

BOARD COMMITTEES' CHARACTERISTICS, EXTERNAL AUDIT QUALITY, AND EARNINGS MANAGEMENT: EVIDENCE FROM GCC COUNTRIES

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Abstract

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The research examined the influence of board committee attributes, audit committee (AC) and risk management committee (RMC), and external audit quality (EAQ) on earnings management. It also investigated the moderating influence of EAQ. The research used a sample of 61 banks registered in the Gulf Cooperation Council (GCC) nations (Qatar, the UAE, Kuwait, Saudi Arabia, Bahrain, and Oman) spanning the years 2010 to 2020. The findings indicated that certain attributes of ACs and RMCs significantly enhanced earnings quality. Moreover, the calibre of external audit serves as an ancillary mechanism to the function of board committees in enhancing the transparency and integrity of financial reporting. Hence, this study offers clear theoretical insights by establishing a comprehensive framework that combines internal and external corporate governance methods to improve earnings quality. This study also offers valuable insights for decision-makers and regulators in the GCC regarding the development of legislation and regulations for board committee formation and the enforcement of stricter standards for external auditing quality.

Keywords: Earnings Management, Audit Committee, Risk Management Committee, External Audit Quality

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1. INTRODUCTION

Earnings management has garnered public scrutiny following recent corporate failures and scandals, including Vien Dong, Enron, Worldcom, Olympus, Parmalat, and Toshiba, particularly after it was revealed that manipulation of earnings by management was a principal factor in these incidents (Nguyen et al., 2024). Brennan and McCafferty (1997) note that corporate executives regard earnings management tactics as “well-kept secrets”. Companies exaggerate their results mainly to evade disclosing losses, surpass prior years’ earnings, or fulfill analysts’ prediction expectations (Jameel et al., 2025). As a result, firms have a moral obligation to reduce the risk of corporate mismanagement in the best interests of shareholders (Musa et al., 2025). To address this, businesses establish an audit committee (AC) that monitors the quality and integrity of earnings. A multitude of criteria may impact the efficacy of these committees, including AC meeting frequency, financial acumen, overlap, and committee size (Zadeh et al., 2023). The AC, a subcommittee of the executive board, is responsible for financial reporting and distribution, and it is an important component of financial reporting analysis (Algrady et al., 2025). As a result, our current study is unique in its complete research of the impact of AC features (size, financial skill, overlap, and meeting frequency) on earnings management.

In addition, the formation of an independent risk management committee (RMC) is essential due to the AC’s extensive obligations, as well as a shortage of resources and time (Afrizal et al., 2025). As a result, in order to strengthen their oversight obligations, boards of directors must form a risk management subcommittee within their individual firms (Bensaid et al., 2021). It is expected that the RMC subcommittee will provide the board with enough resources and support the business in monitoring management measures that improve the corporation’s operation and limit the risk of profits manipulation (Bensaid et al., 2021). According to Musa et al. (2025), RMC is critical for preserving shareholders’ interests. As a consequence, they place a clear obligation on firms, via the board of directors, to considerably enhance the quality of profits. In the opinion of Afrizal et al. (2025), the formation of an RMC will offer the organization critical assessments that will assist it in mitigating the risks that it encounters, hence assisting the company in meeting its objectives and increasing its performance. This research investigates the size, financial competence, overlap, and meeting frequency of the RMC. Furthermore, the research examines the influence of these traits on earnings management.

Furthermore, management utilises obfuscation strategies to hinder the identification of earnings management, thereby limiting the effectiveness of external auditors in accurately detecting earnings discrepancies (Hazzaa et al., 2024). Consequently, the involvement of an external auditor is crucial to guarantee that the financial reports generated by management adhere rigorously to established accounting and auditing standards and align with the perspectives of owners, institutions, and stakeholders (Bawuah, 2024). Despite the general

acknowledgement of the significance of audit quality, there exists a deficiency of empirical research investigating its moderating influence. Studies by Masmoudi (2021) and Nurjanah et al. (2025) demonstrate that the quality of external audits enhances profit quality and mitigates earnings management issues, consequently addressing conflicts of interest between corporations and their shareholders.

The relationship between AC features and earnings management has been variable and inconclusive (Zadeh et al., 2023). Some studies have found a strong association (Algrady et al., 2025), whereas others have not. However, there is limited research on the features of RMCs and earnings management (Musa et al., 2025). Three major ideas drive this analysis to overcome this literature discrepancy. First, it aims to bridge the gap between inadequate empirical information in emerging countries and inconsistent findings on AC characteristics and earnings management. Second, it examines how RMC characteristics affect earnings management. Third, it explores how external audit quality (EAQ) may moderate the relationship between AC characteristics, risk management, and earnings quality in emerging markets, providing unique insights. There is limited research on board committees, EAQ, and earnings management, especially in developing nations. Thus, this study addresses a major gap and offers stakeholders important guidance.

The rest of the paper is organized as follows. Section 2 reviews the literature. Section 3 presents the research methodology. Section 4 provides the results. Section 5 discusses the main findings. Section 6 concludes the paper.

2. LITERATURE REVIEW

In recent years, there has been a growing emphasis among investors and researchers on the significance of board committees in bolstering corporate governance and fostering transparency and accountability within organisations, with particular attention given to ACs and RMCs (Makhlouf, 2024; Yusuf et al., 2023). The board of directors, through these committees, engages actively in overseeing management’s performance and ensuring that reports faithfully represent the company’s financial standing (Chaudhry et al., 2020; Laux & Laux, 2009). While revealing significant information that influences a company’s performance aligns with the principle of good faith, this rule is not universally applicable, particularly in light of the existence of agency issues (Al-ahdal & Hashim, 2022). Agency theory rests on the philosophical premise that agents prioritise their own self-interest, which may lead to actions that do not align with the best interests of shareholders (Jensen & Meckling, 1976).

Managers employ earnings management strategies to enhance shareholder value or pursue self-serving objectives, resulting in agency issues stemming from conflicting interests (Ahmed, Aldhaher, et al., 2021; Ahmed, Ganesan, et al., 2021). The discord emerges from a disparity in information, wherein management possesses greater knowledge than investors, especially regarding earnings (Bawuah, 2024). Consequently, one should

regard the reliability of managers with a measure of suspicion. In these conditions, deficient corporate governance practices and inadequate oversight create an environment favourable to misbehaviour. Therefore, it is imperative for the board of directors to exercise rigorous oversight of management to safeguard shareholder rights (Al Azeez et al., 2019). Githaiga et al. (2022) assert that the efficacy of a board is essential for mitigating opportunistic management behaviour and thus augmenting shareholder wealth. Agency theory recognises the importance of oversight systems, including the characteristics of board committees, particularly the AC, in mitigating potential agency problems (Oanh et al., 2025).

2.1. Audit committee characteristics and earnings management

According to Al-Absy et al. (2019) and Rahman et al. (2023), the establishment of an efficient AC has emerged as a critical component in the process of improving financial report quality. One of the committee's most essential tasks is to supervise a company's management practices with the goal of preserving shareholders' interests. According to Hazzaa et al. (2024), the AC is responsible for giving recommendations on the appointment and replacement of external auditors, as well as monitoring management practices and reviewing the company's internal control system. By carrying out its tasks, the AC contributes significantly to the company's transparency, accountability, and effective governance. The characteristics of the AC, including its size, independence, frequency of meetings, and gender makeup, play an important role in limiting opportunistic management behaviour and defending shareholders' interests via the promotion of honest financial reporting by management (Bawuah, 2024).

Pucheta-Martinez and De Fuentes (2007) found that professional, competent, and empowered ACs are less likely to engage in deceptive financial reporting or earnings management. Ha (2022) shows that the AC considerably improves financial reporting. Audit report quality, earnings reliability, and AC oversight reflect auditor proficiency and effectiveness (Velte & Loy, 2018). AC characteristics have been shown to affect earnings quality in previous research. Inaam and Khamoussi (2016) found an inverse link between AC size and earnings management meeting frequency, suggesting that larger committees improve earnings quality. Almarayeh et al. (2022) and Inaam and Khamoussi (2016) show that AC independence improves efficacy and lowers earnings management to improve quality. Nguyen et al. (2024) and Ooi et al. (2021) show that gender diversity, especially women on ACs, increases monitoring and dramatically reduces management earnings management. Amara et al. (2013) also claim that a female AC reduces earnings management. Bilal et al. (2018) and Inaam and Khamoussi (2016) found that AC members' financial acumen and accounting specialists reduce earnings management, improving earnings quality.

H1: The characteristics of the AC will impact earnings management negatively.

2.2. Risk management committee characteristics and earnings management

In the wake of significant corporate financial failures attributed to fraud and inadequate governance, corporations encountered substantial difficulties in reporting their financial outcomes in annual reports. The disclosure of financial risks has gained paramount significance. Consequently, an autonomous RMC inside the board of directors is now necessary. Signalling theory posits that a company's formation of an RMC conveys a significant message to stakeholders about its adherence to superior risk management procedures (Musa et al., 2025). This committee is crucial for aiding the board of directors in overseeing and regulating risk levels and in developing an effective risk management framework, hence facilitating solid earnings management (Sadaa et al., 2023). The board of directors significantly depends on subcommittees for oversight. An effective RMC substantially decreases agency expenses by curtailing opportunistic conduct by managers, especially concerning risk-taking and oversight (Musa et al., 2023).

Musa et al. (2025) assert that the dimensions of the RMC, the expertise of its members, the regularity of its meetings, and the overlap of its members with the AC significantly adversely affect accrual-based earnings management practices and real earnings management. Musa et al. (2023) found that the size of the RMC, along with its diligence and expertise, significantly reduced real earnings management, improving earnings quality. Independence did not affect real earnings management. Efenyumi and Okoye (2022) found that RMC independence and attentiveness do not affect earnings quality. After reviewing the above, we propose the following:

H2: The characteristics of the RMC will impact earnings management negatively.

2.3. External audit quality and earnings quality

External auditing serves as a robust company governance system that guarantees financial reporting is devoid of fraudulent activities and adheres to relevant accounting standards. People extensively use financial data to evaluate performance and forecast future earnings. Owing to information asymmetries, managers possess significant latitude in determining reported profitability through accounting accruals (Salem et al., 2023). As a result, those responsible for establishing accounting standards persist in voicing concerns about the evaluation of accounting earnings (Camacho-Miñano et al., 2024). Concerns over the quality of external audits have intensified in recent decades due to the involvement of certain audit companies in fraudulent activities. The Enron crisis and Arthur Andersen's involvement led to diminished trust in certain audit companies (Awuye, 2022). Audit quality represents the dependable evaluation that financial statements provide precise, thorough, and impartial information. Numerous research studies have demonstrated that the magnitude and reputation of an audit company substantially affect auditors' capacity to oversee their clients' financial statements (Nguyen et al., 2024).

The studies by Inaam and Khamoussi (2016) and Nurjanah et al. (2025) found that audit quality and earnings management approaches are significantly inversely correlated. Earnings management operations are limited and improved upon when audit quality, as measured by factors like auditor specialism and company size, is high. Analysing data from 22 countries, Neiroukh and Caglar (2025) found that having an auditor from a Big Four firm reduces real earnings management and accrual earnings management. The intricate connection between the quality of external audits and earnings quality is affected by a number of external variables, such as the governance and regulatory framework. Research by Neiroukh and Caglar (2025) suggests that auditors can have a better understanding of a company's operations and internal environment over the course of a longer contract, which could lead to higher-quality audits. Contrary research has shown that this compromises the auditor's objectivity. Thus:

H3: EAQ will have positive effect on earnings quality.

2.4. External audit quality as a moderator

One of the most important jobs of an external auditor is to make sure that a company's income statement and balance sheet are fair. Hence, making audit services better helps people who read financial reports feel surer about the accuracy of reported accruals, which in turn proves the quality of reported earnings (Toumeh et al., 2021). EAQ is the set of things that make it possible for audits to be of consistently high quality. When the audit team shows the right values, ethics, and attitudes, is knowledgeable and experienced, has enough time for audit work, uses strict accounting and auditing methods and procedures that follow the law, and talks to the right people, the audit quality can be high (Bawuah, 2024).

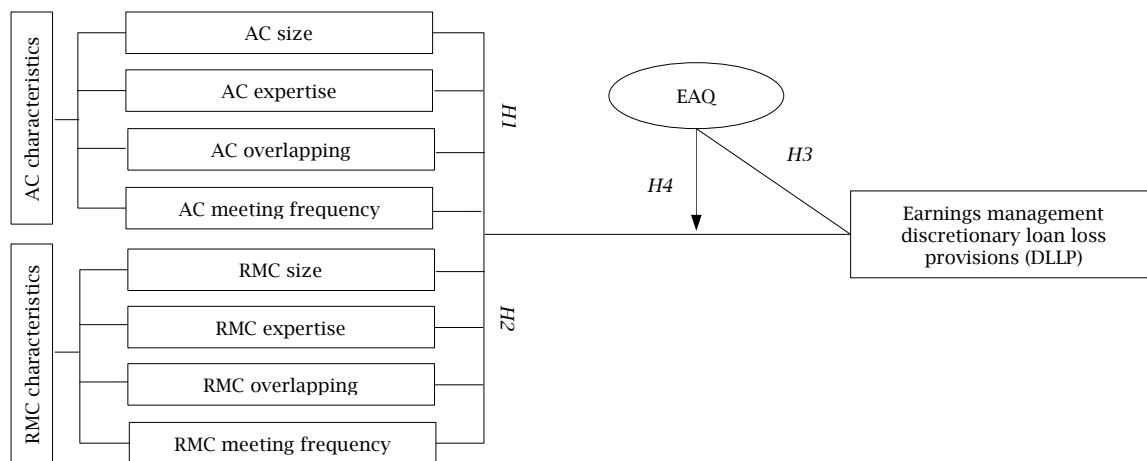
Studies show that EAQ influences AC effectiveness and earnings management (Bouaziz et al., 2025). The Big Four audit firms help reduce opportunistic management and improve profit quality (Toumeh et al., 2021). A professional and experienced external auditor helps company

governance committees oversee opportunistic executive activity (Amara et al., 2025). The influence of audit quality on AC effectiveness and real earnings management was explored. The fiscal year 2018–2022 dataset included 625 observations. Effective AC negatively impacts profit management, which is exacerbated by high EAQ (Nurjanah et al., 2025). Audit quality, especially from Big Four corporations, may mitigate the association between AC performance and earnings management. Bawuah (2024) found that EAQ considerably and negatively influenced AC-earnings management relationships. In the Netherlands, audit quality moderates the relationship between AC characteristics and financial reporting quality, strengthening the link between the AC and real earnings management (Masmoudi, 2021).

Recent literature suggests that the RMC is becoming more significant in corporate governance, expanding the internal control structure to include operational, financial, and regulatory risks that could affect financial statements. In emerging markets, an effective risk committee reduces earnings management (Musa et al., 2025). These committees' ability to improve profit quality depends on external controls, particularly the external audit. Studies have demonstrated that the RMC's size, experience, meeting frequency, and overlap with the AC negatively impact accrual-based and real earnings management. After testing, the external auditor was found to be an integrator (Musa et al., 2025). Effective ACs reduce information asymmetry and improve audit quality monitoring, improving RMC (El-Deeb et al., 2024). Previous research has revealed that EAQ interacts, but the evidence is inconclusive. EAQ helps governance committees improve earnings quality in developed countries (Bouaziz et al., 2025; Masmoudi, 2021). Other research implies that institutional and legal factors may alter this function's efficacy (Nurjanah et al., 2025). Thus, this link must be examined in emerging market situations with different institutional control and audit quality requirements. We hypothesised that:

H4: EAQ will interact with the relationship between board committees and earnings management.

Figure 1. Theoretical framework



Source: Authors' elaboration.

3. METHODOLOGY

3.1. Sample and data collection

Databases such as OSIRIS, Bloomberg Terminal, Eikon/Datastream, ThomsonOne, and the World Bank were used to obtain data on earnings quality and board committees. Furthermore, published annual reports were used to collect data on any other missing data. The study excluded non-financial firms and insurance companies due to the different characteristics of their financial statements (Klein, 2002). Non-financial firms and insurance companies are subject to different regulations, corporate governance rules, and other regulatory provisions than banks. Due to differences in regulations and laws between banks and other companies, this study excluded other companies to ensure consistency of observations (Sadaa et al., 2023). Our study specifically analysed banks listed in the six Gulf Cooperation Council (GCC) marketplaces from 2010 to 2020. This timeframe was chosen due to the substantial increase in oil prices witnessed by the GCC countries in 2010. Additionally, in 2010, Arab markets rebounded from the 2008 global financial crisis. The study was suspended until 2020 to mitigate the adverse impacts of the COVID-19 epidemic that affected nations globally. Investment banks were excluded owing to the distinct nature of their banking operations. The study ultimately eliminated numerous banks owing to insufficient data availability. The study utilises a sample of 671 observations from 61 banks in the GCC countries (Qatar, the UAE, Kuwait, Saudi Arabia, Bahrain, and Oman) spanning eleven years, from 2010 to 2020.

$$LLP_{it} = \alpha 0_{it} + \alpha 1_{it}LLA_{t-1} + \alpha 2_{it}NCO_{it} + \alpha 3_{it}CHLOANS_{it} + \alpha 4_{it}LOANS_{it} + \alpha 5_{it}NPL_{it} + \alpha 6_{it}LOAN_CATEGORIES_{it} + \varepsilon_{it} \quad (1)$$

where,

- The loan loss provision (*LLP*) is the loan loss provision divided by the total initial assets.
- The initial loan loss provision is defined as loan loss allowance (*LLA*) divided by the total initial assets.
- The net loan write-offs are denoted as *NCO* divided by the total initial assets.
- The loan categories are split by the original total assets: loans to municipalities/government (*MUN*), mortgages (*MORT*), installment/leasing (*LEASE*), other loans (*OTH*), loans to group companies/subsidiaries (*GRP*), and loans to banks (*BK*).
- *CHLOANS* is the change in total outstanding loans divided by the starting total assets.
- The term *LOANS* refers to the total outstanding loans divided by the total original assets.
- The term “*NPL*” refers to non-performing loans divided by the original total assets.
- The absolute value of the nondiscretionary loan loss provision measures earnings quality.
- The low value of discretionary loan loss provisions indicates active earnings management behavior.

The outcomes of Eq. (1) for calculating anomalous *LLP* are shown in the primary evidence in Table A.2, Appendix. Since *LLA* and *LLP* have

3.2. Measurement

3.2.1. Dependent variable

The study utilized loan loss provisions to figure out how well we were managing our earnings. Banks' loan loss provisions are the largest and most important accruals, which means that bank managers have many options on how to employ them (Mnif & Slimi, 2024). Prior research has predominantly concurred that loan loss provisions constitute a fundamental instrument for earnings management within the banking sector. Loan loss provisions are an important accounting number for banks, and bank regulators and policymakers are paying more attention to them to make banks more financially stable and avoid a financial disaster. In this context, the phenomenon of earnings management via DLLP has piqued academics' interest in examining the elements that may affect earnings management inside banks (Ozili, 2022). Loan loss provisions primarily serve to reduce anticipated loan losses; however, they may also be employed to alter revenue, convey signals, and manage regulatory capital (Curcio & Hasan, 2015; Peterson & Arun, 2018). Bank management may use loan loss provisions to manipulate reported earnings to meet goals; therefore, auditor quality must be considered when reconciling bank income. This misleads investors by tainting profit reports (Ozili, 2022). Managerial judgment affects loan loss provisions. Loan loss provisions are important to a bank's income statement due to their fluctuation and strong link with net income (Beatty & Liao, 2014). Bank management can overstate or understate loan loss provisions to reduce earnings volatility. The following is the regression estimate:

a negative relationship, a bigger initial loan loss allowance will need a smaller *LLP* throughout the present period. The positive relationship between *LLP* and *NCO*, *LOANS*, *CHLOANS*, and *NPL* indicates that a large volume of charge-offs, loans, loan variation, and non-performing loans results in greater provisions. These results are in line with earlier research (Lassoued et al., 2017; Ozili, 2022).

3.2.2. Independent variables

Audit committee (AC) and *risk management committee (RMC)* sizes are the number of directors on each committee of the bank (Kalita & Tiwari, 2023). *AC* and *RMC expertise* is a binary variable that takes the value of “1” if at least one member of each committee has financial expertise (Bilal et al., 2018). Members of the *AC* and *RMC* are deemed to possess the requisite financial expertise if their biographical details indicate experience in accounting, oversight of financial statement preparation, or proficiency in utilising financial statements. The *overlap between the AC and RMC* is quantified as the percentage of committee members who serve on multiple boards within the bank (Aldhamari et al., 2020). The *committee meeting* is evaluated based on the frequency of meetings conducted by the *AC* and *RMC* committees of the bank annually (Nikulin et al., 2022).

External audit quality (EAQ): Based on bank laws, corporate governance codes, and prior literature (Aslam & Haron, 2021; Chaudhry et al., 2020; Khan & Abdul Subhan, 2019), EAQ was measured by a checklist of 12 items (see Table A.1, Appendix).

3.2.3. Control variable

The *size of a bank* is represented by the logarithm of its total assets, whereas financial leverage is

calculated by dividing total liabilities by total assets (Hazzaa et al., 2024; Sadaa et al., 2020).

3.3. Models

The study used two models to test the hypotheses. Model 1 is related to the direct effect between board committees' characteristics, external audit quality, and earnings management. Model 2 is to examine the moderating role of external audit quality on the relationship between board committees' characteristics and earnings management.

Model 1

$$DLLP_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 LEVERAGE_{it} + \beta_3 AC\ size_{it} + \beta_4 AC\ expertise_{it} + \beta_5 AC\ overlapping_{it} + \beta_6 AC\ meeting\ frequency_{it} + \beta_7 RMC\ size_{it} + \beta_8 RMC\ expertise_{it} + \beta_9 RMC\ overlapping_{it} + \beta_{10} RMC\ meeting\ frequency_{it} + \beta_{11} EAQ_{it} + \varepsilon_{it} \quad (2)$$

Model 2

$$DLLP_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 LEVERAGE_{it} + \beta_3 AC\ size_{it} + \beta_4 AC\ expertise_{it} + \beta_5 AC\ overlapping_{it} + \beta_6 AC\ meeting\ frequency_{it} + \beta_7 RMC\ size_{it} + \beta_8 RMC\ expertise_{it} + \beta_9 RMC\ overlapping_{it} + \beta_{10} RMC\ meeting\ frequency_{it} + \beta_{11} EAQ_{it} + \beta_{12} (EAQ \times AC\ size)_{it} + \beta_{13} (EAQ \times AC\ expertise)_{it} + \beta_{14} (EAQ \times AC\ overlapping)_{it} + \beta_{15} (EAQ \times AC\ meeting\ frequency)_{it} + \beta_{16} (EAQ \times RMC\ size)_{it} + \beta_{17} (EAQ \times RMC\ expertise)_{it} + \beta_{18} (EAQ \times RMC\ overlapping)_{it} + \beta_{19} (EAQ \times RMC\ meeting\ frequency)_{it} + \varepsilon_{it} \quad (3)$$

Besides the research method used in this study, there are a few other ways to look into the connection between bank board groups, the quality of external audits, and earnings management. At first, different alternatives to actual earnings management may be used, such as flexible revenue models (like the modified Jones model) or measures for actual earnings management. Even so, since the sample is made up of banks, loan loss reserves are widely seen as the best and most industry-specific measure of profit management. This is because banking activities are based on accruals (Beatty & Liao, 2014).

Second, different ways of estimating can be used, such as fixed-effects or random-effects panel regression models, dynamic panel models using the generalized method of moments (GMM), or quantile regression. A panel regression and the right diagnostic tests are used in this study to make sure it is long-lasting and addresses economic problems.

Dynamic GMM estimators are also used to deal with problems of endogeneity and hidden heterogeneity.

4. RESULTS

4.1. Descriptive statistics

Table 1 shows that the level of earnings management, as defined by the absolute DLLP ratio (DLLP) divided by total delinquent assets, has a mean of 3% and a standard deviation of 8%. This conclusion implies that the variation in earnings management based on loan loss provisions is negligible. Hence, listed banks in the GCC behave in a manner comparable to discretionary allocation. Furthermore, the sample's average discretionary loan loss provisions are high when compared to prior research in several Middle Eastern (Lassoued et al., 2017) and African (Mnif & Slimi, 2024) nations.

Table 1. Descriptive statistics

Variables	N	Mean	Median	Std. dev.	Min.	Max.
DLLP	671	0.0314	0.0337	0.0821	0.0000	0.0957
AC size	671	3.7500	3.5325	1.1830	2.0000	8.0000
AC expertise	671	0.8700	1.0000	0.3400	0.0000	1.0000
AC overlapping	671	0.6410	0.7140	0.2184	0.2500	0.8522
AC meeting frequency	671	4.4139	4.2518	2.1995	1.0000	11.0000
RMC size	671	2.2700	2.8203	1.4402	2.0000	6.0000
RMC expertise	671	0.6298	0.6714	0.4768	0.0000	1.0000
RMC overlapping	671	0.8815	1.0000	0.1748	0.3333	1.0000
RMC meeting frequency	671	1.3127	1.2848	0.7364	1.0000	3.0000
EAQ	671	8.4726	8.1664	8.4573	6.0000	12.0000
SIZE	671	8.2703	8.1126	0.7400	7.1008	10.884
LEVERAGE	671	0.5406	0.5548	0.2477	0.1983	2.8492

Source: Authors' calculation.

4.2. Variance inflation factor

The variance inflation factor (VIF) test was applied in Table 2 to address multicollinearity. The VIF and the inverse VIF (tolerance) were examined, and a VIF value greater than 3 and a tolerance value less

than 0.1 indicate multicollinearity. In our results, all variables had a VIF value of less than 3 (Ahmed et al., 2023; Hair et al., 2014), with the highest VIF value of 2.08 and the lowest tolerance (0.4808) recorded for the RMC overlapping variable.

Table 2. Variance inflation factor

Variables	VIF	1/VIF
RMC overlapping	2.08	0.4808
AC size	1.98	0.5051
EAQ	1.86	0.5376
AC expertise	1.86	0.5376
RMC meeting frequency	1.74	0.5747
RMC expertise	1.58	0.6329
AC meeting frequency	1.33	0.7519
SIZE	1.25	0.80
AC overlapping	1.23	0.813
LEVERAGE	1.19	0.8403
RMC size	1.17	0.8547
Mean VIF	1.57	

Source: Authors' calculation.

4.3. Correlation matrix

Table 3 shows that the highest correlation was observed between EAQ and AC financial expertise.

All other correlation coefficients fall within the range of -0.723 and 0.843, indicating that none of them exceeds 0.9 (Hair et al., 2014). Thus, there is no significant problem with multicollinearity.

Table 3. Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. DLLP	1.000											
2. AC size	-0.006	1.000										
3. AC expertise	-0.047	0.738	1.000									
4. AC overlapping	-0.468	0.460	0.672	1.000								
5. AC meeting frequency	-0.164	0.805	0.443	0.724	1.000							
6. RMC size	0.052	0.229	0.590	0.369	0.640	1.000						
7. RMC expertise	-0.030	0.793	0.705	0.596	0.813	0.822	1.000					
8. RMC overlapping	-0.031	-0.123	0.106	0.620	0.415	-0.356	0.318	1.000				
9 RMC meeting frequency	-0.084	0.506	-0.167	0.127	0.716	0.200	0.530	0.347	1.000			
10. EAQ	-0.108	0.349	0.843	0.287	0.730	0.502	0.388	0.048	0.588	1.000		
11. SIZE	0.102	0.040	0.477	0.036	0.394	0.122	0.653	0.305	0.224	0.047	1.000	
12. LEVERAGE	0.158	0.313	0.704	-0.723	-0.645	0.201	0.164	-0.580	0.411	-0.366	0.714	1.000

Source: Authors' calculation.

4.4. Hypotheses test

A multi-step analysis is used to analyze the four hypotheses offered in the research and develop a viable model for connecting the study variables. The early phase analysis employs the ordinary least squares (OLS) model. In the second step, the fixed-effect model (FEM) is calculated and compared to the pooled OLS (POLS) model to determine which model is best suited. The second step is known as

the “poolability test stage”. The third step involves estimating the random-effect model (REM) and comparing it to the POLS model. This process is known as the Breusch-Pagan Lagrange multiplier (LM) test. The Hausman test is used in the final stage to compare FEM and REM, assuming that FEM and REM outperform POLS in the second and third phases, respectively (Sadaa et al., 2023; Hazza et al., 2024).

Table 4. Audit committee, risk management committee, and earnings management

Variables	Model 1			
	OLS	FEM	REM	Robust FEM
AC size	-0.1920*(0.0842)	-0.5093(0.5820)	0.1398*(0.0583)	-0.5093(0.5421)
AC expertise	-0.3514(0.6485)	-0.0936**(0.0361)	-0.0785***(0.0014)	-0.0936**(0.0402)
AC overlapping	-0.1818*(0.0837)	-0.3984(0.1836)	-0.1784*(0.0628)	-0.3984(0.1693)
AC meeting frequency	-0.0831*(0.0274)	-0.1483*(0.0809)	-0.0614***(0.0008)	-0.1483*(0.0718)
RMC size	0.0184(0.2107)	0.0396(0.1910)	-0.1794*(0.0938)	0.0396(0.1947)
RMC expertise	-0.0493***(0.0003)	-0.0802**(0.0316)	-0.0722***(0.0225)	-0.0802***(0.286)
RMC overlapping	-0.0128***(0.0000)	-0.0332***(0.0000)	0.0153***(0.0000)	-0.0332***(0.0000)
RMC meeting frequency	-0.1264*(0.0604)	-0.1517*(0.0693)	-0.2613(0.1363)	-0.1517*(0.0652)
EAQ	-0.0630***(0.0283)	-0.0412****(0.0000)	-1.8527***(-2.2839)	-0.0412****(0.0000)
SIZE	0.0184(0.1785)	0.0277(0.1704)	0.0932*(0.0836)	0.0277(0.1298)
LEVERAGE	0.1109*(0.0837)	0.1407*(0.0702)	0.0625(0.1258)	0.1407*(0.0843)
Year dummies	Yes	Yes	Yes	Yes
Country dummies	No	Yes	Yes	Yes
Constant	1.4895***(0.0000)	3.8347***(0.0000)	18.4903***(0.0000)	8.9847***
Observations	671	671	671	671
R ²	0.4027	0.4288	0.4381	0.4471
Adj R ²	0.419	-	0.4162	-
F-stat	13.6432	23.119	17.1248	10.7218
Poolability test (include FEM)		15.83***(0.0000)		
Breusch-Pagan LM test (include REM)			15.3784***(0.0000)	
Hausman test (FEM vs REM)				22.4892(0.0000)
Diagnostic tests:				
Serial correlation				134.17***(0.0000)
VIF				1.57
Heteroskedasticity				328.35***(0.0000)

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The FEM is appropriate for analyzing the relationship between board committees, EAQ, and earnings management as measured by *DLLP*. The poolability test reveals a statistical significance of 0.0000, indicating that the FEM model is superior to the OLS model. The Breusch-Pagan LM test indicates a statistical significance level of 0.0000, implying that the REM model is superior to the POLS model. The Hausman test shows a statistically significant result with a p-value of 0.0000. As a result, the FEM model aligns well with the findings from previous experiments. Furthermore, diagnostic assessments produce significant and reliable results. The average VIF of 1.57 suggests that there are no notable multicollinearity concerns, given that it remains under the established threshold of 3.00 (Hair et al., 2014). The serial correlation test revealed

a notable autocorrelation problem ($F = 134.17^{***}$; $p = 0.0000$). The results of the heteroscedasticity test indicated an issue with the model's heteroscedasticity ($\text{Chi}^2 = 328.35^{***}$; $p = 0.0000$). Prior studies indicated that if there is a problem with diagnostic tests, it means the data will not give accurate results. Therefore, the data is filtered from those issues using the robust effect model (Koller, 2016; Pustejovsky & Tipton, 2018). Consequently, the research addresses both the issues of heteroscedasticity and serial correlation by implementing a robust fixed-effects model. The F-statistic associated with the robust fixed-effects fit suggests that the model demonstrates reliability. The last column in Table 4 serves to either validate or refute the study hypotheses.

Table 5. Audit committee, risk management committee, external audit quality, discretionary loan loss provisions

Variables	Model 2			
	OLS	FEM	REM	Robust FEM
AC size	-0.1293*(0.0604)	-0.2753(0.2182)	-0.24281(0.1374)	-0.2753(0.1983)
AC expertise	-0.0036***(0.0000)	-0.0058***(0.0000)	-0.0192***(0.0000)	-0.0058***(0.0000)
AC overlapping	-0.3207(0.1402)	-0.2844(0.1290)	0.0069(0.2982)	-0.2844(0.1538)
AC meeting frequency	-0.1084**(0.0348)	-0.1289*(0.0624)	-0.0750**(0.0328)	-0.1289*(0.0713)
RMC size	-0.2894(0.1438)	-0.3948(0.1726)	-0.2965**(0.1294)	-0.3948(0.1802)
RMC expertise	-0.0593***(0.0034)	-0.1006***(0.0218)	-0.0973***(0.0286)	-0.1006***(0.0292)
RMC overlapping	-0.0381***(0.0027)	-0.0147***(0.0000)	-0.1098***(0.0302)	-0.0147***(0.0000)
RMC meeting frequency	-0.1823*(0.0813)	-0.1703*(0.0792)	-0.1025***(0.0326)	-0.1703*(0.0761)
EAQ	-0.0287***(0.0000)	-0.0743***(0.0384)	-0.1005***(0.0389)	-0.0743***(0.0299)
AC size × EAQ	-0.3281(0.1392)	-0.2503(0.1182)	-0.1807*(0.0827)	-0.2503(0.1126)
AC expertise × EAQ	-0.0114***(0.0000)	-0.0052***(0.0000)	-0.0138***(0.0053)	-0.0052***(0.0000)
AC overlapping × EAQ	-0.1205*(0.0485)	-0.1056***(0.0271)	-0.0985***(0.0214)	-0.1056***(0.0228)
AC meeting frequency × EAQ	-0.0447***(0.0000)	-0.0384***(0.0000)	-0.0734***(0.0251)	-0.0384***(0.0000)
RMC size × EAQ	-0.2871(0.1335)	-0.5402(0.2178)	-0.3081****(0.1482)	-0.5402(0.1835)
RMC expertise × EAQ	-0.0523***(0.0000)	-0.0124***(0.0000)	-0.0264***(0.0000)	-0.0124***(0.0000)
RMC overlapping × EAQ	-3.1372***(-5.1839)	-1.3842***(-2.2685)	-0.0063***(0.0000)	-1.3842***(-2.5847)
RMC meeting frequency × EAQ	-0.0115***(0.0000)	-0.0182***(0.0000)	-0.0551***(0.0000)	-0.0182***(0.0000)
SIZE	-0.1423*(0.0698)	-0.3980(0.1874)	-0.2402(0.1477)	-0.3980(0.1694)
LEVERAGE	-0.2648(0.1309)	-0.6209(0.3982)	-0.1034***(0.0386)	-0.6209(0.2802)
Year dummies	Yes	Yes	Yes	Yes
Country dummies	No	Yes	Yes	Yes
Constant	13.9804***(0.0000)	21.1604***(0.0000)	12.6384***(0.0000)	19.3007***(0.0000)
Observations	671	671	671	671
R ²	0.5371	0.5804	0.5633	0.5738
Adj R ²	0.5129	-	0.5328	-
F-stat	71.8304	32.385	21.1809	34.1928
Poolability test (include FEM)	29.13***(0.0000)			
Breusch-Pagan LM test (include REM)		18.2981***(0.0000)		
Hausman test (FEM vs. REM)			26.4052(0.0000)	
Diagnostic tests:				
Serial correlation				83.398***(0.0000)
VIF				1.57
Heteroskedasticity				91.452***(0.0000)

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

5. DISCUSSION

This section emphasises the interpretation of empirical findings and their connection to existing literature, utilising agency theory and signalling theory to analyse the results and underscoring their practical significance for the banking industry in GCC countries. The results will be examined in a series of hypotheses, starting with the attributes of the AC, followed by the RMC, then the EAQ, and concluding with the moderating effect of the external audit on these relationships, thereby elucidating the study's theoretical and practical contributions.

The findings indicate that the characteristics of the AC play a crucial role in enhancing earnings

quality. The dimensions of committee size, the expertise of its members, and the regularity of meetings have significantly impacted earnings management. This observation is consistent with current scholarly research (Almarayeh et al., 2022; Inaam & Khamoussi, 2016), demonstrating that the characteristics of AC are crucial in reducing earnings management. This aligns with the agency theory, which suggests that a strong AC reduces opportunistic management behavior and enhances earnings quality (Nurjanah et al., 2025). Concerning overlapping membership, the findings revealed no significant effect, aligning with certain scholarly works that suggest dual membership could undermine the independence of committees (Zadeh et al., 2023). This discovery indicates that Gulf banks

must bolster these committees with financial acumen and a dedication to consistent meetings to guarantee the quality of earnings, elevate the transparency of financial reporting, and strengthen investor trust.

The findings indicated that certain aspects of the RMC, including experience, meeting frequency, and committee overlap, positively influenced earnings quality, although size was not consistently significant. This outcome aligns with the research, including (Afrizal et al., 2025; Musa et al., 2025), which established that the efficacy of the RMC is more contingent upon the quality of its procedures than its size. This outcome further corroborates signalling theory, as the existence of an active risk committee indicates to the markets that banks are dedicated to governance, thereby diminishing the risk of earnings management (Jameel et al., 2025). This outcome increases the importance of investing in the development and enhancement of the risk committee's capability, facilitating Gulf banks' adaptation to regulatory and economic risks. The study additionally revealed that the calibre of external audits positively influences earnings quality, aligning with the conclusions of Amara et al. (2025), Bawuah (2024), and Salem et al. (2023). This conclusion corroborates the assertions of agency theory (Jensen & Meckling, 1976), which posits that external auditing serves as a control mechanism that diminishes the information asymmetry and mitigates opportunistic managerial conduct.

EAQ partially strengthened certain relationships between AC and RMC characteristics and earnings quality. This finding indicates that emerging markets, including the GCC, may experience inconsistent application of governance standards, which accounts for the restricted nature of this moderating effect. This finding corroborates existing literature, including studies by Bouaziz et al. (2025), Masmoudi (2021), and Nurjanah et al. (2025), which indicate that effective external audits reinforce the effect of ACs and RMCs and improve the earnings disclosures quality in banks' financial statements. Agency theory posits that an independent external auditor mitigates information asymmetry and limits management's propensity for earnings manipulation (Amara et al., 2025; Bawuah, 2024; Salem et al., 2023).

6. CONCLUSION

The study investigates the impact of the AC and RMC on earnings management. The study also analysed the moderating effect of EAQ. The research utilised a sample of banks from GCC countries spanning the years 2010 to 2020. The research employed statistical models to evaluate the hypotheses and determine their acceptance or

rejection. The findings indicated that the attributes of the AC, specifically committee size, financial expertise, and frequency of meetings, exerted a significant negative influence on opportunistic management behaviour. Committee overlap, financial expertise, and meeting frequency were found to negatively affect earnings management. The findings suggest that the quality of external audits has a significant impact on the credibility of financial statements. External audit also complements committee characteristics in enhancing earnings quality, albeit to varying degrees. The study presents various theoretical and practical implications. The study introduces a novel theoretical perspective by illustrating that internal corporate governance mechanisms, specifically ACs and RMCs, enhance EAQ as an external governance mechanism aimed at reducing opportunistic management behaviour. The findings substantiate the tenets of agency theory, highlighting the necessity for both internal and external mechanisms to address information asymmetry and conflicts of interest among diverse stakeholders within a corporation. The study indicates that the existence of ACs and RMCs conveys a significant message to investors regarding banks' dedication to corporate governance and risk management, thereby bolstering market confidence and diminishing earnings management practices. Enhancing the quality of external auditing in the Gulf region necessitates institutional and regulatory reforms focused on bolstering auditor independence and enforcing stricter oversight of earnings disclosure practices. The findings support earlier research by illustrating the complementary relationship between internal governance mechanisms (such as the AC and RMC) and external governance (audit quality), which enhances earnings quality. The findings emphasise the necessity of reinforcing the criteria for the formation and functioning of these committees, promoting the involvement of reputable external auditors, and supporting contracts with the Big Four audit firms to enhance transparency and bolster the credibility of financial reporting. This study offers valuable insights for decision-makers and regulators in the GCC regarding the development of legislation and regulations for board committee formation and the enforcement of stricter standards for external auditing quality. The study was confined to listed banks in the GCC, suggesting the need for additional research in the industrial and service sectors to validate the findings. Alternative measures of earnings management, including cash flow and market indicators, should be considered, particularly given that the study focused exclusively on loan loss provisions. While significant, this measure does not cover all forms of earnings practices.

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APPENDIX

Table A.1. Measurement of external audit quality

Category	Item
External audit quality	1. There must be clear norms and policies addressing the interaction with the external auditor.
	2. There must be clear norms and policies addressing the interaction with the external auditor.
	3. Does the bank utilize any of the worldwide audit firms (Deloitte, PwC, KYMG, and E&Y)?
	4. The bank should not be under an ongoing criminal investigation for corporate governance violations.
	5. The audit committee's recommendations at the annual general meeting must be followed when selecting an external auditor.
	6. The internal auditor (audit committee) and the external auditor shall meet periodically for review.
	7. The appointment of external auditors must be open and according to due procedure.
	8. The audit business shall fully disclose its non-audit services and other relevant information.
	9. The existence of a joint auditor comes from independent audit companies.
	10. Do the external auditors have any issues?
	11. Were the financial statements reprinted following the audit?
	12. Audit partners are swapped every five years.

Table A.2. Regression results of loan loss provision on non-discretionary loan loss provision determinants

Item	Expected sign	Coefficient estimate	t-statistic
LLA	-	-0.0493***	-3.21
NCO	+	0.2833***	6.14
Δ LOANS	+	0.0948***	4.51
LOANS	+	0.0147	0.36
NPL	+	0.3174***	6.83
LOAN CATEGORIES	+	0.0891*	1.45
Constant		0.2104***	5.03
Year controls		Included	
Adjusted R ²		57.31%	