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-RESEARCH ARTICLE-

EARNINGS MANAGEMENT, COMPANY VALUE, CORPORATE GOVERNANCE, EVIDENCE FROM NON-FINANCIAL COMPANIES

Yousef Shahwan

Accounting Department, Zarqa University, Jordan
Email: yshahwan@zu.edu.jo

Amal Abuhussein

Accounting Department, Zarqa University, Jordan
Email: amal_whiteflower@yahoo.com

Ruaa Binsaddig

Department of Finance, University of Business and Technology, Jeddah, 21448, Saudi Arabia
Email: r.binsaddig@ubt.edu.sa

─Abstract─

The present study aimed to assess the influence of earnings management on firm value, considering the moderating role of corporate governance. Corporate governance, as a moderating factor, encompasses managerial discretion, audit organisation, board structure and disclosure, and shareholder rights within service and industrial firms listed on the Saudi Stock Exchange. Data were collected from 740 firm-year observations of non-financial companies listed on the exchange. The study employed panel data regression methods, utilising fixed effects and ordinary least squares (OLS) estimation to conduct the analysis. The findings indicate that opportunistic earnings management by managers offers minimal benefits to firms with robust corporate governance mechanisms. Furthermore, the relationship and robustness tests demonstrate that effective corporate governance mechanisms constrain managerial opportunism in earnings management, thereby preventing the associated decline in firm value. Additionally, the study highlights certain limitations encountered by the author and offers insights for future researchers to address existing gaps in the literature.

Keywords: Earnings Management; Saudi Stock Exchange; Company Value; Saudi,

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Corporate Governance.

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INTRODUCTION

Several researchers have defined earnings management (EM) in previous years. For instance, (Schipper, 1989) characterised EM as a "purposeful intervention in the external financial reporting process with the intent of obtaining some private gain." EM influences investor perceptions, alters management compensation, reduces governmental intervention, and decreases the likelihood of loan covenant violations (Healy & Wahlen, 1999). Managers may engage in revenue manipulation through EM, as this approach is subject to fewer extensive audits and controls, as well as external oversight from political legislators, the public, and the media (Cohen et al., 2008; Pires, 2011; Vakilifard & Mortazavi, 2016).

Moreover, EM generates concerns regarding conflicts of interest between shareholders and management due to misaligned incentives and divergent objectives. Management may adopt either effective or opportunistic EM strategies to regulate revenue (Chen et al., 2001). In the first scenario, effective EM enhances firm quality, fosters economic sustainability, and conveys the company's intrinsic value through improved data transparency and stakeholder interactions, leading to a positive relationship between EM and firm value (FV). However, when managerial discretion is exercised opportunistically, it may diminish cash flow (CF) or distort resource allocation to artificially inflate reported profits for personal gain. Additionally, financial misrepresentation may prevent markets from accurately assessing the firm's actual worth, resulting in a negative association between EM and FV.

Previous studies have identified both positive and negative relationships between EM and FV. The positive correlation is supported by signalling theory, which suggests that EM provides shareholders with private financial information, enabling them to forecast and stabilise the firm's future performance (Dye, 1988). Conversely, the negative relationship is attributed to managerial opportunism and information asymmetry, wherein managers may manipulate accounting records to create an illusion of short-term business success, ultimately compromising the firm's long-term stability. From a managerial perspective, EM is closely linked to CG within the framework of agency theory. Effective corporate governance regulations enhance both financial and non-financial performance while promoting disclosure and transparency in all interactions. This is because corporate governance mechanisms mitigate conflicts of interest among shareholders. Consequently, firms with strong CG structures tend to perform better, indicating a positive correlation between CG and FV (Brown & Caylor, 2006; Gompers et al., 2003).

The degree of transparency and willingness to disclose financial results is determined

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by the level of CG within an organisation. In this study, the author argues that sound CG practices influence managerial behaviour in relation to EM, particularly when compared to merely implementing monitoring mechanisms. Effective CG can establish a robust oversight framework by enhancing board and committee independence, increasing the accessibility of financial disclosures, and strengthening audit committees. Consequently, strong CG enhances transparency and mitigates agency conflicts, thereby restricting managers from engaging in EM for self-serving purposes. However, if EM practices are perceived as beneficial, the CG framework may not necessarily constrain them. Additionally, effective CG may help to mitigate the negative association between EM and FV.

Numerous studies have explored the relationship between CG and FV (Black et al., 2006; Lei & Song, 2012; Rouf, 2011) as well as between EM and FV (Abbas & Ayub, 2019; Darmawan et al., 2019). This study extends prior research by examining the bidirectional relationship among EM, CG, and FV simultaneously. To determine whether CG moderates the relationship between EM and FV, the author conducts an interaction analysis. Additionally, the study explores whether specific CG attributes exert a stronger influence on the link between EM and FV. The statistical analysis considers five key CG characteristics: managerial discretion, audit organisation, disclosure practices, board structure, and shareholder rights.

By analysing industrial and service sector firms listed on the Saudi Stock Exchange between 2011 and 2020, the findings suggest that managerial opportunism in EM is negatively associated with FV. Notably, in firms with strong CG frameworks, the opportunistic nature of EM is less pronounced. This indicates that the negative relationship between EM and FV is moderated by CG. Furthermore, multivariate regression analysis reveals an inverse relationship between CG strength and EM activity, suggesting that robust CG mechanisms can deter managerial engagement in EM. The results also show that in firms with high CG, the significant negative relationship between EM and FV diminishes, implying that managerial opportunism in EM is less prevalent in well-governed firms. Based on these findings, the study concludes that firms with effective CG do not necessarily experience the decline in FV associated with EM, as strong governance mechanisms discourage managerial opportunism. This research contributes significantly to the fields of accounting and finance by emphasising the role of CG regulations in enhancing corporate profitability. The results provide strong support for the benefits of CG implementation. Moreover, the study demonstrates that firms with strong CG exhibit superior earnings quality compared to those with weak CG. Ultimately, CG regulations enhance corporate transparency, managerial credibility, and overall organisational integrity.

REVIEW OF LITERATURE

Company Value, Earnings Management

According to Meckling and Jensen (1976), agency theory explores the contractual

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relationship between the principal (the owners) and the agents (the managers). Since managers aim to maximise their personal wealth, while principals seek to enhance corporate performance, a divergence in objectives arises. Consequently, firms should implement compensation structures that align the interests of owners and managers, ensuring equitable treatment of both parties (Jensen & Murphy, 1990). Conflicts of interest may manifest in various forms, including: (i) the prospect of future employment opportunities with an organisation or individual with whom the employee engages in an official capacity, (ii) access to privileged or sensitive information acquired through a separate official role, (iii) holding multiple public sector positions that entail conflicting responsibilities, and (iv) personal or familial relationships, including obligations towards friends and relatives, as well as competitive affiliations. Such conflicts can emerge across all organisational levels and may be mitigated through the adoption of corporate governance policies, the implementation of ethical business training, and the establishment of formal disclosure mechanisms.

Prior research shows executives use management discretion and personal knowledge to make decisions, potentially enhancing profit quality and reflecting a company's intrinsic value (Siregar & Utama, 2008; Katmon & Farooque, 2017). However, flexible financial and accounting standards may encourage opportunistic behaviour, such as manipulating profitability, leading to misaligned incentives between shareholders and management (Dechow et al., 1995; Zhang et al., 2008). With minimal regulatory scrutiny, management may engage in EM to safeguard their positions, maintain corporate image, and ensure predictable revenues, reflecting opportunism (Grabiński & Wójtowicz, 2022). Techniques include inflating current year revenues, artificially boosting sales or gains, or adjusting costs to present a favourable outlook. Other methods involve early or fake earnings recognition, one-time gains, shifting expenses or earnings across periods, underreporting liabilities, or reallocating future earnings or expenses to the current year (specific costs or gains).

Ronen and Yaari (2008) distinguished between smart and opportunistic EM. Effective EM, aligned with signalling theory, can enhance CV by providing investors with confidential financial information to predict future performance. Management leverages accounting flexibility, such as prudent rules, to improve profitability and influence future cash flows. However, under information asymmetry, management may engage in EM to mislead the market and boost FV (Suffian et al., 2015). In contrast, opportunistic EM harms FV, as management prioritises self-interest, misaligning incentives with shareholders, reducing CV, distorting revenue disclosure, and leading to inaccurate company valuation (Abbas & Ayub, 2019; Roychowdhury, 2006). Thus, EM can be a short- or long-term strategy that harms the market, as management with access to confidential data may manipulate current-year financials, impacting future performance. Based on the aforementioned dissection the following hypothesis proposed.

H1: *Earning management significantly negative impact on the company value, thereby*

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this will clarify the prevalent opportunistic EM is in companies.

Company Value and Corporate Governance

Corporate governance employs internal and external measures to address conflicts of interest between stakeholders (e.g., shareholders, directors, managers) and external parties (e.g., creditors, minority owners). The World Bank defines it as a system of rules, practices, and processes that enhance resource efficiency and sustain long-term CV. The OECD outlines four core principles: responsibility, transparency, accountability, and fairness, with additional emphasis on independence and disclosure. Corporate governance mechanisms are divided into internal factors (e.g., board composition, management ownership, executive compensation) and external factors (e.g., debt financing, audit quality) (Alzeaideen, 2018; Barnhart & Rosenstein, 1998). CG can be categorised into low and high levels based on the data policies and strategies implemented. Strong CG frameworks promote transparency by ensuring the disclosure of public information, thereby reducing information asymmetry, managerial opportunism, and agency costs. Furthermore, CG initiatives play a crucial role in enhancing a firm's financial performance. When a company maintains transparency throughout its operations, shareholders and other stakeholders develop trust and confidence, ultimately improving the quality of CG and enhancing both CV and reliability (Black et al., 2006; Saona et al., 2020; Yoon et al., 2006).

Previous research has developed and refined distinct CG measures based on accounting, legal, and financial data, demonstrating that higher CG scores (SCG) positively influence CV. For instance, (Gompers et al., 2003) found a positive correlation between CG and CV in large U.S. firms using a Corporate Governance Index (ICG) comprising 24 governance criteria. Similarly, (Brown & Caylor, 2006), employing Tobin's Q as a performance measure, established a positive relationship between CG and seven key CG components. Klapper and Love (2004) identified a link between market valuation, operational efficiency, and strong CG in firms from developing economies and developed a CG framework for publicly listed firms in Saudi Arabia, highlighting the positive effects of CG policies on CV. Patel and Dallas (2002) further argued that transparency, as a component of the CG Index, includes essential CV-related information derived from publicly disclosed governance reports. Research shows that CG practices transcend national legal systems, effectively addressing inefficiencies in countries with weak legal protections (Imran et al., 2022; Klapper & Love, 2004). CG enhances FV by boosting investor confidence, supporting dividend distribution, and reducing capital costs (La Porta et al., 2002). Based on this analysis, the following hypothesis is proposed.

H2: *Practicing corporate governance positively and significantly impacts company value.*

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Earning Management, Company Value, and Corporate Governance

The presence of incentives provided by both parties gives rise to conflicts of interest between principals and agents. Although principals and agents occupy distinct roles, interests, and positions, they remain mutually dependent. Agents possess operational knowledge of the company but lack full decision-making authority, whereas principals have the right to access internal company data. Moreover, when information asymmetry exists between the two parties, monitoring and regulating agent behaviour becomes increasingly challenging. Consequently, CG enhances FV by mitigating agency conflicts, serving as an effective mechanism for resolving principal-agent disputes (Subanidja et al., 2016). Tobin's Q ratio is commonly employed as a measure of FV, reflecting the return on investment and indicating diversification and investment decisions. It also illustrates the relationship between FV, managerial decisions, and share ownership, which can be used to assess the current state of the stock market (Subanidja et al., 2016).

A high Tobin's Q ratio suggests a strong brand reputation and significant growth potential. Conversely, a low Tobin's Q ratio indicates either increasing market competition or an industry in decline. Previous research, such as (Byard et al., 2006; Jiang et al., 2008) shows a negative link between strong CG and EM practices. Reduced management opportunism and increased control by major owners further minimise EM (Kazemian & Sansui, 2015). In the U.S., firms with high CG implement robust monitoring, enhance financial disclosure, and reduce EM. Similarly, concentrated ownership, board independence, and managerial ownership in high-CG firms lower accounting breaches, fraud, and EM, especially with IFRS adoption (Al-Ramahi et al., 2021; Alves, 2012; Lee et al., 2015; Osma & Noguer, 2007; Xie et al., 2003).

While EM negatively impacts CV by distorting cash flows (Abbas & Ayub, 2019; Roychowdhury, 2006), strong CG positively correlates with CV, offering both short- and long-term benefits (Klapper & Love, 2004). Key CG elements like audit quality and shareholder rights significantly reduce EM, with improved auditing curbing such practices. The audit committee, in particular, enhances earnings quality for firms of all sizes (Christensen et al., 2015). Strong CG traits, such as transparency, confidence, and control, reflect a company's core value and operational integrity. For investors seeking steady income with minimal risk, robust CG may enable EM to positively influence CV rather than harm it. This suggests that, in well-governed firms, EM could be used strategically to enhance CV, aligning with investor interests (Subanidja et al., 2016).

H3: *The mechanisms of corporate Governance significantly impact the negative relation between earning management and company value.*

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RESEARCH DESIGN AND MODELS

Framework of the Research

The framework of the research is depicted in Figure 1, illustrating the various relationships between each of the factors studied.

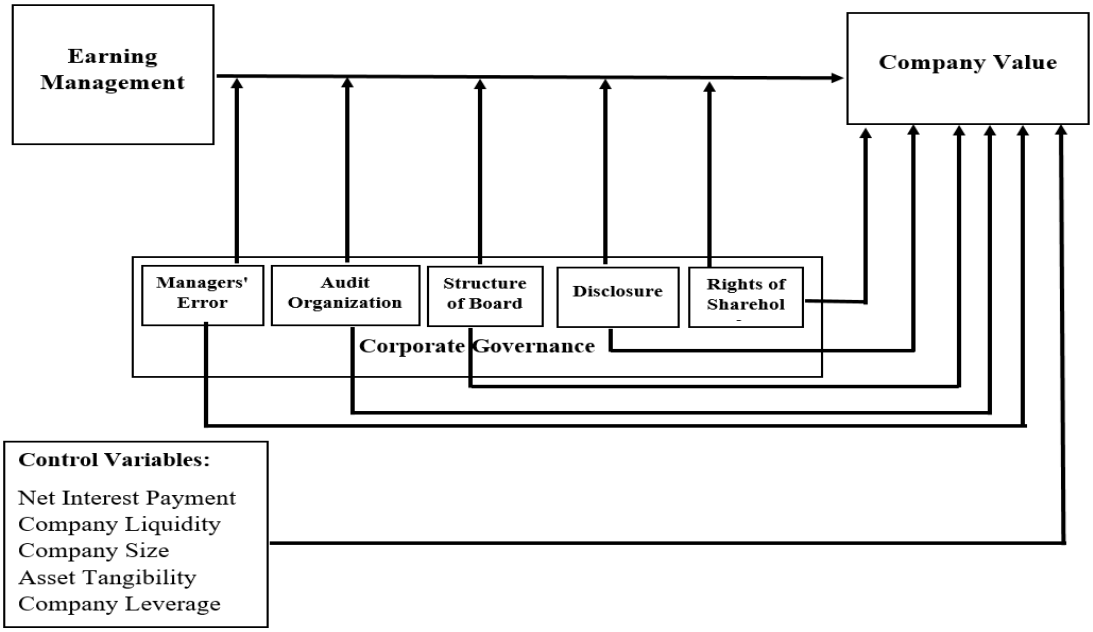

Figure 1: Framework of the Research

Determining the Earning Management

Since Roychowdhury (2006) model is widely recognised as the most frequently used and appropriate approach in EM research (Anagnostopoulou & Tsekrekos, 2017; Cohen et al., 2008; Zamri et al., 2013), it is employed in this study to assess variations in EM. To identify actual earnings manipulations aimed at avoiding losses, the author examines trends in the individual and total amounts of cash flow from operations (CFOP), administrative, general, and selling (AGS) expenses, and production costs for firms nearing a zero-profit benchmark. The aggregation of abnormal CFOP (ANCFOP), abnormal AGS costs (ANAGS), and abnormal production costs (ANPRD) results in the abnormal total EM (AN-EM). In calculating ANCFOP, the variance from actual and expected CFOP is determined using coefficients derived from lagged assets, firm-year sales, and industry-year models. Since both measures indicate negative residuals when companies engage in EM, the author introduces an opposing signal for the factors ANCFOP and ANAGS to enhance interpretability. The formula (1) is estimated using annual data, whereby larger residuals correlate with higher EM, resulting in positive AN-EM when firms manage profits through EM activities.

$$ANEM_{i,t,} = ANCFOP_{i,t,} * (-1) + ANAGS_{i,t,} * (-1) + \varepsilon ANPRD_{i,t,} \dots\dots\dots (1)$$

Where, the symbol t and i indicate the fiscal year and the company, respectively, the $ANPRD_{i,t}$: is the abnormal costs of production. Further, the $ANAGS_{i,t}$: is the abnormal SG&A expenses, while the $ANCFOP_{i,t}$: is the abnormal CFOP. Finally, the $ANEM_{i,t}$: is the abnormal aggregate earning management.

The formula of calculating the abnormal of the cash flow of operations (ANCFOP) as follow:

$$ANCFOP_{i,t,} = \alpha_0 + \alpha_1 \frac{1}{A_{i,t-1}} + \alpha_2 \frac{S_{i,t}}{A_{i,t-1}} + \alpha_3 \frac{\Delta S_{i,t}}{A_{i,t-1}} + \varepsilon_{i,t,} \dots\dots\dots (2)$$

Where, the symbol $ANCFOP_{i,t}$ is determined through $ANCFOP_{i,t} = CFOP_{i,t}$; $CFOP_{i,t}$ is the CFOP, $A_{i,t}{-}1$ indicates the total assets of the company; and $\Delta S_{i,t}$ measured as follows:

$$\Delta S_{i,t} = (S_{i,t} - S_{i,t} - 1)/S_{i,t} - 1$$

Where:
$S_{i,t}$ and $S_{i,t-1}$: Total sales of company i in the years (t and t – 1).
$\varepsilon_{i,t}$: Error term.
α_0: Intercept term.
The author assessments the AN-AGS expenses as showed in formula (3):

$$AN - AGS_{i,t} = \alpha_0 + \alpha_1(1/A_{i,t-1}) + \alpha_4(S_{i,t}/A_{i,t-1}) + \varepsilon_{i,t,} \dots\dots\dots (3)$$

Where, ASG: is the ASG expenses of company i in the years t. Furthermore, $ANAGS_{i,t}$: determined by $ANAGS_{i,t}= (ANAGS_{i,t}/A_{i,t-1})$.
In addition to the aforementioned, ANPRD calculated based on the formula (4).

$$\text{AN} - \text{PRD}_{i,t} = \alpha_0 + \alpha_1 \frac{1}{A_{i,t-1}} + \alpha_2 \frac{S_{i,t}}{A_{i,t-1}} + \alpha_3 \frac{\Delta S_{i,t}}{A_{i,t-1}} + \alpha_5 \frac{\Delta S_{i,t-1}}{A_{i,t-1}} \varepsilon_{i,t,} \dots\dots\dots (4)$$

$\Delta S_{i,t-1}$: Change in sales, that determined via $\Delta S_{i,t-1} = (S_{i,t-1} - S_{i,t-2})/S_{i,t-2}$.
$PRD_{i,t}$: Production cost, which calculated via $PRD_{i,t} = (CGS_{i,t}+\Delta TIN_{i,t})$; Where,
$\Delta TIN_{i,t}$: Changes in the inventory, which determined through $\Delta TIN_{i,t}=(TIN_{i,t}-TIN_{i,t-1})/TIN_{i,t-1}$. Moreover,
$TIN_{i,t}$ and $TIN_{i,t-1}$: Total inventory for company i in the years (i) in the years (t and t – 1).
$CGS_{i,t}$: Sum of the cost of goods sold for company i in the years (i) in the years (t).

Metrics of Corporate Governance

The five characteristics of CG are as follows: managers' errors (CG1, 11 indices), audit

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organisation (CG2, 44 indices), board structure (CG3, 55 indices), disclosure (CG4, 50 indices), and shareholder rights (CG5, 75 indices). These indices are aggregated by (Services, 2004) to determine the overall level of CG, referred to as the Standard Corporate Governance (SCG) score. The SCG has a maximum score of 235, with higher SCG values indicating greater transparency and improved CG practices. In accordance with Saudi company legislation, all listed firms are required to establish an audit committee, issue securities, appoint external directors, and disclose public information. Furthermore, as Saudi companies adopt IFRS, which enhances accounting standards and regulatory frameworks while reducing the likelihood of direct alterations to accounting records and financial disclosures, the SCG facilitates the comparison of companies both nationally and internationally (Services, 2004;) .

Model of the Study

Using panel data regression methods with fixed effects and OLS (Nwakuya & Ijomah, 2017), the author investigates the relationship between CG, EM, and CV in non-financial companies listed in Saudi Arabia. Tobin's Q is the dependent variable, while the independent variables include AN-EM, AN-CFOP, AN-AGS, AN-PRD, and SCG. Additional control variables are net interest payments, company liquidity, company size, asset tangibility, and company leverage (Jelinek, 2007; Vakilifard & Mortazavi, 2016).

Company Value and Earning Management

The coefficient β1 in formula (5) quantifies the relationship between EM activity and CV. If CV is negatively affected by EM, indicating opportunistic EM, β1 should be negative. Therefore, the author expects β1 to be negative.

$$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 ANEM_{i,t} + \beta_2 NIP_{i,t} + \beta_3 CLiq_{i,t} + \beta_4 CS_{i,t} + \beta_5 AT_{i,t} + \beta_6 Clev_{i,t} + \Sigma_{j=1}^{n}\beta_j Industry_{i,t} + \Sigma_{k=74}^{f}\beta_k Year_{i,t} + \varepsilon_{i,t,} \dots\dots\dots (5)$$

Where Tobin's-$Q_{i,t}$ is long-term liabilities book value, plus short-term liabilities book value, plus equity market value divided on the total assets in the book value in year t for company i. While, The abnormal CFOP ($ANCFOP_{i,t}$), abnormal SG&A expenses ($ANGS_{i,t}$), and abnormal production cost ($ANPRD_{i,t}$) make up the abnormal aggregate EM ($ANEM_{i,t}$).

In addition, the control variables (net interest payment, company liquidity, company size, asset tangibility, company leverage) are calculated as follows:

$NIP_{i,t}$: Net interest of payments, which calculated by [(Interest income-interest expenses)/Total assets].
$CLiq_{i,t}$: Company liquidity which determine via dividing current assets on current liabilities.

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$AT_{i,t}$: Assets tangibility, which assess through dividing The net fixed assets on the total assets.
$CS_{i,t}$: Company size, which determine through natural logarithm of total assets
$CLev_{i,t}$: Debt ration which calculated by [(current liabilities - noncurrent liabilities)/Total assets].

The dummy variable Yeari,t represents the year of the information, while the dummy variable Industryi,t denotes the industry of the company. There are two main non-financial sectors, with fifteen sub-sectors listed on the Saudi Stock Exchange, comprising a total of 74 companies (namely, Service and Industrial sectors). The error term is represented by εi,t. The symbol (t) refers to the year, and (i) refers to the company.

Earning Management, Corporate Governance, and Company Size

The relationship between EM behaviours and CG, as well as between EM and company size, is measured by coefficients β1 and β2 in formula (6). The author expects negative correlations for both β1 and β2, indicating opportunistic EM. Furthermore, due to the implementation of robust corporate governance policies that prevent managers from acting opportunistically, larger companies typically exhibit limited EM activity.

$$ANEM_{i,t} = \beta_0 + \beta_1 SCG_{i,t} + \beta_2 CS + \varepsilon_{i,t,} \dots\dots\dots (6)$$

Where, $SCG_{i,t}$ is the score of corporate governance of company (i) in year (t). It is contained of managers' error CG1i,t, audit organization CG2i,t, structure of board CG3i,t, the disclosure CG4i,t, and rights of shareholder. Consequently, CGSi,t: Logarithm of all components (CG1-CG5) of CG for company i in year t.

Company Value and Corporate Governance

Coefficient β1 in formula (7) measures the relationship between CG and CV. A positive β1 indicates that corporate governance positively influences CV, suggesting that effective CG and enhanced confidence may lead to an increase in CV. Therefore, the author expects β1 to be positive.

$$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 SCG_{i,t} + \beta_2 NIP_{i,t} + \beta_3 CLiq_{i,t} + \beta_4 CS_{i,t} + \beta_5 AT_{i,t} + \beta_6 Clev_{i,t} + \Sigma_{j=1}^{n} \beta_j Industry_{i,t} + \Sigma_{k=74}^{f} \beta_k Year_{i,t} + \varepsilon_{i,t,} \dots\dots\dots (7)$$

Company Value, Earning Management, and Corporate Governance

The relationship between EM and CV is quantified by coefficient β1 in formula (8), while the association between CG and CV is captured by coefficient β2. In the current model of this study, the author introduces the interaction term (ANEM $*$ SCG). The third hypothesis, which examines the moderating effect of CG on the relationship

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between EM and CV, is represented by coefficient β3. If β3 is positive, it indicates that the effect of CG on EM and CV is stronger than the individual relationships between EM and CV, and between CG and CV. The author anticipates that coefficients β2 and β3 will exhibit a positive effect, while coefficient β1 is expected to show a negative effect.

$$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 ANEM_{i,t} + +\beta_1 SCG_{i,t} + +\beta_1 ANEM * SCG_{i,t} + \beta_2 NIP_{i,t} + \beta_3 CLiq_{i,t} + \beta_4 CS_{i,t} + \beta_5 AT_{i,t} + \beta_6 Clev_{i,t} + \Sigma_{j=1}^{n} \beta_j Industry_{i,t} + \Sigma_{k=74}^{f} \beta_k Year_{i,t} + \varepsilon_{i,t,} \dots\dots\dots (8)$$

Where, ANEM ∗ SCGi,t represents the interaction term between EM and CG for company i in year t.

Determining the Sample of the Study

The study focuses on non-financial companies in the service and industrial sectors listed on the Saudi Stock Exchange (Tadawul). The final sample comprises 74 companies with 740 company-year observations from 2012 to 2022. Each company included had to have at least three years of complete annual reports. Data was sourced from the Saudi Stock Exchange website, including financial statements (balance sheet, income statement, cash flow statement) and CG information. Due to limited access to internal CG data, the study relies on publicly available CG disclosures in annual reports. The 2012–2022 timeframe was chosen as it represents the most recent and comprehensive CG dataset available. This period also aligns with the mandatory adoption of IFRS in Saudi Arabia, which increased interest in accounting standards among academics and businesses. The findings may be generalised to similar companies in other markets, depending on local financial and accounting regulations. The sample's suitability is supported by the higher number of observations during this period, despite challenges in merging financial and CG datasets.

ANALYSIS AND FINDINGS OF THE STUDY

Descriptive Analysis

Table 1 presents descriptive statistics for each variable. The mean value of Tobin's Q is zero, suggesting that the company's stock value is below the cost of replacing its assets, implying that the stock is undervalued. Additionally, the positive mean for each ANEM variable (ANEM, ANCFOP, ANAGS, and ANPRD) indicates that most management engage in EM activities. These findings, which suggest the presence of opportunistic behaviour through EM actions, provide supporting evidence for the initial hypothesis. Finally, shareholder rights, with the highest mean value, emerge as the primary factor influencing CG.

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Table 1: Descriptive Analysis

Factors	Minimum	Maximum	Standard Deviation	Mean	Median	Lower Quartile (Q1)	Upper Quartile (Q3)
ANEM	-2.664	1.286	0.296	0.021	0.007	-0.121	0.301
ANCFOP	-0.561	0.950	0.087	0.002	0.010	-0.051	0.053
AGS	-0.897	0.316	0.134	0.004	0.005	-0.033	0.080
ANPRD	-2.960	0.991	0.281	0.021	0.039	-0.140	0.206
CG1	1.410	1.909	0.91	1.596	1.704	1.394	1.675
CG2	0.000	1.899	0.319	1.211	1.312	1.052	1.459
CG3	0.513	1.666	0.207	1.221	1.213	0.779	1.501
CG4	0.000	1.701	0.287	1.229	1.069	0.878	1.401
CG5	0.000	1.000	0.337	0.622	0.511	0.319	0.711
SCG	1.606	2.500	0.125	2.001	2.021	1.810	2.010
Tobin's Q	-0.899	0.703	0.102	0.031	0.041	0.010	0.070
NIP	0.000	0.953	0.144	0.156	0.135	0.051	0.199
CLiq	0.237	8.262	1.558	1.922	1.447	0.953	1.997
CS	9.668	16.119	1.556	11.119	10.561	10.447	10.555
AT	0.002	0.935	0.210	0.438	0.431	0.336	0.524
CLev	0.054	1.229	0.216	0.515	0.542	0.299	0.604

Note: The independent factors are ANEM: abnormal aggregate earnings management; ANPRD: abnormal costs of production: ANAGS: abnormal administrative, general, and selling expenses; ANCFOP: abnormal cash flow from operations. The dependent variable is Tobin's Q. The moderating factors score of corporate governance (SCG), which include CG1: managers' error; CG2: audit organization; G3: structure of board; CG4: disclosure; CG5: rights of shareholders. natural logarithms were used to calculate each factor of CG. The control variables are NIP: net interest payment; CLiq: company liquidity; CS: company size; AT: asset tangibility; and Clev: total debt ratio.

Correlation Test

Table 2 illustrates a significant positive relationship between Tobin's Q and the audit organisation, board structure, SCG, and other EM measures (excluding ANPRD). In contrast, Tobin's Q shows a strong negative relationship with shareholder rights and managers' errors at the 1% significance level. Additionally, the correlation between ANEM and SCG, CG1, and CG3 was significantly negative, with a minimum significance level of 5%. The correlation ratios alone did not indicate any exacerbation of the multicollinearity issue.

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Table 2: Result of the Correlation Test

Factors	ANEM	ANCFOP	AGS	ANPRD	CG1	CG2	CG3	CG4	CG5	SCG	Tobin's Q	NIP	CLiq	CS	AT	Clev
ANEM	1															
ANCFOP	0.029	1														
AGS	0.075	0.055	1													
ANPRD	0.140	0.094	0.064	1												
CG1	-0.098	0.0336	0.031	0.111	1											
CG2	0.059	0.154	0.211	-0.247	0.044	1										
CG3	0.023	0.084	0.344	-0.078	0.021	0.506	1									
CG4	0.055	0.635	0.018	-0.175	0.009	0.109	0.197	1								
CG5	-0.075	0.216	0.150	-0.269	0.069	0.068	-0.142	-0.321	1							
SCG	0.076	0.021	0.661	0.099	0.018	-0.099	0.079	0.116	-0.173	1						
Tobin's Q	0.062	0.343	0.213	0.108	0.251	-0.088	0.409	0.154	0.055	0.195	1					
NIP	0.162	0.096	0.005	0.066	0.229	-0.621	0.165	0.025	-0.524	0.321	0.246	1				
CLiq	-0.118	0.088	0.015	0.057	0.196	0.015	0.223	0.044	0.154	0.099	0.206	0.197	1			
CS	0.014	0.064	0.883	-0.089	0.475	0.085	0.077	0.150	0.025	0.128	0.196	0.318	0.215	1		
AT	0.053	0.052	-0.069	-0.055	0.051	0.389	0.333	0.0261	0.126	-0.207	0.256	0.101	0.222	0.065	1	
CLev	0.091	0.222	-0.066	-0.258	0.025	0.456	0.166	0.008	0.015	0.163	-0.388	0.022	0.341	0.037	0.033	1

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Testing the Regression

The Impact of EM on CV

Using a sample of 740 company-year observations from service and industrial non-financial companies listed on the Saudi Stock Exchange, four multiple regression analyses were conducted to examine the relationship between CV and EM behaviours, as measured by ANEM, ANCFOP, ANAGS, and ANPRD. The results are presented in Table 3.

Table 3: The Impact of EM on CV

Factors	Tobin's Q (The Dependent Variables)			
ANEM	-0.013 (-2.998) [1.399]			
ANCFOP		-0.150 (-8.331) [1.201]		
AGS			-0.029 (-3.011) [1.502]	
ANPRD				-0.031 (-3.006) [1.309]
NIP	-0.233 (-11.298) [1.368]	-0.201 (-10.329) [1.426]	-0.199 (-11.444) [1.547]	-0.296 (-10.548) [1.533]
CLiq	-0.001 (-2.861) [1.952]	-0.001 (-3.225) [1.886]	-0.001 (-2.482) [1.886]	-0.039 (-2.646) [1.937]
CS	0.013 (9.652) [1.301]	0.013 (9.221) [1.199]	0.013 (10.115) [1.300]	0.030 (14.556) [1.311]
AT	0.002 (3.445) [1.226]	0.003 (3.887) [1.271]	0.006 (3.822) [1.267]	0.486 (3.450) [1.210]
CLev	-0.009 (-3.018) [1.552]	-0.019 (-2.516) [1.403]	-0.029 (-2.336) [1.239]	-0.501 (-2.549) [1.619]
Intercept	-0.302 (-7.619)	-0.331 (-7.555)	-0.213 (-7.227)	-0.064 (-7.884)
Durbin Watson	1.891	1.911	1.866	1.955
F-Statistics	32.115	29.998	31.223	29.966
Adjusted R^2	0.601	0.525	0.571	0.542
Industry Fixed Impacts	Impact	Impact	Impact	Impact
Year Fixed Impacts	Impact	Impact	Impact	Impact

The findings reveal a significant negative relationship between EM and CV. For non-standardised coefficients, beta values are used, while t-values are presented in parentheses. There is no issue of multicollinearity, as the variance inflation factor (VIF) values, shown in brackets, do not exceed 10 (Hair et al., 2012). The significance level is set at 5%.

At the 1% significance level, a significant negative relationship between CV and EM

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measures is confirmed. These findings further suggest that EM activities involving price reductions, lenient financing conditions, reduction in AGS costs, and overproduction have a substantial negative impact on CV. The simple regression analyses outperform the intercept-only model, as indicated by the higher F-statistics for each model. Moreover, the Durbin-Watson test, with values ranging from 1.866 to 1.955, suggests no autocorrelation in the dataset for this study sample.

The findings indicate that opportunistic EM negatively impacts CV over time, leading to biased profit disclosures and a misrepresentation of future value by maximising managerial compensation. Management may be valued for executing EM strategies to enhance performance (Darmawan et al., 2019; Roychowdhury, 2006; Zhang et al., 2008). However, the study supports the view that EM distorts market realities, particularly when there is a misalignment of incentives and a focus on personal interests to protect management's image and corporate reputation. This causes a decline in CV, resulting in diminished investor confidence and a reduced valuation of future cash flows.

Management typically engages in EM to increase personal benefits and compensation, yet this opportunistic behaviour damages their reputation and reduces the quality of reported earnings (Ronen & Yaari, 2008). Long-term opportunities for earnings manipulation arise from low investor scrutiny, asymmetric information, minimal regulatory oversight, and flexible accounting standards (Abbas & Ayub, 2019). Managers can use their discretion to access confidential information about company performance and may alter real operations to present stronger short-term results, though this ultimately harms the company (Pires, 2011).

In most regression models, control variables show a negative influence. Net interest payments, liquidity, debt ratios, and Tobin's Q all show a strong negative correlation. These results suggest that non-current assets, current assets, and liabilities affect the likelihood of executives exercising discretion. Furthermore, higher interest payments reduce the ability of management to act with discretion. A positive correlation between CV and asset tangibility is also observed, indicating that AT builds shareholder trust and serves as a positive indicator of a company’s success. Similarly, company size is positively correlated with CV, with larger companies demonstrating higher CV values than smaller firms.

The Impact of CV on CG

The relationship between CV and each of the six CG measures is examined through six multiple regression analyses, the results of which are presented in Table 4. The study confirms a significant positive correlation between CV and five of the six CG indicators. The findings suggest that a well-structured governance framework mitigates depreciation within the company. In turn, CG reduces information asymmetry and

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aligns the interests of shareholders, thereby supporting Hypothesis 3, which posits a substantial positive association between corporate governance practices and CV at a 5% significance level. This implies that CG plays a pivotal role in reflecting the core values of a company.

Previous studies (Black et al., 2006; Brown & Caylor, 2006; Gompers et al., 2003; Klapper & Love, 2004) have established the beneficial impact of CG on CV. Specifically, CG protects shareholders' rights, encourages the adoption of both international and national financial and accounting standards, promotes transparency in financial disclosures, supports social responsibility initiatives, reinforces trust in national legal systems, and ensures the employment of high-quality audit committees. Notably, the safeguarding of shareholders' rights results in increased oversight of financial reporting, thereby enhancing audit quality and boosting CV by demanding transparency in all transactions and processes (Geiger & North, 2013; Lopes, 2018). In companies with strong CG, management is under continuous scrutiny, reducing the likelihood of opportunistic behaviour due to limited discretion in decision-making. Moreover, such companies focus on long-term corporate reputation and career stability, rather than short-term gains.

According to Lei and Song (2012), companies with independent board structures tend to have higher CV, as independent directors foster transparency and effectiveness in both financial and operational decision-making. Audit committees and external directors are key components of good corporate governance. Additionally, transparency is positively correlated with CV by improving the accuracy of information, thereby expanding the company's risk profile and offering investors predictable returns (Foerster et al., 2014). The study also highlights how managers' errors—reflecting company standards and practices—are positively related to CV, as they reduce the likelihood of future mistakes and encourage viewing errors as opportunities for learning.

There is no one-size-fits-all solution to the challenges associated with CG. The optimal approach depends on the specific needs of each company. The research indicates that CG regulations can enhance financial disclosure quality by improving shareholder relationships and transparency. This can be achieved, for instance, by better protecting minority shareholders, increasing non-financial disclosures on corporate websites or in financial reports, and reducing risks through improved business risk management. Furthermore, strengthening the internal audit function and ensuring its independence, streamlining board nomination and evaluation processes, and improving board efficiency through better practices (such as formalising agendas, documenting proceedings, and creating annual work plans) can contribute to better governance. Lastly, the recruitment of independent directors and the inclusion of diverse skill sets on boards can further enhance governance quality.

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Table 4: Descriptive Analysis

Factors	The Dependent Variables Tobin's Q					
CG1	0.346 (12.661) [1.512]					
CG2		0.031 (8.142) [1.116]				
CG3			0.030 (1.999) [1.499]			
CG4				0.009 (1.506) [1.201]		
CG5					0.047 (5.992) [1.124]	
SCG						0.239 (8.129) [1.361]
NIP	0.247 (9.667) [1.405]	0.316 (7.551) [1.459]	0.199 (7.574) [1.009]	0.300 (11.259)		
CLiq	-0.006 (-19.229) [1.558]	-0.041 (-18.497) [1.661]	0.006 (8.697) [1.848]	0.040 (19.595) [1.667]	0.002 (3.999) [1.211]	0.039 (17.683) [1.220]
CS	0.026 (14.225) [1.776]	0.019 (13.869) [1.199]	0.009 (2.649) [1.112]	0.030 (12.111) [1.516]	0.020 (7.641) [1.110]	0.031 (15.197) [1.394]
AT	0.498 (32.158) [1.254]	0.478 (30.128) [1.211]	0.004 (2.519) [1.273]	0.499 (32.239) [1.340]	0.005 (2.331) [1.324]	0.488 (28.975) [1.266]
CLev	-0.399 (-18.659) [1.253]	-0.387 (-18.485) [1.246]	-0.029 (-2.542) [1.106]	-0.397 (-18.210) [1.448]	-0.021 (-2.310) [1.116]	-0.563 (-17.328) [1.821]
Intercept	0.168 (2.999)	0.501 (6.868)	-0.255 (-10.767)	-0.099 (-2.598)	-0.199 (-6.485)	-0.064 (-2.466)
Durbin Watson	1.900	1.897	1.926	1.931	1.871	1.928
F-Statistics	125.664	188.221	38.751	156.858	31.649	119.223
Adjusted R^2	0.599	0.570	0.259	0.559	0.193	0.601
Industry Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact
Year Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact

Note: The data reveals a strong positive correlation between CG and CV. For non-standardised coefficients, beta values are used. T-values are presented in parentheses, while VIF values are indicated in brackets.

The Interaction Between Corporate Governance, Earnings Management, and Company Value

The results of six multiple regressions, used to assess the relationships between CV and CG, as well as the interaction between EM activity and CG, are presented in Table 5. Tables 3 and 4 further illustrate that all regression analyses support a strong positive

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association between CG and CV, and a significant negative relationship between EM and CV. Additionally, significant positive coefficients are observed for most of the factors linking EM and CG. The negative correlation between EM and CV is generally weaker in companies with strong CG compared to those with weak CG, suggesting that CG moderates the relationship between EM and CV. The findings indicate that enhanced monitoring and regulatory mechanisms help protect stakeholder interests. Strong CG mitigates corporate risk and reduces the expropriation of minority shareholders by increasing a company's transparency and reliability through improved information sharing. Consequently, management in such companies is less likely to engage in opportunistic behaviour and rarely participates in EM activities.

Table 5: Moderating Impact of CG amongst EM and CV

Factors	**The Dependent Variables Tobin's Q**					
ANEM	-0.411 (-33.229) [1.581]	-0.009 (-3.0116) [1.260]	-0.075 (-2.551) [1.226]	-0.099 (-4.001) [1.110]	-0.029 (-2.098) [1.332]	-0.029 (-2.009) [1.328]
CG1	0.362 (6.657) [1.679]					
CG2		0.009 (3.094) [1.992]				
CG3			0.031 (2.011) [1.551]			
CG4				0.002 (0.061) [1.553]		
CG5					0.051 (6.111) [1.226]	
SCG						0.372 (6.283) [1.026]
ANEM*CG1	0.009 (1.999) [1.332]					
ANEM*CG2		0.055 (3.018) [1.990]				
ANEM*CG3			0.105 (4.008) [1.440]			
ANEM*CG4				0.510 (1.108) [1.669]		
ANEM*CG5					0.634 (2.335) [1.542]	

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Table 5: Moderating Impact of CG amongst EM and CV (Cont…)

ANEM*SCG						0.208 (3.678) [1.319]
NIP	0.299 (9.222) [1.506]	0.309 (9.227) [1.640]	0.415 (9.668) [1.666]	0.416 (10.228) [1.623]	0.400 (11.992) [1.395]	0.391 (8.220) [1.288]
CLiq	-0.039 (-18.228) [1.772]	-0.041 (-17.267) [1.772]	-0.039 (-17.623) [1.695]	-0.039 (-17.389) [1.798]	-0.039 (17.609) [1.920]	-0.048 (-17.216) [1.356]
CS	0.041 (13.542) [1.871]	0.030 (14.259) [1.318]	0.032 (10.332) [1.850]	0.030 (12.395) [1.579]	0.031 (10.021) [1.728]	0.029 (11.510) [1.099]
AT	0.499 (32.597) [1.229]	0.618 (36.781) [1.341]	0.438 (33.664) [1.218]	0.501 (33.682) [1.218]	0.485 (34.009) [1.206]	0.499 (29.227) [1.123]
CLev	-0.516 (19.618) [1.621]	-0.517 (19.325) [1.649]	-0.522 (-19.216) [1.741]	-0.567 (18.958) [1.660]	-0.028 (-9.557) [1.364]	-0.001 (-8.147) [1.966]
Intercept	0.161 (2.664)	0.516 (6.975)	-0.081 (-1.701)	-0.116 (-2.598)	-0.072 (-1.875)	-0.029 (-2.668)
Durbin Watson	1.971	1.962	1.979	1.938	1.954	1.950
F-Statistics	130.572	126.550	127.257	132.869	117.572	110.525
Adjusted R^2	0.549	0.567	0.556	0.548	0.556	0.531
Industry Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact
Year Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact

For non-standardized coefficients, beta values are used. T-values are presented in parentheses, and the variance inflation factor values are indicated by the digits in brackets.

The findings are consistent with previous research. Subanidja et al. (2016) argue that corporate governance indicators, such as audit quality, managerial ownership, and the role of independent commissioners, serve as moderating factors in the relationship between EM and CV. This suggests that when companies adopt stringent corporate governance measures, they positively influence the actual CV. Additionally, Jin et al. (2018) highlight that corporate governance introduces greater control over a company's accounting practices, with finance committees overseeing and regulating the company's debt levels. Consequently, management is not granted unrestricted access to cash flows, nor are they frequently involved in earnings management activities.

Testing the Robustness of the Model

The author does not need to observe as much EM activity in companies with strong CG compared to those with weak CG, thereby supporting the argument that strong CG plays a crucial role in monitoring management's opportunistic tendencies regarding EM. This is particularly evident as the CV is not equally impacted in companies with weak CG. To test the robustness of the study model, the author divides the entire sample into two categories: SCG and weak corporate governance (Q1 and Q3 quartile values). Companies with strong CG have SCG levels above 2.500 (Q3, third quartile), while those with poor CG show SCG levels below 2.010 (Q1, first quartile). This results in

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555 firm-year observations for companies with strong CG and 185 firm-year observations for companies with weak CG. The t-test results for the EM and Tobin's Q measures are presented in Table 6. This test is conducted to determine if there are differences in the means of Tobin's Q, EM activities, and CG indicators between companies with strong CG and those with weak CG. The statistical analysis shows significant differences between the two groups across all independent and dependent factors, thereby confirming that the categorisation based on CG quartile levels is supported by the notable distinction in CG measures between firms with strong and weak corporate governance

Table 6: T-Statistics Evaluating Mean Equality amongst Companies with Weak and Strong CG

Factors	Strong CG	Weak CG	Differences	T-Statistics
Tobin's-Q	0.033	0.20	0.013	4.002
ANEM	0.013	0.41	-0.028	-3.103
ANCFOP	0.002	0.008	-0.006	-3.009
AGS	0.004	0.011	-0.008	-3.659
ANPRD	0.013	0.025	-0.012	-2.997
CG1	2.123	1938	0.185	39.115
CG2	1.678	1.565	0.113	49.665
CG3	1.282	0.860	0.432	16.229
CG4	1.335	1.211	0.124	59.973
CG5	1.331	0.892	0.439	3.090
SCG	2.225	2.056	0.169	70.553

Companies with robust CG structures are perceived as more valuable than those with weaker governance, as evidenced by the higher mean value of Tobin's Q in the former group. This finding corroborates the results of a previous regression analysis, which revealed a positive correlation between CG and CV as shown in Table 4. Furthermore, the mean value of EM activity is higher in companies with weaker CG, suggesting a greater propensity for such companies to engage in EM. This reinforces the earlier argument that effective CG structures prevent managers from engaging in EM activities. Additionally, this observation provides subtle support for the results in Table 3, highlighting the opportunistic nature of EM, as companies with strong CG have little incentive to monitor their managers' EM practices from an efficiency perspective.

To further substantiate the claim that strong CG curtails managerial opportunism in EM activities, the author conducted four multiple regression tests using the SCG and CS as independent variables, with EM as the dependent variable. The significant negative relationships between EM and both SCG and CS are presented in Table 7, with coefficients indicating a substantial inverse association at the 1% significance level. These findings suggest that in the absence of effective CG policies, opportunistic EM is more prevalent. This aligns with existing literature (Byard et al., 2006; He et al., 2009; Jiang et al., 2008), which indicates that companies with strong CG are less likely to engage in EM practices. The implementation of CG regulations enhances a

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company's transparency, providing both internal and external benefits. These benefits include increased reliability, enhanced shareholder oversight, reduced managerial opportunism, diminished information asymmetry, and lower agency costs. Consequently, improved financial disclosure reduces the likelihood of EM participation.

Table 7: Association amongst EM, CG, and CS

Factors	ANEM	ANCFOP	ANAGS	ANPRD
SCG	-0.602 (-6.938) [0.335]	-0.031 (-2.734) [0.439]	-0.201 (-7.956) [0.439]	-0.306 (-5.229) [0.511]
CS	-0.039 (-8.012) [0.526]	-0.002 (-5.991) [0.399]	-0.011 (-6.891) [0.306]	-0.031 (-5.988) [0.521]
Constant	-0.031 (-0.201)	-0.026 (-0.611)	-0.030 (-0.597)	-0.121 (-0.999)
Durbin Watson	1.901	1.740	1.952	1.947
F-Statistics	32.661	30.162	36.227	35.949
Adjusted R^2	0.026	0.002	0.033	0.020

Note: For non-standardised coefficients, use beta. T-values are indicated by the numbers in parentheses, while the variance inflation factor values are displayed within square brackets. The findings reveal a significant negative relationship between a CS and EM, as well as between the SCG and EM.

Large companies with strong CG are typically well-governed, with enhanced supervisory control, transparency, and disclosure, leading to frequent audits and financial oversight (Kim et al., 2003; Tulcanaza-Prieto & Morocho-Cayamcela, 2021), argue that robust governance processes in large companies limit manipulation flexibility, while (Persons, 1995) highlights the prevalence of fraud in smaller firms. As a result, large companies tend to exhibit lower EM activity and stronger CG. The findings show a significant negative effect of CS on EM across various indicators, supporting the third hypothesis that strong CG discourages EM. Table 8 presents the results of multiple regressions for companies with strong and weak CG, analysing the relationship between EM and CV, as measured by ANEM, ANCFOP, ANAGS, and ANPRD. The simple regression model better fits the data than the intercept-only model, with higher F-statistics and Durbin-Watson values between 1.860 and 1.948, indicating no autocorrelation. For companies with weak CG, Panel 1 shows a significant inverse relationship between all EM measures and CV, as determined by Tobin's Q. A one-point increase in abnormal aggregate EM decreases CV by 0.021, with similar negative coefficients for other EM metrics. These findings suggest that EM activities, such as price reductions and flexible financing, negatively impact CV in companies with weak CG (Zhao, 2010).

Conversely, for companies with strong CG, none of the EM coefficients are significant, indicating that EM does not affect CV in these firms. These results support the notion that CG mitigates the negative impact of EM on CV and inhibits managers'

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opportunistic behaviour. The author concludes that, based on the data presented in Tables 6 and 7, companies with weaker CG are more likely to exhibit higher levels of EM activity compared to those with stronger CG. This suggests that the observed EM behaviours are likely tied to the self-serving actions of managers. In contrast, companies with strong CG are more effective in overseeing managerial decision-making, which reduces the tendency of managers to engage in EM activities driven by opportunism, resulting in less economic value loss compared to companies with weak CG.

Table 8: Association among CV and EM for Companies have Weak and Strong CG

Factors	The Dependent Variables Tobin's Q							
	Panel 1: Strong CG [N=555]				Panel 2: Weak CG [N=185]			
ANEM	-0.021 (-0.601) [1.326]				-0.029 (-3.895) [1.361]			
ANCFOP		-0.039 (-1.102) [1.102]				-0.020 (-3.990) [1.303]		
AGS			-0.206 (-0.725) [1.426]				-0.091 (-4.119) [1.446]	
ANPRD				0.002 (0.219) [1.328]				-0.041 (-4.119) [1.330]
NIP	-0.122 (-2.992) [1.352]	0.201 (4.005) [1.315]	0.203 (4.221) [1.229]	0.169 (2.949) [1.266]	-0.088 (-3.886) [1.338]	0.288 (10.664) [1.346]	0.276 (11.487) [1.558]	0.405 (9.225) [1.488]
CLiq	-0.009 (-2.999) [1.786]	-0.030 (-8.779) [1.709]	-0.019 (-8.549) [1.772]	-0.028 (-6.708) [1.449]	-0.021 (-7.794) [1.850]	-0.039 (-18.316) [1.941]	-0.039 (-18.226) [1.907]	-0.038 (-17.597) [1.766]
CS	0.019 (4.115) [1.288]	0.018 (8.597) [1.315]	0.195 (5.872) [1.333]	0.020 (4.887) [1.239]	0.019 (9.657) [1.334]	0.033 (15.694) [1.569]	0.033 (15.334) [1.507]	0.032 (14.273) [1.340]
AT	0.601 (13.888) [1.338]	0.611 (19.667) [1.314]	0.655 (180.777) [1.313]	0.612 (14.201) [1.299]	0.492 ((28.647) [1.042]	0.533 (29.878) [1.226]	0.533 (28.164) [1.229]	0.495 (29.227) [1.468]
CLev	-0.431 (-8.886) [1.337]	-0.307 (-9.002) [1.114]	-0.319 (-9.059) [1.228]	-0.351 (-9.555) [1.266]	-0.492 (-8.659) [1.699]	-0.483 (-18.258) [1.558]	-0.499 (-19.524) [1615]	-0.537 (-17.263) [1.661]
Intercept	-0.068 (-0.602)	-0.132 (-1.301)	-0.152 (-1.500)	-0.069 (-0.561)	-0.131 (-2.444)	-0.200 (-3.101)	-0.153 (-2.973)	-0.119 (-2.926)
Durbin Watson	1.978	1.952	1.955	1.943	1.910	1.886	1.911	1.860
F-Statistics	99.226	126.228	128.649	126.948	19.635	36.115	35.922	20.773
Adjusted R^2	0.602	0.499	0.500	0.486	0.509	0.410	0.446	0.297
Industry Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact	Impact	Impact
Year Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact	Impact	Impact

The findings reveal a significant negative relationship between EM and CV. For non-standardised coefficients, beta values are used. T-values are shown in parentheses. There is no issue with multicollinearity, as the variance inflation factor values, indicated in brackets, do not exceed 10 (Hair et

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al., 2012). The p-value threshold is 5%.

The findings of the study align with previous research, which suggests that the prevalence of opportunistic EM activity gradually deteriorates CV (Darmawan et al., 2019; Roychowdhury, 2006; Zhang et al., 2008). Agency issues between shareholders and management often lead to EM actions, as personal interests sometimes take precedence over the long-term value of the company. Additionally, the execution of EM practices distorts financial realities, lowering future cash flows and misrepresenting the company to potential investors. The primary motivators behind EM activity include the desire to maximise personal value and remuneration, but such opportunistic behaviour negatively affects managers' reputations and the quality of disclosed earnings (Ronen & Yaari, 2008). Long-term strategies to control earnings through real operations include flexible accounting practices, low investor awareness, and regulatory leniency (Abbas & Ayub, 2019). Management can exploit their discretion to access confidential information about the company's performance, potentially manipulating profits to show better results in the short term, but this ultimately harms the company (Pires, 2011).

Asset tangibility was considered in the analysis of each study. However, given the increasing emphasis on intangible assets and non-financial information in recent years, the ability of a company to generate sustained value is increasingly measured by its ability to meet societal expectations and contribute to shared value. In light of new standards, many companies view managing and disclosing non-financial information as a modern requirement. However, Saudi Arabia's accounting standards do not yet include these new obligations. As demand for non-financial disclosures rises, companies are focused on gathering and selecting appropriate metrics, with managers carefully evaluating how these processes impact the company's future value.

The endogenous relationship between CV and CG has been a significant area of interest in accounting and finance research. To address the potential endogeneity issue, the author incorporates a control in Formula (9) and Formula (10), employing the two-stage least squares (2SLS) method to mitigate concerns. The 2SLS regression approach, as established by Black et al., (2006), was utilised to refine the econometric specification. Their study suggests that factors such as company size, long-term profitability, and industry characteristics can influence CG. In the first stage, SCG and Tobin's Q were used, with the author controlling for both "CS_Dummy" and "CS." The results from the first stage were subsequently used to run the model in the second stage.

$$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 ANEM_{i,t} + +\beta_1 SCG_{i,t} + +\beta_1 ANEM * SCG_{i,t} + \beta_2 NIP_{i,t} + \beta_3 CLiq_{i,t} + \beta_4 CS_{i,t} + \beta_5 AT_{i,t} + \beta_6 Clev_{i,t} + \Sigma_{j=1}^{n}\beta_j Industry_{i,t} + \Sigma_{k=74}^{f}\beta_k Year_{i,t} + \varepsilon_{i,t,} \dots\dots\dots (9)$$

$$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 ANEM_{i,t} + +\beta_1 SCG_{i,t} + +\beta_1 ANEM * SCG_{i,t} + \beta_2 NIP_{i,t} + \beta_3 CLiq_{i,t} + \beta_4 CS_{i,t} + \beta_5 AT_{i,t} + \beta_6 Clev_{i,t} + \Sigma_{j=1}^{n}\beta_j Industry_{i,t} + \Sigma_{k=74}^{f}\beta_k Year_{i,t} + \varepsilon_{i,t,} \dots\dots\dots (10)$$

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Table 9: Findings of 2SLS Regression Test

Findings of Regression of Stage One						
Factors	**SCG**	**CG1**	**CG2**	**CG3**	**CG4**	**CG5**
Tobin's-Q	0.401 -8.999	0.201 -2.340	0.400 -9.557	0.502 -9.331	0.619 -9.771	0.759 -2.099
Intercept	-1.896 (-23.154)	-1.572 (-28.196)	-0.998 (28.254)	-1.102 (-30.298)	-1.003 (27.559)	-0.945 (-31.005)
F-Statistics	15.226	4.556	8.594	9.589	12.971	5.006
Adjusted R^2	0.029	0.020	0.031	0.029	0.033	0.009
Co-Variance Tobin's-Q	0.003	0.005	0.007	0.003	0.002	0.004
Findings of Regression of Stage Tow						
Factors	**Tobin's-Q**					
SCG	0.085 (-2.869) [1.526]					
CG1		0.012 (-3.999) [1.310]				
CG2			0.029 (-3.889) [1.115]			
CG3				0.057 (-2.206) [1.226]		
CG4					0.081 (-2.503) [1.211]	
CG5						0.021 (-1.117]
NIP	0.516 (-10.253) [1.229]	0.040 (-9.556) [1.402]	0.901 (-8.663) [1.296]	0.901 (-10.212) [1.226]	0.203 (-10.559) [1.227]	0.896 (-9.880) [1.239]
CLiq	-0.001 (-0.506) [1.806]	-0.020 (-0.062) [1.765]	-0.002 (-0.201) [1.533]	-0.001 (-0.299) [1.531]	-0.003 (-0.466) [1.110]	-0.003 (-0.697) [1.109]
CS	0.030 (-6.119) [1.186]	0.003 (-9.226) [1.331]	0.042 (-8.229) [1.334]	0.039 (-8.230) [1.580]	0.069 (-8.662) [1.499]	0.031 [1.332]
AT	0.015 (-0.751) [1.206]	0.003 (-0.021) [1.316]	0.002 (-0.030) [1.110]	0.030 (-0.467) [1.226]	0.049 (-0.537) [1.228]	0.121 (-0.676) [1.266]
CLev	-0.069 (-2.119) [1.440]	-0.005 (-2.239) [1.236]	-0.201 (-2.401) [1.338]	-0.203 (-2.413) 1.442]	-0.215 (-2.339) [1.432]	-0.039 (-2.461) [1.107]
Intercept	0.305 -3.994	0.628 -3.550	0.497 -2.553	0.210 -1.563	0.438 -2.013	0.869 -8.022
Durbin Watson	1.965	1.964	1.969	1.881	1.964	1.840
F-Statistics	28.546	29.368	30.478	29.895	29.774	18.220
Adjusted R^2	0.281	0.201	0.213	0.211	0.196	
Industry Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact
Year Fixed Impacts	Impact	Impact	Impact	Impact	Impact	Impact

Note: Employing 2SLS regression to address endogeneity, the findings reveal a significant positive association between CGS and FV. For non-standardized coefficients, beta is used. T-values are indicated in parentheses, while the variance inflation factor values are presented in brackets.

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The indicator factor "CS_Dummy" is defined as 0 when total assets are less than two million Saudi Riyals, and 1 when total assets are equal to or exceed two million. Table 9 presents the positive results for each CG factor from the second stage of the 2SLS test. These findings corroborate previous results, reinforcing the conclusion that strong CG positively influences company value. Furthermore, these results lend additional support to the hypothesis that effective CG reduces the likelihood of managers engaging in EM activity.

CONCLUSIONS, LIMITATION, AND FUTURE STUDIES

This study examines the interaction between EM, CV, and CG using a sample of 740 company-year observations from non-financial firms listed on the Saudi Stock Exchange between 2012 and 2022. The findings indicate that EM negatively impacts CV, as evidenced by the use of Tobin's Q as a proxy for CV. This supports the notion that management may act opportunistically, and that EM can erode CV. Additionally, a positive correlation between CG and CV further confirms the beneficial role of CG in enhancing CV. These results advocate for the adoption of strong CG practices, which promote oversight and transparency, reduce agency conflicts, and improve CV. The study also highlights how CG moderates the relationship between EM and CV by introducing an interaction term between EM and CG. Strong CG increases transparency and accountability, thereby deterring self-serving actions by management. Consequently, companies with high CG are less likely to engage in opportunistic EM activities, safeguarding their CV. The robustness check shows that firms with strong CG exhibit lower EM activity compared to those with weaker CG, further confirming the moderating effect of CG. The multi-regression analysis reveals a significant negative relationship between EM and CGS, supporting the view that strong CG reduces management's tendency to manipulate financial outcomes for personal gain.

Moreover, the study finds that companies with strong CG show no significant relationship between EM and CV, while those with weak CG exhibit a negative correlation. This suggests that the level of CG acts as a cap on management's opportunistic behaviour, preserving company value by enforcing reliability, transparency, and control. These findings align with previous research that highlights the role of CG in curbing managerial opportunism and reducing the misuse of both internal and external resources. The study acknowledges several limitations, particularly in the use of Tobin's Q as a performance indicator. Future research could incorporate additional measures such as return on invested capital, return on equity, and return on assets. Moreover, the need for updated CG data, dependent on companies' disclosure practices, is highlighted. The authors also recommend considering the extent of EM activity when classifying companies into suspect or non-suspect groups in future studies.

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REFERENCES

Abbas, A., & Ayub, U. (2019). Role of earnings management in determining firm value: An emerging economy perspective. *International Journal of Advanced and Applied Sciences*, *6*(6), 103-116. https://doi.org/10.21833/ijaas.2019.06.015

Alves, S. (2012). Ownership structure and earnings management: Evidence from Portugal. *Australasian Accounting, Business and Finance Journal*, *6*(1). https://www.uowoajournals.org/aabfj/article/id/1317/

Alzeaideen, K. A. H. (2018). The impact of universities on protecting societies from administrative corruption case study: Zarqa University. *Online Review*, *18*(2), 300-313. https://doi.org/10.12816/0054744

Anagnostopoulou, S. C., & Tsekrekos, A. E. (2017). The effect of financial leverage on real and accrual-based earnings management. *Accounting and Business Research*, *47*(2), 191-236. https://doi.org/10.1080/00014788.2016.1204217

Barnhart, S. W., & Rosenstein, S. (1998). Board composition, managerial ownership, and firm performance: An empirical analysis. *Financial Review*, *33*(4), 1-16. https://doi.org/10.1111/j.1540-6288.1998.tb01393.x

Black, B. S., Jang, H., & Kim, W. (2006). Does corporate governance predict firms' market values? Evidence from Korea. *Journal of Law, Economics, and Organization*, *22*(2), 366-413. https://doi.org/10.1093/jleo/ewj018

Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. *Journal of accounting and public policy*, *25*(4), 409-434. https://doi.org/10.1016/j.jaccpubpol.2006.05.005

Byard, D., Li, Y., & Weintrop, J. (2006). Corporate governance and the quality of financial analysts' information. *Journal of accounting and public policy*, *25*(5), 609-625. https://doi.org/10.1016/j.jaccpubpol.2006.07.003

Chen, C. J., Chen, S., & Su, X. (2001). Profitability regulation, earnings management, and modified audit opinions: Evidence from China. *Auditing: A Journal of Practice & Theory*, *20*(2), 9-30. https://doi.org/10.2308/aud.2001.20.2.9

Christensen, J., Kent, P., Routledge, J., & Stewart, J. (2015). Do corporate governance recommendations improve the performance and accountability of small listed companies? *Accounting & Finance*, *55*(1), 133-164. https://doi.org/10.1111/acfi.12055

Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *The accounting*

review, *83*(3), 757-787. https://doi.org/10.2308/accr.2008.83.3.757

Darmawan, I. P. E., Sutrisno, T., & Mardiati, E. (2019). Accrual earnings management and real earnings management: Increase or destroy firm value. *International Journal of Multicultural and Multireligious Understanding*, *6*(2), 8-19. http://dx.doi.org/10.18415/ijmmu.v6i2.551

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting review*, 193-225. https://www.jstor.org/stable/248303

Dye, R. A. (1988). Earnings management in an overlapping generations model. *Journal of Accounting research*, 195-235. https://doi.org/10.2307/2491102

Foerster, S. R., Sapp, S. G., & Shi, Y.-Q. (2014). The effect of voluntary disclosure on firm risk and firm value: evidence from management earnings forecasts. *Advances in Quantitative Analysis of Finance and Accounting*(12), 179-213. https://doi.org/10.6293/AQAFA.2014.12.07

Geiger, M. A., & North, D. S. (2013). Do Strong Shareholder Rights Mitigate Earnings Management? *Journal of Accounting, Ethics and Public Policy*, *14*(2). https://ssrn.com/abstract=2245683

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The quarterly journal of economics*, *118*(1), 107-156. https://doi.org/10.1162/00335530360535162

Grabiński, K., & Wójtowicz, P. (2022). The impact of catholic religion on earnings management: A case of Poland. *Journal of International Financial Management & Accounting*, *33*(1), 18-56. https://doi.org/10.1111/jifm.12141

Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of accounting and economics*, *40*(1-3), 3-73. https://doi.org/10.1016/j.jacceco.2005.01.002

Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. *Long range planning*, *45*(5-6), 320-340. https://doi.org/10.1016/j.lrp.2012.09.008

He, L., Labelle, R., Piot, C., & Thornton, D. B. (2009). Board monitoring, audit committee effectiveness, and financial reporting quality: Review and synthesis of empirical evidence. *Journal of Forensic & Investigative Accounting*, *1*(2). https://ssrn.com/abstract=1159453

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, *13*(4), 365-383. https://doi.org/10.2308/acch.1999.13.4.365

Jelinek, K. (2007). The effect of leverage increases on earnings management. *The Journal of Business and Economic Studies*, *13*(2), 24-46. https://www.researchgate.net/publication/281638188

Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of political economy*, *98*(2), 225-264.

https://doi.org/10.1086/261677

Jiang, W., Lee, P., & Anandarajan, A. (2008). The association between corporate governance and earnings quality: Further evidence using the GOV-Score. *Advances in Accounting*, *24*(2), 191-201. https://doi.org/10.1016/j.adiac.2008.08.011

Jin, S.-J., Hwang, I. T., & Kang, S. M. (2018). Improving sustainability through a dual audit system. *Sustainability*, *10*(1), 137. https://doi.org/10.3390/su10010137

Kazemian, S., & Sanusi, Z. M. (2015). Earnings management and ownership structure. *Procedia Economics and Finance*, *31*, 618-624. https://doi.org/10.1016/S2212-5671(15)01149-1

Kim, Y., Liu, C., & Rhee, S. G. (2003). The relation of earnings management to firm size. *Journal of Management Research*, *4*(1), 81-88. https://api.semanticscholar.org/CorpusID:15913462

Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of corporate Finance*, *10*(5), 703-728. https://doi.org/10.1016/S0929-1199(03)00046-4

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *the Journal of Finance*, *57*(3), 1147-1170. https://doi.org/10.1111/1540-6261.00457

Lee, Y. H., Kang, S. A., & Cho, S. M. (2015). The effect of voluntary IFRS adoption by unlisted fi rms on earnings quality and the cost of debt: empirical evidence from Korea. *Journal of Business Economics and Management*, *16*(5), 931-948. https://doi.org/10.3846/16111699.2014.953991

Lei, A. C., & Song, F. M. (2012). Board structure, corporate governance and firm value: evidence from Hong Kong. *Applied financial economics*, *22*(15), 1289-1303. https://doi.org/10.1080/09603107.2011.650329

Lopes, A. P. (2018). Audit quality and earnings management: Evidence from Portugal. *Athens Journal of Business & Economics*, *4*(2), 179-192. http://hdl.handle.net/11159/1857

Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial behavior, agency costs and ownership structure*, *3*(4), 305-360. https://doi.org/10.1007/978-94-009-9257-3_8

Nwakuya, M., & Ijomah, M. (2017). Fixed effect versus random effects modeling in a panel data analysis; a consideration of economic and political indicators in six African countries. *International Journal of Statistics and Applications*, *7*(6), 275-279. https://dx.doi.org/10.5923/j.statistics.20170706.01

Osma, B. G., & Noguer, B. G. d. A. (2007). The effect of the board composition and its monitoring committees on earnings management: Evidence from Spain. *Corporate Governance: An International Review*, *15*(6), 1413-1428. https://doi.org/10.1111/j.1467-8683.2007.00654.x

Patel, S. A., & Dallas, G. S. (2002). Transparency and disclosure: Overview of methodology and study results-United States. *Available at SSRN 422800*.

https://dx.doi.org/10.2139/ssrn.422800

Persons, O. S. (1995). Using financial statement data to identify factors associated with fraudulent financial reporting. *Journal of applied business research*, *11*(3), 38. http://dx.doi.org/10.19030/jabr.v11i3.5858

Pires, R. R. (2011). Beyond the fear of discretion: Flexibility, performance, and accountability in the management of regulatory bureaucracies. *Regulation & Governance*, *5*(1), 43-69. https://doi.org/10.1111/j.1748-5991.2010.01083.x

Ronen, J., & Yaari, V. (2008). Earnings management insights in theory, practice and research. *Berlin and Heidelberg: Springer*. http://dx.doi.org/10.1007/978-0-387-25771-6

Rouf, D. M. A. (2011). The relationship between corporate governance and value of the firm in developing countries: Evidence from Bangladesh. *The International Journal of Applied Economics and Finance*, *5*, 237-244. https://ssrn.com/abstract=2576591

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of accounting and economics*, *42*(3), 335-370. https://doi.org/10.1016/j.jacceco.2006.01.002

Saona, P., Muro, L., & Alvarado, M. (2020). How do the ownership structure and board of directors' features impact earnings management? The Spanish case. *Journal of International Financial Management & Accounting*, *31*(1), 98-133. https://doi.org/10.1111/jifm.12114

Schipper, K. (1989). Commentary on earnings management. *Accounting horizons*, *3*(4).

Services, S. a. P. s. G. (2004). Criteria, Methodology and Definitions. In Standard & Poor's Corporate Governance Scores and Evaluations. *New York: McGraw-Hill Companies Inc.*, 1-23.

Siregar, S. V., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The international journal of accounting*, *43*(1), 1-27. https://doi.org/10.1016/j.intacc.2008.01.001

Subanidja, S., Rajasa, A., Suharto, E., & Atmanto, J. D. (2016). The determinants of firm value: The role of earnings management and good corporate governance. *Corporate Ownership and Control*, *13*(4), 609-615. http://dx.doi.org/10.22495/cocv13i4c4p10

Katmon, N., & Farooque, O. A. (2017). Exploring the impact of internal corporate governance on the relation between disclosure quality and earnings management in the UK listed companies. *Journal of Business Ethics*, *142*, 345-367. https://doi.org/10.1007/s10551-015-2752-8

Suffian, M. T. M., Sanusi, Z. M., & Mastuki, N. A. (2015). Real earnings management and firm value: empirical evidence from malaysia. *Malaysian Accounting Review*, *14*(1). https://mar.uitm.edu.my/images/Vol-14-1/02.pdf

Tulcanaza-Prieto, A. B., & Morocho-Cayamcela, M. E. (2021). The evolution and takeoff of the Ecuadorian economic groups. *Econ,omies*, *9*(4), 188.

https://doi.org/10.3390/economies9040188

Vakilifard, H., & Mortazavi, M. S. (2016). The impact of financial leverage on accrual-based and real earnings management. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *6*(2), 53-60. http://dx.doi.org/10.6007/IJARAFMS/v6-i2/2039

Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of corporate Finance*, *9*(3), 295-316. https://doi.org/10.1016/S0929-1199(02)00006-8

Yoon, Y., Gürhan-Canli, Z., & Schwarz, N. (2006). The effect of corporate social responsibility (CSR) activities on companies with bad reputations. *Journal of consumer psychology*, *16*(4), 377-390. https://doi.org/10.1207/s15327663jcp1604_9

Zamri, N., Rahman, R. A., & Isa, N. S. M. (2013). The impact of leverage on real earnings management. *Procedia Economics and Finance*, *7*, 86-95. https://doi.org/10.1016/S2212-5671(13)00222-0

Zhang, X., Bartol, K. M., Smith, K. G., Pfarrer, M. D., & Khanin, D. M. (2008). CEOs on the edge: Earnings manipulation and stock-based incentive misalignment. *Academy of Management Journal*, *51*(2), 241-258. https://doi.org/10.5465/amj.2008.31767230

Zhao, J. (2010). The Association between Corporate Governance and Earnings Surprises Games. In *Finance and Corporate Governance Conference*. http://dx.doi.org/10.2139/ssrn.1534005