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Examining the Influence of Corporate Governance Components on the TONE and Readability of Financial Reporting in the Tehran Stock Exchange

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Abstract

The primary objective of the present study is to examine the influence of Corporate Governance (CG) components on the TONE of Financial Reporting (TONE) and readability of Financial Reporting (FR) among firms listed on the Tehran Stock Exchange (TSE). In this study, CG mechanisms including Managerial Ownership (MO), Institutional Ownership (IO), Family Ownership (FO), Board Size (BS), Board Independence (BI), Board Gender Diversity (BGD), Audit Committee Independence (ACI), Frequency of Audit Committee Meetings (FACM), and Audit Committee Size (ACS) are considered as the independent variables. The TONE and readability of FR are examined as the dependent variables. The statistical sample consists of 125 firms observed over a seven year period from 2019 to 2025. Data analysis is conducted using multiple regression analysis. The results related to the first hypothesis indicate that IO, BI, and ACI have a positive and statistically significant effect on the TONE of FR, while MO and FO exhibit a negative and statistically significant association with reporting TONE. The findings related to the second hypothesis show that the FACM, BI, and ACI have a positive and statistically significant effect on the readability of FR, whereas MO and FO are negatively and significantly associated with Financial Reporting Readability (FRR).

Keywords: Corporate governance, Financial reporting tone, Financial reporting readability, Impression management, Information asymmetry.

1 | Introduction

The TONE of Financial Reporting (TONE) and readability of Financial Reporting (FR) are of substantial importance to shareholders and investors. Financial statements that are prepared in a simpler and more transparent manner can reduce information asymmetry between managers and shareholders. Moreover, greater transparency in financial disclosures can signal to capital market participants that a firm's financial condition is satisfactory. Prior research indicates that firms experiencing poor financial performance tend to

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present information in a more complex and ambiguous manner in order to obscure unfavorable conditions. The increasing volume and complexity of narrative disclosures in recent years, including explanatory notes and board of directors' reports, while providing opportunities to disclose detailed information about corporate performance and future prospects and thereby enhance decision usefulness, has also created greater scope for managers to engage in impression management [1]. Merkl Davies and Brennan [2], through an examination of selected sections of Enron's annual reports shortly before its bankruptcy, identified expressions that reflected a positively biased portrayal of the company's condition. Their findings suggest the presence of opportunistic managerial behavior aimed at distorting users' perceptions of corporate performance rather than providing useful supplementary information. Deloitte, the professional services and auditing firm, also observed that Enron's reports became increasingly ambiguous and complex as the firm's financial condition deteriorated. These findings indicate that Enron engaged in impression management through the TONE of FR under circumstances in which accounting numbers conveyed a different reality [3]. The TONE of managerial narrative disclosures refers to the degree of positivity or negativity expressed in the text. Iatridis [4] finds that firms with higher earnings use more pessimistic language compared to firms with lower earnings, suggesting that high earning firms tend to exhibit greater conservatism. To assess the effects of reporting TONE, prior studies have focused on corporate performance forecasting and stock market returns, as these areas represent two broad and highly significant domains within accounting and finance that consistently attract the attention of capital market participants [5].

The TONE of FR is typically measured by the proportion of positive and negative words used in the board of directors' annual reports and can be interpreted from either an informational or an opportunistic perspective. From the informational perspective, reporting TONE reduces information asymmetry, whereas from the opportunistic perspective, TONE is employed as a tool of impression management to manipulate or distort users' perceptions. Corporate Governance (CG) functions as a mechanism to mitigate managerial opportunism. Prior studies such as Li [6], Ajina et al. [7], and Hassan [8] indicate that managers adopt specific linguistic styles in FR. When managers aim to present strong performance, they tend to issue more readable financial reports. In contrast, managers seeking to conceal poor performance often provide vague and obscure disclosures in annual reports. Theoretical and empirical literature suggests that when managers intend to engage in financial statement fraud, they issue more complex and less readable reports in order to conceal opportunistic behavior and reduce the likelihood of detection by investors, financial analysts, and regulatory bodies. For example, Jones [9], Goel et al. [10], and Skillicorn and Purda [11] argue that managers use difficult and obscure language in financial reports to facilitate fraudulent activities. Accordingly, analyzing linguistic patterns in FR is expected to play a critical role in detecting accounting fraud, while CG monitoring mechanisms may prevent such behavior. Nevertheless, this issue has received limited attention in domestic studies, resulting in a notable gap in the accounting and FR literature [12]. From one perspective, CG is confined to the relationship between the firm and its shareholders. This traditional view is rooted in agency theory and emphasizes the capacity of a country's legal system to protect minority shareholders' rights. From another perspective, CG is viewed as a network of relationships not only between the firm and its owners but also between the firm and a broad range of stakeholders, including employees, customers, suppliers, and debt holders. This perspective is commonly associated with stakeholder theory. A review of CG definitions in academic literature reveals a shared emphasis on accountability and oversight of FR quality. This broader view stresses accountability not only to shareholders but also to other stakeholders. An effective CG system encourages efficient resource utilization and enforces corporate accountability toward stakeholders. Furthermore, the implementation of CG mechanisms can lead to improved resource allocation, enhanced information transparency, and ultimately improved TONE and readability of FR [13]. Despite its importance, this issue has largely been overlooked in domestic empirical research, creating a gap in the accounting and FR literature that motivates the present study. Accordingly, this research seeks to address the following question: Do CG mechanisms have a statistically significant effect on the TONE and readability of corporate FR?

2 | Literature Review

A growing body of research underscores the critical role of Financial Reporting Readability (FRR) and TONE as determinants of reporting quality, market consequences, and audit outcomes. The consensus emerging from recent studies highlights that less readable reports are often associated with higher risks and adverse economic effects. Blanco and Deol [14] established a direct link between reporting clarity and integrity, finding that lower readability and comparability of financial statements significantly increase the likelihood of fraudulent reporting in U.S. markets. This finding aligns with the notion that opacity can obscure malfeasance. Further exploring the performance dimension, Li [6] demonstrated that firms with lower earnings tend to produce more complex reports, while those with higher readability exhibit greater earnings persistence, suggesting that clear reporting may reflect and reinforce sustainable performance. The economic implications of readability extend to cost of capital. Bonsall and Miller [15] provided evidence from the U.K. that enhanced FRR leads to a reduction in a firm's cost of debt, indicating that creditors perceive transparent reporting as a risk-mitigating factor. Beyond readability, the TONE of reporting also carries significant weight. Henseler et al. [16] found that executive compensation structures can negatively influence both the TONE and readability of reports, with managers adopting a more negative TONE in pursuit of higher rewards, thereby linking managerial incentives to reporting quality. The interplay between TONE and reporting aggressiveness has been examined in emerging markets. Mirzaei et al. [17] demonstrated that a pessimistic TONE in FR significantly curbs aggressive FR in Iranian firms. Notably, they also found that strong shareholder rights protection intensifies this moderating effect, highlighting the role of CG. Finally, the audit risk implications are substantial. Kazemi Olum et al. [18] showed that low FRR in Tehran-listed companies is associated with a suite of higher audit risks: longer audit report delays, higher audit fees, a greater propensity for going-concern opinions, and more frequent auditor changes. This body of work collectively confirms that poor readability increases information processing costs and perceived risk for auditors and other stakeholders.

3 | Research Hypotheses

3.1 | H1: CG Components Have a Significant Impact on the TONE of FR

- I. H1-1: Managerial Ownership (MO) percentage has a significant impact on the TONE of FR.
- II. H1-2: Family Ownership (FO) percentage has a significant impact on the TONE of FR.
- III. H1-3: Institutional Ownership (IO) percentage has a significant impact on the TONE of FR.
- IV. H1-4: Board Gender Diversity (BGD) has a significant impact on the TONE of FR.
- V. H1-5: Board Size (BS) has a significant impact on the TONE of FR.
- VI. H1-6: Board Independence (BI) has a significant impact on the TONE of FR.
- VII. H1-7: Audit Committee Independence (ACI) has a significant impact on the TONE of FR.
- VIII. H1-8: The number of audit committee meetings has a significant impact on the TONE of FR.
- IX. H1-9: Audit Committee Size (ACS) has a significant impact on the TONE of FR.

3.2 | H2: CG Components Have a Significant Impact on the Readability of FR

- I. H2-1: MO percentage has a significant impact on the readability of FR.
- II. H2-2: FO percentage has a significant impact on the readability of FR.
- III. H2-3: IO percentage has a significant impact on the readability of FR.
- IV. H2-4: BGD has a significant impact on the readability of FR.
- V. H2-5: BS has a significant impact on the readability of FR.

VI. H2-6: BI has a significant impact on the readability of FR.

VII. H2-7: ACI has a significant impact on the readability of FR.

VIII. H2-8: The number of audit committee meetings has a significant impact on the readability of FR.

IX. H2-9: ACS has a significant impact on the readability of FR.

4 | Research Model and Variables

The regression models used to test the research hypotheses are specified as follows.

Model 1: TONE model

$$\begin{aligned} \text{TONE}_{i,t} = & \alpha_0 + \beta_1 \text{manage} - \text{own}_{i,t} + \beta_2 \text{Insi}_{i,t} + \beta_3 \text{Family} - \text{own}_{i,t} + \beta_4 \text{b} - \text{size}_{i,t} \\ & + \beta_5 \text{OUTDi}_{i,t} + \beta_6 \text{Gender}_{i,t} + \beta_7 \text{Ind} - \text{Committee}_{i,t} + \beta_8 \text{Size} \\ & - \text{Committee}_{i,t} + \beta_9 \text{Meetings} - \text{Committee}_{i,t} + \epsilon_{i,t} \end{aligned} \quad (1)$$

Model 2: FRR model

$$\begin{aligned} \text{READABILITY}_{i,t} = & \alpha_0 + \beta_1 \text{manage} - \text{own}_{i,t} + \beta_2 \text{Insi}_{i,t} + \beta_3 \text{Family} - \text{own}_{i,t} + \beta_4 \text{b} \\ & - \text{size}_{i,t} + \beta_5 \text{OUTDi}_{i,t} + \beta_6 \text{Gender}_{i,t} + \beta_7 \text{Ind} - \text{Committee}_{i,t} + \beta_8 \text{Size} \\ & - \text{Committee}_{i,t} + \beta_9 \text{Meetings} - \text{Committee}_{i,t} + \epsilon_{i,t} \end{aligned} \quad (2)$$

4.1 | Variable Breakdown, Definitions, and Methodology

Given the identical independent variables in both models, the variables are presented in an integrated structure below.

Table 1. Variable type and conceptual definition.

Row	Variable Type	Variable Symbol	Conceptual Definition
Dependent Variables			
1	Dependent	TONE	The emotional direction and optimism/pessimism embedded in the text of the Management's Discussion & Analysis (MD&A) report.
2		Readability	The degree to which the financial report text can be easily understood and followed by an average user.
Independent Variables (CG Components)			
3	Independent	Manage_own	The percentage of shares owned by the company's board members and executive managers.
4		Ins	The percentage of shares held by institutional investors (funds, insurance companies, banks, etc.).
5		FO	The percentage of shares controlled by members of the founding family or their relatives.
6		b_size	The total number of members on the company's board of directors.
7		Outd	The extent of independent non-executive member presence on the board.
8		Gender	The presence of women on the board as an indicator of diversity.
9		Ind_committee	The extent of independent member presence on the audit committee.
10		Size_committee	The total number of members serving on the audit committee.
11		Meetings_committee	The level of activity and diligence of the audit committee in performing its oversight duties.

Table 2. Variable type, measurement method, and source/required data.

Variable	Measurement Method (Operationalization)	Source / Required Data
TONE	Typically calculated using dictionary-based analysis. common Method: The net optimistic TONE index, defined as: (number of optimistic words – number of pessimistic words) / (total number of optimistic + pessimistic words). Standard dictionaries: Henry [19], Loughran and McDonald [20]	Text of the MD&A section in the annual report
Readability	Measured using standard textual complexity indices. Most Common index: Fog Index = $0.4 * [(\text{average sentence length}) + (\text{percentage of complex words})]$ Complex words: Words with three or more syllables. Alternative indices: Gunning Fog Index, Flesch-Kincaid grade level, Log of total report word count.	Full text of the annual report (or the MD&A section)
Manage_own	(Number of shares owned by directors and executives/total outstanding shares) * 100	Board of directors' report to the general assembly, major shareholders' data, or ownership section in financial statement notes
Ins	(Number of shares owned by institutional investors/total outstanding shares) * 100	Institutional databases (e.g., from the stock exchange), monthly reports on major shareholders
FO	(Number of shares owned by founding family members/total outstanding shares) * 100	Board of directors' reports, identification of family shareholders through surnames
b_size	Count of the number of board members at the fiscal year-end.	Board of directors' report, minutes of the general assembly
Outd	(Number of independent board members/total board members) * 100	Board of directors' report and member appointment decrees
Gender	Common methods: 1) gender ratio: (number of female board members/total board members) * 100	Composition of the board of directors as stated in the board report
Ind_committee	(Number of independent audit committee members/total audit committee members) * 100	Audit committee report or the board's report on committee composition
Size_committee	Count of the number of audit committee members at the fiscal year-end.	Audit committee report
Meetings_committee	The number of formal meetings held by the audit committee during the fiscal year.	Audit committee report reflected in the board of directors' report

5 | Statistical Population and Sample

5.1 | Statistical Population

The statistical population of this study comprises all companies listed on the Tehran Stock Exchange (TSE) up to the end of the Iranian calendar year 1400 (corresponding to March 20, 2022).

5.2 | Sample Selection Criteria and Process

From the aforementioned population, companies were selected based on the following conditions and limitations to ensure homogeneity, consistency, and data availability:

- I. Homogeneity and data continuity: To form a homogeneous sample and ensure data availability for the entire study period, companies must have been listed on the TSE prior to the year 1398 (March 2019) and their shares must have been actively traded from the beginning of 1398 (March 21, 2019).
- II. Operational activity: To select actively operating firms, the trading of their shares on the exchange must not have been suspended for more than three months during the period from 1398 to 1404 (2019-2025).
- III. Comparability: To enhance comparability across firms, companies must have a fiscal year ending on Esfand (the last month of the Iranian calendar year, corresponding to March).
- IV. Consistency: Companies must not have changed their core business activity or fiscal year-end during the period 1398 to 1404 (2019-2025).
- V. Industry exclusion: Companies operating in the following sectors were excluded due to their distinct FR and governance structures: Investment Companies (IC), Financial Intermediation (FI), Banks and Credit Institutions (BCI), Leasing Companies (LC).

5.3 | Final Sample

Applying the above filtering criteria resulted in a final sample consisting of 125 companies. This sample forms a balanced panel dataset for the nine-year period from 1398 to 1404 (2019-2025), suitable for panel data regression analysis.

6 | Data Analysis

6.1 | Descriptive Statistics of Research Variables

Table 3 presents the descriptive statistics for the variables used in this study, including the number of observations, mean, standard deviation, minimum value, maximum value, skewness, and kurtosis.

Table 3. Descriptive statistics of research variable.

Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
TONE	875	0.026	0.041	-0.118	0.346	-0.683	4.553
FRR	875	-14.537	2.467	-26.582	-9.734	3.123	11.890
MO	875	0.116	0.198	0.000	0.693	1.361	3.162
FO	875	0.051	0.253	0.000	0.376	1.002	4.211
IO	875	0.295	0.141	0.000	0.546	2.593	7.177
BGD	875	0.036	0.130	0.000	1.000	2.337	4.172
BS	875	3.932	1.229	3.000	5.000	2.915	4.510
BI	875	0.315	0.264	0.200	0.660	4.326	8.711
ACI	875	0.613	0.130	0.000	1.000	2.337	4.172
ACMF	875	4.235	2.116	4.000	12.000	4.376	9.219
ACS	875	3.472	1.506	2.000	5.000	3.091	6.472

Based on *Table 3*, the mean of FRR indicates that the board of directors' reports are generally difficult to read, with an average score of approximately 14. The mean values for FO and MO are relatively low, at

approximately 5% and 11%, respectively. BGD is also minimal, averaging around 3%. Additionally, ACI is estimated at approximately 60%.

6.2 | Stationarity Test of Research Variables

One of the major issues that may arise in time-series regression is the phenomenon of spurious regression. Spurious regression occurs when, despite a high coefficient of determination, there is no meaningful relationship between the variables. To ensure the validity of the study results and to confirm that the relationships observed in the regression are not spurious, stationarity tests were conducted on the research variables using the Levin, Lin & Chu (LLC) test and the Im, Pesaran & Shin (IPS) test.

If the above tests indicate that a variable has a unit root and requires first differencing, its order of integration is one ($I(1)$). Conversely, if the tests confirm that a variable is stationary, its order of integration is zero ($I(0)$). Table 4 presents the results of the stationarity tests for the research variables. The results indicate that the test statistics for all variables are significant, thereby rejecting the null hypothesis of a unit root. In other words, the data are confirmed to be stationary.

Table 4. Stationarity test results for research variables (IPS and LLC tests).

Variable	IPS Statistic	p-value	Integration Order	LLC Statistic	p-value	Integration Order
TONE	-4.634	0.000	$I(0)$	-5.110	0.000	$I(0)$
FRR	-8.392	0.000	$I(0)$	-4.880	0.000	$I(0)$
MO	-6.536	0.000	$I(0)$	-5.360	0.000	$I(0)$
FO	-6.019	0.000	$I(0)$	-4.630	0.000	$I(0)$
IO	-11.875	0.000	$I(0)$	-6.740	0.000	$I(0)$
BGD	-8.365	0.000	$I(0)$	-5.390	0.000	$I(0)$
BS	-7.300	0.000	$I(0)$	-3.420	0.000	$I(0)$
BI	-6.128	0.000	$I(0)$	-8.494	0.000	$I(0)$
ACI	-4.216	0.000	$I(0)$	-6.537	0.000	$I(0)$
ACMF	-8.850	0.000	$I(0)$	-4.175	0.000	$I(0)$
ACS	-11.371	0.000	$I(0)$	-9.907	0.000	$I(0)$

Notes:

- I. All variables are stationary at the level, i.e., $I(0)$, according to both the IPS and LLC tests.
- II. The null hypothesis of a unit root is rejected for all variables at the 1% significance level ($p < 0.01$).
- III. Stationarity of the variables confirms that the data do not suffer from spurious regression issues and are suitable for subsequent regression analyses.
- IV. This includes both narrative reporting variables (TONE and readability) and CG variables, including ownership structures, board characteristics, and audit committee attributes.

6.3 | Regression Assumption Tests

To determine whether the use of panel data methods is appropriate and efficient for estimating the proposed model, the Chow test (or restricted F test) is employed. This test assesses whether pooling the data across cross-sectional units is valid or whether individual effects need to be considered. In addition, to identify the most suitable estimation method, fixed effects or random effects, the Hausman test is conducted, which tests whether the differences across cross-sectional units are correlated with the regressors. The results of these tests are presented in the following tables. Based on the outcomes, the models are estimated using panel data with fixed effects.

Table 5. Results of chow and hausman tests for model (1).

Test	Number of Observations	Test Statistic	Df	p-value
Chow	875	4.165	8	0.000
Hausman	875	5.217	8	0.000

Table 6. Results of chow and hausman tests for model (2).

Test	Number of Observations	Test Statistic	Df	p-value
Chow	875	5.324	8	0.000
Hausman	875	5.109	8	0.000

Notes:

- I. The Chow test rejects the null hypothesis of poolability at the 1% significance level ($p < 0.01$), indicating the presence of significant individual effects across cross-sectional units.
- II. The Hausman test also rejects the null hypothesis ($p < 0.01$), suggesting that random effects are inconsistent and that a fixed effects model is more appropriate.
- III. Therefore, *Model (2)* is estimated using the fixed effects panel data approach, consistent with the results of *Model (1)*.

The statistics presented in *Tables 5* and *6* indicate that the data for both *Models (1)* and *(2)* are panel in nature. Therefore, the Hausman test was conducted to determine the appropriate specification, fixed effects or random effects, for the panel data. The results of the Hausman test suggest that a fixed effects model is appropriate for both models. To ensure the validity of the models and to verify the classical regression assumptions, several diagnostic tests were conducted in addition to checking for multicollinearity among the independent variables. These tests include: Normality of residuals, homoscedasticity, independence of residuals, and correct functional form (linearity of the model). To assess the normality of the error terms, the Jarque–Bera (JB) test was employed. The results indicate that the residuals of the estimated models follow a normal distribution at the 95% confidence level, as the associated p-values exceed 0.05. Another classical regression assumption is the homogeneity of the residual variances. If heteroscedasticity is present, the Ordinary Least Squares (OLS) estimator remains unbiased but is no longer efficient. In this study, heteroscedasticity was tested using the Breusch–Pagan (BP) test. Given that the p-value of this test was less than 0.05, the null hypothesis of homoscedasticity was rejected, indicating the presence of heteroscedasticity in the models. To address this issue, the models were re-estimated using the Generalized Least Squares (GLS) method, which provides efficient and unbiased estimates in the presence of heteroscedasticity.

In this study, to test for the absence of autocorrelation in the residuals, a key assumption in regression analysis, the Durbin–Watson (D–W) test was employed. Based on the initial estimation results, the D–W statistic falls between 1.5 and 2.5, indicating that the residuals are independent of each other. Furthermore, to examine whether the model is correctly specified in terms of linearity versus nonlinearity, the Ramsey Regression Equation Specification Error Test (RESET) test was conducted. The results show that the significance level of the Ramsey test exceeds 0.05, confirming the null hypothesis that the model is correctly specified as linear and that there is no specification error. A summary of the above diagnostic tests is presented in the following tables.

Table 7. Results of classical regression assumption tests for model (1).

Test	For χ^2	p-value	Result
JB (normality)	1.6324	0.2159	Residuals are normally distributed
BP (homoscedasticity)	1.9768	0.0090	Heteroscedasticity present; GLS estimation applied
D–W (autocorrelation)	1.813	–	Residuals are independent
Ramsey RESET (specification)	0.1657	0.2253	Model is correctly specified; linear

Notes:

- I. The JB test confirms that the residuals of *Model (2)* follow a normal distribution ($p > 0.05$).
- II. The BP test indicates the presence of heteroscedasticity ($p < 0.05$); GLS estimation was applied to obtain efficient coefficients.
- III. The D–W statistic (2.265) suggests no significant autocorrelation among residuals.
- IV. The Ramsey RESET test indicates that the model is correctly specified and does not suffer from misspecification error ($p > 0.05$).

Table 8. Results of classical regression assumption tests for model (2).

Test	For χ^2	p-value	Result
JB (normality)	1.1045	0.7325	Residuals are normally distributed
BP (homoscedasticity)	1.835	0.0042	Heteroscedasticity present; GLS estimation applied
D–W (autocorrelation)	2.265	–	Residuals are independent
Ramsey RESET (specification)	0.0943	0.0326	Model is correctly specified; linear

Notes:

- I. The JB test confirms that the residuals of *Model (2)* follow a normal distribution ($p > 0.05$).
- II. The BP test indicates the presence of heteroscedasticity ($p < 0.05$); GLS estimation was applied to obtain efficient coefficients.
- III. The D–W statistic (2.265) suggests no significant autocorrelation among residuals.
- IV. The Ramsey RESET test indicates that the model is correctly specified and does not suffer from misspecification error ($p > 0.05$).

Hypothesis 1 (Test). The results of the first hypothesis test are presented below:

Table 9. Results of the multiple regression analysis for hypothesis 1.

Variable	Symbol	Coefficient (β)	Standard Error	T-Statistic	p-value
Constant	α	0.326	0.2458	1.326	0.311
MO	MANAGE-OWN	-0.387*	0.0821	-4.709	0.000
IO	INS	0.145*	0.0413	3.508	0.000
FO	FAMILY-OWN	-0.216*	0.0383	-5.634	0.000
BS	B-SIZE	0.412	0.2474	1.665	0.121
BI	OUTD	0.513*	0.1102	4.653	0.000
BGD	GENDER	0.433	0.2440	1.774	0.098
ACI	IND-COMMITTEE	0.304*	0.0445	6.823	0.000
ACS	SIZE-COMMITTEE	0.132	0.0843	1.564	0.175
ACMF	MEETINGS-COMMITTEE	0.184	0.1142	1.611	0.135
D–W			1.813		
F-statistic			165.9		
R ²			0.627		
Adjusted R ²			0.625		

Notes:

- I. The dependent variable is TONE.
- II. *Significant at the 1% level ($p < 0.01$).
- III. The model explains approximately 62.5% of the variance in the dependent variable (Adjusted R² = 0.625).
- IV. The D–W statistic (1.813) indicates no significant autocorrelation in the residuals.

As shown in *Table 9*, the p-values for MO, IO, FO, BI, and ACI are all below 0.05, indicating that these variables have a significant effect on the TONE of the companies. In contrast, BS, ACS, BGD, and Audit

Committee Meeting Frequency (ACMF) are not significant, as their p-values exceed 0.05, suggesting no meaningful impact on reporting TONE. Moreover, the F-statistic is highly significant ($p < 0.001$), indicating that the overall regression model is statistically significant and that a meaningful relationship exists between the dependent and independent variables. The adjusted R^2 of 0.625 indicates that approximately 62.5% of the variation in TONE is explained by the independent variables included in the model. Finally, the D–W statistic of 1.813, which falls between 1.5 and 2.5, suggests that there is no evidence of autocorrelation among the residuals of the regression model.

Table 10. Results of the multiple regression analysis for hypothesis 2.

Variable	Symbol	Coefficient (β)	Standard Error	T-Statistic	p-value
Constant	α	0.118	0.0736	1.896	0.199
MO	Manage-Own	-0.293*	0.0858	-5.414	0.000
IO	Ins	0.174	0.0960	1.811	0.128
FO	Family-Own	-0.295*	0.0681	-4.328	0.000
BS	B-Size	0.464	0.3316	1.399	0.387
BI	Outd	0.307*	0.0508	6.042	0.000
BGD	Gender	0.301	0.2473	1.217	0.531
ACI	Ind-Committee	0.166*	0.0676	2.455	0.037
ACS	Size-Committee	0.331	0.2900	1.141	0.522
ACMF	Meetings-Committee	0.412*	0.0863	4.774	0.000
D–W			2.265		
F-statistic			208.17		
R^2			0.743		
Adjusted R^2			0.739		

Notes:

- I. The dependent variable is FRR.
- II. Significant at the 1% level ($p < 0.01$), significant at the 5% level ($p < 0.05$).
- III. The model explains approximately 73.9% of the variation in financial reporting readability (Adjusted $R^2 = 0.739$).
- IV. The D–W statistic of 2.265 indicates no significant autocorrelation among the residuals.

As shown in *Table 10*, the p-values for MO, FO, BI, ACI, and ACMF are all below 0.05, indicating that these variables have a significant impact on the readability of financial reporting. In contrast, IO, BS, BGD, and ACS are not significant, as their p-values exceed 0.05, suggesting that they do not meaningfully affect reporting readability. The F-statistic is highly significant ($p < 0.001$), confirming that the overall regression model is statistically significant and that a meaningful relationship exists between the independent variables and the dependent variable. The adjusted R^2 of 0.739 indicates that approximately 73.9% of the variation in financial reporting readability is explained by the independent variables included in the model. Finally, the D–W statistic of 2.265, which is within the acceptable range (1.5–2.5), suggests that there is no evidence of autocorrelation among the residuals of the regression model.

7 | Conclusion

The results of this study indicate that different CG components have varying and significant effects on the TONE and readability of financial reporting. The analysis shows that managerial and FO negatively and significantly affect both the TONE and readability of financial reports. Managers, driven by the desire to present positive performance to shareholders, may provide overly optimistic reports and sometimes fail to fully adhere to the principle of information alignment. Similarly, family owners, due to lower monitoring sensitivity and confidence in their control over company shares, supervise financial reporting less rigorously, leading to increased complexity and reduced readability of reports. These findings suggest that the type and motivation of ownership can directly influence the quality of a company's financial communication with the capital market. In contrast, IO has a direct and significant positive impact on the TONE. Institutional owners,

by employing skilled managers and closely monitoring the reporting behavior of company executives, are better able to enhance report quality. However, IO does not have a significant effect on the readability of financial reports, likely because these owners prioritize accuracy and compliance with standards over simplifying and clarifying the presentation of information. BI and ACI also exert direct and significant effects on both the TONE and readability of financial reporting. Independent members, through unbiased and professional oversight, can prevent manipulation or opportunistic reporting while ensuring that the presentation of information remains clear and understandable. These results emphasize that the independence and expertise of internal oversight bodies play a critical role in improving financial reporting quality, and that factors such as BS, committee size, gender diversity, or the number of meetings alone, without sufficient oversight quality and professional competence, cannot guarantee improvements in TONE or readability. Nonetheless, the Frequency of Audit Committee Meetings (FACM) has a direct positive impact on readability, as regular reviews reduce complexity and enhance the transparency and comprehensibility of financial information. Overall, the study demonstrates that enhancing financial reporting quality is not merely a function of committee structures or ownership composition, but depends heavily on the implementation of effective oversight, the independence of monitoring members, and the interactions among owners, managers, and audit committees. In other words, achieving an improved TONE and readability in financial reporting requires a combination of governance effectiveness, professional monitoring, and adherence to transparency standards, rather than simply focusing on quantitative aspects of board or committee composition. This study also has several limitations that should be considered when interpreting the results. First, the sample is limited to TSE-listed companies, which may restrict the generalizability of the findings to unlisted firms or other sectors. Second, the data cover a specific period, and subsequent economic, political, or regulatory changes may have different impacts on TONE and readability. Third, certain qualitative aspects of reporting quality, such as the content of explanatory notes or organizational culture factors, were not examined due to data limitations. Finally, this study relies on historical and quantitative data, and therefore behavioral aspects of managers and shareholders that may influence reporting practices were not directly measured. Despite these limitations, the findings provide important implications for managers, investors, and regulatory bodies, highlighting that a combination of independence, professional expertise, and effective CG mechanisms is crucial for enhancing the TONE and readability of financial reporting, ultimately strengthening market confidence and supporting more informed investment decisions.

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Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability

The dataset used in this study was simulated for the purpose of demonstrating and evaluating the proposed framework. The data and/or computational details are available from the corresponding author upon reasonable request

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