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The Moderating Effect of Accounting Expertise on The Relationship Between Board Characteristics and Earnings Management "Evidence from Iraq"

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ABSTRACT

The current study aims to examine how board characteristics impact earnings management in non-financial companies. Its primary objective is to ascertain whether accounting expertise modifies the association between board characteristics and earnings management. The data utilised in this study came from 598 firm-year observations from 46 non-financial sector businesses registered on the Iraqi Stock Exchange between 2010 and 2022. To take care of potential endogeneity and reverse causality, the study employed the system generalised method of moments (SGMM) estimate model. The findings revealed a positive and significant relationship between gender diversity, busyness, board independence, and earnings management. Conversely, the results show that the relationship between board independence, busyness, gender diversity, and earnings management is significantly and negatively moderated by accounting expertise. Thus, by investigating the subject experimentally in Iraq, this study adds to the body of existing literature. Additionally, by investigating whether accounting expertise moderates the association between board features and EM, the study fills the gap in the literature.

Keywords: Board Characteristics, Accounting Expertise, Earnings Management, Non-Financial Companies.

INTRODUCTION

The The collapse of formerly prominent and well-known companies due to financial reporting fraud (Enron, Xerox, WorldCom, HealthSouth, Tyco, Waste Management, Rite Aid, and Subeam, to name a few) further highlights the detrimental nature of EM [1]. The most often used indicator of a company's financial performance is its accounting earnings. It is not unexpected that understanding the factors that influence earnings management has received more attention in accounting literature given that financial reporting requirements and accounting regulations provide managers of a company with significant chances to manipulate results. According to [2], earnings management (EM) occurs "when managers use judgement in financial reporting and in structuring transactions to alter financial reports to either alter contractual outcomes that depend on reported accounting numbers or to mislead some stakeholders about the underlying economic performance of the company." Earnings management continues to be a crucial subject that causes serious concerns in society, even though it has long been a worry for organisations. Additionally, one of the main issues brought up by previous business failures is that people lack the skills necessary to do their professions [3]. However, from the standpoint of agency theory, previous research [4] and [5] indicates that corporate governance (CG) systems can be quite effective in reducing earnings management, improving business performance, and moderating agency issues.

As a mediator between capital owners (shareholders) and managers who use that capital to generate value (maximise shareholders' wealth), the board of directors is a crucial internal control tool. Furthermore, the boards of directors oversee the company's accounting system by making sure managers follow pertinent accounting rules and principles while creating financial reports, assuring the accuracy of accounting data. Because opportunistic managerial practices linked to profit manipulation have the potential to deceive shareholders, the board's oversight role in financial reporting is essential. According to [6], corporate governance revolves around the board of directors, and the form of the board dictates how well it can keep an eye on the management. As a result, the board's gender diversity, busyness, board independence, and accounting expertise are crucial components that enhance its efficacy in reducing profit manipulation [1].

Even though previous research has looked at how board factors affect EM, the results are conflicting and unclear [7] and [8]. Given that the majority of these studies were conducted in nations with robust investor protection laws, the institutional context of these studies may help to explain the equivocal findings [9]. Based on the results of earlier research, it is necessary to investigate the potential moderating variables of the association between board characteristics and EM. Contextual variables, including the location of this research, may also account for the diverse results.

To the best of the researcher's knowledge, no research has yet examined how accounting expertise modifies the connection between board characteristics and EM in terms of gender diversity, busyness, and board independence. Furthermore, the majority of studies in Iraq in particular used banks, so we only included non-financial companies in our analysis. Additionally, the few studies that looked at the connection between board characteristics and earnings management used questionnaires and overlooked the actual data. According to [10] organisations respect directors with adequate experience as intellectual resources for which they make choices. Furthermore, [11] discovered that the board significantly influences the success of the company. Thus, the purpose of this study is to look at how accounting expertise acts as a moderator. Furthermore, practically all recent studies that assessed how board members' experience and skill levels affected financial organisations' performance only looked at financial literacy. However, the present study filled the vacuum in the literature by utilising the AC directors' financial literacy as well as their experience and skill in finance or accounting, as demonstrated by their membership in an accounting association body.

Companies in the United States and other developed nations have been the subject of a significant amount of written research on board characteristics and EM; emerging market companies have received less attention. Consequently, there has been a pressing need for more research on ACs in emerging nations with unique economic contexts, like Iraq. Therefore, by investigating the moderating effect of accounting expertise on the link between board characteristics and EM in the context of Iraq, this study aims to fill a gap in earlier research.

In this regard, Iraq is considered a developing country; hence, the research findings may not be as important or applicable to Iraq. For instance, prior studies could not be applied to the issue of Iraqi corporations due to the fact that Iraqi corporate governance laws differ from those of other countries. Additionally, Iraq's financial reporting system and institutional structure differ from those of developed countries. In Iraq and other emerging nations with comparable economies, institutions, and legal frameworks, the study may thus have theoretical and practical ramifications. Thus, in the context of Iraq, the primary goal of the study is to examine the moderating effect of accounting expertise on the link between board characteristics and EM. Regulators, decision-makers, auditors, practitioners, scholars, and researchers may find the study to offer insightful and useful concepts [12] and [13].

The remainder of the paper is structured as follows: The literature is reviewed in the next section. The next part covers the data, sample, research methods, and variable measurement. The next section presents the empirical findings. The final portion discusses the study results and conclusion.

LITERATURE REVIEW

According to research on corporate governance, maximising shareholders' wealth requires a board that is adept at preventing opportunistic managerial practices like manipulating earnings [6]. This study looked into how board characteristics (board gender diversity, board busyness, and board independence) on EM.

Gender Diversity and Earnings Management

Over the past 10 years, gender diversity has drawn more attention, and there is a global push for women to serve on corporate boards in order to enhance corporate governance and decision-making [14]. A number of nations have started to enact laws mandating a certain percentage of female directors on corporate boards [13]. For example, Norway has sanctions for companies that do not have 40% of women on their boards. After that, Sweden and Spain looked at having 40% and 25% of women on corporate boards, respectively. As a result, the EU recently suggested that big listed companies have 25% of women on their boards [15]. Similar quotas for women have been adopted or proposed in a number of other developed and developing nations, including Australia, Brazil, Canada, and India [16]. In the US, the number of female directors has increased over the past 20 years, though their appointment is still optional (Catalyst Group, 2004).

On the other hand, the study anticipates that having female directors on the board will limit earnings management and enhance the overall quality of profits because of their superior monitoring skills (based on the expectations of economic theories). The link between female directors and earnings management, on the other hand, has received less attention, and the few studies that have tried to answer this subject have often produced conflicting findings e.g., [7], [17], [18], and [19]. In the same vein, this research, conducted by [7] and titled Characteristics of Female Directors and Earnings Management, using the GMM approach to address any missing variables and reverse causality issues, includes all non-financial firms listed on the Borsa Istanbul between 2009 and 2017. According to the current study, there is no correlation between the presence of female directors and earnings management on company boards.

The purpose of the study [19] is to look at the relationship between board diversity and the corporate performance of publicly traded companies on the Amman Stock Exchange, in contrast to the studies that have not found any discernible relationship, especially those that focus on the influence of board gender diversity on earnings management. For the fiscal year 2010–2015, the sample comprised 23 insurance firms and 15 banks. The findings showed that female holders were under-represented on the board of directors. In the same context, the study found that gender had no effect. A similar study, Examining the Impact of Gender Power and Gender Diversity within the Top Management Team on Firm Performance and Firm Risk [33], used data from 2,570 publicly traded American companies with small, medium, and large market capitalisations between 1998 and 2018. Measures of company risk and performance were evaluated using panel regression analysis. The results show that adding female directors has no positive impact on the quality of earnings.

In the same way, [34] conducted this study, The Relationship Between Audit Committee Characteristics and Financial Performance of Listed Banks in Ghana. For this study, banks listed on the Ghana Stock Exchange (GSE) serve as the population or unit of analysis. All eight of the GSE-listed banks were involved in the study. The information encompassed the banks' audited financial statements and pertinent documentation from 2014 to 2018. The study's primary findings revealed a negative correlation between ROE and the gender diversity of the audit committee. Likewise, there is a negative correlation between ROA and the audit committee's gender diversity.

On the other hand, several empirical studies have demonstrated a connection between gender diversity and earnings management, particularly in developed economies and some developing nations. For example, [35], [36], [37], [38], [39], and [40].

In a similar vein, some empirical research was done. For example, the Gender Diversity and Earnings Management Practices study by [37] used a sample of 100 listed non-financial companies in Pakistan between 2013 and 2018. Interestingly, the findings demonstrate that gender-diverse corporate boards enhance the efficiency of women's audit committee participation in reducing earnings management methods. Furthermore, in order to provide an efficient and transparent managerial decision, female CEOs are significantly inclined to decrease earnings management. Furthermore, primary and secondary sector companies listed on the Indonesia Stock Exchange between 2014 and 2020 comprise the study's samples, according to [40], who are meta-analyzing corporate governance to influence business performance. Selecting the samples based on a number of criteria results in 170 final samples of the company with 1064 observations. Gender diversity on boards has a major impact on market-based business performance, according to the study's key findings.

Similarly, to investigate the impact of board characteristics on the level of earnings management, [38] used the quantile regression technique on a sample of the UK Financial Times Stock Exchange 350 businesses from 2010 to 2019. The main conclusions of the study showed that gender diversity on boards significantly affects earnings management. Similarly, [35] used a sample of 80 Egyptian non-financial companies listed on the Egyptian Stock Exchange to conduct research about the relationship between audit committee characteristics and earnings management over the course of the eight fiscal years 2012–2019. The results show that there is a substantial negative correlation between Audit Committee gender and earnings management, as shown by testing the link between the variables using a multiple regression model. We suggest the following in light of organisational theory and the aforementioned arguments:

- **H1:** Board gender diversity has no significant effect on earnings management.

Board Directors' Busyness and Earnings Management

Multiple directorships have become a significant concern since they may impact a director's ability to monitor. Because the time of busy directors is dispersed over all board seats, busyness is perceived as harmful to shareholder interests (i.e., the busyness hypothesis). The reputation theory, on the other hand, contends that busy directors could be busy due to increased demand for their superior monitoring. There is conflicting evidence in the academic literature about the appropriateness of multiple directorships on corporate boards, which has led to increased investigation of the subject. Multiple directorships can serve as a signal to the external labour market for directors about a director's reputation, quality, and expertise [6]. According to studies like [41], [42], and [43], there is proof to support this reputation theory.

The theory of resource dependency explains why Iraqi boards of directors have several members. It served as the foundation for the majority of studies that addressed the problem of numerous corporate board memberships, which state that businesses hire board members and treat them as human capital. Due to their successful personalities and connections in growing the business, it is impossible to examine numerous corporate board of directors memberships without considering this idea [44]. In the same context, research by [42] titled The Impact of Board Interlocking on Firm Performance was conducted in the same setting. In 2016, information from 131 companies in the Saudi financial market was gathered. The study concludes that the highest performance in businesses is achieved when boards of directors have the ideal number of busy members.

Australian research by [45] found that the number of audit committee members with extra directorships had a negative impact on discretionary accruals and a favourable impact on audit fees. They contend that this suggests that audit committee busyness improves the quality of both audits and financial reporting. Prior to Saudi Arabia's adoption of IFRS, [43] examined the moderate effects of multiple directorships on the audit committee and business performance from 2012 to 2017. The findings show that the audit committee members' numerous directorships have a major favourable impact on the performance of the company in the Kingdom of Saudi Arabia (KSA).

On the other hand, [46] book Busy Boards and Corporate Earnings Management: An International Analysis. Data on the career history, education, and demographics of company directors from 1999 to 2012 is available from BoardEx. They demand that all candidate firms be publicly traded and that each sample business have a minimum of three directors for each year reflected in BoardEx. This study's research design is empirical. It looks at past company accounting, finance, and governance data using both univariate and multivariate statistical analysis. According to the study's findings, businesses with a higher proportion of busy independent audit committee members produce financial reports of inferior quality.

In a similar vein, the research When Does Audit Committee Busyness Influence Earnings Management in the UK by [47]. They look at how busy audit committees affected FTSE350 businesses' earnings management from 2007 to 2013. evaluating the effects on accruals and actual earnings management using a variety of workload metrics. They discovered that audit committee members' hectic schedules degrade earnings quality, indicating that those with more board seats are less capable of keeping an eye on managers' attempts to manipulate earnings. These results are consistent with those of [48] and [49]. Given the contradicting evidence, we put out a neutral hypothesis on the expected impact of busyness on earnings management.

- **H2:** Board directors' busyness has no significant effect on earnings management.

Board Independence and Earnings Management

Resource dependence theory asserts that internal corporate governance organisations, including the board of directors, have two functions [50]. They operate as a crucial conduit between the business and the resources required to maximise financial performance, in addition to being a significant tool for efficiently monitoring managerial activities. [51] go on to stress that non-executive directors in particular provide priceless resources, such as their independence, expertise, knowledge, and professional guidance. According to resource dependence theory, independent members on the board and its committees are essential for strengthening access to essential resources, keeping an eye on executive management, connecting the bank to the outside world, and creating and sustaining legitimacy—all of which lead to improved performance [52].

According to agency theory, an independent board with a minimal number of non-executive directors is also more likely to reduce conflicts of interest between management and shareholders. Independent boards help the board make decisions by bringing experience and objectivity to the board's decisions [53] and [38] . In the same vein, [6] propose that adding more non-executive directors to boards can help reduce agency conflicts. Because of their extensive experience and independent judgement, non-executive directors are an effective instrument for keeping an eye on opportunistic management. According to [5], non-executive directors are often better at keeping an eye on CEOs since they work to protect their professional reputations and offer pertinent supplementary information.

One important element that affects the board's qualitative characteristics is the directors' independence. It alludes to the board's independence from the executive management of the business. Consequently, non-executive managers must make up the majority of board members [55]. By guaranteeing alignment with the interests of shareholders, this composition improves the board's ability to monitor and regulate the top management's performance [56]. This strategy increases the market value of the business by reducing biased decision-making and opportunistic behaviour. In the end, it results in better financial statement quality, especially when it comes to reporting profits [57].

However, many studies provide evidence of a significant association between board independence and earnings management, such as [58], [35], and [1]. Conversely, other studies revealed no relationship between the two variables [59], [34], [46], [60], [63], and [65] [62]. Below is a detailed explanation of these studies.

Independent board members provide efficient oversight to preserve their reputation, according to several studies. Nonetheless, previous research highlights the value of an independent board in safeguarding shareholders' interests and demonstrates a negative correlation between board independence and EM [54]. Likewise, in the research, Board Characteristics and Earnings Management [58]. From analyzing firms listed on the Ho Chi Minh and Hanoi Stock Exchanges from 2012 to 2017, they found that percentages of outside directors and CEOs are negatively related to earnings management.

The goal of the study by [1] was to add to the body of literature by conducting an empirical investigation into the impact of board features on earnings management (EM) from the standpoint of emerging regions. The data used in this study came from 88 East African Community (EAC) listed companies between 2011 and 2020. The results showed that EM was significantly and negatively impacted by board independence. Similarly, this study, The Relation between Audit Committee Characteristics and Earnings Management, was carried out by [35]. Over the eight fiscal years 2012–2019, utilising a sample of 80 Egyptian non-financial enterprises registered on the Egyptian Stock Exchange. The findings demonstrate a strong inverse link between audit committee independence and earnings management. However, this research, Corporate Governance and Its Relationship With Financial Performance in Iraq, by [60], shows otherwise. The audited yearly financial statements of 10 banks listed on the Iraqi stock exchange over the 2017–2021 timeframe provided secondary data. The results demonstrated that there is a substantial and adverse correlation between the financial performance of banks and their independent boards. Similarly, [61], who looked at Saudi Arabian listed companies, discovered that independent directors had no effect on the decrease in earnings management.

Similar to this, [59] examined how the characteristics of the board of directors affected the reduction of earnings management. For the years 2015–2020, researchers gathered information from Jordanian non-financial enterprises' published financial reports, which included 94 businesses from the industries and services sectors. The results showed no connection between board independence and EM. The findings of [34], [63], [65], and [62] are in line with these results. The expectation is that non-executive directors will force executives to keep an eye on the process of developing financial information. Hence, the following hypothesis:

- **H3:** Board independence has no significant effect on earnings management.

The Moderating Role of Accounting Expertise

In addition to enabling them to effectively carry out their duties by utilising their vast financial knowledge and experience, financial experience is a critical characteristic that sets Board of

Directors members apart. This competency is also essential for protecting the company's assets and allowing it to meaningfully provide executive management with insightful financial advice [12]. Furthermore, board members who possess accounting and financial knowledge effectively supervise the financial report preparation process, resulting in increased accuracy and transparency [66]. According to [67], on the other hand, board members who lack enough financial knowledge could find it difficult to adequately advise their colleagues. According to the resource dependence theory, directors also supply important human capital, such as knowledge, experience, and reputation, as well as relational capital, which includes relationships with other businesses and the outside world. These resources play a key role in improving the firm's skills and strategic posture, emphasising the vital function that directors play in supplying the necessary connections and expertise to propel organisational success [40].

In a similar vein, businesses need a skilled board that can successfully support organisational objectives [68]. In this situation, one of the most important factors influencing the makeup of the board is accounting experience. Accounting expertise has sadly gotten relatively little attention in previous studies, despite the fact that it greatly improves the level of corporate governance (CG) inside organisations. Since accounting expertise has a significant impact on board members' performance, firms should give it top priority [36]. Therefore, directors who have relevant accounting education or experience tend to be more credible and effective with shareholders, which supports board empowerment [69]. By minimising conflicts and promoting shareholder trust, a board with accounting expertise helps to lower agency expenses. Despite its importance, the literature has frequently ignored how accounting expertise affects a company's success or failure. Therefore, the goal of the current study is to look at how important experienced directors are in controlling company profits.

Similarly, this study intends to elucidate the relationship between board expertise and earnings management in listed non-financial firms in Iraq, recognising the critical role of accounting expertise within boards and identifying a research gap regarding the influence of directors' expertise on earnings management within firms. Similarly, the scant literature on accounting competence highlights the urgent need for boards to increase their role in achieving the highest level of audit quality possible within the company [12]. It is often known that board experience enhances decision-making and resource allocation, which benefits company performance [70]. Expected to produce numerous contributions to scholarly research and real-world implementation, this project has the potential to greatly enhance knowledge in the areas of agency theory, board committees, and corporate governance (CG).

Moreover, directors supply important human capital, such as knowledge, experience, and reputation, in accordance with the resource dependency hypothesis [8]. The study used data from 2014 to 2018 and a sample of 37 companies listed on the Nigerian Stock Exchange. Their study's findings showed a strong correlation between earnings manipulation (EM) and the audit committee's financial and governance experience. Board members with accounting and finance backgrounds are effective in limiting earnings management, according to research by [17] and [71], which found that the board's financial knowledge is important and adversely associated with EM.

The majority of studies have revealed the importance of accounting expertise in the board. The results of studies in regard to developing markets are conflicting. For example, [72] did not discover a significant association. Similarly, the findings of [73] could not discover any statistically significant correlation. Nevertheless, prior research has not sufficiently examined the matter of accounting expertise. Consequently, this study anticipates that AEXP will increase board effectiveness and lead to improved EM. As a result, the study suggested the following hypotheses for further research:

- **H4a:** Accounting expertise significantly moderates the relationship between gender diversity and earnings management.
- **H4b:** Accounting expertise significantly moderates the relationship between busyness and earnings management.
- **H4c:** Accounting expertise significantly moderates the relationship between board independence and earnings management.

The theoretical framework of the study is shown in Figure 1.

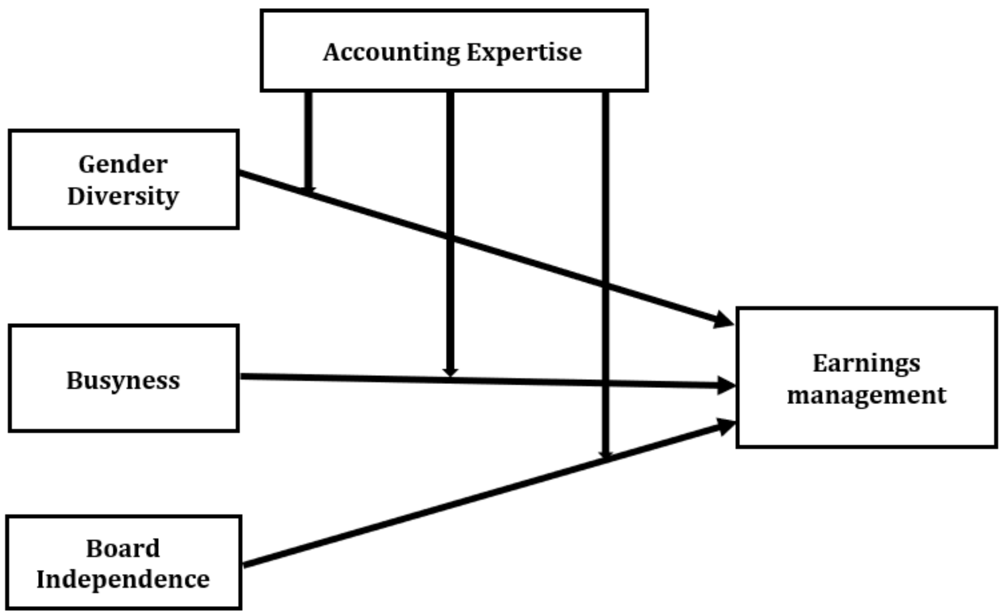

Figure 1. Theoretical framework

RESEARCH METHODOLOGY

Sample and Data

The sample included every listed non-financial company on the Iraqi stock exchange. The primary methods used for data collection were quantitative ones. This study's target population consists of 46 non-financial companies. The 13-year research period runs from 2010 until 2022. In order to guarantee the collection of sufficient data for producing reliable results, a 13-year period was defined. The sample selection process included two criteria. In order to estimate the discretionary accruals during the sample period, firms must first have enough data. Second, for the data to remain consistent, companies shouldn't be involved in any mergers or acquisitions. The information was taken from the chosen companies' annual reports. In accordance with the Modified Jones model, data on cash, debt, sales, assets, and liabilities were behind by lagging for one period. The final data collection, which included 598 firm-year observations spanning 13 years and 46 businesses, was the result of these procedures.

Measurement of Variables

Dependent Variable:

The dependent variable is the management of earnings. Based on earlier research, this analysis estimates discretionary accruals as a gauge of the degree of EM using the modified Jones model [74].

$$\frac{\text{TAt}}{\text{At}-1} = a_1 \left(\frac{1}{\text{At}-1}\right) + a_2 \left[\frac{(\Delta\text{REVt} - \Delta\text{RECt})}{\text{At}-1}\right] + a_3 \left(\frac{\text{PPEt}}{\text{At}-1}\right) + \varepsilon_{it}$$

The difference between net profit and operational cash flows from operations is known as total accruals or TAt. At-1—total assets at year t-1's conclusion; PPEt, or property, plant, and equipment, at the end of year t; ΔRECt, or the difference between net receivables in year t and year t-1; and ΔREVt, or the difference between operating revenues in year t and year t-1.

Independent Variables:

The three main board characteristic variables used for this study are board gender diversity, busyness, and board independence. The study looked at gender diversity in this way since prior research defined board gender diversity as the presence of women on corporate boards. In order to quantify this variable, the study employed the ratio of female board members to all board members seated on the board [1] nad [75]. To gauge busyness, we use a variable that indicates the average number of additional board seats each member holds. The number of board members divided by the number of additional seats held by each firm's members yields this figure [47] and [76]. A gauge of the board's independence is the number of outside directors. The ratio of independent directors to total directors [77] and [78] served as a gauge for this variable.

Moderator Variable:

As previously mentioned, we looked at how accounting expertise affected the connection between board characteristics and EM. Measured in accordance with earlier research, this variable indicates the proportion of board members that possess financial and accounting expertise. Measured as the ratio of the number of board members with financial competence to the total number of board of director members, this variable was in line with [3], [61], and [1].

Control Variables:

According to prior studies, this article adjusts for the effects of two company-specific factors: firm age and firm performance. According to existing research, company age has a major impact on EM [72]. As a result, the natural logarithm of the years from incorporation was used to calculate company age [79]. The study included return on assets (ROA) as a control variable in response to research that showed a connection between company success and EM (C7) [1], and [80].

Regression Model and Data Analysis

This study examined the association between board characteristics and earnings management of Iraqi non-financial enterprises using two models. Using Model 1, this study assessed the direct correlation between board characteristics and earnings management. Furthermore, the second model uses Model 2 to assess the mild impact of accounting expertise on the association between board characteristics and earnings management:

Model 1

$$EM_{it} = \beta_0 + \beta_1 BGD_{it} + \beta_2 BBUSYNESS_{it} + \beta_3 BINDEP_{it} + \beta_4 FA_{it} + \beta_5 ROA_{it} + \varepsilon$$

Model 2

$$EM_{it} = \beta_0 + \beta_1 BGD_{it} + \beta_2 BBUSYNESS_{it} + \beta_3 BINDEP_{it} + \beta_4 AEXP_{it} + \beta_5 (BGD* AEXP)_{it} + \beta_6 (BBUSYNESS * AEXP)_{it} + \beta_7 (BINDEP * AEXP)_{it} + \beta_8 FA_{it} + \beta_9 ROA_{it} + \varepsilon$$

Because STATA 13 is widely used and accepted in panel data estimate methods, it was used to analyse the data. The study uses the system generalised method of moments (SGMM), which is based on previous research, to handle econometric and statistical issues such as omitted variable bias, measurement error, autocorrelation, heteroscedasticity, endogeneity, simultaneity, reverse causation, etc.[81], and [82].

RESULTS AND DISCUSSION

Table 1 displays the sample descriptive statistics for the 2010–2022 research variables. The average earnings management value was 0.033, indicating that listed companies in the Iraqi community are more likely to participate in income-increasing (positive) EM and are less cautious. These findings closely resemble those of [37]. According to Table 1, the average percentage of board gender was 0.235, which suggests that there aren't many women on boards of Iraqi-listed companies. The average percentage of busyness directors was 0.793, indicating that the board has a higher percentage of busyness directors. The average percentage of independent directors on the board was 0.791, indicating that there are more outside directors than executive directors. The average level of accounting expertise was 0.202.

Table 1: Research Variable Descriptive Statistics for the Years 2010–2022.

Variable	Obs	Mean	Std. Dev.	Min	Max
EM	598	0.033	0.337	0.977	1.017
GD	598	0.235	0.149	0.000	0.669
BUSYNESS	598	0.793	0.123	0.232	1.000
IND	598	0.791	0.124	0.232	1.000
AEXP	598	0.202	0.810	0.000	2.000
ROA	598	0.057	0.098	-0.289	0.485
FA	598	4.103	0.546	2.305	5.169

Correlation Analysis

Understanding the kind and strength of the link between study variables is the aim of correlation analysis. Table 2 displays the pairwise correlation coefficients for the variables under investigation. According to Pearson pairwise correlation coefficients, there is a positive and statistically significant correlation between earnings management, board gender diversity ($r = 0.486$; $\rho < 0.05$), board busyness directors ($r = 0.678$; $\rho < 0.05$), board independence ($r = 0.587$; $\rho < 0.05$), ROA ($r = 0.179$; $\rho < 0.05$), and firm age ($r = 0.091$; $\rho < 0.05$).

Table 2: Pairwise Correlation.

	EM	GD	BUSYNESS	IND	AEXP	ROA	FA
EM	1.000						
GD	0.486*	1.000					
BUSYNESS	0.678*	0.781	1.000				
IND	0.587*	0.792	0.991	1.000			
AEXP	-0.114*	-0.071*	-0.202*	-0.100*	1.000		
ROA	0.179*	-0.059	-0.028	0.042	-0.059	1.000	
FA	0.091*	-0.097*	0.062	0.066	0.071*	0.115*	1.000

Regression Results

We use the Sargan-Hansen test for over-identifying restrictions to evaluate the instrument's validity before testing the hypotheses. Since all p-values are greater than 0.1, the test results shown in Table 3 verify that the models do not reject the null hypothesis of valid instruments. In addition, [83] AR (2) presented the second-order serial autocorrelation test. The findings demonstrate that the models' instruments were suitable. The GMM system estimate and size-based distinction. The results show that the AR (2) test does not reject the null hypothesis that there is no second-order autocorrelation and that none of the Hansen/Sargan test requirements exclude the instruments utilised. The specifications were therefore legitimate.

Table 3 displays the outcomes of the direct impact of Model 1. Hypothesis H1 is rejected since the results showed that gender diversity positively significantly affected EM ($\beta = 0.313$, ρ-value<0.05). The results are consistent with those of [13], [68], [34], [17], and [7]. This runs counter to the agency hypothesis, which holds that having more women on the board increases its ability to keep an eye on the calibre of financial reporting procedures and discourages earnings manipulation. Conversely, the results contradict [38], [63], [35], [33], [40], [1], and [36]. However, there was no correlation between board gender diversity and EM practices, according to [18], [19], [29], and [27]. The results further indicated that board busyness had a positive and significant effect on EM ($\beta = 0.544$, ρ -value<0.05); hence, H2 was rejected. [76], [47], and [17] all reported similar outcomes. Conversely, the results contradict [84], [43], and [85]. [86] However, no significant association between board busyness and EM was discovered. H3 was excluded since the data also showed that board independence significantly and favourably affected EM (β = 0. 424, ρ-value<0.05). [60], [65], and [34] reported similar results and [63] and [86], found no association between board independence and EM. On the other hand, the findings go counter to [38], [59], [86], and [1], who discovered a strong inverse relationship between EM and board independence. Additionally, EM was positively and significantly impacted by firm performance ($\beta = 0.383$, $\rho < 0.05$). The results are in line with those of [87] and [13], who contend that high-performing companies are more likely to manage their earnings. They do, however, go counter to the findings of [88], who found a negative correlation. Firm age and EM show a positive and significant relationship ($\beta = 0.348$, $\rho < 0.05$), indicating that older enterprises often have greater levels of EM than younger ones. The findings are consistent with those of [1]. They do, however, conflict with the findings of [72], who discovered a negative correlation. According to model 2, earnings management is negatively and significantly impacted by accounting expertise ($\beta = -0.079$, $\rho < 0.05$). These findings are consistent with earlier research by [24], [1], and [35]. However, the findings go counter to [73], who could not discover any statistically significant correlation. Board members with accounting and finance backgrounds are better equipped to carry out their supervisory responsibilities in the financial reporting process.

In order to investigate the moderating influence of accounting expertise on the link between board gender and EM, Table 3 presents the regression findings. H4a was accepted since the data showed that the interaction coefficient between gender diversity and accounting expertise was negative and significant ($\beta = -0.281$, $\rho < 0.05$). The findings indicate that the involvement of female directors with appropriate accounting experience enhances earnings management more than that of female directors without such experience. These findings concur with earlier research by [13], [68], [17], and [7]. Furthermore, according to the results, the addition of accounting expertise as a moderating variable had a negative and significant impact on the interaction between members' busyness and EM; the interaction coefficient between members' busyness and accounting expertise is ($\beta = -0.382$, $\rho < 0.05$); as a result, H4b was accepted. Outside directors carry out a crucial oversight and supervision role. They must provide an unbiased, independent assessment of the audit function, internal controls, and the financial reporting process. Furthermore, the interaction between board independence and EM was adversely and substantially impacted by the addition of accounting experience as a moderating variable ($\beta = -0.392$, $\rho < 0.05$); as a result, H4c was accepted. These findings concur with earlier research by [18], [84], and [89]. These results support the idea that knowledgeable directors are viewed as intellectual assets by the organisations in which they make decisions and are in line with agency theory and resource dependency theory. These results show that the negative association between these attributes— gender diversity, busyness, board independence, and EM—increases with accounting expertise. Therefore, board accounting expertise will lessen the practice of manipulating earnings.

Table 3: System Generalised Method of Moments Regression Results.

	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**
Constant	-0.181(0.572)	-0.886(0.616)	-0.633(0.616)	-0.535(0.613)	-0.576(0.619)
Control					
ROA	0.383(0.091) **	0.378(0.091) **	0.339(0.091) **	0.339(0.091) **	0.339(0.091) **
FA	0.348(0.312)	0.424(0.313)	0.320(0.311)	0.366(0.310)	0.379(0.311)
Board Characteristics					
GD	0.313(0.159) **	0.302(0.158) **	0.290(0.157) **	0.233(0.157) **	0.238(0.158) **
BUSYNESS	0.544(0.140) **	0.531(0.141) **	0.566(0.147) **	0.588(0.147) **	0.598(0.147) **
IND	0.424(0.122) **	0.433(0.122) **	0.423(0.122) **	0.411(0.122) **	0.431(0.122) **
Moderating Variable					
AEXP		-0.079(0.025) **	-0.078(0.254) **	-0.064(0.027) **	-0.065(0.0260) **
Interplay					
GD * AEXP			-0.261(0.113) **	-0.273(0.113) **	-0.281(0.115) **
BUSYNESS * AEXP				-0.376(156) **	-0.382(0.158) **
IND					-0.392(0.157) **
Post-estimation tests					

AR (2)	0.537	0.577	0.825	0.834	0.786
Sargan	0.078	0.083	0.169	0.162	0.149
Hansen	0.248	0.282	0.346	0.345	0.346
Observation	598	598	598	598	598
Groups	46	46	46	46	46
Wald Chi2	168.15	178.82	176.89	183.56	183.04
** P < 0.05, Standard Errors in Parentheses					

CONCLUSIONS AND RECOMMENDATIONS

The characteristics of the board that impact its effectiveness reduce the motivation for managers to use unethical earnings management techniques. As a result, this study looked at how board characteristics and EM are related to Iraqi-listed companies. The analysis took into account panel data for 2010 to 2022 as well as a sample of 46 businesses. The study concentrated on three aspects of board characteristics—board gender, board busyness, and board independence—in light of prior research. There was a favourable correlation between board gender, board busyness, and board independence and EM. These suggest that the three aspects are ineffective at stopping opportunistic behaviours associated with EM. without members having access to accounting expertise. Furthermore, this study provided evidence in favour of accounting expertise as a moderating factor between board and EM, which might account for the consistent results regarding the relationship between board characteristics and EM. In particular, the study found that the moderating effect of accounting experitise moderated the relationship between board gender, board busyness, board independence and earnings management, and significantly reduced rates of positive discrimination.

Investors can evaluate the impact of board qualities on EM with the help of the study's conclusions. Regulators ought to think about establishing a suitable standard of corporate governance that complements accounting expertise. They must specifically take into account board characteristics that strengthen board oversight procedures and raise the calibre of results since they might boost investor trust. As with other research, the results of this one should be treated with caution, even though they are innovative. First, there can be potential inaccuracies in the variables' measurements. Discretionary accruals, for example, served as a stand-in for EM; nevertheless, measuring methods may have varied in earlier research. Second, more research can take into account the potential omission of other board features and control factors that could influence EM. Third, the sample came from a developing nation with comparatively weak institutional and legal frameworks. Fourth, although the current study only looked at non-financial organisations, further research on financial companies may be conceivable. Lastly, because institutional frameworks and corporate governance norms are always changing, the results might not be applicable to other eras.

Additionally, board composition may vary every year. Notwithstanding the aforementioned drawbacks, this work adds to the continuing discussion on the connection between EM and board features. Furthermore, this study only looked at three general characteristic characteristics. Therefore, future research may look at additional board characteristic elements that were not considered in this study. Furthermore, given the limitations of the modified Jones model utilised in this study to quantify EM, future research may examine alternative models to estimate EM. Last but not least, future research may take into account a comprehensive range of corporate governance factors, including stock ownership, audit committee composition, and remuneration structure, all of which are probably more likely to reduce profits manipulation.

References

[1] P. N. Githaiga, P. Muturi Kabete, and T. Caroline Bonareri, "Board characteristics and earnings management. Does firm size matter?," *Cogent Bus. Manag.*, vol. 9, no. 1, 2022, doi: 10.1080/23311975.2022.2088573.

[2] P. M. Healy and J. M. Wahlen, "A Review of the Earnings Management Literature and Its Implications for Standard Setting," *Account. Horizons*, vol. 13, no. 4, pp. 365–383, Dec. 1999, doi: 10.2308/acch.1999.13.4.365.

[3] Y. A. Al-Matari, "Does the Expertise of the Audit Committee Chairperson Moderate the Association Between Audit Committee Attributes and Firm Performance?," *J. Gov. Regul.*, vol. 11, no. 4 Special Issue, pp. 365–373, 2022, doi: 10.22495/jgrv11i4siart17.

[4] A. Klein, "Firm Performance and Board Committee Structure," *J. Law Econ.*, vol. 41, no. 1, pp. 275–304, Apr. 1998, doi: 10.1086/467391.

[5] M. C. Jensen and W. H. Meckling, "Theory of the firm: Managerial behavior, agency costs and ownership structure," *J. financ. econ.*, vol. 3, no. 4, pp. 305–360, Oct. 1976, doi: 10.1016/0304-405X(76)90026-X.

[6] E. F. Fama and M. C. Jensen, "Separation of Ownership and Control," *J. Law Econ.*, vol. 26, no. 2, pp. 301–325, Jun. 1983, doi: 10.1086/467037.

[7] E. Arioglu, "The affiliations and characteristics of female directors and earnings management: evidence from Turkey," *Manag. Audit. J.*, vol. 35, no. 7, pp. 927–953, 2020, doi: 10.1108/MAJ-07-2019-2364.

[8] C. I. Asogwa, G. N. Ofoegbu, J. I. Nnam, and O. D. Chukwunwike, "Effect of corporate governance board leadership models and attributes on earnings quality of quoted nigerian companies," *Cogent Bus. Manag.*, vol. 6, no. 1, 2019, doi: 10.1080/23311975.2019.1683124.

[9] S. P. Ferris, N. Jayaraman, and M.-Y. (Stella) Liao, "Better directors or distracted directors? An international analysis of busy boards," *Glob. Financ. J.*, vol. 44, p. 100437, May 2020, doi: 10.1016/j.gfj.2018.05.006.

[10] M. S. Beasley, "An empirical analysis of the relation between the board of director composition and financial statement fraud," *Account. Rev.*, vol. 71, no. 4, pp. 443–465, 1996, doi: 10.2469/dig.v27.n2.79.

[11] S. Turley and M. Zaman, "Audit committee effectiveness: informal processes and behavioural effects," *Accounting, Audit. Account. J.*, vol. 20, no. 5, pp. 765–788, Sep. 2007, doi: 10.1108/09513570710779036.

[12] O. T. Hazzaa, D. F. Abdullah, and A. M. Sadaa, "INFLUENCE OF CEO CHARACTERISTICS Jo u rn a l P of," *J. Open Innov. Technol. Mark. Complex.*, p. 100290, 2024, doi: 10.1016/j.joitmc.2024.100290.

[13] A. M. Zalata, C. G. Ntim, M. H. Alsohagy, and J. Malagila, *Gender diversity and earnings management: the case of female directors with financial background*, vol. 58, no. 1. Springer US, 2022. doi: 10.1007/s11156-021-00991-4.

[14] A. Huu Nguyen, D. Thuy Doan, and L. Ha Nguyen, "Corporate Governance and Agency Cost: Empirical Evidence from Vietnam," *J. Risk Financ. Manag.*, vol. 13, no. 5, p. 103, May 2020, doi: 10.3390/jrfm13050103.

[15] S. Terjesen and R. Sealy, "Board Gender Quotas: Exploring Ethical Tensions From A Multi-Theoretical Perspective," *Bus. Ethics Q.*, vol. 26, no. 1, pp. 23–65, Jan. 2016, doi: 10.1017/beq.2016.7.

[16] A. Kirsch, "The gender composition of corporate boards: A review and research agenda," *Leadersh. Q.*, vol. 29, no. 2, pp. 346–364, Apr. 2018, doi: 10.1016/j.leaqua.2017.06.001.

[17] A. A. Gull, M. Nekhili, H. Nagati, and T. Chtioui, "Beyond gender diversity: How specific attributes of female directors affect earnings management," *Br. Account. Rev.*, vol. 50, no. 3, pp. 255–274, Apr. 2018, doi: 10.1016/j.bar.2017.09.001.

[18] H. J. Hammadi and M. R. Jassim, "The Effect Of The Demographic Characteristics Of The Board Of Directors On The Quality Of Receivables: A Study On A Sample Of Companies Listed In The Iraqi Stock Exchange," *Tikrit J. Adm. Econ. Sci.*, vol. 18, no. 58, 1, pp. 56–73, 2022, doi: 10.25130/tjaes.18.58.1.4.

[19] A. Washali, "Board Diversity and Its Impact on Corporate Performance of Public Companies Listed in Amman Stock Exchange: The Case of Banks and Insurance Companies," pp. 467–487, 2019.

[20] aead S. Dakhil., M. R. Jassim, and A. H. Fares, "The Impact of Demographic Characteristics of Board directors on Unconditional conservatism: A Study on a Sample of Companies Listed on the Iraq Stock Exchange," *J. Bus. Econ. Appl. Res.*, vol. 1, no. 1, pp. 269–286, 2021.

[21] Y. A. Al-Matari, "Do the characteristics of the board chairman have an effect on corporate performance? Empirical evidence from Saudi Arabia," *Heliyon*, vol. 8, no. 4, p. e09286, 2022, doi: 10.1016/j.heliyon.2022.e09286.

[22] M. Fahlevi, M. Gt, and S. Aisjah, "The impact of board independence and CEO education on earning manipulation beneish M-score models," *Test Eng. Manag.*, vol. 83, no. March-April, pp. 18264–18276, 2020, [Online]. Available: http://www.testmagzine.biz/index.php/testmagzine/article/view/6957/5365

[23] S. D. Wulandari, N. Indrawati, A. S. Program, A. S. Program, and A. S. Program, "Chief Financial Officer Accounting Education," *Int. J. Econ. Bus. Manag. Res.*, vol. 5, no. 09, pp. 164–176, 2021.

[24] H. A. N. Al-Refiay, "The Effect of Audit Committee Chair Characteristics in Earnings Management: Evidence from the UK," *J. Baghdad Coll. Econ. Sci.*, 2021.

[25] M. W. A. Associate, "The Role of Corporate Governance in Controlling the Earnings Management Practices of Palestinian Shareholding Industrial Companies: A Field Study Dr.," *Arab J. Adm.*, vol. 39, no. 2, pp. 99–124, 2019, doi: 10.21608/aja.2019.36042.

[26] L. Ioualalen, H. Khemakhem, and R. Fontaine, "The Impact of Audit Committee Characteristics on Earnings Management: A Canadian Case Study," *Case Stud. Bus. Manag.*, vol. 2, no. 1, p. 68, Jun. 2015, doi: 10.5296/csbm.v2i1.7901.

[27] J. Sun, G. Liu, and G. Lan, "Does Female Directorship on Independent Audit Committees Constrain Earnings Management?," *J. Bus. Ethics*, vol. 99, no. 3, pp. 369–382, 2011, doi: 10.1007/s10551-010-0657-0.

[28] S. N. Abdullah and K. N. I. K. Ismail, "Women directors, family ownership and earnings management in Malaysia," *Asian Rev. Account.*, vol. 24, no. 4, pp. 525–550, 2016, doi: 10.1108/ARA-07-2015-0067.

[29] J. M. García Lara, B. García Osma, A. Mora, and M. Scapin, "The monitoring role of female directors over accounting quality," *J. Corp. Financ.*, vol. 45, pp. 651–668, Aug. 2017, doi: 10.1016/j.jcorpfin.2017.05.016.

[30] A. Ujunwa, "Board characteristics and the financial performance of Nigerian quoted firms," *Corp. Gov.*, vol. 12, no. 5, pp. 656–674, 2012, doi: 10.1108/14720701211275587.

[31] L. H. H. Weber, "Is Audit Committee Expertise Related to Earnings Quality? Evidence from Germany," *J. Manag. Issues*, vol. 32, no. 3, pp. 294–317, 2020, [Online]. Available: http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=0&sid=361c5099-560d-4b55-b212-8cc6b2a3e188%40sessionmgr4006

[32] S. M. Pulungan, "Accounting Conservatism Analysis in Indonesia after Adoption of IFRS and Relation to the Characteristics of the Board As One of the Mechanism of Corporate Governance," *Soc. Sci. Res. Netw.*, pp. 1–26, 2014.

[33] R. Walton and M. A. Tribbitt, "Examining the impact of gender power and gender diversity within the top management team on firm performance and firm risk," *Am. J. Bus.*, vol. 38, no. 1, pp. 22–37, 2023, doi: 10.1108/ajb-05-2022-0081.

[34] J. K. Agyemang, "The Relationship Between Audit Committee Characteristics and Financial Performance of Listed Banks in Ghana," *Res. J. Financ. Account.*, vol. 11, no. 10, pp. 22–35, 2020, doi: 10.7176/rjfa/11-10-03.

[35] H. M. Galal, M. M. Soliman, and M. B. Bekheit, "The Relation between Audit Committee Characteristics and Earnings Management: Evidence from Firms Listed on the Egyptian Stock Market," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1439–1467, 2022, doi: 10.4236/ajibm.2022.129080.

[36] S. T. Kangea, T. Nasieku, and W. Muturi, "Effect of Board Diversity on Earnings quality of Non-Financial Firms Listed at the Nairobi Securities Exchange," *J. Appl. Financ. Bank.*, vol. 12, no. 3, pp. 55–75, 2022, doi: 10.47260/jafb/1234.

[37] R. Umer, N. Abbas, and S. Hussain, "The Gender Diversity and Earnings Management Practices: Evidence from Pakistan," *CITY Univ. Res. J.*, vol. 2, no. 10, pp. 342–357, 2020.

[38] M. Usman, J. Nwachukwu, and E. Ezeani, "The impact of board characteristics on the extent of earnings management: conditional evidence from quantile regressions," *Int. J. Account. Inf. Manag.*, vol. 30, no. 5, pp. 600–616, 2022, doi: 10.1108/IJAIM-05-2022-0112.

[39] A. D. Sakhil and S. T. Ali, "Profit Management, Board Independence and their Interactive Effects on Operational Cost Stability in Companies Listed on the Iraqi Stock Exchange Affiliation," *Al-Kut Univ. Coll. J.*, 2022.

[40] A. Zarefar and I. M. Narsa, "Do corporate governance drive firm performance? Evidence from Indonesia," *Gest. e Prod.*, vol. 30, no. April, 2023, doi: 10.1590/1806-9649-2022V29E7322.

[41] E. M. A. Alsayani, M. N. Mohamad Nor, and E. M. Al-Matari, "Audit committee's chairman characteristics and auditor choice: an empirical evidence from Malaysia ACE market," *Cogent Bus. Manag.*, vol. 10, no. 1, 2023, doi: 10.1080/23311975.2022.2156086.

[42] A. Hamdan, "The Impact of Board Interlocking on Firm Performance," *Arab J. Adm. Sci.*, no. November 2019, 2020.

[43] K. Kamaludin, S. Sundarasen, and I. Ibrahim, "Moderation effects of multiple directorships on audit committee and firm performance: A middle eastern perspective," *Cogent Bus. Manag.*, vol. 10, no. 1, 2023, doi: 10.1080/23311975.2023.2194147.

[44] A. Hamdan, "The role of the audit committee in improving earnings quality: The case of industrial companies in GCC," *J. Int. Stud.*, vol. 13, no. 2, pp. 127–138, 2020, doi: 10.14254/2071-8330.2020/13-2/9.

[45] N. Sultana, H. Singh, and A. Rahman, "Experience of Audit Committee Members and Audit Quality," *Eur. Account. Rev.*, vol. 28, no. 5, pp. 947–975, 2019, doi: 10.1080/09638180.2019.1569543.

[46] S. P. Ferris and M. Y. Liao, "Busy boards and corporate earnings management: an international analysis," *Rev. Account. Financ.*, vol. 18, no. 4, pp. 533–556, 2019, doi: 10.1108/RAF-07-2017-0144.

[47] C. Ghafran, N. O'Sullivan, and S. Yasmin, "When does audit committee busyness influence earnings management in the UK? Evidence on the role of the financial crisis and company size," *J. Int. Accounting, Audit. Tax.*, vol. 47, no. May, 2022, doi: 10.1016/j.intaccaudtax.2022.100467.

[48] H. H. Huang and C. Wang, "Through the Grapevine : The Effect of CFO Network Centrality on Financial Reporting Quality," *China Account. Financ. Rev.*, vol. 22, no. 2, pp. 1–46, 2020.

[49] Y. A. Al-Matari, "Does the expertise of the audit committee chairperson moderate the association between audit committee attributes and firm performance?," *J. Gov. Regul.*, vol. 11, no. 4, special issue, pp. 365–373, Dec. 2022, doi: 10.22495/jgrv11i4siart17.

[50] J. Pfeffer, "Size, Composition, and Function of Hospital Boards of Directors: A Study of Organization-Environment Linkage," *Adm. Sci. Q.*, vol. 18, no. 3, p. 349, Sep. 1973, doi: 10.2307/2391668.

[51] N. Q. Abdulkarem and M. R. Jassim, "The impact of the quality of the external audit on real earnings management: An applied study on a sample of companies listed in the Iraq Stock Exchange," *Tikrit J. Adm. Econ. Sci.*, vol. 18, no. 58, 1, pp. 56–73, 2022, doi: 10.25130/tjaes.18.58.1.4.

[52] S. Abraham and P. Cox, "Analysing the determinants of narrative risk information in UK FTSE 100 annual reports," *Br. Account. Rev.*, vol. 39, no. 3, pp. 227–248, Sep. 2007, doi: 10.1016/j.bar.2007.06.002.

[53] E. F. Fama, "Agency Problems and the Theory of the Firm," *J. Polit. Econ.*, vol. 88, no. 2, pp. 288–307, Apr. 1980, doi: 10.1086/260866.

[54] E. Ezeani, R. Salem, F. Kwabi, K. Boutaine, Bilal, and B. Komal, "Board monitoring and capital structure dynamics: evidence from bank-based economies," *Rev. Quant. Financ. Account.*, vol. 58, no. 2, pp. 473–498, Feb. 2022, doi: 10.1007/s11156-021-01000-4.

[55] W. Xuezhou, R. Y. Hussain, H. Hussain, M. Saad, and S. A. Qalati, "Analyzing the impact of board vigilance on financial distress through the intervention of leverage structure and interaction of asset tangibility in the non-financial sector of Pakistan," *Int. J. Financ. Eng.*, vol. 09, no. 02, p. 1142, Jun. 2022, doi: 10.1142/S2424786321500043.

[56] S. S. M. Hassan, "The impact of board of directors' characteristics on financial distress: Empirical evidence from Egypt using logit and discriminant analysis models.," *Sci. J. Financ. Commer. Stud. Res.*, vol. 3, no. 1, pp. 205–234, Jan. 2022, doi: 10.21608/cfdj.2021.207373.

[57] N. K. Sandeep Goel, "Is earnings management related to board independence and gender diversity? Sector-wise evidence from India." p. Int. J. Discl. Gov., 2022.

[58] S. Cho and C. Chung, "Board Characteristics and Earnings Management: Evidence from the Vietnamese Market," *J. Risk Financ. Manag.*, vol. 15, no. 9, 2022, doi: 10.3390/jrfm15090395.

[59] S. M. Adous, S. Y. Al-Abdallah, and L. M. Wedyan, "The Impact of Board of Directors Characteristics on Reducing Earnings Management," *Acad. Account. Financ. Stud. J.*, vol. 25, no. 3, p. 2635, 2021.

[60] A. M. Ahmed and I. Hágen, "Corporate Governance and Its Relationship with Financial Performance in Iraq," *Acta Carolus Robertus*, vol. 13, no. 1, pp. 76–89, Jun. 2023, doi: 10.33032/acr.4099.

[61] A. A. Binashour, A. S. Albairaq, E. M. Sulaiman, A. F. Hayek, and I. Hazarika, "The Impact Of Board Of Director Characteristics On Earning Management In The Real Estate Companies Listed United Arab Emirates," *Acad. Account. Financ. Stud. J.*, vol. 12, no. SpecialIssue 1, pp. 1–12, 2021.

[62] I. Saleh, M. Abu Afifa, and A. Alkhawaja, "Internal corporate governance mechanisms and earnings manipulation practices in MENA countries," *Econ. Res. Istraz.* , vol. 36, no. 2, pp. 1–26, 2023, doi: 10.1080/1331677X.2022.2134902.

[63] N. Orazalin, "Board gender diversity, corporate governance, and earnings management: Evidence from an emerging market," *Gend. Manag.*, vol. 35, no. 1, pp. 37–60, 2020, doi: 10.1108/GM-03-2018-0027.

[64] D. M. H. F. A. A. A. H. J. A. A. S. O. Qeshta, "Audit Committee Characteristics and Firm Performance: Evidence from the Insurance Sector in Bahrain," *Rev. Gestão Inovação e Tecnol.*, vol. 11, no. 2, pp. 1666–1680, 2021, doi: 10.47059/revistageintec.v11i2.1789.

[65] M. Qeshta, "Audit Committee Characteristics and Firm Performance: Evidence from the Insurance Sector in Bahrain," *Rev. Gestão Inovação e Tecnol.*, vol. 11, no. 2, pp. 1666–1680, Jun. 2021, doi: 10.47059/revistageintec.v11i2.1789.

[66] J. Lee and J. Park, "The Impact of Audit Committee Financial Expertise on Management Discussion and Analysis (MD&A) Tone," *Eur. Account. Rev.*, vol. 28, no. 1, pp. 129–150, 2019, doi: 10.1080/09638180.2018.1447387.

[67] I. D. Bimo, E. E. Silalahi, and N. L. G. L. Kusumadewi, "Corporate governance and investment efficiency in Indonesia: the moderating role of industry competition," *J. Financ. Report. Account.*, vol. 20, no. 2, pp. 371–384, 2022, doi: 10.1108/JFRA-12-2020-0351.

[68] H. L. Huang, L. W. Liang, H. Y. Chang, and H. Y. Hsu, "The influence of earnings management and board characteristics on company efficiency," *Sustain.*, vol. 13, no. 21, 2021, doi: 10.3390/su132111617.

[69] M. M. Aleqab and M. M. Ighnaim, "The impact of board characteristics on earnings management," *J. Gov. Regul.*, vol. 10, no. 3, pp. 8–17, 2021, doi: 10.22495/JGRV10I3ART1.

[70] C. Ghafran and S. Yasmin, "Audit committee chair and financial reporting timeliness: A focus on financial, experiential and monitoring expertise," *Int. J. Audit.*, vol. 22, no. 1, pp. 13–24, Mar. 2018, doi: 10.1111/ijau.12101.

[71] M. K. Olum, "Impacts of Gender Diversity in Board of Directors and Audit Committee on Earnings Quality," *J. Account. Knowl.*, vol. 10, no. 1, 2019, doi: 10.22103/jak.2019.11887.2655.

[72] D. Bouaziz, B. Salhi, and A. Jarboui, "CEO characteristics and earnings management: empirical evidence from France," *J. Financ. Report. Account.*, vol. 18, no. 1, pp. 77–110, Jan. 2020, doi: 10.1108/JFRA-01-2019-0008.

[73] A. Farhan, S. N. Obaid, and H. Azlan, "Corporate governance effect on firms' performance – evidence from the UAE," *J. Econ. Adm. Sci.*, vol. 33, no. 1, pp. 66–80, May 2017, doi: 10.1108/JEAS-01-2016-0002.

[74] P. M. Dechow, R. G. Sloan, and A. P. Sweeney, "Dechow_et_al_1995.pdf," *The accounting Review*, vol. 70, no. 20. pp. 193–225, 1995.

[75] G. Cai, W. Li, and Z. Tang, "Religion and the Method of Earnings Management: Evidence from China," *J. Bus. Ethics*, vol. 161, no. 1, pp. 71–90, Jan. 2020, doi: 10.1007/s10551-018-3971-6.

[76] H. Y. Al Mukhaymar, "The Effect of Board of Directors' Characteristics on Payout Policy: An Empirical Study on Saudi Banks," *Arab J. Adm.*, vol. 0, no. 0, pp. 0–0, 2022, doi: 10.21608/aja.2022.127202.1216.

[77] A. Ali, "Audit committee characteristics and earning management of insurance companies in Ethiopia," *Cogent Bus. Manag.*, vol. 11, no. 1, Dec. 2024, doi: 10.1080/23311975.2023.2301136.

[78] S. Chen, Y. Ye, K. Jebran, and M. A. Majeed, "Confucianism culture and corporate cash holdings," *Int. J. Emerg. Mark.*, vol. 15, no. 6, pp. 1127–1159, Mar. 2020, doi: 10.1108/IJOEM-08-2019-0590.

[79] U. S. Bhutta, A. AlHares, Y. Shahab, and A. Tariq, "The jinx of real earnings management: evidence from inefficient investments and debt maturity structure in Pakistan," *J. Account. Emerg. Econ.*, vol. 12, no. 2, pp. 405–432, Mar. 2022, doi: 10.1108/JAEE-03-2021-0079.

[80] S. Triki Damak, "Gender diverse board and earnings management: evidence from French listed companies," *Sustain. Accounting, Manag. Policy J.*, vol. 9, no. 3, pp. 289–312, Jul. 2018, doi: 10.1108/SAMPJ-08-2017-0088.

[81] H. N. Dang, K. Hoang, V. T. Vu, and L. Van Nguyen, "Do socially responsible firms always disclose high-quality earnings? Evidence from an emerging socialist economy," *Asian Rev. Account.*, vol. 29, no. 3, pp. 291–306, Aug. 2021, doi: 10.1108/ARA-11-2020-0174.

[82] L. Leszczensky and T. Wolbring, "How to Deal With Reverse Causality Using Panel Data? Recommendations for Researchers Based on a Simulation Study," *Sociol. Methods Res.*, vol. 51, no. 2, pp. 837–865, May 2022, doi: 10.1177/0049124119882473.

[83] M. Arellano and S. Bond, "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations," *Rev. Econ. Stud.*, vol. 58, no. 2, p. 277, Apr. 1991, doi: 10.2307/2297968.

[84] V. Q. Trinh, M. Elnahass, A. Salama, and M. Izzeldin, "Board busyness, performance and financial stability: does bank type matter?," *Eur. J. Financ.*, vol. 26, no. 7–8, pp. 774–801, May 2020, doi: 10.1080/1351847X.2019.1636842.

[85] N. De Vlaminck and G. Sarens, "The relationship between audit committee characteristics and financial statement quality: evidence from Belgium," *J. Manag. Gov.*, vol. 19, no. 1, pp. 145–166, Feb. 2015, doi: 10.1007/s10997-013-9282-5.

[86] M. Habbash, C. Sindezingue, and A. Salama, "The effect of audit committee characteristics on earnings management: Evidence from the United Kingdom," *Int. J. Discl. Gov.*, vol. 10, no. 1, pp. 13–38, Feb. 2013, doi: 10.1057/jdg.2012.2.

[87] S. P. Kothari, A. J. Leone, and C. E. Wasley, "Performance matched discretionary accrual measures," *J. Account. Econ.*, vol. 39, no. 1, pp. 163–197, 2005, doi: 10.1016/j.jacceco.2004.11.002.

[88] A. Ali, T.-Y. Chen, and S. Radhakrishnan, "Corporate disclosures by family firms," *J. Account. Econ.*, vol. 44, no. 1–2, pp. 238–286, Sep. 2007, doi: 10.1016/j.jacceco.2007.01.006.