

***The impact of CEO attributes on real earnings management in Saudi Arabia***

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***Received: 16/12/2024***

***Accepted : 04/03/2025***

***Published: 31/03/2025***

**Abstract:**

This research aims to investigate and determine the relationship between CEO characteristics and REM of Saudi financial firms from 2012 to 2023. Four attributes of a chief executive officer have been examined in this study: tenure, duality, ownership, and financial expertise. 504 observations throughout twelve years, from 2012 to 2023, make up the sample. CEO ownership, duality, and financial expertise have a significant negative association with real earnings management out of the four characteristics. However, the last feature of this study is CEO tenure, which the current research demonstrated to have a positive and significant relationship with real earnings management.

**Keywords:** CEO, real earnings management, Saudi Arabia, Financial firm

**Jel Classification Codes:** M40 ,M41.

## **1. Introduction :**

A pressing inquiry exists over the extent to which the chief executive officer (CEO) exercises discretion in influencing the company's decisions. Hambrick and Finkelstein (1987) assert that CEOs differ based on the extent of their discretion. The authors propose that the qualities of the managers influence managerial decisions. Finkelstein and Boyd (1998) identified CEO attributes, including tenure, share ownership, and experience, as critical elements that augment their discretion. In this paper, we limited our focus on the effect of CEO characteristics on real earnings management. The main claim of this empirical study is to investigate the relationship between CEO characteristics and manipulation in King Saudi Arabia firms using a unique dataset of (the Gulf Cooperation Council), which contains characteristics data on top executives and financial data of firms over the past 13 years (2012-2023).

According to our limited knowledge, it could be argued that very few studies have been conducted on CEO characteristics in Gulf countries in general and in KSA, in particular. This is primarily due to limited data available in this area. Perhaps this is the reason why the association of CEO characteristics with real earnings management remains a grey area.

**1.1. Research Aims:** With all these in mind, this study aims at achieving several objectives:

First, it strives to bridge the gap in the literature by providing the first rigorous econometrics evidence on CEO characteristics with REM and by contributing to a better understanding of CEO characteristics.

In light of all of these, this study seeks to accomplish several objectives: By offering the first thorough econometrics evidence on CEO characteristics with REM and by advancing our knowledge of CEO characteristics, it first aims to close the gap in the research.

Second, it looks at how the CEO and REM interact in firms that are listed in the Kingdom of Saudi Arabia. Third, it aims to chronicle the CEO's involvement in a company by improvising on Jaiswal and Bhattacharyya's (2016) empirical technique. Lastly, it makes an effort to offer fresh perspectives on this subject to benefit KSA's scholars, policymakers, and board members.

As previously said, this study's main goal is to look into how CEO traits and REM relate to one another in the context of the Kingdom of Saudi Arabia. One may argue that the focus on KSA is essential since it was noted that most studies on CEOs and their impact on REM has been done in the markets of Western industrialized nations, while less is known about CEO traits in the Middle East. Since the Islamic economic system strikes a balance between capitalism and Marxism, it offers a distinct edge over other nations like the US and the UK when it comes to undertaking corporate governance research.

Additionally, KSA participates actively in the GCC. Furthermore, perhaps most significantly, the KSA economy is regarded as the biggest among the GCC nations. Given how similar the managerial, economic, social, and political situations are in the other GCC nations, this specific aspect may enable us to extrapolate our research findings to other GCC companies. Additionally, research conducted in the context of the Kingdom of Saudi Arabia reveals some of its salient characteristics that set it apart from other developing and developed nations (Abdulkarim, 2016).

Furthermore, the growing number of KSA-listed businesses between 2012 and 2023 necessitated and encouraged attempts to improve the efficacy of the CEO's traits to lessen manipulation in KSA

companies. Saudi Arabia is an interesting and important market to study because it is a member of the G20 and contributes 25% of the Arab world's GDP. In terms of GDP, Saudi Arabia is the most prominent Arab economy in 2020 and 2021, according to Forbes Middle East. Furthermore, one of the biggest exporters of oil worldwide is Saudi Arabia.

Al-Duais, Malek, Abdul Hamid, and Almasawa (2022) claim that after the numerous accounting scandals that shook the world (Elzahaby, 2021), in particular REM, earnings management has drawn the attention of researchers and regulators worldwide. For a variety of reasons, businesses would instead manage earnings through actual business operations than accrual-based EM (Dong, Wang, Zhang, and Zhou 2020). The function of CG mechanisms in reducing EM, a type of agency problem, has been thoroughly examined in earlier research (Wan Mohammad and Wasiuzzaman, 2020). Nevertheless, the CEO greatly influences EM and is crucial to corporate accounting practices (Dong et al., 2020).

Furthermore, earnings manipulation occurs when management purposefully tampers with the company's reporting structure to benefit himself. Managers have the option to manipulate actual earnings or accrual earnings at their discretion. The intentional alteration of the accounting processes or estimations utilized in the financial statement preparation process is known as accrual earnings management (AEM) (Zang, 2012). Contrarily, REM entails deviations from standard operating procedures intending to mislead shareholders into believing that the financial statement has been prepared by standard operating procedures (Roychowdhury, 2006).

## **2.Literature Review and Hypotheses:**

### **2.1 Real earnings management:**

REM and AEM are the two categories into which previous research has divided EM (Dong et al., 2020; Roychowdhury, 2006). Scholars have recently focused more on REM. According to Nasir, Razaque, and Ahmed (2018), most EM nowadays takes the form of REM. "Management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain earnings thresholds" is how Roychowdhury (2006) defines REM.

Accordingly, researchers have documented several operational activities that a company uses to manage earnings, such as manipulating price reductions and favourable credit terms to increase sales, lowering maintenance costs, reducing overproduction to lower the unit cost of goods, shifting shipment schedules or postponing or eliminating hiring, reducing the travel budget, purchasing stock options, delaying or cancelling software spending, deferring a new project, selling assets, hedging, repurchasing stock, capital investments, debt-equity swaps, and securitization (Alquhaif, Al-Gamrh, and Latif, 2020; Roychowdhury, 2006).

Real and accrual-based earnings management differ in their metrics, timing, and associated expenses. Unlike accrual-based earnings management, the REM must be executed during the fiscal year, which can still be altered post-fiscal year-end. Another body of literature examines the trade-off effects between real and accrual-based earnings management (e.g., Cohen and Zarowin, 2010; Zang, 2012). The selection between real and accrual-based earnings management is contingent upon the comparative costs of each, as both methods incur expenses (Zang, 2012). Furthermore, to attain specific objectives, managers likely employ various strategies concurrently. This study diverges from the predominant literature on traditional accruals-based earnings management by emphasizing executive actions related to actual earnings manipulation and examining the influence of CEO traits on this manipulation.

Kothari, Leone, and Wasley (2005) and Fields, Lyz, and Vincent (2001) are two examples of previous earnings management research that heavily emphasizes accrual-based earnings management. In contrast to accrual-based earnings management, executive REM has recently attracted research attention and produced substantial theoretical and empirical works. This is particularly true in light of the dividend irrelevance hypothesis, which states that managers have more leeway to manipulate earnings by using real activities manipulation as a strategy because auditors and outsiders are unlikely to notice it (Chou and Chan, 2018).

Because conventional accrual-based earnings management is subject to accounting procedures or estimations that must be disclosed in financial statements, auditors can identify it more readily (Järvinen and Myllymäki, 2016). On the other hand, REM itself is not necessary for regulators to explain and has no bearing on widely accepted accounting principles (GAAP). Roychowdhury (2006) showed that managers will attempt to use REM to influence reported profitability in relation to standard operational actions, such as granting price breaks, overproducing, and cutting back on discretionary spending.

## **2.2. Hypothesis development**

Recent studies have shown that the CEO significantly impacts the accounting results of the reporting organization (Kouaib and Jarboui, 2016). Furthermore, there is evidence that the CEO's ownership, financial expertise, experience, and CEO duality all contribute to their ability to maintain a high-caliber financial report.

Furthermore, by reducing the possibility of profit manipulation, a CEO's attributes enhance his ability to prevent and safeguard the company's assets, according to certain scholars like Zhang (2009). The following subsections discussed the evolution of the presumptions about the CEO's attributes and how they relate to profit management.

### **2.2.1. CEO Tenure and Real Earnings Management**

According to the empirical evidence, there are differing views on the impact of CEO tenure. On the one hand, CEO tenure is seen to provide significant benefits for managers, which lowers agency costs (Naseem, Rehman, Ahmad, and Ali, 2020). Long-serving CEOs usually have a thorough understanding of their organizations and operating environments. They have stronger networks with key stakeholders and are more adept at managing strategic risk-taking. Furthermore, these CEOs may acquire crucial skills, expertise, and significant information over time (Simsek, 2007).

However, long-serving CEOs may be considered seasoned experts, which might work against the company's success (Berger, Ofek, and Yermack, 1997). Longer tenure may lead to more people adhering to outdated assumptions about the business and its environment (Schwenk, 1993). Therefore, tenure and corporate performance may have a negative correlation as long-tenured CEOs are less likely to develop successful ideas.

This stance is supported by the findings of Miller (1991) and Le, Nguyen, Hunjra, Truong, and Ntim (2024), who found that short-tenured CEOs demonstrated a stronger relationship between the company's environment, strategy, and structure. Consequently, CEO tenure and profit are usually negatively correlated. In more recent studies, CEO tenure is a proxy for CEO power (Altunbaş, Thornton, & Uymaz, 2018). They conclude that corporate misconduct may result when a CEO has too much authority and influence.

This study hypothesizes that:

H1. There is a negative relationship between CEO tenure and real earnings management.

### **2.2.2 CEO ownership and real earnings management.**

According to agency theory, CEOOW should align its interests with those of its shareholders (Jensen and Meckling, 1976). This is predicated on the idea that managers with a significant stake in the business would use their clout to make prudent decisions to safeguard their investment. According to stakeholder theory, the CEO is therefore obliged to protect the interests of all stakeholders by ensuring that the appropriate accounting procedures and norms are selected (Patrick, Paulinus, and Nympha, 2015).

Many scholars have provided evidence about the relationship between CEO ownership and earnings management. For example, a CEO with a higher interest may utilize his voting power to influence the quality of the company's reporting (Santiago-Castro and Brown, 2011). According to Vu, Phan, and Le (2018), the CEO's ownership of shares also lessens agency conflict, who contend that a CEO with a higher ownership position is likely to increase the company's financial performance.

Many scholars have provided evidence about the relationship between CEO ownership and earnings management. For example, a CEO with a higher interest may utilize his voting power to influence the quality of the company's reporting (Santiago-Castro and Brown, 2011). According to Vu et al. (2017), a CEO with a higher interest in the company's stock is likely to increase its financial performance, minimizing agency conflict.

Nonetheless, scholars such as Yang et al. (2008) and Bergstresser and Philippon (2006) point out that directors with a sizable voting shareholding might opportunistically control profitability. The findings of Laux and Laux (2009) provide strong evidence that CEO ownership and earnings management are not significantly correlated. The following is the hypothesis of this study:

H2. There is a negative relationship between CEO ownership and real earnings management.

### **2.2.3. CEO financial expertise and real earnings management.**

Experience in a certain business function area causes managers to understand and process information differently. According to Putra and Setiawan (2024), a particular business function area offers particular goals, remuneration, and procedures.

Managers with accounting and financial backgrounds are more knowledgeable about the flexibility of accounting standards, and they ultimately use accrual earnings management to surpass profit goals, according to Qi, Lin, Tian, and Lewis (2018).

CEOs with backgrounds in finance and accounting can also overcome the challenges of managing accrual earnings due to the complexity of accounting standards, auditor independence, and regulatory oversight. A CEO with a background in finance is said to be crucial in putting suitable accounting rules into place and managing the financial reporting procedure (Baatwah et al., 2015). According to earlier research, the impact of profit management is empirically limited by the

financial skill of the CEO. For instance, Jiang et al. (2013) show that a CEO with financial experience delivers higher-quality profit data. They also advise the CEO to be guided by financial competence to identify and curb the trend of actual earnings management. Additionally, real

earnings management efforts and CEO financial skills are negatively correlated, according to Baatwah et al. (2015). To put it briefly, CEOs who possess more excellent financial knowledge and have worked in the industry before are more likely to apply their abilities to raise the caliber of reporting.

Expanding on this contention, the research hypothesizes that:

H3. There is a negative relationship between CEO financial expertise and real earnings management.

#### **2.2.4 CEO duality and real earnings management.**

Based on the agency theory and the stewardship theory, two schools of thought are about separating the power between the chairman and CEO (Abdul Rahman and Haniffa, 2005). By offering cross-checking evidence against the potential for too-ambitious ambitions by the CEO, proponents of the agency theory contend that the separation of the two positions is essential for assessing the efficacy of the board over management. Because if an individual has two key roles, they are likely to adopt tactics that prioritize their interests above the company's. According to Zulkafli et al. (2005), these opinions favor the division of powers, with two distinct people serving as chairman and CEO, enabling the board to supervise operations effectively.

Stewardship theory proponents, on the other hand, think that the two positions work well together to improve decision-making and enable a CEO with + a strategic vision to lead the board in achieving a company's goals with the least amount of board intervention.

To elaborate on this claim, the study postulates that:

H4. There is a negative relationship between CEO duality and real earnings management.

### **3. Research Methodology**

A thorough explanation of the data utilized in this investigation is given in this section. The sources from which the data was gathered are first listed. Second, a detailed description of the sample selection process is provided.

#### **3.1 Sample and data**

As previously stated, this study aims to assess the influence of the CEOs of financial listed businesses in the Saudi stock market database, the CEOs of these companies, and the financial reports that argaamm.com provides for the years 2012 through 2024. Financial listed companies on the Saudi stock exchange (Tadawul) comprise the study's primary sample; 45 listed companies were eliminated because of incomplete data, leaving 42 firms in the final sample. Table I displays a variety of financial listed businesses from three categories on the Saudi stock exchange (Tadawul).

### 3.2 Variables measurement

<b>Table I</b>	<b>Research sample</b>	
Sector	Firm's no.	(%)
BANK	10	23.8
Insurance	8	19.04
Financial Services	24	57.14
Total	42	100

**The source:** Prepared by the researcher based on the outputs of the Stata program.

The study's variables were divided into dependent and independent factors to examine the impact of CEO attributes on REM in KSA enterprises.

### 3.3 Regression equation

In the analysis, this study suggested using econometric models. The model examines how the CEOs affect REM.

$$REM = \beta + \beta_1 CEOFIEX_{it} + \beta_2 CEOOW_{it} + \beta_3 CEOTE_{it} + \beta_4 CEODU_{it} + \epsilon_{it}$$

REM represents real earnings management, CEO financial expertise by CEOFIEX, CEO ownership by CEOOW, CEODU by CEO Duality, and CEO tenure by CEOTE.

### 3.4 Descriptive statistic

The mean, minimum, and maximum values of REM are 0.350, -1.85, and 5.02, respectively, based on the descriptive data shown in Table 2. This suggests that Saudi financial listed corporations manipulated genuine activity to manipulate income and earnings. This is evidence of inadequate earnings quality and actual earnings management.

Chief executive officers only control 8% of voting shares, according to the mean CEO ownership value of 0.799. The CEO's financial knowledge has a mean of 0.84, a minimum of 0.00, and a maximum of 1.00. This suggests that 84% of CEOs possess business, accounting, and financial knowledge, which may assist them in raising the caliber of their profits. Furthermore, the CEO tenure ranges from 4 years on average to 23 years on average. Additionally, CEODU has an average value of 0.332. This means that around 33.22 percent of Saudi CEOs are dualistic.

	Variable	Obs	Mean	Std. Dev.	Min	Max
	REM	504	0.3501042	0.75486	-1.85	5.02
	CEOFIEX	504	0.8406667	0.126047	0	1
	CEODU	504	0.3322917	0.109028	0	1
<b>Table II.</b>	CEOTE	504	4.133333	2.628027	0	23
<b>Descriptive statistic</b>	CEOOW	504	0.2447292	0.088629	0	0.799

**The source:** Prepared by the researcher based on the outputs of the Stata program.

#### 4. Pearson’s Correlation Matrix for the variables

The Pearson correlation matrix for all of the research variables is shown in Table III. According to the results, the CEOFIEX and REM correlation coefficient is the greatest at 0.746. This indicates no multicollinearity issue because it is smaller than the 0.8 recommended by Hair et al. (2014).

Similarly, Table III shows that, at the 1 percent and 5 percent significance levels, respectively, CEODU and CEOTE exhibit a positive relationship with REM. On the other hand, the coefficient below shows a substantial negative correlation with REM.

Variables	REM	CEOFIEX	CEODU	CEOTE	CEOOW	
REM	1					
CEOFIEX	0.672***	1				
CEODU	0.0048***	0.072**	1			
CEOTE	0.1295**	-0.0162*	-0.0061**	1		<b>Table III.</b>
CEOOW	0.046***	0.0147**	-0.0052	-0.3092***	1	<b>Correlation matrix</b>

**The source:** Prepared by the researcher based on the outputs of the Stata program.

#### 5. Regression Result

Using the random effect (RE) model, this study examines the relationship between REM and CEO attributes (CEO tenure, CEO duality, CEO ownership, and CEO financial acumen) using data from Saudi-listed financial enterprises. RE regression is used once the Hausman specification test and the Breusch-Pagan LM test are finished. The random effect (RE) and pooled OLS are selected using the LM test. The Hausman test selects between the Fixed Effect (FE) and RE models. In both tests, the RE model has been preferred. The outcomes of the random effect regression are shown as follows in Table 4:

Variable	Coef.	t	P>t
CEOFIEX	-0.8319762	1.42	0.000***
CEODU	-0.0729264	-0.11	0.000***
CEOTE	0.0316551	-1.07	0.01**
CEOOW	-0.661687	-7.59	0.000***
_cons	1.499383	2.36	0.023
Observations	504		
No. of Observations	42		
R <sup>2</sup>	0.3225		
Wald chi2 (8)	129.225		
Prob>chi2	0.000***		

**The source:** Prepared by the researcher based on the outputs of the Stata program.

According to the RE regression result in Table 4, the explanatory factors account for 32.25% of the variation in the dependent variable, with an R<sup>2</sup> value of 0.3225. The model's goodness of fit is shown by the fact that the outcome shows that it is significant (Wald chis2(8) =129.225, p<0.01).

Furthermore, the outcome displayed in Table 4 implies that CEOOW is negative and significant (= -0.661687; p0.01), indicating that the CEO's capacity to enhance the quality of reporting is increased when he owns more shares. This is in line with Kim and Lu's (2011) findings that CEOW raises a company's market value. This result confirms our theory that a CEO's ownership enhances his ability to limit the frequency of actual profit manipulations.

The regression coefficient for CEO financial competence shows that CEOFIEX significantly reduces real earnings manipulation (b = -0.8319762, p = 0.000), indicating a CEO's financial experience's function in reducing the impact of earnings manipulation. The findings corroborated those of Baatwah, Salleh, and Ahmad (2015), who concluded that CEOFIEX enhances timely financial reporting and lessens the extent of earnings manipulation.

Regarding CEO tenure, the findings show a positive relationship between CEOTE and REM (b = 0.0316551, p = 0.01), suggesting that CEOs with longer tenure are more likely to solidify the company's resources. This can be explained by the notion that, depending on their position, CEOs with longer tenure can aggressively control profitability. The shortcomings in corporate governance and the rising corruption that defined the Saudi economy might cause a positive correlation between CEO tenure and actual earnings management.

The regression coefficient for CEODU shows that real earnings manipulation is significantly impacted negatively by CEO duality (b = -0.0729264, p = 0.000), indicating the function of a CEO with duality in reducing the impact of earnings manipulation. The findings corroborated those of

Baatwah, Salleh, and Ahmad (2015), who concluded that CEO duality enhances timely financial reporting and lessens the extent of earnings manipulation.

## 6. Conclusion:

Based on information gleaned from the annual reports of 42 financial businesses listed on the Bursa Saudi market, this study investigated the impact of CEO attributes on the REM of Saudi finance companies. The data indicates that the REM in Saudi stocks is lessened by CEO ownership, CEO dualism, and CEO financial expertise. At the same time, this study's favourable, substantial findings were documented by CEO tenure.

Only listed financial businesses from the Bursa Saudi website were used in this study, which has some limitations that may be addressed in future research. New researchers will investigate the impact of CEO characteristics on the REM of unlisted businesses and the various business sectors. Some more possible topics for future research include the CEO's age, nationality, and personal traits.

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