2018; Baatwah et al., 2015), the variable AQ is operationalized as a binary indicator, taking a value of one when a firm undergoes an audit conducted by one of the four major audit-firms, and zero otherwise. The primary model of this study incorporates AC effectiveness (ACE) as an independent variable. The measurement of ACE is determined by the composite variable encompassing the four AC measures. The variables ACIND, ACAEXPRT, ACSIZE, and ACMT are being referred to.

Various control variables have been incorporated into the study's framework to mitigate the impact of the eliminated factors and enhance the model's predictive capability. These variables have been selected based on previous research that has identified their influence on audit quality, as evidenced by studies conducted by Al-Qadasi et al. (2023), Omer (2022), and Baatwah et al. (2018). Table 1 provides a comprehensive presentation of the descriptions of all control variables included in the model employed in the study.

3.2 Data and Sample Characteristics

Except for financial institutions, which are subject to specific regulatory frameworks, accounting systems, and procedures, the sample for this study was obtained from all companies listed on the Muscat Stock Exchange (MSE) between 2010 and 2019. The pertinent data was gathered from the annual reports of the companies listed on the MSE. The final sample of this study consists of 773 company-year observations obtained after excluding financial companies and corporations with incomplete or delisted data. The process of sample selection is illustrated in Table 2.

Table 2: Sample Choice

Total year-observations for publicly traded companies-companies 2010 to 2019	1156
Minus financial companies-year observations	(344)
Minus missing and delisted data companies-years observations	(39)
Final sample	773

4. UNIVARIATE ANALYSIS

4.1 Analysis of Descriptive Statistics

Table 3 summarises the descriptive statistics for the variables included in the AQ model employed in this investigation. The study sample's descriptive statistics reveal that the audit quality's mean and median values (AQ) are 0.633 and 1, respectively. The study revealed that around 63% of the sampled organizations underwent audits by the big four audit-firms. The similarity to previous studies in the Omani setting has been noted by Omer (2022), as well as Baatwah et al. (2020) and Baatwah & Al-Qadasi (2020). Regarding the effectiveness of the AC (ACE), the findings also indicate that the average (middle value) is 1.890 (2), correspondingly. Although the study does not provide a detailed analysis of control factors to maintain brevity, the findings indicate that the analysis conducted is considered satisfactory. The findings mentioned above are presented in Table 3.

Table 3: Statistically Descriptive Summaries

Variables	Min	p25	Mean	Std. Dev.	Median	p75	Max
AQ	0.000	0.000	0.633	0.482	1.000	1.000	1.000
ACE	0.000	1.000	1.890	0.949	2.000	3.000	4.000
CEOEXPT	0.000	0.000	0.118	0.322	0.000	0.000	1.000
OWCCO	0.000	45.000	59.157	22.590	60.100	76.500	99.130
ROA	-0.360	0.004	0.034	0.095	0.038	0.082	0.252
GROTH	-0.816	-0.070	0.063	0.349	0.029	0.128	2.165
BSEGM	1.000	1.000	1.618	1.126	1.000	2.000	6.000
COMSIZE	12.677	15.809	17.009	1.605	17.013	18.090	20.473
LCOMAGE	1.386	2.708	3.008	0.472	2.996	3.401	3.738
INVRECR	0.005	0.097	0.295	0.224	0.262	0.466	0.823
LEV	0.063	0.244	0.497	0.329	0.448	0.689	2.036

See Table 1 for definitions

4.2 Correlation Analysis

The correlation analysis among the variables utilized in the study model is presented in Table 4. The findings indicate a favorable and statistically significant association (coefficient = 0.13) between AQ and the audit committee's effectiveness. This implies that corporations tend to select an external auditor from one of the four major accounting firms when the AC of these corporations demonstrate higher levels of effectiveness. The findings indicate a significant correlation of 0.48, the highest seen, between the dependent variable AQ and the independent variable COMSIZE. Furthermore, the study's findings reveal that the strongest link among the independent variables is a negative and statistically significant correlation of -0.47 between LEV and ROA. The absence of correlation coefficients over the 0.80 threshold, as stated by Gujarati (2003), indicates the absence of any multicollinearity issue.

Table 4: Pairwise Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) AQ	1.00										
(2) ACE	0.13***	1.00									
(3) CEOAEXPT	-0.02	-0.02	1.00								
(4) OWCCO	-0.10***	0.03	0.00	1.00							
(5) ROA	0.16***	0.07*	-0.05	-0.09**	1.00						
(6) GROTH	0.10***	0.07*	-0.02	0.06*	0.22***	1.00					
(7) BSEGM	0.01	0.17***	-0.18***	-0.02	0.00	0.01	1.00				
(8) COMSIZE	0.48***	-0.01	0.01	-0.13***	0.29***	0.11***	0.11***	1.00			
(9) LCOMAGE	-0.17***	0.10***	-0.04	-0.15***	-0.04	-0.06*	0.15***	-0.16***	1.00		
(10) INVRECR	-0.07*	0.10***	-0.10***	-0.12***	-0.02	0.03	0.16***	-0.21***	0.33***	1.00	
(11) LEV	-0.02	-0.11***	0.04	0.03	-0.47***	-0.01	-0.09**	0.06*	-0.20***	0.10***	1.00

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

See Table 1 for definitions

5. MULTIVARIATE REGRESSION RESULTS

The findings of the multivariate analysis, aimed at testing the study's hypotheses, are presented in Table 5. The statistical analysis presented in Table 5 demonstrates that the estimated model exhibits a high level of overall statistical power, as evidenced by its very significant p-value ($p < 0.000$). This suggests that the model is well-fitted to the data. The calculated pseudo- R^2 value of 0.351 indicates that the independent variables included in the model of the study account for about 35.1% of the variability seen in the dependent variable. When examining the hypothesis of the proposed study, it is observed that the effectiveness of the AC has an impact on the quality of the audit. The study's findings demonstrate a positive and statistically significant relationship between the ACE coefficients and AQ, with a significance level of $p < 0.01$. This finding is consistent with the complementing perspective, as it provides empirical support for the notion that firms listed on the Muscat Stock Exchange (MSE) exhibit a greater inclination towards emphasizing high AQ levels when their AC demonstrates a high degree of effectiveness. This finding aligns with previous research conducted by See et al. (2020) and Agyei-Mensah (2019), which posited that the effectiveness of the AC is linked to the quality of audits and serves to safeguard the interests of stakeholders (See et al., 2020; Jizi & Nehme, 2018).

Regarding the control variables, this study found that the SIZE and INCREASE have positive and significant associations with AQ. Alongside this, that the relationship between OWCCO, ROA, BSEGM and LCOMAGE, and AQ are a significantly negatively. Meanwhile, this study finds insignificant associations between GROTH and LEV with AQ.

Table 5: Results for Logistic Regression

Variables	(1)	(2)	(3)
ACE	0.284***	0.312***	0.364***
	(3.502)	(3.579)	(3.480)
OWCCO			-0.011**
			(-2.517)
ROA			-2.249*
			(-1.857)
GROTH			0.241
			(0.706)
BSEGM			-0.366***
			(-3.797)
COMSIZE			1.346***

			(11.320)
LCOMAGE			-1.495***
			(-4.742)
INVRECR			2.177***
			(3.974)
LEV			-0.234
			(-0.529)
INDUSTRY	NO	YES	YES
YEAR	NO	YES	YES
_cons	0.015	-0.059	-19.703***
	(0.093)	(-0.121)	(-9.335)
Wald chi2	12.26	72.17	180.83
Prob > chi2	0.005	0.000	0.000
Observations	773	773	773
Pseudo R ²	0.013	0.097	0.351

t-values are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

See Table 1 for definitions

6. ADDITIONAL ANALYSIS

6.1 The Impact of the CEO's Accounting Expertise as a Moderating Factor on Audit Quality

CEOs play a crucial role in CG by improving the integrity of financial reporting and audits, mitigating agency conflicts and safeguarding stakeholders' interests (Altarawneh et al., 2020; Fama & Jensen, 1983; Fama, 1980). The involvement of CEOs in the negotiation and selection process of external auditors has been found to substantially impact AQ (Bhattacharya & Banerjee, 2019). Previous research has established that the characteristics of a Chief Executive Officer (CEO) have a significant impact on the quality of financial reporting and also play a crucial role in determining the level of AQ (Ahmad et al., 2022; Al-Awaqleh et al., 2021; Corten et al., 2021; Karaibrahimoglu et al., 2021; Altarawneh et al., 2020; Alzeban 2020; Jaeyoon Yu et al. 2020; Jizi & Nehme 2018; Kalelkar & Khan 2016; Baatwah et al., 2015; Huang et al., 2012).

The accounting expertise possessed by CEOs is regarded as a highly significant characteristic, as it equips them with a heightened comprehension of financial and accounting matters (Ashafoke et al., 2021). This expertise can strengthen their standing in negotiations about year-end accounting concerns with the external auditor (Gibbins et al., 2007). The accounting expertise of the CEO will enable them to assess audit risk, engage in negotiations, and efficiently fulfil their responsibilities in monitoring. According to Baatwah and Adel AlQadasi (2020), the accounting expertise of the CEO can enhance the calibre of audits conducted by auditing companies. In light of the study mentioned above conducted by Baatwah et al. (2015), which advocates for more exploration into the impact of CEO characteristics on audit matters, this research examines the role of the CEO's accounting expertise as a moderator.

To validate the primary findings of this study, an additional examination is conducted, focusing on the moderating impact of the CEO's accounting expertise on AQ. Consistent with prior research (e.g., Al-Qadasi et al., 2023; Jizi & Nehme, 2018; Kalelkar & Khan, 2016; Baatwah et al., 2015; Aguinis & Stone-Romero, 1997), the subsample approach is employed for the identification of moderating effects. Consequently, the researcher divided the entire study sample into two distinct sub-samples, namely the group consisting of CEOs with accounting expertise (referred to as CEOAEXPT) and the group

consisting of CEOs without accounting expertise (referred to as CEONAEXPT). Thus, if a company's CEO possesses accounting expertise, it falls under the CEOAEXPT group; otherwise, it falls under the CEONAEXPT group.

Table 6 reveals that accounting expertise in the CEO (CEOAEXPT group) does not exhibit a significant association with audit quality. Conversely, non-accounting expertise in the CEO (CEONAEXPT group) demonstrates a positive and substantial association with AQ, with statistical significance at $p < 0.01$. This implies that companies led by CEOs without an accounting expertise are more inclined to engage Big four auditors to strengthen their monitoring systems and consequently prioritize audit quality, in contrast to companies whose CEOs possess accounting expertise. This finding aligns with prior research (e.g., Kalelkar & Khan, 2016), which indicated that firms led by CEOs with accounting expertise demonstrate a decreased tendency to use the services of Big 4 accounting firms.

Table 6: Results for Logistic Regression for the CEO Expertise Effect

	AQ	
	(1) CEOAEXPT = 1	(2) CEONAEXPT = 0
ACE	-0.307 (-0.498)	0.392*** (3.437)
OWCCO	0.004 (0.171)	-0.018*** (-3.585)
ROA	65.922*** (3.024)	-2.424* (-1.832)
GROTH	0.452 (0.291)	0.537 (1.278)
BSEGM	16.745*** (2.907)	-0.355*** (-3.646)
COMSIZE	7.232*** (3.858)	1.237*** (11.177)
LCOMAGE	-1.295 (-0.551)	-1.815*** (-5.009)
INVRECR	7.377 (1.614)	1.766*** (3.001)
LEV	-23.914*** (-3.494)	-0.181 (-0.355)
INDUSTRY	YES	YES
YEAR	YES	YES
_cons	-138.351*** (-3.509)	-16.614*** (-8.910)
Observations	91	682
Pseudo R ²	0.720	0.348

t-values are in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

See Table 1 for definitions

7. THE CONCLUSION AND IMPLICATIONS FOR MANAGEMENT AND STAKEHOLDERS

The inconclusive findings from previous studies on audit quality and the scarcity of studies conducted in the Omani setting (e.g., Baatwah et al., 2018; Baatwah et al., 2014), provided a rationale for the researcher to undertake a renewed examination of this matter in the emerging market, specifically Oman. Therefore, the primary objective of this research is to address a deficiency in the existing literature by examining the direct impact of AC effectiveness, as a comprehensive measure of the audit committee's

attributes, on audit quality. Hence, this research expands upon previous investigations about the factors that determine AQ by investigating whether the collective impact of AC attributes (namely, independence, size, frequency of meetings, and experience) affects the choice of high-quality external audit services.

Consistent with the hypothesis posited in the study, the findings revealed a statistically significant and positive association between the effectiveness of AC and the quality of audits conducted in listed Omani companies. Following the complementary perspective, the findings of this study suggest that Omani companies exhibiting a high level of effectiveness in their AC are inclined to prioritize attaining superior AQ. This inclination stems from their objective of enhancing the overall quality and dependability of financial reporting. Consequently, the enhancement of the monitoring function within CG processes leads to a reduction in stakeholder conflict of interest. Contrary to the complementing perspective, this study has revealed that the influence of the CEO's accounting competence on the association between AC effectiveness and AQ is not statistically significant. Therefore, it may be inferred by the researcher that there exists an association between the effectiveness of the AC and the need for high-quality audit services, whereas the accounting skill of the CEO does not appear to have a significant impact on this demand.

The present study's findings provide empirical information that adds to the advancement of knowledge for companies' management, regulators, academics, and shareholders concerning the correlation and significance of AC effectiveness in the broader context of AQ. Furthermore, this research contributes to advancing our comprehension of agency theory in the emerging market such as Oman.

Notwithstanding the significance of the findings presented in this research, it is susceptible to some constraints. The primary focus of this study was directed towards emerging markets, potentially constraining the applicability of the findings to industrialized nations. In addition, it is worth noting that other corporate monitoring mechanisms could potentially influence the quality of audits, which were not explicitly examined in the scope of this study. These mechanisms include the internal audit function and the ownership structure. Given the constraints mentioned above, forthcoming research endeavors should focus on addressing these facets to expand upon the invaluable insights furnished by this study.

REFERENCES

- Abbott, L. J., & Parker, S. (2000). Auditor selection and audit committee characteristics. *Auditing: A journal of practice & theory*, 19(2), 47-66.
- Abbott, L. J., Parker, S., Peters, G. F., & Raghunandan, K. (2003). The association between audit committee characteristics and audit fees. *Auditing: A journal of practice & theory*, 22(2), 17-32.
- Ahma, A., Muhammad Faisal, M., Riaz, S., & Rahman, Z.U. (2022). Influence of CEOs Characteristics on the Earning Management via Moderating Role of Audit Committee Independence in Perspective of Pakistan. *Webology*, 19(4), 429-446.
- Aguinis, H. and Stone-Romero, E.F. (1997). Methodological artifacts in moderated multiple regression and their effects on statistical power. *Journal of Applied Psychology*, 82(1), 192-206.

- Aljaaidi, K. S., Abidin, S. B., & HASSAN, W. K. (2021). Audit fees and audit quality: Evidence from Gulf Cooperation Council Region. *AD-minister*, (38), 121-159.
- Al-Ajmi, J. (2008). Audit and reporting delays: evidence from an emerging market. *Advances in Accounting. Incorporating Advances in International Accounting*, 24 (2), 217-226.
- Al-Ajmi, J. (2009). Audit firm, corporate governance and audit quality: evidence from Bahrain. *Advances in Accounting*, 25(1), 64–74.
- Alattar, J.M. & Al-Khater, K. (2007). An empirical investigation of users' views on corporate annual reports in Qatar. *International Journal of Commerce and Management*, 17 (4), 312–325.
- Alareeni, B. A. (2018). The associations between audit firm attributes and audit quality-specific indicators: A meta-analysis. *Managerial Auditing Journal*, 31(1), 6-43.
- Alawaqleh, Q. A., Almasria, N. A., & ALSAWALHAH, J. M. (2021). The effect of board of directors and CEO on audit quality: Evidence from listed manufacturing firms in Jordan. *The Journal of Asian Finance, Economics and Business*, 8(2), 243-253.
- Al-Qadasi, A., Baatwah, S. R., & Omer, W. K. (2023). Audit fees under the COVID-19 pandemic: evidence from Oman. *Journal of Accounting in Emerging Economies*, (ahead-of-print).
- Altarawneh, M., Shafie, R., & Ishak, R. (2020). CEO characteristics: A literature review and future directions. *Academy of Strategic Management Journal*, 19(1), 1-10.
- Al-taee, S. H. H., & Flayyih, H. H. (2022). The impact of the audit committee and audit team characteristics on the audit quality: Mediating impact of effective audit process. *International journal of economics and finance studies*, 14(03), 249-263.
- Alzeban, A. (2020). The impact of audit committee, CEO, and external auditor quality on the quality of financial reporting. *Corporate Governance: The International Journal of Business in Society*, 20(2), 263-279.
- Ashafoke, T., Dabor, E., & Ilaboya, J. (2021). Do CEO characteristics affect financial reporting quality? An empirical analysis. *Acta Universitatis Danubius. Oeconomica*, 17(1).
- Asiriwa, O., Aronmwan, E. J., Uwuigbe, U., & Uwuigbe, O. R. (2018). Audit committee attributes and audit quality: a benchmark analysis. *Business: Theory and Practice*, 19, 37-48.
- Baatwah, S. R. (2022). Key audit matters and big4 auditors in Oman: a quantile approach analysis. *Journal of Financial Reporting and Accounting*. (ahead-of-print).

- Baatwah, S. R., & Al-Qadasi, A. A. (2020). Determinants of outsourced internal audit function: a further analysis. *Eurasian Business Review*, 10(4), 629-659.
- Baatwah, S. R., Al-Ebel, A. M., & Amrah, M. R. (2019). Is the type of outsourced internal audit function provider associated with audit efficiency? Empirical evidence from Oman. *International Journal of Auditing*, 23(3), 424-443. doi:10.1111/ijau.12170
- Baatwah, S. R., Al-Qadasi, A. A., & Al-Ebel, A. M. (2020). Religiosity at the top: does it interact with accounting expertise to limit real earnings management?. *Managerial Auditing Journal*, 35(9), 1343-1377.
- Baatwah, S. R., Salleh, Z., & Ahmad, N. (2014). What is known about audit quality in Oman? An empirical investigation. Working paper.
- Baatwah, S. R., Salleh, Z., & Ahmad, N. (2015). CEO characteristics and audit report timeliness: do CEO tenure and financial expertise matter?. *Managerial Auditing Journal*, 30(8/9), 998-1022.
- Baatwah, S. R., Salleh, Z., & Ahmad, N. (2018). High-quality auditors vs. high-quality audit: the reality in Oman. *Afro-Asian Journal of Finance and Accounting*, 8(3), 209-236.
- Baatwah, S. R., Omer, W. K. H., & Aljaaidi, K. S. (2022). Does the expertise of outsourced IAF providers affect audit efficiency? Empirical evidence from an emerging market. *Pacific Accounting Review*, 34 (2), 249-273.
- Beisland, L. A., Mersland, R., & Strøm, R. Ø. (2015). Audit quality and corporate governance: evidence from the microfinance industry. *International Journal of Auditing*, 19(3), 218-237.
- Bhattacharya, A., & Banerjee, P. (2020). An empirical analysis of audit pricing and auditor selection: evidence from India. *Managerial Auditing Journal*, 35(1), 111-151.
- Boubaker, S., Gounopoulos, D. & Rjiba, H. (2019). Annual report readability and stock liquidity. *Financial Markets, Institutions and Instruments*, 28 (2), 159-186.
- Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley Jr, R. A. (2002). Board characteristics and audit fees. *Contemporary accounting research*, 19(3), 365-384.
- Chen, K. Y., & Zhou, J. (2007). Audit Committee, Board Characteristics, and Auditor Switch Decisions by Andersen's Clients. *Contemporary Accounting Research*, 24(4), 1085-1117.
- Corten, M., Steijvers, T., Lybaert, N., & Coeckelbergs, C. (2021). The influence of the CEO on auditor choice in private firms: An interplay of willingness and ability. *Sustainability*, 13(12), 6710.
- Cottell, P.G., & Rankin, L. J. (1988). Do audit committees bias auditor selection? *Akron Business and Economic Review*, 19(4), 87-103.

- DeAngelo, L.E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183-199.
- DeFond, M. & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58 (2/3), 275-326.
- DeZoort, F. T., Hermanson, D. R., Archambeault, D. S., & Reed, S. A. (2002). Audit committee effectiveness: A synthesis of the empirical audit committee literature. *Journal of Accounting Literature*, 21, 38-75.
- Dezoort FT, Salterio SE (2001) The effects of corporate governance experience and financial reporting and audit knowledge on audit committee members' judgments. *Auditing: A Journal of Practice & Theory* 20 (2): 31-47. <https://doi.org/10.2308/aud.2001.20.2.31>.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy*, 88(2), 288-307.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Fan, J. P., & Wong, T. J. (2005). Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of accounting research*, 43(1), 35-72.
- Gibbins, M., McCracken, S. A., & Salterio, S. E. (2007). The chief financial officer's perspective on auditor-client negotiations. *Contemporary Accounting Research*, 24(2), 387-422.
- Gow, I. D., Ormazabal, G., & Taylor, D. J. (2010). Correcting for cross-sectional and time-series dependence in accounting research. *Accounting Review*, 85(2), 483-512. <https://doi.org/10.2308/accr.2010.85.2.483>
- Gray, G.L., Turner, J.L., Coram, P. & Mock, T. (2011). Perceptions and misperceptions regarding the unqualified auditor's report by financial statement preparers, users, and auditors. *Accounting Horizons*, 25 (4), 659-684.
- Gujarati, D. N. (2003). *Basic Econometrics*. 4th. New York:McGraw-Hill.
- Hay, D. (2013). Further evidence from meta-analysis of audit fee research. *International Journal of Auditing*, 17, (2), 162-76.
- Hay, D., Knechel, W. R. & Ling, H. (2008). Evidence on the impact of internal control and corporate governance on audit fees. *International Journal of Auditing*, 12, (1), 9-24.
- Hay, D., Knechel, W. R. & Wong, N. (2006). Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research*, 23 (1), 141-91.

- Habbash M (2010) The effectiveness of corporate governance and external audit on constraining earnings management practices in UK: Doctoral thesis. Durham University. <http://etheses.dur.ac.uk/448/>.
- Ho, W. K., Hock, Y., & Kueng, K. C. (2017). Corporate governance quality and audit quality in Malaysia. *SHS Web of Conferences*, 34, 1-10. DOI: 10.1051/shsconf/20173404003
- Hope, O.-K., Kang, T., Thomas, W. & Yoo, Y.K. (2008). Culture and auditor choice: A test of the secrecy hypothesis. *Journal of Accounting & Public Policy*, 27, (5), 357-73.
- Hu, N., Huang, R., Li, X., & Liu, L. (2017). The impact of CEOs' accounting backgrounds on earnings management and conservatism. *Journal of Centrum Cathedra*, 10(1), 4-24.
- Huang HW, Rose-Green E, Lee CC (2012) CEO age and financial reporting quality. *Account Horizons*. <https://doi.org/10.2308/acch-50268>
- Husnin, A. I., Nawawi, A., & Salin, A. S. A. P. (2016). Corporate governance and auditor quality—Malaysian evidence. *Asian Review of Accounting, Asian Review of Accounting*, 24 (2), 202-230.
- Husaini, H., Saiful., & Ilyas, F. (2019). The substitution role of audit committee effectiveness and audit quality in explaining audit report lag. *Acc. Fin. Review*, 4(1), 28-37.
- Idris, M. I., Abu Siam, Y. I., & Ahmad, A. L. (2018). The impact of external auditor size on the relationship between audit committee effectiveness and earnings management. *Investment Management and Financial Innovations*, 15(3), 122-130. doi:10.21511/imfi.15(3).2018.10
- Ika, S.R., & Ghazali, M.N.A. (2012). Audit committee effectiveness and timeliness of reporting: Indonesian evidence, *Managerial Auditing Journal*, 27(4), 403-424.
- Janjarasjit, S., Uthayapong, T., & Adthajak, P. (2023). Corporate Governance and Audit Quality in Thailand. *In Prosiding International Conference on Sustainable Innovation (ICoSI)* 3, (2), 54-60).
- Jizi, M., & Nehme, R. (2018). Board monitoring and audit fees: the moderating role of CEO/chair dual roles. *Managerial Auditing Journal*, 33(2), 217-243.
- Kane, G., & Velury, U. (2004). The role of institutional ownership in the market for auditing services: An empirical investigation. *Journal of Business Research* 57(9), 976-983. DOI:10.1016/S0148-2963(02) 00499-X.
- Kalelkar, R., & Khan, S. (2016). CEO financial background and audit pricing. *Accounting Horizons*, 30(3), 325-339.
- Khasharmeh, H. A. and Aljifri, K. (2010). The timeliness of annual reports in Bahrain and the United Arab Emirates: An empirical comparative study. *The International Journal of Business and Finance Research*, 4(1), 51-71.

- Krishnan J (2005). Audit committee quality and internal control: an empirical analysis. *The Accounting Review* 80 (2): 649-675. <https://doi.org/10.2308/accr.2005.80.2.649>
- Li J, Mangena M, Pike R (2012). The effect of audit committee characteristics on intellectual capital disclosure. *The British Accounting Review* 44 (2012): 98-110. <https://doi.org/10.1016/j.bar.2012.03.003>
- Lin, Z. J. & Liu, M. (2009). The impact of corporate governance on auditor choice: Evidence from China. *Journal of International Accounting, Auditing & Taxation*, 18 (1), 44-59.
- Lin JW, Li JF, Yang SY (2006). The effect of audit committee performance on earnings quality. *Managerial Auditing Journal* 21 (9): 921-933. <https://doi.org/10.1108/02686900610705019>
- Mohamed, Z., Zain, M.M., Subramaniam, N. & Yusoff, W. F.W. (2012). Internal audit attributes and external audit's reliance on internal audit: Implications for audit fees. *International Journal of Auditing*, 16 (3), 268-85.
- Mustafa, A. S., Che-Ahmad, A., & Chandren, S. (2018). Board diversity, audit committee characteristics and audit quality: The moderating role of control-ownership wedge. *Business and Economic Horizons (BEH)*, 14(1232-2019-858), 587-614.
- Naser, K., & Hassan, Y. M. (2016). Factors influencing external audit fees of companies listed on Dubai Financial Market. *International Journal of Islamic and Middle Eastern Finance and Management*. 9(3), 346-363.
- Omer, W. K. H. (2022). Going-Concern Audit Opinion and Firm-Specific Expertise of Outsourced IAF Providers: Empirical Evidence from an Emerging Market. *ESIC Market*, 53(2), e287-e287.
- Omer, W. K.H., Salmen Aljaaidi, K., Md Yusof, M. A., & Hisyam Selamat, M. (2020). The associations of board of directors' characteristics with modified audit opinion. *AD-minister*, (37), 5-34.
- Owolabi SA, Dada SO (2011) Audit committee: an instrument of effective corporate governance. *European Journal of Economics Finance and Administrative sciences* 35: 173-184.
- Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies*, 22(1), 435-480. <https://doi.org/10.1093/rfs/hhn053>
- Pozzoli, M., Pagani, A., & Paolone, F. (2022). The impact of audit committee characteristics on ESG performance in the European Union member states: Empirical evidence before and during the COVID-19 pandemic. *Journal of Cleaner Production*, 371, 133411.

- Pucheta-Martinez MC, Cristina de Fuentes (2007). The impact of audit committee characteristics on the enhancement of the quality of financial reporting: an empirical study in the Spanish context. *Journal Compilation* 15 (6): 1394-1412. <https://doi.org/10.1111/j.1467-8683.2007.00653.x>
- Ruiz Acosta, L. E., Camargo Mayorga, D. A., & Cardona García, O. (2019). Effect of convergence to International Financial Reporting Standards on Companies Listed in the Colombian Stock Exchange. *AD-minister*, (35), 77-92.
- Vafeas, N., & Waegelein, J. F. (2007). The association between audit committees, compensation incentives, and corporate audit fees. *Review of Quantitative Finance and Accounting*, 28(3), 241-255.
- Yu, J., Kwak, B., Park, M. S., & Zang, Y. (2021). The impact of CEO/CFO outside directorships on auditor selection and audit quality. *European Accounting Review*, 30(4), 611-643.
- Zengin-Karaibrahimoglu, Y., Emanuels, J., Gold, A., & Wallage, P. (2021). Audit committee strength and auditors' risk assessments: The moderating role of CEO narcissism. *International Journal of Auditing*, 25(3), 661-674.
- Zgarni, I., Hlioui, K., & Zehri, F. (2016). The effective audit committee, audit quality, and earnings management: Evidence from Tunisia. *Journal of Accounting in Emerging Economies*, 6(2), 138-155. <https://doi.org/10.1108/JAEE-092013-0048>.