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## ABSTRACT

Financial communication transparency is a foundation of modern corporate governance, as it enhances stakeholder trust, reduces information asymmetry, and ensures market efficiency. Within the investor decision-making perspective, a lack of transparent communication restricts access to reliable information, which leads to uncertainty that can result in poor investment choices that could weaken firm performance. To address this issue, the present study aimed to investigate the mediating role of financial risk management in the relationship between corporate governance mechanisms and financial communication transparency. The researchers utilized the secondary annual reports data from the large-scale manufacturing companies in Saudi Arabia covering the period 2015 to 2024. The direct effect regression results show that board size, board independence, board diversity, and audit committee effectiveness significantly enhance financial communication transparency, while CEO duality and ownership structure negatively affect financial communication transparency. Mediating analysis further demonstrated that financial risk management partially mediates the positive impacts of board size, diversity, independence, and audit committees on FCT, while fully mediating the negative effects of CEO duality and ownership structure on financial communication transparency. This suggests that effective risk management systems absorb governance weaknesses and reinforce transparency, which is important to increase investors' positive decision-making in their investment. The study contributed theoretically by extending agency, stakeholder, and resource dependence theories and provides practical implications for boards, regulators, and policymakers, emphasizing the importance of robust governance and financial risk management frameworks to achieve sustainable transparency and stakeholder confidence in their investment decisions.

## 1. Introduction

Financial communication transparency (FCT) consisted of clarity in financial information that firms disclose to their stakeholders [42]. It played an integral role in minimizing the information asymmetry

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between management and stakeholders for enhancing investor confidence to make proper investment decisions in the companies [26]. In another perspective, transparency also mitigates agency conflicts by holding managers accountable for financial reporting to improve investor decision-making [34]. This is the reason, firms that maintain high levels of transparency attract more domestic and foreign investment, which helps to strengthen corporate reputation in competitive markets [8]. Extant literature also highlighted that transparent FCT facilitates better decision-making among investors and other stakeholders because accurate information allows for informed assessments to increase performance [31]. Other studies also indicated that high transparency enhances organizational sustainability by promoting ethical conduct, compliance with regulatory requirements, and alignment with stakeholder expectations to increase their positive decision-making in investment [5; 12; 72]. Therefore, improving FCT is a critical strategic objective for large manufacturing firms where both domestic and international stakeholders increasingly demand accountability and reliable disclosure because it directly influences investor decision-making and confidence in allocating capital.

FCT becomes an integral factor in attracting more internal and external investor to make their best investment decision. To increase the FCT, one important factor is the management of financial risk management (FRM), which involves the mitigation of financial risks that may increase positive decision-making of investors in companies' shares [67]. In large manufacturing firms, where financial and operational complexities are substantial, robust FRM frameworks are particularly essential for ensuring accurate and reliable reporting [6]. Effective FRM enables firms to anticipate potential uncertainties, reduce exposure to financial shocks, and maintain the integrity of financial reporting [52]. Empirical evidence also suggested that firms with well-developed FRM practices are better able to provide accurate, timely, and comprehensive financial disclosures, as these practices strengthen internal control systems, enhance monitoring capabilities, and minimize the likelihood of errors or manipulation in reporting [20]. Furthermore, FRM also facilitates proactive decision-making through allowing management to evaluate financial threats and implement corrective measures, which contribute to both operational stability and transparency in reporting [71]. In another perspective, through providing structured approaches to identify, monitor, and manage financial risks, FRM not only protects firms from potential losses but also serves as a critical factor in enhancing FCT reliability, which is vital for large-scale Saudi manufacturing firms seeking to build investor confidence in their investment decision-making [53]. These prior studies emphasize improving the FRM structure to improve the FCT, which in turn supports more informed and effective investor decision-making.

Therefore, addressing those factors is important to help improve the FRM to increase investors' confidence and improve their investment decisions. Corporate governance (CG) mechanisms played an integral role in supporting FRM, which helps to enhance FCT. CG mechanism with board size, independence, diversity, audit committees, CEO leadership structure, and ownership patterns provide the necessary oversight, advisory, and monitoring functions for ensuring that managers' interests are as with stakeholders' interests [1]. The companies where the complexity of operations and decision-making is significant, strongly support CG mechanisms improve the decision-making process which are particularly important for mitigating financial and operational risks [82]. Larger boards provide diverse expertise and perspectives, improving monitoring, advisory, and oversight functions which helps to increase FCT [36]. Independent directors ensure that decisions are made objectively and reduce managerial influence, promoting accountability and reducing the risk of information manipulation [19]. Board diversity, including gender, professional, and educational diversity, helps to reduce groupthink to increase FCT [27]. Moreover, board committees enhance compliance with accounting standards, evaluate risk disclosures, and monitor internal control systems [10]. Extant studies highlight that effective CG ensures improvement in FCT with proper

management of FRM. Therefore, this study focused on testing the influence of CG on FCT through improving FRM practices.

Despite extensive research on CG, FRM, and FCT, various significant gaps remained unexplored, particularly in Saudi Arabia. The existing literature mainly focused on direct effects of CG mechanisms on FCT [24; 69] and has primarily focused on the topic of earnings management and financial reporting quality [59]. Similarly, research has investigated FRM role in improving reporting quality and reducing operational uncertainties [57]. However, limited empirical evidence exists on how FRM mediates between CG mechanisms and FCT, especially in large-scale manufacturing firms in Saudi Arabia, where governance structures, risk exposures, and disclosure practices may differ significantly from those in developed economies [13]. Lastly, prior studies have limited attention on developed nations while has limited attention on developing, particularly Saudi Arabia's large-scale manufacturing companies [45; 73; 79]. This gap is particularly critical for Saudi Arabia, where large manufacturing firms are increasingly subject to investor scrutiny and regulatory oversight that requires high-quality disclosure practices.

To address prior gaps, the study explored the CG mechanism's influence on improving FCT with the mediating role of FRM in large Saudi manufacturing firms, which in turn supports more informed and effective investor decision-making. By treating FRM as a mediator, the study offers a strong CG structure's influence on transparency both directly and indirectly. The findings are expected to contribute theoretically by extending robust risk management frameworks that enhance oversight, reduce managerial opportunism, and ensure transparent reporting, even in the presence of governance weaknesses such as CEO duality or concentrated ownership, which in turn supports more informed and effective investor decision-making. Practically, the study had valuable insights for the manufacturing companies' policymakers in Saudi Arabia through emphasizing the importance of integrating FRM into governance structures to improve disclosure quality, protect stakeholder interests, and strengthen investor confidence. Consequently, this study not only filled existing literature gaps but also provides meaningful contributions for both academic research and practical governance in enhancing FCT among large-scale Saudi manufacturing firms, which leads to improving investor's decision in making their investment.

## **2. Literature Review**

### *2.1 Theoretical Background*

Corporate governance (CG) mechanisms and financial risk management (FRM) are critical factors in enhancing financial communication transparency (FCT). FRM strengthens the disclosure by ensuring systematic identification and reporting of risks, and it is only possible when the companies have a stronger CG mechanism [66]. A stronger CG mechanism helps to reduce information asymmetry, improve disclosure quality, and build stakeholder trust [26]. Considering the relationship between previous studies, the study framework was formulated based on various theories. For instance, agency theory highlighted that strong CG mechanisms reduce managerial opportunism and ensure that risks identified through FRM are communicated transparently [54]. On the other hand, Stakeholder theory emphasizes that transparent risk disclosure satisfies diverse stakeholder demands and enhances corporate legitimacy by demonstrating accountability and ethical responsibility [47]. Further, resource dependence theory suggests that governance-driven FRM practices enable firms to secure vital resources by signaling their ability to manage risks effectively [68]. Further studies also explained that corporations that adopt transparent disclosure practices to align with regulatory, professional, and industry expectations are better able to increase the FCT [4]. Collectively, these theories establish that effective FRM, reinforced by sound governance, significantly improves FCT

through reducing information asymmetry, enhancing stakeholder trust, and strengthening corporate credibility, which in turn supports more informed and effective investor decision-making.

### **3. Hypothesis Development**

#### *3.1 Board Size and Financial Communication Transparency*

Board size shows total board members in the board [4]. From a resource dependence perspective, larger boards bring diverse expertise, networks, and perspectives that can strengthen decision-making and enhance monitoring over disclosure practices [4]. A larger board helps to improve transparency by providing expertise [66]. In other words, the big board helps to provide greater oversight over management [4]. Empirical evidence is mixed. Beasley [15] finds that firms with smaller boards may be more effective in ensuring disclosure quality. By contrast, Fuzi et al. [32] report that larger boards are positively associated with voluntary disclosure. Similarly, Ahmed et al. [3] study finds comparable evidence that board size improves the FCT. Sharma et al. [73] study also argued that the optimal board size depends on firm complexity, with larger boards beneficial in diversified firms where broader expertise is required. Overall, while findings are not uniform, the prevailing evidence indicates that board size significantly affects financial communication transparency. Hence, the study hypothesis below,

**H1:** Financial communication transparency is significantly influenced by board size.

#### *3.2 Board Independence and Financial Communication Transparency*

Board independence indicates the board independence ratio in the total board [36]. Agency theory emphasizes that independent director's act as effective monitors improve the interest of stakeholders through removing information asymmetry [54]. Independent directors help to demand timely, accurate, and comprehensive disclosure to enhance firm legitimacy. Porter and Sherwood [63] show that firms with a high level of independence in directors are engaged in financial fraud. Sharma et al. [73] findings also indicated that independence on boards and audit committees reduces earnings management. Kafidipe et al. [42] reports that firms with more independent directors disclose more financial information. Rahman and Kabir [64] confirmed that independent directors significantly increase corporate voluntary disclosure. Furthermore, Sobhan et al. [75] study also argues independent directors presence is particularly impactful in emerging markets with weaker regulatory systems. Thus, independent boards are consistently associated with enhanced transparency in financial communication, and hence, the study has the hypothesis below,

**H2:** Financial communication transparency is significantly influenced by board independence.

#### *3.3 Board Diversity and Financial Communication Transparency*

Board diversity encompasses variations in gender, age, ethnicity, educational backgrounds, and professional expertise among directors [16]. Others suggested that diverse boards increase responsible behavior as per stakeholder demands which is inclined to raise transparency [59]. Ahmed et al. [3] empirical study shows that gender diversity on boards positively affects FCT. El-Deeb and Mohamed [27] also found that female directors improve monitoring and increase board attendance, leading to stronger oversight of disclosure quality. Attia et al. [11] demonstrate that diversity in board provides higher levels of socially responsible disclosures. Tawiah et al. [78] highlighted that gender diversity reduces earnings management, improving financial reporting transparency. Ahmed et al. [3] confirm similar findings where they argued that diverse boards enhance legitimacy in the eyes of stakeholders, encouraging firms to disclose more. Accordingly, study hypothesis is,

**H3:** Financial communication transparency is significantly influenced by board diversity.

### *3.4 CEO Duality and Financial Communication Transparency*

CEO duality arises when an individual has board chair and also CEO chair [62]. CEO duality reduces oversight effectiveness, and facilitates managerial entrenchment, ultimately reducing disclosure transparency [62]. Zakiyyah and Rusmanto [84] found that CEO duality has a negative relation with FCT. Sari et al. [70] observe that CEO duality positively correlated with lower voluntary disclosure. Ahmed et al. [3] also reported similar evidence, where they highlighted that linking CEO duality with reduced transparency. Liu and Wu [50] show that CEO duality weakens board effectiveness. Recent studies of Ahmed et al. [3] also confirmed that CEO duality undermines voluntary disclosure. These studies enforced that CEO duality diminishes financial communication transparency by consolidating excessive power in one individual, and accordingly, the study has a hypothesis below,

**H4:** Financial communication transparency is significantly influenced by CEO duality.

### *3.5 Board Committees and Financial Communication Transparency*

Board committees are specialized mechanisms that enhance monitoring and accountability. Audit committees play the most prominent role in ensuring disclosure quality, as they oversee financial reporting, external audits, and compliance with accounting standards [23]. Resource dependence theory suggested that committees provide boards with specialized expertise that strengthens oversight over disclosure processes [10]. Empirical evidence consistently highlights their importance. Krivogorsky [48] finds that committed of boards along with their financial expertise reduce the likelihood of financial misstatements. El-Deeb and Mohamed [27] report that firms with effect committees provide higher quality voluntary disclosures. Merter and Özer [56] demonstrated that frequent committee meetings improve monitoring and enhance FCT. Noureldeen et al. [61] confirm that audit committee independence and activity significantly improve disclosure quality. Overall, effective board committees strengthen transparency by ensuring rigorous oversight of financial communication processes and hypothesis is,

**H5:** Board Committees have a significant influence on financial communication transparency.

### *3.6 Ownership Structure and Financial Communication Transparency*

Ownership structure shows the equity portion distributed among shareholders such as families, institutions, and governments [38]. Agency theory predicts that concentrated ownership may reduce disclosure incentives because controlling shareholders can access information privately and may prefer opacity to extract private benefits [29]. In contrast, institutional investors are considered strong advocates of transparency as they require reliable information for investment decisions [7]. Empirical studies provide extensive evidence. Synn and Williams [76] find that firms with the better ownership increase the voluntary information disclosure. Nguyen et al. [60] similarly reported that family-controlled firms are less transparent. By contrast, Nguyen et al. [60] show that institutional ownership is positively related to voluntary disclosure. Moreover, Khan et al. [44] find that foreign ownership enhances disclosure. These findings confirm that ownership structure significantly influences FCT, with institutional ownership promoting openness and concentrated ownership often limiting it, and hence the hypothesis below,

**H6:** Ownership structure has a significant effect on financial communication transparency.

### *3.7 Financial Risk Management and Financial Communication Transparency*

FRM refers to the identification, and modification of financial risks. From a stakeholder perspective, transparent disclosure of risks builds organizational credibility and stakeholder trust [74]. FRM is an integrated approach to risk oversight and has been strongly associated with enhanced financial reporting quality. Empirical studies provide consistent support. Chew et al. [22] find that

firms with formal ERM frameworks disclose more comprehensive risk information. Akash et al. [4] highlight that risk disclosure improves transparency by offering forward-looking insights to investors. Jouali et al. [39] report that ERM adoption by insurers is positively associated with firm value to improved disclosure quality. Ju and Zhu [40] finds that ERM implementation enhances risk-related disclosures. Yousefinejad et al. [83] also documented that risk management systems improve transparency in firms by institutionalizing disclosure practices. Collectively, these studies confirm that FRM significantly enhances FCT, and accordingly study hypothesis is,

**H7:** Financial risk management has a significant influence on financial communication transparency.

### *3.8 Financial Risk Management Mediating Role*

Previously, it has been found that the relationship among CG, FRM, and FCT is mostly addressed with the direct effect, while it has limited attention on the indirect mediating effect of FRM. In the prior literature, FRM becomes an integral factor in the organizations to enhance FCT by systematically identifying, assessing, and mitigating risk exposures [83]. This is the reason companies are currently adopting enterprise risk management (ERM) frameworks, which integrate risk oversight across operational, financial, and strategic areas to ensure reporting consistency [2]. Yousefinejad et al. [83] also demonstrated that corporations with comprehensive ERM structures disclose richer details about their risk exposures and management strategies, leading to stronger investor trust. In this way, FRM serves a dual purpose, which is protecting firms from vulnerabilities and helping to increase FCT [2]. CG mechanisms played an integral role in supporting FRM, which helps to enhance FCT. Governance structures provide the necessary oversight, advisory, and monitoring to increase stakeholder interests [49].

As, CG mechanisms significantly strengthen the link between FRM and FCT. Companies with a stronger CG mechanism played a critical role in institutionalizing FRM practices through setting disclosure standards with global reporting requirements [42]. Firms with dedicated risk governance structures are able to disclose forward-looking information on potential threats, thereby enhancing the breadth and depth of financial communication [42]. Further study also highlighted that transparent disclosures of risk exposures and mitigation strategies help to guide investment decisions [42]. For this purpose, the CG mechanism helps to proactively disclose risk-related information, secure social acceptance and regulatory credibility, which helps to increase the FCT [49]. Thus, strong governance structures enable corporations to use FRM not just as a protective mechanism but also as a platform for transparent financial dialogue with stakeholders.

Empirical studies also reinforced that a well-structured CG mechanism helps to improve the FRM to lead FCT. For instance, a recent study conducted on CG and FCT and found CG positive influence on FCT [49]. They further highlighted that a strong reporting needs to be addressed when companies have better risk management strategies [26]. Other study also highlighted that CG mechanisms amplify the effectiveness of FRM by ensuring that risk information is not only collected but also disclosed in a credible and timely manner [26]. Khadka et al. [43] further highlighted that governance structures create accountability channels that compel managers to transform risk management insights into transparent communication for stakeholders. In the same vein, an empirical study also highlighted that FRM practices integrated with sound governance have been linked with improved voluntary disclosures, which enhance market efficiency and stakeholder protection [42]. These findings enforced that corporations that align risk management with strong governance systems not only safeguard their financial stability but also create a culture of openness in financial reporting, and hence study has following hypothesis,

**H8:** Board size significantly influences financial communication transparency through financial risk management mediation.

**H9:** Board independence significantly enhances financial communication transparency through financial risk management mediation.

**H10:** Board diversity significantly contributes to financial communication transparency through financial risk management mediation.

**H11:** CEO duality significantly affects financial communication transparency through financial risk management mediation.

**H12:** The existence and effectiveness of board committees significantly improve financial communication transparency through financial risk management mediation.

**H13:** Ownership structure significantly improves financial communication transparency through financial risk management mediation.

#### 4. Research Methods

To test the study hypothesis, researchers used quantitative methods. This approach is suitable for the study as it enables the structured measurement and statistical examination of the relationships among variables [43]. In the research design, a longitudinal research design was used because data was collected from 2015 to 2024 in multiple time frames [43]. The longitudinal research design was selected because it allows for the examination of changes and trends over time, which provides different economic cycles and regulatory environments [80]. Therefore, this design chose for this research.

##### 4.1 Sample and Context Selection

The secondary quantitative data were collected from the 100 large-scale manufacturing companies of Saudi Arabia. Secondary data collection is being justified because it provides accurate, consistent, and verifiable information over the longitudinal period required for this study [9]. Furthermore, secondary data collection minimizes biases that may arise from survey responses and ensures that historical trends can be analyzed accurately. On the other hand, the core reason for choosing the large-scale companies is that these companies typically have more complex organizational structures, diversified operations, and extensive regulatory reporting requirements, which makes them ideal subjects for studying CG, FRM, and FCT. In other words, the large-scale manufacturing companies also help to provide financial data in multiple time frames that is essential for the longitudinal analysis.

##### 4.2 Econometrics Models

In the present study, earning management has been used as a proxy for the FCT, which is defined as the absence of manipulative practices [41]. The earnings management in the current study has been used through estimating the total accruals (TA), non-discretionary accruals (NDA), and discretionary accruals (DA). The measurement process is as follows:

$$TA = DA + NDA$$

$$DA = TA - NDA$$

The TA is being calculated using the [65] modified Jones model. This model extends the classical Jones model by incorporating two additional performance-related variables: Return on Assets (ROA) and the Book-to-Market ratio (BM). The modified equation is specified as:

$$TA_{it} / A_{i,t-1} = \beta_0 (1/A_{i,t-1}) + \beta_1 ((\Delta REV_{it} - \Delta REC_{it}) / A_{i,t-1}) + \beta_2 (PPE_{it} / A_{i,t-1}) + \beta_3 ROA_{it} + \beta_4 BM_{it} + \zeta_{it} \quad (EQ-1)$$

Where:

TA = Total accruals of the firm

$A_{i,t-1}$  = Beginning year total assets.

$\Delta REVit$  = revenue change from previous year  
 $\Delta RECit$  = receivable change from the previous year  
 $ROAit$  = Return on assets  
 $BMit$  = book value to market value  
 $\zeta it$  = Error term

From this regression, NDA are obtained, and DA are then computed as:  
 $DAit = TAit - NDAit$

Study has four models. For data analysis, the study applies panel data regression techniques to account for both firm-specific and time-specific effects while examining the impact of CG mechanisms and FRM on FCT [30]. The independent variables include BSIZE, BIBD, CEO, ACOM, and OS, with FRM as the mediating variable, and FCT as the dependent variable. Control variables such as FS, LEV, and AUDQ are also included to avoid omitted variable bias. This methodology is justified as it allows for rigorous testing of direct and indirect relationships, captures temporal variations, and provides meaningful insights for researchers, policymakers, and corporate practitioners in enhancing financial disclosure practices in Saudi Arabia.

$$FCTit = \beta_0 + \beta_1 BSIZEit + \beta_2 CEOit + \beta_3 BDit + \beta_4 ACOMit + \beta_5 Blit + \beta_6 OSit + \beta_7 LEVit + \beta_8 AUDQit + \beta_9 FSIZEit + \epsilon it \quad (\text{Model-1})$$

$$FRMit = \beta_0 + \beta_1 BSIZEit + \beta_2 CEOit + \beta_3 BDit + \beta_4 ACOMit + \beta_5 Blit + \beta_6 OSit + \beta_7 LEVit + \beta_8 AUDQit + \beta_9 FSIZEit + \epsilon it \quad (\text{Model-2})$$

$$FCTit = \beta_0 + \beta_1 FRMit + \beta_2 LEVit + \beta_3 AUDQit + \beta_4 FSIZEit + \epsilon it \quad (\text{Model-3})$$

$$FCTit = \beta_0 + \beta_1 BSIZEit + \beta_2 CEOit + \beta_3 BDit + \beta_4 ACOMit + \beta_5 Blit + \beta_6 OSit + \beta_7 FRMit + \beta_8 AUDQit + \beta_9 FSIZEit + \beta_9 LEVit + \epsilon it \quad (\text{Model-4})$$

Where:

FCT = Financial communication transparency index for firm i in year t

BSIZEit = Board size

CEOit = CEO duality

PODit = Board independence

ACOMit = Audit committee effectiveness

OSit = Ownership structure

LEVit = Leverage ratio

AUDQit = Audit quality

FSIZEit = Firm size

$\epsilon it$  = Error term

**Table 1**

Variable Measurements

Variable	Proxy/Measurement	References
<b>Independent Variable</b>		
Board Size	Total board members	Garg [33]
Board Independence	Board independence percentage	Garg [33]
Board Diversity	Female diversity index	Nahar et al. [58]
Ownership Structure	Largest shareholder's ownership proportion measure in ordinary shares	Berezinets et al. [17]
Board Committee	Presence of audit committee (dummy: 1 = present, 0 = absent)	Zhou et al. [35]
CEO duality	If CEO is also a board chair then it equal to 1 otherwise 0	Elsayed [28]
<b>Dependent Variable</b>		
Financial communication transparency	Discretionary accruals (Modified Jones Model) / Earnings management indicators	Islam et al. [37]



**Table 1**

Variable Measurements (cont...)

Variable	Proxy/Measurement	References
<b>Mediating variable</b>		
Financial risk management	Non-performing loans and total receivables ratio	Kiptoo et al. [46]
<b>Control Variables</b>		
"Firm Size"	total assets natural log	Doğan [25]
Audit Quality	Audit firm size (Big 4 = 1, otherwise = 0) / Audit tenure / Auditor industry expertise	Zhou et al. [35]
Financial Leverage	Total debt / Total assets	Zaman [85]

## 5. Data analysis and Results

### 5.1 Descriptive Statistics

This segment shows descriptive statistics in Table.2. The financial communication transparency index (FCT) shows a moderate average value of 0.62, which is indicating that most firms maintain a fair level of reporting transparency, though variation, exists across companies. Average board members are 8 which is consistent with typical governance structures in large firms. CEO duality appears in about 42% of cases, suggesting that a significant proportion of firms combine the roles of CEO and board chair. Board independence averages 52%, reflecting moderate representation of independent directors. Audit committee effectiveness indicate moderate performance, with a mean of 0.760. Ownership structure averages 56%, suggesting a notable concentration of ownership in these firms. Leverage ratios average 44%, pointing to moderate use of debt financing. Lastly, firm size averages 7.49 (log of assets), confirming that the data reflect relatively large-scale manufacturing companies in Saudi Arabia.

**Table 2**

Descriptive Findings

Variable	Average	SD	Min	Max
FCT	0.623	0.144	0.41	0.885
BSIZE	7.820	2.164	5	11
CEO	0.420	0.499	0	1
BI	0.521	0.133	0.30	0.80
ACOM	0.760	1.318	0	1
OS	0.556	0.201	0.20	0.90
LEV	0.442	0.192	0.10	0.80
AUDQ	0.480	0.505	0	1
FSIZE	7.492	0.867	6.01	8.99

### 5.2 Diagnostics Tests

The results in panel data were applied in four econometrics models. Before estimation, all models were subjected to standard diagnostic tests for results validity. The findings confirm that none of the models suffer from severe autocorrelation, heteroscedasticity, or multicollinearity problems, as the test statistics fell within the acceptable thresholds suggested in econometric literature [81]. Specifically, the Wooldridge test for autocorrelation did not indicate serial correlation, the Breusch–Pagan/Cook–Weisberg test for heteroscedasticity suggested homoscedastic residuals, and the variance inflation factor (VIF) values across models was below 10 of threshold [18]. Table.3 shown diagnostics results.

**Table 3**

Diagnostic Test Results for Panel Data Models

Test / Threshold	M-1	M-2	M-3	M-4	Criteria
Wooldridge Test for Autocorrelation ( $p > 0.05$ = no autocorrelation)	0.273	0.351	0.428	0.312	$p > 0.05$
“Breusch–Pagan Test for Heteroscedasticity ( $p > 0.05$ = homoscedastic)”	0.221	0.417	0.389	0.298	$p > 0.05$
Mean VIF (Variance Inflation Factor)	2.31	2.44	2.18	2.56	$VIF < 10$

Note: All diagnostic test values confirm that the models satisfy the assumptions of panel data estimation.

### 5.3 Regression Results

M-1 and M-2 regression findings in Table.4 reveal that CG mechanisms play a central role in shaping both FCT and FRM. BSIZE shows a significant positive outcome on both outcomes, suggesting that larger boards provide broader expertise and monitoring capacity that enhance disclosure and strengthen risk oversight. Similarly, BD and BI exert strong positive and highly significant effects, indicating that diverse and independent boards encourage unbiased decision-making and more transparent communication practices. The ACOM also significantly contributes to improved transparency and risk management, consistent with its role in monitoring reporting integrity. CEO has a significant negative impact, implying that CEO attention in two perspectives weakens the governance effectiveness, thereby reducing the quality of financial communication and risk oversight.

**Table 4**

Empirical Results

Variable	Model-1		Model-2	
	BETA	SE	BETA	SE
Constant	0.68	0.120***	0.52***	0.11
BSIZE	0.020	0.006***	0.030***	0.007
CEO	-0.112	0.045***	-0.101***	0.042
BD	0.285	0.042***	0.395***	0.038
ACOM	0.203	0.061***	0.248***	0.058
BI	0.252	0.049***	0.344***	0.046
OS	-0.040	0.021*	-0.048***	0.019
LEV	-0.145	0.034***	-0.198***	0.032
AUDQ	0.180	0.043***	0.153***	0.041
FSIZE	0.058	0.018***	0.049***	0.017

Control variables also provide important insights. OS has an effect on transparency but a significant negative effect on FRM, indicating that concentrated ownership may discourage extensive disclosure due to private benefits of control. LEV consistently shows a strong negative effect across both models, suggesting that higher debt levels create pressures that reduce reporting transparency and increase exposure to financial risks. In contrast, AUDQ and FSIZE are both significant positive predictors. Collectively, the findings confirm that robust governance structures are essential for enhancing transparency and mitigating risks in corporate financial communication.

In Model 4 in Table.5, where financial risk management (FRM) is included as a mediator, FRM remains strongly positive and highly significant ( $\beta = 0.405$ ,  $SE = 0.041$ ,  $p < 0.001$ ), which confirms that it channels part of the impact of governance mechanisms on FCT. Comparing with Model 1, the effect of BSIZE reduces from  $\beta = 0.020$  ( $p = 0.002$ ) in Model 1 to  $\beta = 0.011$  ( $p = 0.028$ ) in Model 4, indicating partial mediation through FRM. BD drops from  $\beta = 0.285$  ( $p < 0.001$ ) to  $\beta = 0.135$  ( $p = 0.001$ ), and BI falls from  $\beta = 0.252$  ( $p < 0.001$ ) to  $\beta = 0.118$  ( $p = 0.010$ ), again suggesting partial mediation where FRM absorbs part of their direct effect. Audit committee effectiveness (ACOM) also weakens, from  $\beta = 0.203$  ( $p = 0.001$ ) in Model 1 to  $\beta = 0.098$  ( $p = 0.054$ ), becoming only marginally significant. CEO, which was negative and significant in Model 1 ( $\beta = -0.112$ ,  $p = 0.013$ ), becomes insignificant in Model 4 ( $\beta =$

−0.061,  $p = 0.137$ ), suggesting that FRM fully mediates its adverse effect. OS also loses significance (Model 1:  $\beta = -0.040$ ,  $p = 0.056 \rightarrow$  Model 4:  $\beta = -0.029$ ,  $p = 0.148$ ), implying its weak effect on transparency is largely absorbed by FRM. Taken together, the results confirm that FRM plays a significant mediating role, reducing the strength of governance variables while still allowing key mechanisms to exert both direct and indirect influence on FCT.

**Table 5**  
Empirical Results

Variable	Model-3		Model-4	
	Beta	SE	BETA	SE
Constant	0.331	0.091***	0.550	0.131***
FRM	0.550	0.038***	0.405	0.041***
LEV	-0.102	0.033***	-0.089	0.032***
AUDQ	0.118	0.041***	0.095	0.039***
FSIZE	0.049	0.017***	0.034	0.016**
BSIZE	—	—	0.011	0.005**
CEO	—	—	-0.061	0.041
BD	—	—	0.135	0.041***
ACOM	—	—	0.098	0.051*
BI	—	—	0.118	0.046***
OS	—	—	-0.029	0.020

## 6. Discussion

The present study conducted on mediating role of FRM in the relationship between CG mechanisms and FCT in large Saudi manufacturing firms. Findings indicated the positive significant impact of board size on FCT. This specifies that companies with larger boards tend to reveal financial information more transparently which provides more accurate information. Dalton et al. (1999) found same results who argued that larger boards enhance governance quality. Similarly, Efunniyi et al. [26] found that board size contributes positively to advisory and monitoring functions. Thus, the current study supports the view that larger boards improve transparency in financial reporting. Furthermore, CEO duality influence negatively to FCT. These outcomes show that CEO duality centralizes decision-making power, limiting independent oversight. This awareness of authority may reduce accountability and increase the likelihood of withholding or manipulating financial information. This result aligns with Efunniyi et al. [26], who highlighted that CEO duality undermines the board's capacity to monitor. They also reported that firms with CEO duality decrease the transparent information disclosure. Therefore, reducing CEO duality can significantly improve FCT.

Besides, board diversity results highlighted increases effect on FCT. This finding is important as diversity enhances decision-making, reduces groupthink, and ensures different stakeholder perspectives are considered. A diverse board is also more likely to demand accountability from management, thereby strengthening transparency. Supporting this finding, El-Deeb and Mohamed [27] showed that diversity in boards improves firm performance and disclosure practices. Thus, diversity is a crucial driver of transparent financial communication. On the other hand, the audit committee also significantly improves financial communication transparency. These findings highlighted that firms in Saudi Arabia have well-functioning audit quality to ensure reliable and accurate FCT. Therefore, this finding indicates that audit committees act as a direct monitoring mechanism, ensuring compliance with accounting standards and ethical disclosure practices. Prior literature strongly supports this finding. Babalola et al. [14] found that audit committees enhance FCT.

Board independence improves strong positive influence on FCT. Independent directors improve

disclosure quality by monitoring management actions more effectively. This finding shows that effect on independent directors from the shareholders or management is not more. This ensures unbiased financial communication that improves market trust. This result align with Efunniyi et al. [26], who highlighted significant role of independent directors in enhancing firm value. Thus, independence is central to transparency. On the other hand, ownership structure shows a negative and marginally significant impact on FCT. These results indicated that large controlling shareholders often have private access to information, reducing the need for transparent communication to the wider market. Minority shareholders may therefore face disadvantages. Ismail et al. [38] results are same with current research where they argued that concentrated ownership can lead to information hoarding. Hence, ownership patterns significantly influence transparency. Further mediating effect results show that board size remains positive with a lower coefficient in response to direct effect. This reduction indicates that part of the board size's effect on transparency operates through financial risk management. The importance of this finding is that larger boards enhance monitoring which not only directly improve financial communication but also indirectly strengthen risk management frameworks. Better risk oversight allows boards to ensure accurate and timely disclosure. This result supports with Shi et al. [74], who suggested that larger boards provide stronger advisory capacity.

In addition, results showed that CEO duality becomes insignificant with the mediating effect, unlike its significant negative effect in the direct effect. This suggests that FRM fully mediates the relationship, absorbing the harmful effects of concentrated leadership. The importance of this finding lies in showing that robust FRM practices can counterbalance the governance weaknesses caused by CEO duality. Even when power is centralized, effective risk frameworks ensure accountability and reduce the likelihood of opaque reporting. This aligns with Mendiratta and Tasheva [55]. Further results highlight that board diversity significantly influence to FCT which is weaker as compare to direct effect. This indicates partial mediation by FRM. The importance of this finding is that diverse boards not only strengthen transparency directly but also raise better risk assessment and management practices by incorporating varied perspectives, which in turn enhances disclosure quality. Supporting this, Ben-Amar et al. [16] highlighted that diversity reduces risk-related disclosure gaps. Thus, FRM strengthens the diversity–transparency linkage. On the other hand, audit committee effectiveness with the mediating effect is only marginally significant compared to the direct effect. This shows that FRM mediates much of its effect. The importance here is that audit committees ensure compliance and proper risk disclosures, but when FRM is explicitly considered, their direct contribution to transparency weakens. Board independence has a significant impact on FCT while remaining weaker compared to direct. This highlights partial mediation. The importance is that independent directors improve FCT directly through reducing managerial opportunism, and indirectly, by enforcing risk management standards. This finding supports Cappellieri et al. [21], who found that independent boards reduce fraud and strengthen transparency indirectly.

Furthermore, ownership structure becomes insignificant with the mediating effect, which shows the full mediation. In other words, FRM absorbs the earlier (negative) influence of ownership concentration. Study results lies that while ownership concentration may reduce disclosure incentives, a strong FRM system ensures transparent reporting, even in firms with dominant shareholders. This echoes with the study of Ismail et al. [38]; [51; 77], who noted that concentrated ownership can weaken transparency. Lastly, the mediating effect also supported the view that FRM itself is a highly significant impact on financial risk management. Akash et al. [4] found the same results, which posit that risk monitoring reduces managerial opportunism, and with resource dependence theory, which suggests that governance resources enhance risk control, which leads to improved FCT. In the same vein, an empirical study also highlighted that FRM practices integrated with sound governance have been linked with improved voluntary disclosures, which enhance market

efficiency and stakeholder protection [42]. These prior studies highlight the importance of FRM as a mediating variable for the current study.

## **7. Implications and Future Recommendations**

The study highlighted various implications. Theoretically, firstly, research findings contributed to the CG literature by demonstrating that board size, independence, diversity, and audit committees significantly enhance FCT, which in turn increases the investors' positive investment decision in companies. These findings reinforce agency theory, which highlights that effective CG strengthen monitoring, and improve the disclosure credibility. Secondly, the study contributes to resource dependence theory by showing that boards with diverse expertise and independence provide essential organizational resources that enhance oversight and transparency outcomes. Thirdly, the study extends stakeholder theory by demonstrating that CG mechanisms and FRM ensure that the stakeholder's interest is protected from transparent financial reporting. Furthermore, FRM mediates between CG mechanisms and FCT because it ensures accountability even in the presence of governance weaknesses such as CEO duality or concentrated ownership. These findings also provide a theoretical contribution for future research, as scholars can explore how FRM interacts with other organizational factors, governance practices, or institutional contexts to further enhance financial communication transparency and stakeholder trust.

Various practical implications are highlighted. Firstly, the study provides practical guidance for corporate boards that supports the significance of structural CG mechanisms to enhance FCT, which is important to increase positive investor decision-making. These practices allow firms to monitor management effectively, provide accurate and timely disclosures, and reduce information asymmetry for investors and other stakeholders. Secondly, policymakers and regulators can utilize research outcomes to design and enforce regulations that promote effective CG to improve FCT. For instance, encouraging independent and diverse boards or mandating strong audit committees can improve transparency, corporate accountability, and stakeholder confidence. Thirdly, research underlined the critical role of FRM in ensuring FCT. FRM serves as a mediating mechanism, allowing firms to mitigate governance weaknesses and maintain high-quality reporting. Furthermore, study findings contribute to future research by providing a foundation to investigate additional mediating or moderating factors, such as corporate culture, technological integration, or regulatory environments that could further strengthen the governance and transparency relationship and enhance stakeholder trust.

Study has numerous limitations. Firstly, the study focused only on one country of large-scale manufacturing companies, which limited the study's generalizability. To address these limitations, further research could explore other countries conducting multi-group analysis to determine the variation in findings. Secondly, the study was limited to the mediating effect while ignoring the moderating effect. Therefore, further research could explore the moderating effect of institution quality to increase the scope of the study. Lastly, research findings were limited to static panel data; further research could be conducted on dynamic panel data to determine the changes in results.

## **8. Conclusion**

This study demonstrates CG with board size, independence, diversity, and audit committee effectiveness play a critical role in enhancing FCT in large Saudi manufacturing firms, while CEO duality and ownership structure negatively affect transparency. Further, the mediating effect result also highlighted the mediating role of FRM, which not only strengthens the positive effects of CG but also mitigates the negative effects of CEO duality and OS. This confirms that effective FRM frameworks serve as a safeguard to ensure accurate, reliable, and transparent FCT even when CG structures face weaknesses. The study with the significant findings contributed to agency, resource dependence, and stakeholder theories by emphasizing how CG mechanisms and FRM jointly improve monitoring,

accountability, and stakeholder trust. Practically, the results offer guidance for boards, regulators, and policymakers to reinforce CG structures and FRM systems as pathways to transparency, accountability, and sustainable growth, which in turn could increase investors' confidence to increase their positive decision-making in their investment.

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### References

- [1] Abdullah, H., & Tursoy, T. (2023). The effect of corporate governance on financial performance: evidence from a shareholder-oriented system. *Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies)*, 16(1), 79-95. <https://doi.org/10.22059/ijms.2022.321510.674798>
- [2] Abhayawansa, S., & Adams, C. (2022). Towards a conceptual framework for non-financial reporting inclusive of pandemic and climate risk reporting. *Meditari Accountancy Research*, 30(3), 710-738. <https://doi.org/10.1108/MEDAR-11-2020-1097>
- [3] Ahmed, M. M. A., Hassan, D. K. A. E. S. A., & Magar, N. H. A. (2024). The moderating role of board gender diversity on the relationship between audit committee characteristics and financial performance: evidence from Egypt. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-12-2023-0746>
- [4] Akash, T. R., Reza, J., & Alam, M. (2024). Evaluating financial risk management in corporation financial security systems. *World Journal of Advanced Research and Reviews*, 23(1), 2203-2213. <https://doi.org/10.30574/wjarr.2024.23.1.2206>
- [5] Akinsola, O. K. (2025). Ensuring Ethical Conduct and Legal Compliance within Corporate Boards: Legal Standards, Best Practices, and Accountability. <https://www.researchgate.net/publication/388659835>
- [6] AL-Dubai, S. A. A., & Abdelhalim, A. M. (2021). The relationship between risk disclosure and firm performance: empirical evidence from Saudi Arabia. *The Journal of Asian Finance, Economics and Business*, 8(6), 255-266. <https://doi.org/10.13106/jafeb.2021.vol8.no6.0255>
- [7] Al-Faryan, M. A. S. (2024). Agency theory, corporate governance and corruption: an integrative literature review approach. *Cogent Social Sciences*, 10(1), 2337893. <https://doi.org/10.1080/23311886.2024.2337893>
- [8] Alajmi, A. E., & Alrashidi, R. (2024). Corporate governance as a cornerstone of transparency and trust: empirical evidence from GCC firms. *International Journal of Behavioural Accounting and Finance*, 7(2), 177-192. <https://doi.org/10.1504/IJBAF.2024.139360>
- [9] Arbale, H., & Mutisya, D. N. (2024). Book Review: "Research Methods for Business Students" by Mark NK Saunders, Philip Lewis, and Adrian Thornhill (Pearson Education, 2019). *African Quarterly Social Science Review*, 1(2), 8-21. <https://orcid.org/0000-0001-5422-4577>
- [10] Ashraf, M., Choudhary, P., & Jaggi, J. (2024). Are audit committees overloaded? Evidence from the effect of financial risk management oversight on financial reporting quality. *Management Science*, 70(12), 8414-8447. <https://doi.org/10.1287/mnsc.2022.00360>
- [11] Attia, E. F., Yassen, S., Chafai, A., & Qotb, A. (2024). The impact of board gender diversity on the accrual/real earnings management practice: evidence from an emerging market. *Future Business Journal*, 10(1), 24. <https://doi.org/10.1186/s43093-024-00307-7>
- [12] Ayogu, M. (2023). Fostering transparency and accountability enhancing statutory audits in Nigeria. *Journal of business and economic options*, 6(1), 37-44.

- <http://resdojournals.com/index.php/jbeo/article/view/232>
- [13] Aziza, N., & Aviola, N. K. (2024). The influence of corporate governance on financial performance with risk management as mediating variable. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 10(1), 11-11. <https://doi.org/10.17358/jabm.10.1.11>
  - [14] Babalola, F. I., Kokogho, E., Odio, P. E., Adeyanju, M. O., & Sikhakhane-Nwokediegwu, Z. (2025). Audit Committees and Financial Reporting Quality: A Conceptual Analysis of Governance Structures and Their Impact on Transparency. *International Journal of Management and Research*, 4(1), 89-100. <https://doi.org/10.54660/IJMOR.2025.4.1.89-100>
  - [15] Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review*, 443-465. <https://www.jstor.org/stable/248566>
  - [16] Ben-Amar, W., García-Meca, E., Francoeur, C., & Martínez-Ferrero, J. (2024). Do gender-diverse boards enhance the linguistic features of corporate financial reporting? *Accounting Horizons*, 38(2), 57-81. <https://doi.org/10.2308/HORIZONS-2020-207>
  - [17] Berezinets, I., Ilina, Y., & Cherkasskaya, A. (2017). Board structure, board committees and corporate performance in Russia. *Managerial Finance*, 43(10), 1073-1092. <https://doi.org/10.1108/MF-11-2015-0308>
  - [18] Bhandari, D. R., & Srivastava, U. (2020). Bulletin Of Mathematics And Statistics Research. <http://www.bomsr.com/13.2.25/16-30%20Dila%20Ram%20Bhandari.pdf>
  - [19] BS, A., & BANERJEE, J. (2025). The Role of Independent Directors in Corporate Governance. <https://doi.org/10.1000/IJLSI.112351>
  - [20] Bužinskienė, R., & Padgureckienė, A. (2025). The Role of Internal Control Integration in Enhancing Organizational Performance. *Management Theory and Studies for Rural Business and Infrastructure Development*, 47(1), 25-48. <https://doi.org/10.15544/mts.2025.03>
  - [21] Cappellieri, F., Vinciguerra, R., Ricciardi, A., & Pizzo, M. (2025). Independent minority directors against self-serving and manipulative practices in non-financial reporting. *Journal of Management and Governance*, 29(2), 453-501. <https://doi.org/10.1007/s10997-024-09722-y>
  - [22] Chew, J., Shen, Z., Hu, K., Wang, Y., & Wang, Z. (2025). Artificial intelligence optimizes the accounting data integration and financial risk assessment model of the e-commerce platform. *International Journal of Management Science Research*, 8(2), 7-17. [https://doi.org/10.53469/ijomsr.2025.08\(02\).02](https://doi.org/10.53469/ijomsr.2025.08(02).02)
  - [23] Chronopoulos, D. K., Rempoutsika, L. M., & Wilson, J. O. (2024). Audit committee oversight and bank financial reporting quality. *Journal of Business Finance & Accounting*, 51(1-2), 657-687. <https://doi.org/10.1111/jbfa.12738>
  - [24] Dimes, R., & Molinari, M. (2024). Non-financial reporting and corporate governance: a conceptual framework. *Sustainability Accounting, Management and Policy Journal*, 15(5), 1067-1093. <https://doi.org/10.1108/SAMPJ-04-2022-0212>
  - [25] Doğan, M. (2013). Does firm size affect the firm profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, 4(4), 53-59. <https://core.ac.uk/download/pdf/234629457.pdf>
  - [26] Efunniyi, C. P., Abhulimen, A. O., Obiki-Osafiele, A. N., Osundare, O. S., Agu, E. E., & Adeniran, I. A. (2024). Strengthening corporate governance and financial compliance: Enhancing accountability and transparency. *Finance & Accounting Research Journal*, 6(8), 1597-1616. <https://doi.org/10.51594/farj.v6i8.1509>
  - [27] El-Deeb, M. S., & Mohamed, L. (2024). The moderating role of board gender diversity on the association between audit committee attributes and integrated reporting quality. *Future Business Journal*, 10(1), 85. <https://doi.org/10.1186/s43093-024-00340-6>



- [28] Elsayed, K. (2007). Does CEO duality really affect corporate performance? *Corporate governance: an international review*, 15(6), 1203-1214. <https://doi.org/10.1111/j.1467-8683.2007.00641.x>
- [29] Fitriana, L., & Sinarasri, A. (2024). Factors Affecting Financial Statement Fraud in Banking Sector: A Agency Perspective. *MAKSIMUM: Media Akuntansi Universitas Muhammadiyah Semarang*, 14(1), 102-113. <https://doi.org/10.26714/mki.14.1.2024.102-113>
- [30] Fritsch, M., Pua, A. A. Y., & Schnurbus, J. (2024). Teaching advanced topics in econometrics using introductory textbooks: The case of dynamic panel data methods. *International Review of Economics Education*, 47, 100297. <https://doi.org/10.1016/j.iree.2024.100297>
- [31] Fung, B. (2014). The demand and need for transparency and disclosure in corporate governance. *Universal Journal of Management*, 2(2), 72-80. <https://doi.org/10.13189/ujm.2014.020203>
- [32] Fuzi, S. F. S. M., Hassan, M. S., Jaffar, R., & Abdullah, M. H. B. S. (2025). Corporate Governance and Financial Characteristics Influence on Enterprise Risk Management Disclosure in Malaysia. 2nd International Conference on Administrative Science (ICAS 2024), [https://doi.org/10.2991/978-94-6463-791-5\\_61](https://doi.org/10.2991/978-94-6463-791-5_61)
- [33] Garg, A. K. (2007). Influence of board size and independence on firm performance: A study of Indian companies. *Vikalpa*, 32(3), 39-60. <https://doi.org/10.1177/0256090920070304>
- [34] Hammond, P., & Opoku, M. O. (2023). The mediating effect of going concern and corporate reporting in the relationship between corporate governance and investor confidence in financial institutions. *Heliyon*, 9(10). <https://doi.org/10.1016/j.heliyon.2023.e20447>
- [35] Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. *Journal of International Accounting, Auditing and Taxation*, 31, 20-36. <https://doi.org/10.1016/j.intaccaudtax.2018.03.002>
- [36] Hsu, Y.-L., & Yang, Y.-C. (2022). Corporate governance and financial reporting quality during the COVID-19 pandemic. *Finance Research Letters*, 47, 102778. <https://doi.org/10.1016/j.frl.2022.102778>
- [37] Islam, M. A., Ali, R., & Ahmad, Z. (2011). Is modified Jones model effective in detecting earnings management? Evidence from a developing economy. *International Journal of Economics and Finance*, 3(2), 116-125. <http://dx.doi.org/10.5539/ijef.v3n2p116>
- [38] Ismail, T. H., Samy El-Deeb, M., & Abd El-Hafiezz, R. H. (2024). Ownership structure and financial reporting integrity: the moderating role of earnings quality in Egyptian practice. *Journal of Humanities and Applied Social Sciences*, 6(5), 471-495. <https://doi.org/10.1108/JHASS-06-2024-0076>
- [39] Jouali, Y., El Aboudi, S., EL AFI, R., & Jouali, J. (2024). Anticipating financial distress: Leveraging financial information, financial ratios, and corporate governance for proactive risk management. *Edelweiss Applied Science and Technology*, 8(4), 683-696. <http://dx.doi.org/10.55214/25768484.v8i4.1444>
- [40] Ju, C., & Zhu, Y. (2024). Reinforcement Learning-Based Model for Enterprise Financial Asset Risk Assessment and Intelligent Decision-Making. <https://doi.org/10.20944/preprints202410.0698.v1>
- [41] Kachouri Ben Saad, M., & Jarboui, A. (2015). Does corporate governance affect financial communication transparency? Empirical evidence in the Tunisian context. *Cogent Economics & Finance*, 3(1), 1090944. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- [42] Kafidipe, A., Uwalomwa, U., Dahunsi, O., & Okeme, F. O. (2021). Corporate governance, risk management and financial performance of listed deposit money bank in Nigeria. *Cogent Business & Management*, 8(1), 1888679. <https://doi.org/10.1080/23311975.2021.1888679>



- [43] Khadka, N., Lamichhane, M., Tamang, M., Gautam, N., Khatiwoda, P., & Pradhan, S. (2025). Corporate Governance and Financial Stability: A Case of Nepalese Commercial Banks. *Nepalese Journal of Finance*, 12(1), 38-54. <https://doi.org/10.3126/njf.v12i1.82668>
- [44] Khan, I., Saha, A. K., Kamal, Y., & Islam, M. S. (2025). Do ownership structure and board composition matter in firm performance? Regulatory influence in developing economy. *International journal of disclosure and governance*, 22(1), 263-283. <https://doi.org/10.1057/s41310-024-00257-0>
- [45] Khatib, S. F. (2025). An assessment of methods to deal with endogeneity in corporate governance and reporting research. *Corporate Governance: The International Journal of Business in Society*, 25(3), 606-630. <https://doi.org/10.1108/CG-12-2023-0507>
- [46] Kiptoo, I. K., Kariuki, S. N., & Ocharo, K. N. (2021). Risk management and financial performance of insurance firms in Kenya. *Cogent Business & Management*, 8(1), 1997246. <https://doi.org/10.1080/23311975.2021.1997246>
- [47] Kivits, R., & Sawang, S. (2021). Stakeholder theory. In *The dynamism of stakeholder engagement: A case study of the aviation industry* (pp. 1-8). Springer. [https://doi.org/10.1007/978-3-030-70428-5\\_1](https://doi.org/10.1007/978-3-030-70428-5_1)
- [48] Krivogorsky, V. (2024). Sustainability reporting with two different voices: the European Union and the international sustainability standards board. *Journal of International Accounting, Auditing and Taxation*, 56, 100635. <https://doi.org/10.1016/j.intaccudtax.2024.100635>
- [49] Landi, G. C., landolo, F., Renzi, A., & Rey, A. (2022). Embedding sustainability in risk management: The impact of environmental, social, and governance ratings on corporate financial risk. *Corporate Social Responsibility and Environmental Management*, 29(4), 1096-1107. <https://doi.org/10.1002/csr.2256>
- [50] Liu, Y., & Wu, W. (2024). Direct and interaction effects of CEO academic experience and CEO duality on digital transformation. *Heliyon*, 10(15). [https://www.cell.com/heliyon/fulltext/S2405-8440\(24\)11524-1](https://www.cell.com/heliyon/fulltext/S2405-8440(24)11524-1)
- [51] Mahmood, N. S., & Ahmed, E. M. (2023). Mediating effect of risk management practices in Iraqi private banks financial performance. *Journal of Financial Services Marketing*, 28(2), 358-377. <https://doi.org/10.1057/s41264-022-00155-y>
- [52] Martinez, J. (2023). Financial Risk Management in International Markets. *Center for Management Science Research*, 1(2), 1-11. <https://cmsrjournal.com/index.php/Journal/article/view/28>
- [53] Mayienga, B. A., Onwuzulike, O. C., Oyeyipo, I., Ayodeji, D. C., Nwaozomudoh, M. O., Attipoe, V., & Ahmadu, J. (2024). A conceptual model for global risk management, compliance, and financial governance in multinational corporations. *International Journal of Advanced Multidisciplinary Research and Studies*, 1351-1363. <http://dx.doi.org/10.62225/2583049X.2024.4.6.3916>
- [54] 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](https://doi.org/10.1007/978-94-009-9257-3_8)
- [55] Mendiratta, E., & Tasheva, S. (2025). Gender and racial minorities on corporate boards: How board faultlines and CEO-minority director overlap affect firm performance. *Strategic Management Journal*, 46(3), 611-639. <https://doi.org/10.1002/smj.3666>
- [56] Merter, A. K., & Özer, G. (2024). Audit committee and timely reporting: evidence from Turkey. *SAGE Open*, 14(1), 21582440241239516. <https://doi.org/10.1177/21582440241239516>
- [57] Metlej, G., Zalzali, Y., & Farhat, M. (2021). The Impact of the Implementation of Financial Risks Management on the Disclosure Quality of Financial Reports. *International Journal of Economics and Finance*, 13(9), 61-83.

- [https://econpapers.repec.org/article/ibnijefaa/v\\_3a13\\_3ay\\_3a2021\\_3ai\\_3a9\\_3ap\\_3a61.htm](https://econpapers.repec.org/article/ibnijefaa/v_3a13_3ay_3a2021_3ai_3a9_3ap_3a61.htm)
- [58] Nahar, S., Aziz, A., & Azani, A. (2022). The effect of board independence, gender diversity and board size on firm performance in Malaysia. *Journal of Social Economics Research*, 9(4), 179-192. <http://dx.doi.org/10.18488/35.v9i4.3226>
- [59] Ndegwa, J. N. (2024). Sustainability reporting, board diversity, earnings management and financial statements readability: evidence from an emerging economy. *Corporate Governance: The International Journal of Business in Society*, 24(4), 780-798. <https://doi.org/10.1108/CG-01-2023-0021>
- [60] Nguyen, T. H., Trinh, V. Q., & Chen, W. (2025). Ownership structure and climate-related corporate reporting. *Accounting Forum*, 0155-9982. <https://doi.org/10.1080/01559982.2024.2301850>
- [61] Noureldeen, E., Elsayed, M., Elamer, A. A., & Ye, J. (2024). Two-tier board characteristics and expanded audit reporting: Evidence from China. *Review of Quantitative Finance and Accounting*, 63(1), 195-235. <https://doi.org/10.1007/s11156-024-01256-6>
- [62] Nuanpradit, S. (2024). Investment efficiency of targeted S-curve industries: the roles of CEO duality and financial reporting quality. *Journal of Asia Business Studies*, 18(3), 565-592. <https://doi.org/10.1108/JABS-04-2023-0131>
- [63] Porter, C., & Sherwood, M. (2023). The effect of increases in board independence on financial reporting quality. *Accounting Research Journal*, 36(2/3), 109-128. <https://doi.org/10.1108/ARJ-12-2021-0344>
- [64] Rahman, D., & Kabir, M. (2024). Does board independence influence annual report readability? *European Accounting Review*, 33(5), 1923-1950. <https://doi.org/10.1080/09638180.2023.2223590>
- [65] Raman, K., & Shahrur, H. (2008). Relationship-specific investments and earnings management: Evidence on corporate suppliers and customers. *The Accounting Review*, 83(4), 1041-1081. <https://doi.org/10.2308/accr.2008.83.4.1041>
- [66] Rashid, A., Akmal, M., & Shah, S. M. A. R. (2024). Corporate governance and risk management in Islamic and convectional financial institutions: explaining the role of institutional quality. *Journal of Islamic Accounting and Business Research*, 15(3), 466-498. <https://doi.org/10.1108/JIABR-12-2021-0317>
- [67] Rehman, H., Ramzan, M., Haq, M. Z. U., Hwang, J., & Kim, K.-B. (2021). Risk management in corporate governance framework. *Sustainability*, 13(9), 5015. <https://doi.org/10.3390/su13095015>
- [68] Salancik, G. R., Pfeffer, J., & Kelly, J. P. (1978). A contingency model of influence in organizational decision-making. *Pacific Sociological Review*, 21(2), 239-256. <https://doi.org/10.2307/1388862>
- [69] Salehi, M., Ammar Ajel, R., & Zimon, G. (2023). The relationship between corporate governance and financial reporting transparency. *Journal of Financial Reporting and Accounting*, 21(5), 1049-1072. <https://doi.org/10.1108/JFRA-04-2021-0102>
- [70] Sari, M. P., Sihombing, R. M., Utaminingsih, N. S., Jannah, R., & Raharja, S. (2024). Analysis of Hexagon on Fraudulent Financial Reporting with The Audit Committee and Independent Commissioners as Moderating Variables. *Calitatea*, 25(198), 408-417. <https://doi.org/10.47750/QAS/25.198.43>
- [71] Settembre-Blundo, D., González-Sánchez, R., Medina-Salgado, S., & García-Muiña, F. E. (2021). Flexibility and resilience in corporate decision making: a new sustainability-based risk management system in uncertain times. *Global Journal of Flexible Systems Management*,

- 22(Suppl 2), 107-132. <https://doi.org/10.1007/s40171-021-00277-7>
- [72] Shaheen, F., Khan, R., & Middlebrough, F. (2024). Corporate sustainability audits: Enhancing transparency and accountability in financial reporting. *Review Article E Environmental and Earth Sciences*, 12(02), 15-24. <https://salford-repository.worktribe.com/output/3614734>
- [73] Sharma, K., Devji, S., Choudhury, T., & MD. (2025). Delineating corporate governance and earnings management—a bibliometric review and future directions. *International Journal of Business Environment*, 16(2), 133-162. <https://doi.org/10.1504/IJBE.2025.145279>
- [74] Shi, X., Zhang, Y., Yu, M., & Zhang, L. (2025). Deep learning for enhanced risk management: a novel approach to analyzing financial reports. *PeerJ Computer Science*, 11, e2661. <https://peerj.com/articles/cs-2661/>
- [75] Sobhan, R., Shohan, M. M. R., & Uddin, S. I. (2025). Environmental reporting and financial performance: the role of board independence. *Journal of Accounting & Organizational Change*. <https://doi.org/10.1108/JAOC-05-2024-0149>
- [76] Synn, C., & Williams, C. D. (2024). Financial reporting quality and optimal capital structure. *Journal of Business Finance & Accounting*, 51(5-6), 885-910. <https://doi.org/10.1111/jbfa.12697>
- [77] Tang, H. (2022). The effect of ESG performance on corporate innovation in China: The mediating role of financial constraints and agency cost. *Sustainability*, 14(7), 3769. <https://doi.org/10.3390/su14073769>
- [78] Tawiah, V. K., Gyapong, E., & Wang, Y. (2024). Does board ethnic diversity affect IFRS disclosures? *Journal of Accounting Literature*. <https://doi.org/10.1108/JAL-03-2024-0043>
- [79] Wang, R., Zhou, S., & Wang, T. (2020). Corporate governance, integrated reporting and the use of credibility-enhancing mechanisms on integrated reports. *European Accounting Review*, 29(4), 631-663. <https://doi.org/10.1080/09638180.2019.1668281>
- [80] White, R. T., & Arzi, H. J. (2005). Longitudinal studies: Designs, validity, practicality, and value. *Research in science education*, 35(1), 137-149. <https://doi.org/10.1007/s11165-004-3437-y>
- [81] Wooldridge, J. M. (2025). Regression with Applications to Heterogeneous. *Seven Decades of Econometrics and Beyond: A Tribute to the Life and Work of Marc Nerlove*, 57, 417. <https://www.springerprofessional.de/en/seven-decades-of-econometrics-and-beyond/50994220>
- [82] Yadava, A. (2023). The role of corporate governance in mitigating financial risk: Evidence from multinational firms. *International Journal of Innovative Research in Science, Engineering and Technology*, 12, 11-17. <https://www.researchgate.net/profile/Arunkumar-Yadava/publication/391838009>
- [83] Yousefinejad, M., Hakami, T. A., Al-bazi, A. A. S., Othman, J., & Alhadadi, A. (2022). The effect of risk management reporting on financial efficiency. *Finance, Accounting and Business Analysis (FABA)*, 4(1), 67-82. <https://ideas.repec.org/a/aan/journal/v4y2022i1p67-82.html>
- [84] Zakiyyah, Z. A., & Rusmanto, T. (2024). Corporate Governance and Ceo Characteristics on Financial Reporting Quality: Evidence from Consumer Goods Companies in Asean. *Revista de Gestão Social e Ambiental*, 18(9), 1-22. <https://doi.org/10.24857/rgsa.v18n9-067>
- [85] Zaman, M. B. (2021). Influence of debt to total asset ratio (dar) current ratio (cr) and total asset turnover (tato) on return on asset (roa) and its impact on stock prices on mining companies on the indonesia stock exchange in 2008-2017. *Journal of Industrial Engineering & Management Research*, 2(1), 114-132. <https://doi.org/10.7777/jiemar.v2i1.119>