

The Role of Board Composition in Mitigating Financial Misconduct: An Analysis of Gender Diversity, Independent Directors, Committee Structure, and Expertise of Directors in South Africa

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Keywords

Financial Misconduct, Corporate Governance, Board Composition, Gender Diversity, Audit Quality, Board Independence, Director Expertise, Internal Controls, Fraud Prevention.

Abstract

Financial misconduct remains a critical issue in corporate governance, particularly in the South African context, given the recent history of State Capture and prominent corporate governance scandals. The main objective of this study was to investigate how board composition influences financial misconduct mitigation. Specifically, the study analysed how gender diversity, board independence, committee structure, and director expertise influence fraud detection and prevention. The study employed a quantitative research approach through analysing primary survey data gathered from South African manufacturing firms. Data was collected from 129 individuals holding key governance roles such as board members, senior executives, finance managers, internal auditors, and risk committee members. Using a logistic regression model, it was found that the directors' financial expertise and the presence of strong internal controls significantly enhance confidence in fraud detection. Other factors, such as gender diversity, board independence, having an audit or risk committee, and having an external auditor, were not statistically significant in perceived fraud prevention. These findings suggest that while diverse and independent boards contribute to overall governance improvements, financial expertise and robust internal controls play a more decisive role in preventing corporate fraud. The study provides valuable insights for policymakers, corporate executives, and regulatory bodies seeking to enhance governance frameworks and strengthen financial integrity in the South African corporate landscape.

Introduction

Corporate governance is globally recognised as the central mechanism for establishing accountability and mitigating firm-level risk (Rybalchenko et al., 2022). The board of directors, as the ultimate oversight body, plays a critical role in monitoring management and ensuring ethical organizational conduct (Jensen & Meckling, 1976). This function is particularly critical in emerging market economies like South Africa, where persistent governance failures, highlighted by prominent corporate scandals and state capture incidents, have severely eroded investor confidence and necessitated enhanced oversight measures (Serfontein-Jordaan & Bornman, 2022). Consequently, the effectiveness of board composition—specifically the interplay between independence, diversity, and director expertise—is continuously scrutinized as a primary defense against financial misconduct.

Despite the rigorous adoption and compliance with governance codes (e.g., King IV), the prevalence of financial misconduct remains a significant threat to organizational stability and market confidence (Velte, 2023). This persistent failure suggests a decoupling between formal structural compliance and actual fraud prevention efficacy (Tayeh et al., 2023). The core research

problem addressed by this study is to ascertain which specific attributes of board composition are most instrumental in translating governance mandates into tangible outcomes, particularly as measured by confidence in the detection and prevention of financial misconduct. The study's primary objective is to empirically investigate the differential influence of structural (e.g., diversity, independence) and functional (e.g., expertise, internal controls) board attributes on misconduct mitigation within South African manufacturing firms. A critical gap exists in the empirical literature: most studies focus on whether structural compliance (e.g., fulfilling minimum requirements for board independence or gender diversity) is present, rather than evaluating the functional efficacy of these structures in practice (Zubeltzu-Jaka et al., 2019). Governing frameworks frequently mandate the presence of key components (like an Audit Committee) but often fail to robustly test the skill set of the individuals serving on them or the practical strength of internal controls. As a result, many compliant firms remain vulnerable to sophisticated financial fraud.

This study contributes to the literature by directly testing the relative predictive power of both structural attributes and functional attributes on fraud detection confidence. The key finding demonstrates that functional, expertise-driven elements are the critical determinants of effective misconduct mitigation. This insight offers a crucial basis for future policy shifts, urging regulators to move beyond simple formal compliance towards a governance model centered on competence, skill-based appointment protocols, and operational robustness.

The remainder of this paper is structured as follows: Section 2 presents a concise review of the theoretical frameworks and empirical evidence surrounding board composition and misconduct mitigation. Section 3 outlines the research methodology, including the survey design and logistic regression model. Section 4 presents the descriptive statistics, empirical results, and discussion of the findings. Finally, Section 5 concludes the study by summarizing the key contributions, outlining policy implications, and identifying areas for future research.

Literature Review

Corporate governance frameworks, particularly board composition, are central to mitigating financial misconduct. This study is grounded in two primary theoretical perspectives: agency theory and stakeholder theory, which provide opposing yet complementary views on the board's monitoring and ethical roles.

Theoretical Framework

The agency theory (Jensen & Meckling, 1976) posits that conflicts arise between principals (shareholders) and agents (management). The core solution is to structure the board to maximize oversight, primarily through board independence and specialized committees, to align managerial incentives with shareholder interests and reduce agency costs (Rybalchenko et al., 2022). In contrast, stakeholder theory (Freeman, 1984) views the firm as a network of constituents (employees, customers, community) and suggests that a broader focus, often achieved through board diversity, fosters ethical decision-making and long-term sustainability, thereby reducing the risk of misconduct that harms non-shareholder parties (Munisi, 2019; Adegbayibi & Adelowotan, 2024).

Empirical evidence on board composition and misconduct

Board independence and diversity

The consensus based on agency theory suggests board independence should improve monitoring, as non-executive directors are ostensibly free from management influence (Jensen & Meckling, 1976; Velte, 2023). Empirically, independent boards are often associated with less earnings management (Tayeh et al., 2023). A study by Mothapo et al. (2024) investigated the top 40 Johannesburg Stock Exchange (JSE) listed companies, from 2015 to 2020, to find out how market responses to the appointment of women and men as directors. Similarly, while gender diversity aligns with stakeholder theory by bringing varied ethical perspectives, its direct link to misconduct reduction is mixed. Research by Amin et al. (2021) suggests

diverse boards enhance transparency, yet others find the effect is moderated by the firm's overall governance culture.

Committees and director expertise

The specialized functions of audit and risk committees are fundamental structural elements designed to scrutinize financial reporting and internal control systems. Empirical literature strongly supports the notion that effective committees reduce financial fraud, provided they meet strict independence and expertise criteria (Velte, 2023). Most crucial among these criteria is directors' financial expertise. Zubeltzu-Jaka et al. (2019) highlight the value of critical resources (skills, knowledge), concluding that boards with directors possessing accounting or financial expertise are significantly better equipped to detect complex fraud schemes than those without. This expertise serves as a critical operational mechanism beyond formal compliance.

Internal controls and external audit

The final line of defense against misconduct rests with internal controls and external auditors. Strong internal controls are directly linked to effective operational governance, reducing the opportunities for fraudulent activities at the operational level (Tayeh et al., 2023). External auditors are expected to provide an independent check on management's financial reporting, and the use of large, reputable auditors is generally associated with higher financial statement quality (Mvunabandi et al., 2022). However, both mechanisms are limited; internal controls can be overridden, and external auditors provide assurance, not a guarantee of fraud detection, necessitating a board that is equipped with the expertise to properly evaluate their output.

This review highlights a gap where structural compliance (independence, diversity) is frequently mandatory but often found less effective than the functional elements (expertise and strong internal controls) in the empirical detection and prevention of financial misconduct. This study seeks to bridge this gap by empirically testing the relative predictive power of these attributes in the South African corporate context.

Research Method

Model specification

A multiple linear regression model was employed to examine the impact of independent variables (board independence, audit quality, director expertise, and gender diversity) on the dependent variable (financial misconduct prevention score). The study used a fixed-effects regression model to determine whether board diversity, independent directors, and risk management committees influenced financial misconduct. The regression model followed the equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

- Y = Financial Misconduct Prevention Score
- X₁ = Board Independence
- X₂ = Audit Quality
- X₃ = Director Expertise
- X₄ = Gender Diversity
- ε = Error term

Logistic regression was also conducted to examine binary outcomes, such as whether a firm detected financial misconduct (Yes/No) based on board composition characteristics. Statistical significance (p-values), R-squared values, and regression coefficients were interpreted to determine the strength of relationships.

Target population, sample, and sampling strategy

The target population for this study consists of board members, senior executives, finance managers, internal auditors, and risk committee members in South African manufacturing firms. These individuals hold key roles in corporate governance and financial oversight, making them well-positioned to provide insights into the study variables.

A purposive sampling technique was employed to select respondents, ensuring that only individuals with direct involvement in board governance and financial decision-making participated. Purposive sampling is advantageous in studies where expertise in the subject matter is required, as it increases the reliability of responses (Creswell & Creswell, 2018). The study aimed to collect responses from at least 100 participants; a sample size deemed adequate for statistical analysis (Hair, Black, Babin, & Anderson, 2019).

Data collection

Primary data was collected from a realised sample of 129 respondents using a structured questionnaire administered through online surveys and email correspondence. The questionnaire consisted of five sections, covering Demographic Information (age, gender, education, experience), Board Composition and Governance (gender diversity, board independence, committee structure, director expertise), Audit Quality (external audits, reporting standards, credibility), Ownership Structure (family-owned, institutional, state-owned, publicly traded) and Financial Misconduct Mitigation (fraud detection, internal controls, accountability measures). All questions were closed-ended, with responses measured using a Likert scale (1-5) to quantify perceptions of governance effectiveness. The structured format enhanced consistency and allowed for direct comparison across respondents (Kumar, 2019).

Data analysis methods

Data analysis was conducted using SPSS and Microsoft Excel for data visualisation and reporting. Post estimation diagnostic tests were also conducted to test the reliability of findings. The first stage of analysis involved descriptive statistics, summarising response distributions for each variable.

Presentation of Results

Descriptive statistics

The study analysed responses from 129 governance professionals, including board members, senior executives, and risk officers. Table 1 summarizes the demographic profile and governance characteristics of the sample. The respondents represent a mature and experienced cohort; 85% are aged over 31 years, and 66% possess more than five years of industry experience. The sample is also well-qualified, with the majority holding diplomas (36%) or postgraduate degrees (32%), ensuring the participants possess the requisite knowledge to evaluate governance mechanisms effectively.

Table 1: Demographic and Governance Profile of Respondents (n=129)

Category	Sub-Category	Frequency (%)	Category	Sub-Category	Frequency (%)
Gender	Female	57%	Board Diversity	Gender Diverse	71%
	Male	43%		Not Diverse	29%
Age	18–30 years	15%	Board Independence	Independent Directors	61%
	31–50 years	65%		No Indep. Directors	39%
	> 50 years	20%	Committees	Audit/Risk Committee	79%
Education	Diploma	36%		No Committee	21%
	Bachelor's	20%	Director Expertise	Financial Expertise	71%

	Postgraduate	32%		No Expertise	29%
	Prof. Cert	12%	External Audit	Engaged	83%
Experience	< 5 years	19%		Not Engaged	17%
	5-10 years	36%	Internal Controls	Present	85%
	11-15 years	15%		Absent	15%
	> 15 years	30%			

Source: Survey data (2025)

Regarding corporate governance structures, the results indicate high adoption of standard governance mechanisms. A significant majority of firms report having gender-diverse boards (71%) and independent non-executive directors (61%). Institutional oversight is also prevalent, with 79% of firms maintaining an audit or risk committee and 83% engaging external auditors. Notably, 71% of boards include members with specific financial or audit expertise. However, despite high adherence to structural requirements – such as the presence of internal controls (85%) – confidence in the actual detection of fraud remains mixed. Only 46% of respondents expressed "strong confidence" in their organization's ability to detect financial misconduct, suggesting a potential gap between the presence of governance structures and their perceived effectiveness.

Empirical analysis of governance effectiveness

To examine the relationship between governance structures and financial misconduct prevention (or fraud detection), Chi-square tests of independence were conducted (Table 2). The results reveal that director expertise ($p = 0.002$) and internal controls ($p < 0.0001$) are significantly associated with confidence in fraud detection. Conversely, structural attributes such as gender diversity, board independence, and the mere presence of audit committees did not show statistically significant bivariate relationships.

Table 2: Key Findings from Chi-Square Tests

Governance Factor	Chi-square value	p-value	Statistical significance
Gender diversity	9.49	0.148	No significant relationship
Board independence	4.65	0.589	No significant relationship
Audit committee presence	5.43	0.489	No significant relationship
Director expertise	20.32	0.002	Strong significant relationship
External auditor engagement	9.08	0.169	No significant relationship
Internal controls	30.91	0.000026	Very strong significant relationship

Source: Own modelling results (2025)

Logistic regression analysis and discussion

A logistic regression model was employed to isolate the impact of these variables on the likelihood of detecting financial misconduct. The model demonstrated a good fit (Pseudo $R^2 = 0.2429$; LLR p -value = 0.00002), explaining approximately 24.3% of the variance. The results (Table 3) corroborate the Chi-square findings.

As shown in Table 3, logistic regression analysis indicates that only two variables significantly predict confidence in financial misconduct prevention. Director financial expertise, with a positive and statistically significant coefficient ($p = 0.004$), and internal controls ($p = 0.003$), emerged as statistically significant

predictors of fraud detection confidence. The strong positive coefficient for financial expertise ($\beta = 1.135$) suggests that boards with specific financial literacy are significantly better at interpreting complex reports and identifying irregularities. This suggests that technical skills are critical for effective governance board monitoring role. Similarly, the significance of internal controls ($\beta = 1.388$) highlights that practical, operational mechanisms—such as segregation of duties and automated fraud checks—serve as the most effective "first line of defense" against misconduct.

Interestingly, board independence, gender diversity, and audit committees were not statistically significant in this model. While these structures are vital for stakeholder representation and compliance (Stakeholder Theory), this finding suggests they do not automatically translate into operational fraud detection without the accompanying technical expertise. The negative (though non-significant) coefficient for audit committees may further imply that committees lacking specific expertise or authority may offer a false sense of security. Generally, the results of this underscore that operational quality (controls) and specialized knowledge (expertise) are more critical for fraud detection than mere structural compliance.

The internal consistency of the survey instrument was verified using Cronbach's alpha. The results indicated acceptable reliability, yielding coefficients of 0.78 for the governance constructs and 0.72 for the financial controls construct, both meeting the conventional threshold for internal reliability (Tavakol & Dennick, 2011).

Table 3: Logit Regression Results

Dependent Variable: Financial Misconduct Prevention Score						
Explanatory (Independent Variables)	Coefficient	Standard error	z	P> z	[0.025]	[0.975]
Does your organisation have a gender diverse board?	0.288	0.352	0.818	0.413	-0.402	0.977
Are there independent non-executive directors on your board?	-0.038	0.325	-0.118	0.906	-0.676	0.599
Does your organisation have an audit or risk committee?	-0.973	0.557	-1.745	0.081	-2.065	0.120
Do board members have financial or audit expertise?	1.135	0.397	2.857	0.004	0.357	1.913
Does your company engage an external auditor?	0.389	0.387	1.004	0.315	-0.370	1.148
Does your organisation have internal controls to prevent financial misconduct?	1.388	0.462	3.008	0.003	0.484	2.293
Constant	-1.958	0.893	-2.192	0.028	-3.708	-0.207

Source: Own modelling results (2025)

Conclusions and Policy Implications

Conclusion and summary of key findings

This study investigated the effectiveness of various board composition attributes—both structural (independence, diversity) and functional (expertise, internal controls)—in mitigating financial misconduct within South African manufacturing firms using a quantitative survey methodology and logistic regression analysis. The results demonstrate that while structural compliance with governance codes remains high, it does not guarantee effectiveness. The key finding is that director financial expertise and the robust application of internal controls are the only factors that significantly increase confidence in the detection and prevention of financial misconduct. Conversely, the presence of independent directors, gender diversity, and the mere existence of audit committees were found to be statistically insignificant. This indicates that functional competence and operational robustness are far more critical than simple compliance with structural mandates, reinforcing the study's primary contribution to the corporate governance literature.

Policy recommendations and practical implications

The empirical findings offer direct and actionable policy implications for corporate governance reform:

Prioritize functional expertise over structural compliance

Policy makers, including the JSE and relevant regulatory bodies, must evolve board appointment guidelines. Merely fulfilling independence or diversity quotas is insufficient (Velte, 2023). Based on the strong significance of financial expertise, regulations should shift to mandate specific, verified technical competence across the board, supporting the previous empirical studies which emphasise the financial literacy to scrutinise complex financial reports and challenge management (Tayeh et al., 2023).

Demand assurance of internal control efficacy

The finding that internal controls are the most powerful predictor of fraud detection confidence underscores their necessity as the first line of defense. Practitioners must move beyond the mere presence of controls to ensure their operational robustness and independent verification. Regulators should consider measures that require external certification or validation of internal control efficacy, focusing on the quality of implementation rather than just mandatory adoption, thereby closing the gap between compliance and effectiveness (Tayeh et al., 2023).

Rethink board independence metrics

The statistical insignificance of board independence suggests that independence is a necessary, but insufficient, condition for effective monitoring. Board nominating committees must shift their focus from simply tallying independent directors to conducting a holistic assessment of whether directors, regardless of their classification, possess the technical competence and time commitment necessary to challenge management and detect misconduct.

Limitations and suggestions for future research

This study's primary limitation is its reliance on perceptual data gathered through a survey, which assesses the confidence in fraud detection rather than the actual incidence of fraud. Future research should leverage archival data to explore the relationship between the measured functional attributes (expertise and controls) and objectively measured outcomes, such as restatement rates or enforcement actions. Additionally, the study's focus on the South African manufacturing sector limits generalization, suggesting that future studies could replicate this model across different sectors and emerging economies to test the universality of the findings.

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