

Ownership Concentration and Fraud Risk: The Moderating Role of Board Structure – Malaysian Evidence

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ABSTRACT

Fraudulent financial statements remain a critical challenge to investor confidence and financial market integrity, particularly in emerging economies such as Malaysia. This study examines the relationship between ownership concentration and fraud risk, while analysing the moderating role of board structure. Fraud risk is proxied using the Altman Z-score, which captures financial distress, a common precursor to earnings manipulation. Drawing on agency theory and network perspectives, this study argues that ownership concentration can strengthen monitoring and reduce fraud risk, but its effectiveness may depend on internal governance design, specifically board structure. Using a balanced panel of 578 firms listed on Bursa Malaysia, comprising 2,890 firm-year observations, the study employs panel least squares regression with cross-section and period fixed effects. The findings show that ownership concentration is positively and significantly associated with the Altman Z-score, suggesting that concentrated ownership reduces fraud risk. Board structure also shows a positive and significant relationship with financial health. However, the interaction between ownership concentration and board structure is negative and significant, indicating that large boards weaken the positive monitoring effect of concentrated ownership. These results suggest that while ownership concentration enhances monitoring, excessively large boards can dilute this benefit. The findings contribute to fraud risk and governance research by highlighting the moderating influence of board structure and providing policy insights for regulators and investors to balance ownership control with board efficiency to strengthen financial reporting integrity.

Keywords: ownership concentration, board structure, fraud risk, audit quality, Malaysia

INTRODUCTION

Fraudulent financial statements are among the most damaging corporate misconducts, undermining investor trust and destabilising financial markets. Although less frequent than operational or asset misappropriation frauds, their economic and reputational consequences are profound, including corporate collapse, investor losses, and public distrust (ACFE, 2014; ACFE, 2020). In Malaysia, high-profile scandals such as 1Malaysia Development Berhad (1MDB) have exposed vulnerabilities in corporate oversight, transparency, and enforcement mechanisms (Smaili, Arroyo, & Issa, 2022), underscoring the persistence of fraud risk despite governance reforms. These incidents have prompted regulators, investors, and scholars to revisit the effectiveness of existing governance mechanisms in detecting and deterring financial misreporting.

Ownership concentration plays a central role in determining how effectively managers are monitored and disciplined. Under agency theory, concentrated ownership can align managerial and shareholder interests, enhancing oversight and curbing fraudulent reporting by reducing information asymmetry and strengthening direct control over management (Jensen & Meckling, 1976). In such settings, large or institutional shareholders often act as active monitors who demand greater transparency and accountability. However, when ownership is excessively concentrated, controlling shareholders may exploit their power to influence financial reporting for private benefit, engage in tunnelling, or conceal poor performance to protect their interests (Sikka & Stittle, 2019). This duality improved monitoring versus potential entrenchment and creates an empirical puzzle regarding ownership's true impact on fraud risk, especially in emerging markets where ownership is often concentrated within families or state-linked entities.

This study examines how ownership concentration influences fraud risk and whether this relationship is moderated by board structure. The Altman Z-score is used to measure firms' financial distress, which serves as a proxy for fraud pressure (Altman, 1968; Bhavani & Amponsah, 2017; Kukreja et al., 2020). A higher Z-score implies stronger financial health and, consequently, a lower likelihood of fraudulent financial reporting. The Z-score is a reliable indicator frequently applied in corporate failure and fraud prediction studies in Malaysia (Azhar, Lokman, Alam, & Said, 2021), offering a robust measure of financial stability that reflects management's incentives to manipulate results under distress.

Board structure, captured through board size, may either reinforce or weaken ownership monitoring. Larger boards can enhance decision-making by integrating diverse expertise, broader networks, and multiple viewpoints that contribute to stronger strategic and ethical oversight (Gaio & Raposo, 2011). A well-balanced board can also impose reputational constraints that deter opportunistic behaviour. Nonetheless, excessively large boards may lead to coordination inefficiencies, diffusion of responsibility, and slower responses to managerial misconduct (Krause, Semadeni, & Cannella, 2014). Hence, the effectiveness of ownership concentration as a governance mechanism may depend significantly on how well board structure complements or constrains it.

The Malaysian context marked by family-controlled firms, state-linked companies, and high ownership concentration provides an ideal setting for examining these relationships. Although the Malaysian Code on Corporate Governance (MCCG) has progressively enhanced standards for board independence and accountability, enforcement gaps and varying governance quality across firms continue to influence fraud risk exposure. The coexistence of formal governance rules and informal relational networks in Malaysian corporations further complicates how ownership and board structure interact to influence transparency and reporting behaviour.

This study contributes to the literature in three key ways. First, it empirically tests the relationship between ownership concentration and fraud risk within an emerging economy, contributing to the ongoing debate on whether concentrated ownership mitigates or exacerbates fraudulent reporting. Second, it introduces board structure as a moderating mechanism linking ownership control and fraud risk, providing fresh evidence on how internal governance configuration influences monitoring effectiveness. Third, it offers regulatory and policy implications by identifying how optimal board composition can balance the benefits of ownership concentration with the need for effective, independent oversight to strengthen governance outcomes.

This study is among the first to examine the moderating role of board structure in the ownership concentration and fraud risk relationship using the Altman Z-score within the Malaysian context, providing new empirical insights for emerging markets.

The remainder of this paper is structured as follows. Section 2 reviews the theoretical foundations and develops hypotheses. Section 3 outlines the research methodology, including data collection and model specification. Section 4 presents the empirical findings and analysis, while Section 5 concludes with implications for policy, practice, and future research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Agency Theory and Ownership Concentration

Agency theory posits that managers may act in their own self-interest rather than maximising shareholder value, leading to agency costs and potential misreporting (Jensen & Meckling, 1976). Concentrated ownership mitigates these issues by aligning incentives and empowering major shareholders to exercise closer control and oversight over managerial decisions (DeAngelo, 1981; Rahmat et al., 2021). When ownership is concentrated, large shareholders possess both the motivation and the capacity to monitor effectively, thereby reducing information asymmetry and managerial opportunism.

However, excessive concentration can have adverse consequences. Dominant shareholders may exploit their control to expropriate minority shareholders or obscure weak performance through accounting manipulation (Sikka & Stittle, 2019; Smaili et al., 2022). Such behaviour may arise when monitoring shifts from protecting

firm value to safeguarding personal or political interests. The net effect of ownership concentration on fraud risk therefore depends on the balance between its monitoring benefits and its potential for entrenchment and control abuse, a duality that remains empirically contested, particularly in emerging markets.

Network Theory

Network theory extends agency perspectives by recognising that corporate actors operate within social and professional networks that shape behaviour and reputation. Directors and controlling shareholders embedded in prominent, high-reputation networks face social and reputational penalties if misconduct occurs, motivating stronger monitoring and a greater commitment to transparency (Rahmat et al., 2021; Rahmat et al., 2024). This relational dimension of oversight complements formal governance mechanisms by introducing reputational accountability that constrains opportunistic reporting.

In Malaysia, ownership concentration is commonly held by institutional investors, family owners, and state-linked funds that are deeply connected within professional and governmental networks. These network ties create relational pressure to uphold credible reporting, as financial scandals involving such entities attract intense public and regulatory scrutiny. Hence, ownership concentration linked to these networked actors is expected to exert a stronger positive effect on fraud deterrence through reputational discipline and sustained monitoring commitment.

The Moderating Role of Board Structure

Board structure plays a critical role in determining whether ownership concentration enhances or weakens monitoring effectiveness. Board size, in particular, affects how governance decisions are debated, coordinated, and enforced. Larger boards can improve oversight by incorporating a variety of expertise, perspectives, and professional backgrounds, which enhance the quality of deliberation and the firm's strategic and ethical orientation (Gaio & Raposo, 2011; Pucheta-Martínez & Gallego-Álvarez, 2019).

Nevertheless, overly large boards may suffer from coordination inefficiencies, free-rider behaviour, and slow decision-making, limiting their ability to respond quickly to fraudulent behaviour (Krause, Semadeni, & Cannella, 2014). In the context of concentrated ownership, board size may either strengthen monitoring by improving independence and diversity or dilute control discipline by dispersing accountability. Therefore, the interaction between ownership concentration and board structure is expected to determine the overall effectiveness of fraud risk mitigation.

H1: Ownership concentration is positively associated with financial health, indicating lower fraud risk.

H2: Board structure moderates the relationship between ownership concentration and the risk of fraudulent financial statement.

Research Model

The study examines firms listed on Bursa Malaysia over a five-year period from 2013 to 2017, encompassing 2,890 firm-year observations from 578 non-financial companies. Malaysia provides an ideal context for analysing fraud risk due to its highly concentrated ownership structures, widespread family-controlled firms, and persistent governance weaknesses (Rahmat et al., 2021; Othman et al., 2023). The 1Malaysia Development Berhad (1MDB) scandal, in particular, exposed serious deficiencies in corporate oversight and reinforced the need to assess the effectiveness of board composition and monitoring mechanisms in preventing fraudulent financial reporting.

The study period was intentionally selected to ensure a consistent regulatory environment. Specifically, it excludes the effects of the 2018 revision of the Malaysian Code on Corporate Governance (MCCG), which introduced new requirements for board and audit committee composition. By focusing on the years 2013 to 2017, the analysis captures governance practices before major reforms, providing a stable institutional backdrop to evaluate the roles of ownership concentration and board structure in mitigating fraud risk.

Data for this study were obtained from two primary sources. Information on ownership concentration and board structure was manually extracted from firms' annual reports available on Bursa Malaysia's website, as commercial databases often provide limited details on governance characteristics. Financial data, including variables used to compute the Altman Z-score, were sourced from the Thomson Reuters DataStream database and cross-verified with firms' annual reports to ensure accuracy and consistency.

To maintain comparability, financial institutions, closed-end funds, and real estate investment trusts (REITs) were excluded due to their distinct regulatory and capital structures. Firms with missing information arising from delisting, mergers, or incomplete disclosures were also removed. The final sample of 578 firms and 2,890 firm-year observations provides a robust dataset for examining the effects of ownership concentration and board structure on the risk of fraudulent financial statements in the Malaysian context.

Research Model

To test the hypotheses, this study employs a panel data regression framework with cross-sectional and time-period fixed effects. The fixed-effects model was selected based on the Hausman specification test, which confirmed its superiority over the random-effects model. This approach effectively controls for unobserved firm-specific heterogeneity, while cross-sectional and time-period effects account for structural differences across firms and macroeconomic shocks over time. Consequently, the model specification enhances robustness and reduces potential bias associated with omitted variables (Wooldridge, 2010). The regression model is formulated as follows:

$$\begin{aligned}
 RFFS_{i,t} = & \beta_0 + \beta_1 DOS_{i,t} + \beta_2 BOD_{i,t} + \beta_3 DOS * BOD_{i,t} + \beta_4 ACIND_{i,t} + \beta_5 SIZE_{i,t} \\
 & + \beta_6 LEV_{i,t} + \beta_7 GROWTH_{i,t} + \beta_8 ROA_{i,t} + \beta_9 AQ_{i,t} + \beta_{10} \sum_{i,t}^5 Year_{i,t} \\
 & + \beta_{11} \sum_{i,t}^6 Ind_{i,t} + \varepsilon_{i,t}
 \end{aligned}$$

where RFFS denotes the risk of fraudulent financial statements, measured using the Altman Z-score. The Z-score has been widely adopted as a reliable proxy for financial distress, which increases the likelihood of earnings manipulation and accounting fraud (Altman, 1968; Bhavani & Amponsah, 2017; Kukreja et al., 2020; Azhar et al., 2021). Its straightforward linear formulation allows for ease of interpretation, providing a practical and consistent method to evaluate firms' financial stability. Firms facing financial pressure are more likely to commit fraud to conceal poor performance, making the Z-score a suitable proxy for assessing fraud risk in this study.

The key independent variable, DOS, represents direct ownership shareholding, measured by the percentage of ownership held by controlling shareholders (Ahmed & Hamdan, 2015). Concentrated ownership can enhance monitoring and mitigate fraud risk by aligning the interests of owners and managers, but it may also enable controlling shareholders to expropriate minority interests when monitoring power becomes excessive (Rahmat et al., 2021; Smaili et al., 2022).

The moderating variable, BOD, refers to the board size, measured by the total number of directors on the board. Larger boards are often associated with broader expertise and improved oversight but may also face coordination challenges that limit decision-making efficiency (Krause, Semadeni, & Cannella, 2014; Pucheta-Martínez & Gallego-Álvarez, 2019). The interaction term (DOS × BOD) captures whether the effect of ownership concentration on fraud risk is conditioned by the board's structural composition.

The variable ACIND denotes audit committee independence, calculated as the proportion of independent directors serving on the audit committee. Greater independence enhances objectivity and strengthens internal oversight over financial reporting (Ahmed & Hamdan, 2015; Othman et al., 2023).

In addition, several control variables are included to account for firm-specific and governance-related attributes. SIZE represents firm size, measured as the natural logarithm of total assets. Larger firms tend to be under greater public and regulatory scrutiny but may also face more complex audit risks (Rahmat & Ali, 2016). LEV (leverage) is the ratio of total debt to total assets, reflecting financial pressure that may motivate earnings manipulation

(Hoang & Phung, 2019). GROWTH is measured by the change in revenue from year $t-1$ to year t (Cesinger et al., 2018), and ROA (return on assets) is used to capture profitability, calculated as earnings before interest and tax divided by total assets (Ahmed & Hamdan, 2015). Profitable firms typically have lower incentives to engage in fraud due to reduced performance pressures (Tahir et al., 2020).

AQ represents audit quality, proxied by a binary variable that equals 1 if a Big 4 audit firm audits the company and 0 otherwise. Big 4 auditors are expected to deliver superior audit quality, thereby enhancing fraud detection and financial reporting reliability (Harris & Williams, 2020). Additionally, the differential effect of *Year* and *Industry* is controlled using the panel least-squares, cross-section, and period fixed effects (Hawtrey and Liang, 2008). Note that ε is the error term.

RESULTS

Table I presents the descriptive statistics for 2,890 firm-year observations of Malaysian non-financial listed companies from 2013 to 2017. The mean value of RFFS, measured by the Altman Z-score, is 1.396, ranging from -4.29 to 6.53 . This wide range suggests substantial variation in firms' financial stability and exposure to financial distress, supporting its role as a proxy for fraudulent financial statement risk.

The average board size (BOD) is 7.3 directors, with a minimum of 3 and a maximum of 13, indicating that most firms comply with Bursa Malaysia's governance requirements while maintaining moderate board diversity. Ownership concentration (DOS) averages 51.3%, reflecting Malaysia's characteristic pattern of concentrated shareholding among controlling owners. The interaction term BOD*DOS, which captures the moderating effect of board size on ownership concentration, has a mean value of 378.05 and a large standard deviation (165.59), signifying wide dispersion across firms and validating the inclusion of this interaction in testing moderating effects on fraud risk.

The mean value for audit committee independence (ACIND) is 0.889, showing that the majority of firms comply with the Malaysian Code on Corporate Governance (MCCG), which requires at least one independent member on the audit committee. The control variables also display expected variation: ROA averages 5.6%, indicating moderate profitability, while leverage (LEV) averages 18.6%, suggesting that most firms rely on moderate levels of debt financing. Firm size (SIZE) has a mean of 5.723, measured as the natural logarithm of total assets, implying that the sample includes both medium and large-sized corporations. Firm growth (GROWTH) is relatively modest, averaging 0.002, consistent with the steady expansion typical of mature public-listed firms.

Panel B shows that approximately 50.24% of firms are audited by Big 4 auditors, while the remaining 49.76% are audited by non-Big 4 firms. This balanced distribution indicates that Malaysian firms engage both international and local audit firms at nearly equal proportions, reflecting competitive dynamics in the country's audit market.

Overall, the descriptive statistics confirm that Malaysian listed companies operate under a highly concentrated ownership structure, with strong governance mechanisms such as independent audit committees and moderate board sizes. These characteristics provide an ideal empirical setting to examine how ownership structure and board composition interact to influence the risk of fraudulent financial reporting.

Table I Descriptive Statistics

Panel A: Continuous variables					
	Mean	Median	Maximum	Minimum	Std. Dev.
RFFS	1.396	1.385	6.53	-4.29	1.092
BOD	7.3	7	13	3	1.815
DOS	51.291	53.79	98.014	16.8	16.627

BOD*DOS	378.047	367.19	1078.154	62.718	165.587
ACIND	0.889	1	1	0.4	0.153
ROA	0.056	0.053	0.523	-0.432	0.096
LEV	0.186	0.16	0.76	0	0.155
SIZE	5.723	5.663	7.828	3.869	0.639
GROWTH	0.002	0.003	0.123	-0.119	0.028
Panel B: Dummy variable					
AQ					
				Frequency	Percentage
Big 4				1452	50.24
Non Big 4				1438	49.76
n				2890	100
Notes: RFFS is a risk of fraudulent financial statements measured by the Z-score value of the Altman Z-score formula. BOD is a board of directors measured by the actual number of directors on board. DOS is a direct ownership shareholder, measured by the percentage of shares by direct ownership shareholders. BOD*DOS is moderating variable. ACIND is an audit committee independence, measured by the proportion of the number independent audit committee members divided by the total number of audit committee members. ROA is the return on assets measured using earnings before interest and tax divided by total assets. LEV is a company's leverage scaled by total debt ratio over total assets. SIZE is a firm's size, measured by a natural logarithm of its book value of total assets at year-end. GROWTH is measured by revenue at the end of the year t divided by revenue year t-1. AQ is a binary variable representing audit quality, with a value equal to "1" if a firm is audited by a Big 4 auditor or "0" otherwise.					

Table II presents the Pearson correlation coefficients among all variables used in the study. The results show that none of the variables are highly correlated with each other, indicating the absence of serious multicollinearity issues. The highest correlation is observed between RFFS and ROA ($r = 0.693$), suggesting that firms with higher profitability tend to exhibit stronger financial stability and a lower likelihood of financial distress or fraudulent financial reporting. Other relationships are relatively weak to moderate, with correlations ranging between -0.266 and 0.796 , all below the threshold of concern ($r < 0.80$).

As expected, the correlation between BOD and the interaction term (BOD*DOS) is relatively high ($r = 0.796$) due to the mathematical construction of the moderating variable. However, this does not pose a multicollinearity problem, as the interaction term is specifically created to test moderation effects. To further validate this, the variance inflation factor (VIF) values were examined for all variables, and each recorded a value well below the conservative threshold of 10 (Neter et al., 1983), confirming that multicollinearity is not a concern in the regression estimations. Overall, these results suggest that the variables used in the model are distinct and suitable for inclusion in the panel regression analysis.

Table II Correlation Analysis

	RFFS	DOS	BOD	DOS*BOD	ACIND	SIZE	LEV	GROWTH	ROA	AQ
RFFS	1.000	0.159	0.123	0.172	0.009	0.045	-0.266	0.179	0.693	0.090

DOS		1.000	0.119	0.796	-0.035	0.162	-0.052	0.047	0.142	0.180
BOD			1.000	0.669	0.049	0.377	0.149	0.050	0.124	0.141
DOS*BOD				1.000	-0.002	0.343	0.059	0.059	0.166	0.214
ACIND					1.000	-0.072	0.001	0.023	-0.055	-0.135
SIZE						1.000	0.370	0.060	0.142	0.410
LEV							1.000	0.021	-0.124	0.115
GROWTH								1.000	0.227	0.006
ROA									1.000	0.109
AQ										1.000

Table III Multiple Regression Result

	Coefficient	t-Statistic
DOS	0.013	4.123***
BOD	0.071	3.594***
DOS*BOD	-0.001	-3.064**
ACIND	0.2	3.572**
ROA	4.576	17.881***
LEV	-1.691	-20.109***
SIZE	0.525	7.104***
AQ	0.152	3.784***
GROWTH	0.544	8.701***
n	2890	
Adjusted R2	92.78%	
Durbin-Watson statistic	1.439	
F-Statistic	63.97	
Prob (F-statistic)	0	

Notes: Refer to Table I for variable definition and measurement. The model is regressed using panel least-squares estimation with cross-section fixed and period effects. We report t-statistics based on White's (1980) consistent estimator. ***Significant level $p < 0.01$, ** significant level $p < 0.05$, *significant level $p < 0.10$

The fixed effect panel regression model examines the relationship between ownership concentration (DOS), board size (BOD), their interaction (DOS*BOD), audit committee independence (ACIND), and the risk of fraudulent financial statements (RFFS). The results are presented in Table III. The adjusted R^2 is 92.78%, indicating that the explanatory variables collectively account for a substantial proportion of the variation in fraud risk among Malaysian listed companies. The Durbin–Watson statistic (1.439) falls within the acceptable range, suggesting that there is no serious issue of autocorrelation.

As shown in Table III, ownership concentration (DOS) is positively and significantly associated with RFFS ($\beta = 0.013$, $t = 4.123$, $p < 0.01$). This suggests that higher ownership concentration is linked to a stronger financial position and reduced likelihood of financial distress, supporting the view that concentrated owners can enhance monitoring effectiveness and reduce the risk of fraudulent financial statement. Similarly, board size (BOD) is positive and significant ($\beta = 0.071$, $t = 3.594$, $p < 0.01$), implying that larger boards contribute to improved oversight and better control mechanisms, thereby lowering the potential for fraudulent practices.

The interaction term (DOS*BOD), however, is negative and significant ($\beta = -0.001$, $t = -3.064$, $p < 0.05$), confirming the presence of a moderating effect. This indicates that while both ownership concentration and board size individually enhance monitoring, their joint effect may reduce efficiency when concentrated ownership exerts excessive influence over board decisions. In other words, as board size increases, the positive impact of ownership concentration on fraud risk mitigation may weaken due to potential coordination challenges or dominance by controlling shareholders.

In addition, audit committee independence (ACIND) is positively and significantly associated with the Z-score ($\beta = 0.200$, $t = 3.572$, $p < 0.05$), demonstrating that independent audit committees play an essential role in safeguarding financial integrity and preventing fraudulent reporting. Among the control variables, profitability (ROA) shows a strong positive association with RFFS ($\beta = 4.576$, $t = 17.881$, $p < 0.01$), suggesting that more profitable firms face lower financial distress and, consequently, reduced fraud risk. Conversely, leverage (LEV) is negative and highly significant ($\beta = -1.691$, $t = -20.109$, $p < 0.01$), indicating that firms with higher debt levels are more prone to financial stress and potential manipulation of financial statements.

Firm size (SIZE) is positively significant ($\beta = 0.525$, $t = 7.104$, $p < 0.01$), consistent with the notion that larger firms are subject to greater scrutiny and better governance structures, thereby reducing fraud likelihood. Likewise, audit quality (AQ) is positive and significant ($\beta = 0.152$, $t = 3.784$, $p < 0.01$), supporting the view that Big 4 auditors enhance audit reliability and contribute to fraud prevention. Firm growth (GROWTH) also exhibits a positive and significant relationship with RFFS ($\beta = 0.544$, $t = 8.701$, $p < 0.01$), suggesting that growing firms are financially healthier and less likely to engage in fraudulent reporting.

Taken together, the findings indicate that ownership concentration and board size each play a vital role in strengthening governance mechanisms that mitigate the risk of fraudulent financial statements. However, the significant negative interaction between DOS and BOD underscores the importance of maintaining a balanced governance structure, where increased board size does not dilute the monitoring effectiveness of controlling shareholders. The results collectively highlight that strong internal controls, independent oversight, and effective monitoring mechanisms are crucial in reducing the risk of financial statement fraud in Malaysian listed companies.

CONCLUSION

This study examined the impact of ownership concentration on the risk of fraudulent financial statements, with board structure tested as a moderating factor. Drawing on agency theory and network theory, the study proposed that concentrated ownership can enhance monitoring by aligning the interests of controlling shareholders and managers, but that this monitoring effect may depend on how the board is structured. Board size, as an element of governance architecture, was expected to either strengthen control through broader expertise or weaken it through diffusion of responsibility. The results provide strong evidence that higher ownership concentration is positively associated with the Altman Z-score, which reflects stronger financial health and therefore lower fraud risk. Board size was also found to be positively related to financial health, indicating that larger boards are linked to lower fraud risk. However, the interaction between ownership concentration and board size was negative and

significant, suggesting a weakening effect. This implies that while both mechanisms independently reduce fraud risk, the fraud-mitigating benefit of concentrated ownership becomes weaker as boards grow larger.

These findings align well with agency theory, which posits that ownership concentration mitigates agency conflicts by empowering large shareholders to monitor management effectively. However, consistent with network theory, the results also reveal that governance effectiveness depends on relational dynamics and structural design within corporate networks. When boards become excessively large, coordination and accountability weaken, reducing the strength of relational monitoring and diluting the efficiency of ownership-based oversight. Thus, the study demonstrates that ownership concentration alone is insufficient, its effectiveness is conditioned by how well the internal governance network, particularly the board, functions to sustain credible monitoring relationships.

These findings are consistent with real-world governance concerns in Malaysia. The 1MDB scandal highlighted how weak oversight and diffuse accountability can allow problematic reporting to persist, even in environments with concentrated control. In settings where ownership is highly concentrated, common in Malaysian listed firms, including family-controlled and state-linked firms which an effective monitoring cannot rely solely on dominant shareholders. Instead, it also depends on a board structure that is capable of acting independently, coordinating oversight, and responding quickly to signs of distress.

From a policy perspective, the findings suggest that regulators, investors, and boards should not assume that concentrated ownership alone guarantees lower fraud risk. Instead, attention should be given to the design and functionality of the board. In particular, while larger boards may add expertise and legitimacy, excessively large boards may dilute accountability and reduce the incremental monitoring value of controlling shareholders. This has direct relevance for ongoing refinement of the Malaysian Code on Corporate Governance (MCCG), which increasingly emphasises board effectiveness, independence, and clarity of oversight roles.

This study has several limitations. The analysis focuses on the period 2013 to 2017, which was intentionally selected to capture a stable governance environment prior to major regulatory changes after 2018. As such, the findings may not fully reflect more recent governance reforms. In addition, the measures of ownership concentration and board structure are based on publicly disclosed information and do not capture qualitative aspects such as informal influence, director competence, or board dynamics. Finally, the sample is limited to Malaysian listed non-financial firms, which may limit the generalisability of the results to jurisdictions with more dispersed ownership structures or different enforcement regimes.

In conclusion, this study provides new evidence that ownership concentration and board structure both play important roles in reducing the risk of fraudulent financial statements, but their interaction produces a diminishing rather than reinforcing effect. The findings highlight the importance of balancing concentrated ownership with an efficient, accountable board structure, consistent with both agency and network perspectives to ensure credible financial reporting and protect stakeholders confidence.

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