Business Management and Strategy
ISSN 2157-6068
2026, Vol. 17, No. 1

Organizational Sustainability in the Light of Corporate Governance: Pre-COVID Empirical Analysis

Muhammad Danial, Waqas Ahmad, Nadia Iftikhar

Email: danialk065@gmail.com

Institute of Management Sciences, Peshawar, Pakistan

Sidra Jamal

Iqra National University, Peshawar, Pakistan

Ahmad Ali

Institute of Management Sciences, Peshawar, Pakistan

Received: October 22, 2025   Accepted: December 24, 2025 Published: December 27, 2025

doi:10.5296/bms.v17i1.23239   URL: https://doi.org/10.5296/bms.v17i1.23239

Abstract

In an increasingly competitive environment, ensuring organizational sustainability is a priority for both managers and stakeholders. This study investigates the relationship between corporate governance practices and financial distress in manufacturing firms listed on the Pakistan Stock Exchange. The research examines four core governance variables including board size, board independence, audit committee size, and CEO duality using regression analysis to assess their impact on financial distress. The findings of the study reveals that board size has a positive and statistically significant relationship with financial distress, indicating that larger boards may increase the risk of instability. By contrast, the effects of board independence, audit committee size, and CEO duality, though directionally consistent with theoretical expectations, were found to be statistically insignificant in most of the model. These results suggest that governance mechanisms may operate differently considering an emerging market, where institutional and regulatory frameworks shape their effectiveness. The study presents the importance of contextualizing governance reforms to local market realities, rather than assuming uniform effects across contexts. Through clarifying the influence of governance in financial resilience, this research contributes to ongoing debates in corporate governance literature and demonstrate practical insights for regulators, investors, and policymakers seeking to strengthen oversight frameworks in Pakistan and similar emerging economies.

Keywords: financial distress, corporate governance, board size, board composition, audit committee size, CEO duality

1. Introduction

Corporate governance encompasses systems and policies that govern and restrict businesses and corporations, focusing on transparency to safeguard stakeholder interests (Parkinson, 2016). It is built upon four pillars: accountability, transparency, fairness, and leadership management, with key components including shareholders, board directors, and management. The ongoing debate centers on developing the financial sustainability of the firms from the lens of corporate governance, a critical consideration for companies facing economic challenges (Abdullah, 2006). While some argue for its role in enhancing performance and financial stability, others caution against potential risk-taking behavior induced by strong governance (Shahwan, 2015). Financial distress is a contentious issue, as it can destabilize national economies. Corporate governance is increasingly recognized as a key factor in firm survival amidst financial distress (Neves et al., 2023). Various definitions emphasize its role in effectively managing operations, enhancing performance, and ensuring stakeholder accountability.

Financial unsustainability as indicated by financial distress is the condition where the company cannot pay its principle financial responsibility, with potential consequences ranging from financial failure to an inability to meet objectives (Muranda, 2006). Effective corporate governance can mitigate financial distress risks by enabling better decision-making and strategy formulation (Adams & Ferreira, 2007; Jamal & Shah, 2017) in the growing global demand for energy consumption while also keeping in view the economic growth (Tahir et al., 2023). Given its potential impact on companies and economies, understanding the important role of corporate governance in mitigating the financial distress is paramount.

Problem Statement: The role of corporate governance in financial distress has attracted considerable attention globally, yet findings remain inconsistent across regions. Some studies report that governance mechanisms strengthen financial stability, while others highlight their limited or even adverse effects (Younas et al., 2021; Yousaf et al., 2024; Deng & Wang, 2006; Croci et al., 2024; Khalid et al., 2020; Rahim et al., 2024). Such mixed evidence is largely due to differences in institutional environments, ownership structures, and regulatory enforcement. In countries like Pakistan, where concentrated ownership and compliance-oriented practices are common, the impact of governance mechanisms on financial distress may differ significantly from patterns observed in developed economies. Despite the importance of this issue, empirical evidence on Pakistani firms remains limited, leaving unanswered questions about how governance practices shape financial sustainability in this context.

This study contributes to filling that gap by providing insights into the corporate governance–distress nexus in Pakistan's manufacturing sector, which has received far less attention than the extensively studied banking and service sectors. By focusing on four interrelated governance dimensions—board size, board independence, audit committee size, and CEO duality—the research offers a holistic assessment of how governance structures influence financial health. Unlike much prior work, the study employs both pooled and annual regressions, introducing a temporal perspective that uncovers year-to-year shifts in the effectiveness of governance mechanisms. The findings are also interpreted through multiple theoretical lenses—agency theory, stewardship theory, and resource dependence theory—allowing for a more nuanced understanding of why results may diverge across contexts. Taken together, the sectoral focus, methodological design, and theoretical integration ensure that this research does not merely replicate existing studies but extends the debate by addressing an overlooked context and providing context-specific insights relevant to emerging markets.

2. Literature Review

Financial sustainability has been of greater concern in today's world. Literature tried to examine different aspect that leads to the financial sustainability. Corporate governance is in an important variable to direct the organization and bring financial sustainability considering the asymmetry flow of information between management and shareholders (Danial et al., 2023). Best corporate governance practices are crucial factor for the firm profitable future while considering the organizational politics (Kalbuana et al., 2022). Elloumi and Gueyie (2001) investigated the role of corporate governance variables while investigating the financial health of Canadian firms. Results revealed a positive correlation between the composition of the board and financial distress, indicating that the presence of outside board directors also influenced a company's financial situation. Chang (2009) investigated the corporate governance importance in financial bankruptcy of the firms, concluding that board director excellence along with the corporate governance structure serve as indicators of bankruptcy risk. They found that significant board directors and corporate structure positively affect a company's financial position. Wang and Deng (2014) investigated the influence of corporate governance principles on the financial distress of Chinese firms. Through a comparative analysis of distressed and non-distressed companies listed on the Chinese stock exchange, their study revealed that factors such as stakeholder size, state ownership, and the presence of independent directors played a mitigating role in reducing financial distress. In contrast, larger board sizes, higher levels of managerial ownership, CEO duality, and balanced ownership were found to intensify financial distress. These findings highlight the complexity of corporate governance, suggesting that certain governance elements, while generally seen as positive, may contribute to financial instability under specific circumstances. This points to the need for tailored governance strategies to effectively manage financial risk.

Lee and Yeh (2004) examined how corporate governance could help stabilize financially distressed Taiwanese companies. Their research pinpointed three governance variables that had a positive impact on reducing financial distress, highlighting the role of specific governance measures in recovery efforts. Similarly, Jamal and Shah (2017) explored the influence of corporate governance on financial distress, finding that board size, CEO duality, and board independence were positively correlated with financial health. They observed that larger and more independent boards were linked to improved financial stability. Abor (2007) extended this analysis to Ghanaian firms, where the study found that board size, capital structure, and

CEO duality positively influenced financial distress. These findings suggest that while some governance factors can aid in financial recovery, others may have varied effects depending on the context, underscoring the importance of context-specific corporate governance strategies.

Muranda (2006) conducted a study on the link between corporate governance and financial distress in Zimbabwean banks, revealing that weak corporate governance had a direct influence on financial instability. The research highlighted that poor governance practices were closely associated with financial distress in the banking sector, emphasizing the critical role of effective governance in preventing financial crises. Similarly, Al-Tamimi (2012) investigated the effect of corporate governance on financial distress in UAE banks. The study found that factors such as transparency (Danial et al., 2023), executive compensation, stakeholder and shareholder relations, and board roles were positively associated with financial distress. These findings indicate that certain governance practices, though essential in theory, can sometimes lead to financial difficulties if not properly managed or balanced. This suggests a need for a nuanced approach to governance in maintaining financial stability.

Li et al. (2021) provided explanation in assessing of financial distress through ratio analysis, which predicts bankruptcy risk. Traditional ratio analysis, incorporating financial and economic ratios, was found to be effective in identifying financial distress. Mangena et al. (2020) investigated the importance of corporate governance in explaining the financial distress, finding that ownership of managers, board size, and composition positively affected financial distress in firms. Shahwan (2015) conducted research on Egyptian listed companies experiencing financial distress, concluding that corporate governance rules and regulations impact negatively the financial distress. Pramudena (2017) analyzed secondary data from Indonesian stock exchange-listed firms to study the role of institutional and managerial possession on financial distress. Results showed a negative effect of institutional institute and managerial possession while board size has positive association with financial distress. Brédart (2014) emphasized the role of corporate governance in contributing to financial distress, especially during the 2007 financial crisis. Board size was notably highlighted as a key factor influencing financial distress. Similarly, Murhadi et al. (2018) found positive relationship of corporate governance in Malaysian listed companies. Additionally, Sameera and Separate (2015) conducted a study on financially distressed firms in Sri Lanka, focusing on how different corporate governance structures influence financial distress. They revealed significant role of corporate governance. These studies collectively underscore the importance of corporate governance mechanisms in shaping a firm's financial stability, highlighting regional and contextual differences.

2.1 Theoretical Discussion

The relationship between corporate governance and financial distress has been widely explored through multiple theoretical lenses, each providing unique insights into how governance mechanisms shape organizational sustainability. This study anchors its framework in three dominant theories: agency theory, resource dependence theory, and stewardship theory.

Agency theory, proposed by Meckling and Jensen, (1976), is one of the most influential theoretical frameworks underpinning corporate governance research. The theory explains the principal–agent relationship, where shareholders (principals) delegate decision-making authority to managers (agents). A fundamental issue arises when agents pursue personal goals rather than maximizing shareholder wealth, resulting in conflicts of interest, information asymmetry, and moral hazard (Al-Faryan, 2024). Within this context, corporate governance mechanisms such as board size, board independence, audit committee, and the separation of CEO and chairman roles are seen as essential tools to monitor managerial actions, reduce opportunistic behavior, and align managerial decisions with the best interests of shareholders (Naz et al., 2022). Financial distress is often associated with managerial inefficiencies, excessive risk-taking, and inadequate oversight (Abdu, 2022). Agency theory suggests that a strong governance framework mitigates these risks by enhancing transparency, accountability, and monitoring functions (Bui & Krajcsák, 2024). For instance, independent directors provide objective judgment to curb managerial opportunism, while audit committees strengthen financial reporting and monitoring, thereby lowering the likelihood of distress (Fakhar et al., 2023). Similarly, the separation of CEO and chairman roles prevents concentration of power and ensures balanced decision-making (Fama & Jensen, 1983; Rahim et al., 2024). In this way, agency theory provides a compelling explanation of how governance practices act as safeguards against financial instability and contribute to organizational sustainability.

Resource Dependence Theory, advanced by Pfeffer and Salancik, provides another perspective to understand the role of corporate governance in ensuring organizational sustainability (Pfeffer & Salancik, 2015). The theory argues that organizations are not self-sufficient but rely on external resources such as capital, expertise, networks, and information, for survival and growth (Akram & Abrar, 2022). Since these resources are often controlled by the external environment, firms must strategically manage relationships with stakeholders to secure access to them. Boards of directors and governance structures therefore act as critical boundary-spanning mechanisms that connect firms to essential external resources. In the context of financial distress, resource dependence theory emphasizes that a well-structured board can enhance a company's ability to attract resources, reduce uncertainty, and manage risks. Larger boards bring diverse skills, expertise, and networks that strengthen financial resilience, while independent directors can offer credibility and facilitate access to external capital and partnerships (Sewpersadh, 2022). Similarly, audit committees contribute to enhancing transparency and accountability, which improves investor confidence and resource inflows. The separation of CEO and chairman roles also broadens leadership perspectives, ensuring the organization is better positioned to negotiate and manage its resource dependencies (Yousaf et al., 2024).

In contrast to both agency and resource dependence perspectives, Stewardship Theory provides a more optimistic view of managerial behavior. Donaldson and Davis (1991) argue that managers are stewards whose goals align with those of shareholders and stakeholders, driven by intrinsic motivation, trust, and organizational commitment. From this perspective, corporate governance mechanisms should empower rather than constrain managers, enabling them to exercise discretion in navigating financial challenges. Considering this, independent and experienced directors can support managerial decision-making during crises, while strong audit committees enhance credibility and reduce the pressure of financial uncertainty (Aliahmadi, 2024). Stewardship theory also acknowledges contextual variability—for instance, CEO duality, often criticized under agency theory, may sometimes enhance efficiency by providing unified leadership and faster decision-making in times of distress. Integrating these perspectives, this study provides a richer theoretical explanation of how governance mechanisms—board size, board independence, audit committee size, and CEO duality—relate to financial distress and contribute to the sustainability of firms listed on the Pakistan Stock Exchange. Figure 1 display the conceptual framework of the study presenting the understudy variables considering the relevant theories.

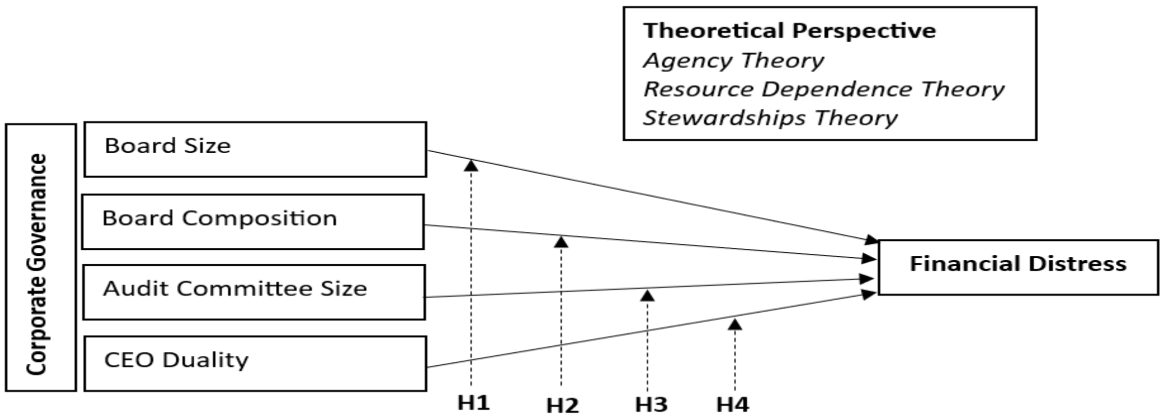

Figure 1. Conceptual Framework

2.2 Hypothesis Development

2.2.1 Board size and Financial Distress Relation

Board directors play a pivotal role in leading, making decision and business oversight to affectively accomplish business objectives (Younas et al., 2021). Research by Kalbuana et al. (2022) highlights their significant impact on management efficiency and decision-making quality, with board size being a key determinant that is positively associated with financial distress. Literature discussed numerous studies that have investigated the importance of board size in explaining financial distress (Younas et al., 2021; Guizani, & Abdalkrim, 2023). Yousaf et al. (2024) review study conducted in analyzing the corporate governance impact on financial distress found board size an important factor. They concluded 75% of the studies analyzed showed significant relation. Most of significant effect showed negative relation with financial distress suggesting that board size is significant factor to reduce financial distress. Celiktas et al. (2025) examined the global perspective of corporate governance in mitigating the financial distress. They concluded that board size is a significant factor in mitigating the financial distress both in developed and emerging markets. Croci et al. (2024) found significant impact of board size in reducing financial distress during disruptive market conditions. Rahim et al. (2024) confirm the significant effect of board size in mitigating financial distress in Indonesian market. Natalia and Rudiawarni (2022) conducted an extensive study on non-financial companies concluding the significant contribution of board size and profitability in decreasing financial distress. Similarly, Younas et al. (2021) research indicated the significant importance of corporate governance (specifically board size and CEO duality) in decreasing the financial distress. This emphasizes that not only do well-structured governance frameworks, such as board composition, provide a stabilizing effect, but specific leadership attributes, like ensuring the separation of key executive roles, are crucial in enhancing financial resilience. Collectively, these studies underscore the pivotal role corporate governance plays in protecting companies from financial crises, particularly within non-financial sectors. Both findings suggest that organizations aiming to prevent financial distress should strategically design their board structures and executive authority distribution to optimize financial resilience and minimize instability.

H1. There is a significant positive relationship between board size and financial distress of a company.

2.2.2 Board Composition and Financial Distress Relation

Mangena et al. (2020) emphasize the crucial role of independent board directors in business control and decision-making autonomy. Independent board members are distinct from upper management and abstain from daily business operations to mitigate conflicts of interest. Deng and Wang (2006) conducted a comparative study of distressed and non-distressed Chinese firms. Their analysis explained board independence minimize the financial distress due to make more informed decision and effectively monitor management. Similarly, Mangena et al. (2020) reinforced Deng and Wang's findings through supporting the importance of board independence in mitigating financial distress, particularly within the banking sector. Findings Lajili and Zéghal (2010) revealed that companies having more independent directors did not necessarily shield firms from financial instability. This result contrasts with the more conventional view that independent boards are better equipped to oversee management and protect shareholder interests. Similarly, Natalia and Rudiawarni (2022) found significant contribution of independent directors in board in financial performance causing to minimizing financial distress, a conclusion similarly supported by Aldamen and Duncan (2012). Abiad et al. (2025) concluded the significant role of board independence in firm performance, thereby helping to alleviate the financial distress condition of the firms in Gulf Cooperation Council (GCC) countries. Furthermore, El-Chaarani et al. (2023) presented the significant role of board independence to support the financial condition of the firms in pandemic crises in the Middle Eastern and North African (MENA) markets.

These findings suggest that the presence of independent directors enhances oversight and decision-making processes, leading to improved financial outcomes. The ability of independent directors to provide objective perspectives and effectively monitor management appears to be a significant factor in driving better financial performance. However, the relation of board composition with the financial distress is subject to the market conditions. Yousaf et al. (2024) concluded the market dynamics is important for the relationship between board composition and financial distress. Their study findings concluded 70% of the studies shows significant negative relation with financial distress. While, 30% showed insignificant impact of board composition on financial distress. Celiktas et al. (2025) found that board independence as the significant factor for the financial distress. However, it is positively significant in the developed markets and negatively significant in the emerging markets. While, Croci et al. (2024) concluded that board independence worsen the financial condition of the company during the disruptive market conditions. This body of research underscores the importance of board independence in strengthening governance structures and fostering long-term financial stability. Considering the empirical evidence presented above, following hypothesis is formulated:

H2. There is a significant negative relationship between board composition and financial distress of a company.

2.2.3 Audit Committee Size and Financial Distress Relation

Nursiva and Widyaningsih, (2020) identified the importance of agency theory owing to the conflicting objectives of managers, arising when decisions prioritize self-interest over shareholder benefit, leading to conflict. They emphasized the importance of audit committee while enhancing company performance. Klein et al. (2002) found that size of the audit committees improves financial reporting, resolve agency problems leading to reduce the financial distress. Burke et al. (2008) advocated for larger audit committees, arguing that an increase in size could positively influence a company's performance, supported by Khalid et al. (2020). This view aligns with the idea that a well-constituted audit committee can enhance transparency and accountability, ultimately boosting stakeholder confidence. Salloum et al. (2014) found that strong audit committees in Lebanese financial institutions help mitigate financial distress. Similarly, Mohid et al. (2009) observed that larger audit committees reduce the likelihood of financial instability in the Malaysian market, highlighting the importance of audit committee size in preventing financial distress.

Despite the importance of audit committee role in firm sustainability, its role in mitigating the financial distress varies across the markets. Yousaf et al. (2024) presented mostly insignificant findings between audit committee size and financial distress in the review article that considered studies across 26 countries. They further argued that one-size-fit-all approach is not applicable while studying corporate governance-financial distress relationship. While, Damayani et al. (2025) explained the development perspective of corporate governance with time that is used to mitigate the financial distress through audit committee size and independence, board size board diversity and ownership. The dispersity in the findings that relate the audit committee size and financial distress lead to the third hypothesis of the study. Considering the above discussion and empirical finding, following is the third hypothesis:

H3. There is a significant negative relationship between audit committee size and financial distress of a company.

2.2.4 Financial Distress and CEO Duality Relation

The primary responsibility of independent board members is to ensure clarity of duties between the CEO and the chairman, promoting a balance of power and effective oversight. Younas et al. (2021) underline the importance of separating the CEO's responsibilities from those of the chairman, alleviating the undue burden on the CEO and allowing for a more strategic focus on problem-solving. Saleh and Natalia (2023) reinforced these findings, demonstrating that combine role of CEO has significant negative correlation in exacerbating financial distress, further supporting Younas et al.'s conclusions. Concentrating power in a single individual not only creates governance issues but also diminishes the company's financial performance, as decision-making becomes less objective. Abiad et al. (2025) concluded that CEO duality decreases the return on assets of the firm, thereby contributing toward increasing the financial distress. Furthermore, Yousaf et al. (2024) in review article presented mixed findings between the relationship of CEO duality and financial distress. They found mostly insignificant and positive relationship among the above two variables, stressing the idea of contextual variability of the market effect the result. While, Croci et al. (2024) concluded that CEO duality do not capture the marker reaction in disruptive events, contributing insignificant role in mitigating financial distress. However, Rahim et al. (2024) highlighted the significant role of CEO duality in decreasing the financial distress of the firms. Ud-Din et al. (2020) highlighted a different perspective from corporate governance theories, showing that the dual nature of the CEO has important significant role to impact the financial distress positively. This suggests that certain contexts or organizational structures might benefit from a unified leadership approach. However, Chen et al. (2020) offered another layer of complexity, explaining the insignificant role of CEO duality in triggering financial distress. This view was further confirmed by García and Herrero (2021), who also found that insignificant role of CEO duality regarding financial condition. These conflicting results indicate that the impact of CEO duality may be context-dependent, with various factors influencing its effectiveness as a governance mechanism.

Considering these varying viewpoints, it becomes evident that while separating the roles of CEO and chairman is typically recommended for reducing financial distress, the decision may need to account for specific organizational characteristics. Thus, the fourth hypothesis of the study follows this line of inquiry, seeking to understand the particular dynamics of CEO duality in the context of Pakistani firms.

H4. There is a significant negative relationship between CEO duality and financial distress of a company.

3. Methodology

3.1 Population and Sample

The study employed a purposive, non-probability sampling technique to collect data for hypothesis testing (Rahim et al., 2024; Campbell et al., 2020; Mulatsih et al., 2024). The sampling was purposive because firms were purposively selected based on their market capitalization rankings to ensure the inclusion of major players across the manufacturing sector. Purposive sampling is appropriate for this study because it allows the selection of firms that are most relevant and information-rich for analyzing manufacturing sector performance.

Pakistan Stock Exchange lists 27 manufacturing-related sectors. From these, the top-ranked firm from each sector (based on sector-level market capitalization) was selected. The remaining 21 firms were then chosen from the highest market-capitalized firms across all manufacturing sectors**,** ensuring adequate representation of leading firms within the industry. In total, 48 listed manufacturing firms were included in the sample. Although purposive sampling is a non-probability method and does not involve random selection, the procedure ensured broad sectoral representation within the manufacturing industry. The study used a five-year pre-COVID period (2015–2019) for analysis.

The COVID-19 pandemic introduced unprecedented shocks to the manufacturing sector, disrupting supply chains, reducing production capacity, and distorting financial indicators worldwide (Li, 2021). Including the pandemic years alongside pre-pandemic data would have introduced structural breaks in the dataset, thereby biasing the analysis and obscuring the true relationship between corporate governance mechanisms and financial distress (Munmun et al., 2023). Through focusing exclusively on the pre-COVID period, the study ensures internal consistency of the data and avoids conflating firm-level governance effects with the exogenous crisis-driven distortions caused by the pandemic. Rationale considering the exclusion of financial sector is difference in the capital and financial structure of the financial and non-financial firms. Considering the fact, mostly the studies deal the manufacturing and financial sectors separately. For instance, Smith, and Liou (2007), Bae (2012) and Wu et al., (2020) considered manufacturing sectors for conducting research on financial destress. While, Rahman et al., (2004), Fakhar et al., (2023) and Abdu (2022) explored the financial distress of the firms in financial sectors. Pakistan stock exchange and companies' annual reports were the source for collecting the data for the study.

3.2 Measurement of Variables

3.2.1 Dependent Variable

The dependent variable in this study is financial distress. Which is assessed using the Altman Z-score model. This model is widely recognized as one of the most effective tools for assessing a company's financial health. Researchers often prefer the Altman Z-score because of its reliability in producing accurate predictions of financial distress, particularly when compared to alternative models. As noted by Ahmed and Govind (2018), the Altman Z-score stands out as the most effective model for predicting corporate financial distress, also confirmed by Yousaf et al., (2024) in the review article that was conducted on the literature from 1985 to 2021. Explanation of the Z-score is straightforward: a value above 2.4 indicates that the company is financially stable, while a value below 1.8 suggests financial distress. This study utilizes a cross-sectional method to collect data. The Altman Z-score formula integrates several financial ratios to determine the likelihood of distress, making it a highly useful tool for measurement that is given by:

3.2.2 Independent Variables

This research identifies key factors as independent variables: the number of board members, the proportion of non-executive directors, the size of the audit committee, and the combined role of CEO and chairman. The board's total membership is measured using the natural logarithm of its members. The composition reflects the ratio of non-executive to total directors, while the audit committee size is based on the total number of its members. CEO duality is assigned a binary value: 0 if the CEO and chairman roles are combined, and 1 if they are distinct (Saleh & Natalia, 2023). These elements are analyzed to assess their influence on financial performance.

3.3 Model of the Study

The independent and dependent variables is assessed through data regression analysis, employing the cross-sectional technique to gather data. Along with panel data, cross-sectional methodology was also applied that enables the collection of data for each company across various years. Consequently, a cross-sectional regression model is applied to elucidate the relationship between explanatory and observed variable.

Model of the study is given by:

$$Y\,i,t = \beta 0 + \beta 1X1\,i,t + \beta 2X2\,i,t + \beta 3X3\,i,t + \beta 4X4\,i,t + \varepsilon\,i,t$$

$$Y = \text{ independent variable (financial distress)}$$

$$X1 = \text{ Board size}$$

$$X2 = \text{ Board composition}$$

X3 = Audit committee size

X4 = CEO duality

ε = error term

β = Predictor variables coefficients

3.4 Analysis Procedure

The study employed firm-level panel data for the period 2015–2019 to examine the effect of corporate governance on financial distress. Consistent with prior research that has applied ordinary least squares (OLS) estimation in examining the corporate governance–performance and financial distress nexus (Bhagat & Bolton, 2008; Schultz et al., 2010; Zelie, 2019), a pooled OLS regression was first conducted across the full sample period. This approach allowed us to capture the average effect of corporate governance mechanisms on financial distress during the pre-COVID years without imposing heterogeneity across firms or time. To complement the pooled estimation, year-wise regressions were also performed for each year from 2015 to 2019. The rationale for this additional step was to explore whether the effectiveness of governance mechanisms in mitigating financial distress exhibited consistency or variation across different years, considering possible firm-level adjustments, regulatory changes, and macroeconomic conditions. By combining pooled and annual analyses, the study ensured both a comprehensive and dynamic assessment of the relationship between corporate governance and financial distress in the pre-COVID context.

4. Results and Discussion

4.1 Results

Upon analyzing the 5-year dataset (table 4.1), it is evident that one variable, board size, exhibits significance in relation to the dependent variable. The significance of variables is determined by the p-value, where a value greater than 0.05 indicates non-significance. For board size, the p-value is 0.0001, well below the threshold, indicating significance. The p-values for board composition, audit committee size, and CEO duality are above 0.05, showing these variables lack statistical significance. The coefficients reflect how much the dependent variable changes with the independent variable.

Table 4.1. Pooled OLS

	Coefficient	Std. Error	t − ratio	p − value	
Const	−2202.14	496.751	−4.433	<0.0001	***
Board size	1081.46	205.872	5.253	<0.0001	***
Board composition	174.417	288.344	0.6049	0.5459	
Audit size	−65.7432	323.046	−0.2035	0.8389	
CEO Duality	−30.9010	190.429	−0.1623	0.8713	

*Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

The analysis of the 2015 data reveals no correlation between explanatory and observed variable (table 4.2). The p-value for board size is 0.1432, exceeding the threshold of 0.05, indicating insignificance. The overall p-value signify insignificance for all the variables collectively. Thus, in 2015, no significance is observed between corporate governance and financial distress.

Business Management and Strategy
ISSN 2157-6068
2026, Vol. 17, No. 1

Table 4.2. OLS Model

	Coefficient	Std. Error	t − ratio	p − value
Const	−316.965	252.391	−1.256	0.2160
Board size	150.225	100.742	1.491	0.1432
Board composition	−73.6342	151.416	−0.4863	0.6292
Audit size	83.9733	182.707	0.4596	0.6481
CEO Duality	11.3437	87.6355	0.1294	0.8976

*Results 2015, Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

Table 4.3. OLS Model

	Coefficient	Std. Error	t − ratio	p − value	
Const	−1528.97	488.062	−3.133	0.0038	***
Board size	801.136	215.974	3.709	0.0008	***
Board composition	−617.234	257.467	−2.397	0.0229	**
Audit size	190.325	347.683	0.5474	0.5881	
CEO Duality	204.929	171.455	1.195	0.2414	

*Result 2016, Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

The analysis of the 2016 data indicates a significant role of board size and board composition with financial distress (table 4.3). However, the p-value for audit committee size (0.5881) and CEO duality (0.2414) is surpassing the threshold of 0.05, rendering the variable insignificant. The overall p-value is 0.0038, indicating that the significance of the variables collectively is not zero; some variables exhibit a positive correlation with financial distress. Thus, in 2016, there is significance between corporate governance and financial distress.

The analysis of the 2017 data found a significant positive effect of board size on financial distress (table 4.4). The p-value for board composition is 0.0002, below the threshold of 0.05, indicating significance. The overall p-value is 0.0128, signifying that the significance of the variables collectively is not zero. Thus, in 2017, the corporate governance prevailed significant.

Table 4.4. OLS Model

	Coefficient	Std. Error	t − ratio	p − value	
Const	−8266.81	3186.58	−2.594	0.0128	**
Board size	3519.22	859.381	4.095	0.0002	***
Board composition	1295.83	1386.86	0.9344	0.3552	
Audit size	205.103	2732.89	0.07505	0.9405	
CEO Duality	196.347	1521.89	0.12900	0.897	

*Result 2017, Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

The 2018 data analysis (table 4.5) shows a positive correlation between financial distress and certain corporate governance variables, with board size being significant. However, the p-value for audit committee size is 0.7927, indicating insignificance. The CEO duality factor shows insignificant contribution toward financial distress. The overall analysis of the model shows significant effect in explaining the financial distress for 2018.

Table 4.5. OLS Model

	Coefficient	Std. Error	t − ratio	p − value	
Const	−1899.09	644.615	−2.946	0.0063	***
Board size	897.287	244.165	3.675	0.0010	***
Board composition	270.877	415.404	0.6521	0.5195	
Audit size	−120.150	452.976	−0.2652	0.7927	
CEO Duality	19.4050	230.093	0.08434	0.9334	

*Result 2018, Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

Table 4.6. OLS Model

	Coefficient	Std. Error	t − ratio	p − value
Const	−166.028	163.109	−1.018	0.3144
Board size	88.7791	74.3610	1.194	0.2391
Board composition	−24.9443	98.3044	−0.2537	0.8009
Audit size	19.1291	81.0144	0.2361	0.8145
CEO Duality	−0.602219	57.0949	−0.01055	0.9916

*Result 2019, Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

In 2019, the explanatory variables exhibit insignificance with the observed variable. The p-value of 0.3144 indicates insignificance of corporate governance (table 4.6).

4.2 Discussion

This research investigates how different elements of corporate governance play their roles in managing the risk of financial distress. The year-wise comparison of variables significance is presented in table 4.6. The results show positive and statistically significant association between board size and financial distress in the model (and consistently in 2016–2018), indicating that larger boards are linked to greater financial vulnerability. This pattern supports the classic argument that oversized boards can suffer coordination and free-rider problems, slowing responses during periods of stress. The finding is congruent with Lipton and Lorsch (1992), who argue that smaller boards facilitate faster, more decisive action**,** improving firms' odds of navigating distress, also supported by Gerged et al. (2023). It also resonates with Kalbuana et al. (2022), who emphasize that as boards grow, decision quality and managerial efficiency can deteriorate, elevating risk. However, our evidence diverges from a large stream of recent literature summarized in the Yousaf et al. (2024) review, which reports that about 75% of studies find a significant *negative* relation concluding larger boards tend to reduce financial distress by broadening oversight and expertise. Supporting this, Celiktas et al. (2025) conclude (across developed and emerging markets) that board size mitigates distress; Croci et al. (2024) find that larger boards help reduce distress during disruptive market conditions**;** Rahim et al. (2024) document a protective effect of board size in Indonesia; Natalia and Rudiawarni (2022) show board size decreases distress in non-financials; and Younas et al. (2021) similarly report that board size (along with CEO role separation**)** lowers distress.

Table 4.6. Year-wise comparison of variables

	2015	**2016**	**2017**	**2018**	**2019**
	P-value	*P-value*	*P-value*	*P-value*	*P-value*
Const	0.2160	0.0038 ***	0.0128 **	0.0063 ***	0.3144
Board Size	0.1432	0.0008 ***	0.0002 ***	0.0010 ***	0.2391
Board Composition	0.6292	0.0229 **	0.3552	0.5195	0.8009
Audit Size	0.6481	0.5881	0.9405	0.7927	0.8145
CEO Duality	0.8976	0.2414	0.897	0.9334	0.9916

*Dependent variable: FD, ***, **, * show significance levels at 1, 5 and 10%*

Two contextual explanations can reconcile these differences. First, the resource-dependence channel (where larger boards add networks, expertise, and legitimacy) work in settings with effective independence, enforcement, and director capacity; the Pakistani context may attenuate those benefits when independent oversight is weak and appointments are compliance-oriented. Second, larger boards in the study sample may reflect ownership structures (e.g., family influence), political ties, and "box-ticking" expansions that inflate size without enhancing capability, thereby diluting accountability and slowing monitoring precisely the agency-cost mechanism flagged by Lipton & Lorsch (1992). The year-wise pattern also aligns with this interpretation: the positive effect is strongest in 2016–2018, while insignificance in 2015 (pre-adjustment) and 2019 (macro uncertainty) suggests that external conditions can mask governance effects. Concludingly, H1 is supported, but contradicts the majority of recent cross-market evidence (Yousaf, 2024; Celiktas, 2025; Croci, 2024; Rahim, 2024; Natalia & Rudiawarni, 2022; Younas, 2021). The contrast underscores that board-size effects are context-dependent: where independence is substantive and enforcement strong**,** larger boards can mitigate distress; where these conditions are weaker, larger boards may exacerbate it through coordination frictions and diffused responsibility. This contributes to the literature by showing that, in Pakistan's Pre-COVID setting, governance capacity, not headcount, is decisive.

The study results show that board independence has no significant effect on financial distress in the overall period and year-by-year analysis. This raises questions about how effectively independent directors in developing market perform their monitoring and advisory roles. From an agency theory perspective, independent directors are supposed to reduce agency problems by monitoring managers and protecting shareholders' interests. Prior studies such as Deng and Wang (2006) and Mangena et al. (2020) support this idea, showing that board independence lowers the chance of distress by improving oversight. Similarly, Natalia and Rudiawarni (2022) and Aldamen and Duncan (2012) reported that independent boards help improve financial performance, while El-Chaarani et al. (2022, 2023) and Abiad et al. (2025) also highlight their positive role during times of crisis. However, the study findings align more closely with studies that contradicts the agency theory argument. Lajili and Zéghal (2010) found that independence did not shield firms from distress, and Croci et al. (2024) showed that independence could even worsen outcomes in volatile markets. Yousaf et al. (2024) also noted that about 30% of studies found no effect, while Celiktas et al. (2025) explained that the direction of the relationship depends on market context—positive in developed markets but negative in emerging markets.

One possible explanation comes from the stewardship theory **(**Donaldson & Davis, 1991), which argues that managers may act as responsible stewards of the company and not necessarily need constant monitoring. In Pakistan, where family ownership and close business ties are common, independent directors may lack real influence or may even have personal or social connections with management, reducing their effectiveness as monitors. The resource dependence theory also provides insight: independent directors are often appointed to provide external connections, advice, and legitimacy rather than to strictly monitor management. In weak regulatory environments, this symbolic role might explain why independence does not reduce distress. Overall, H2 is not supported in the study sample. While much of the global literature supports the agency theory expectation that independence reduces distress, the study findings suggest that in Pakistan, structural and cultural factors limit the true independence of directors. This highlights that the effectiveness of independence depends less on the number of outside directors and more on their ability to act with autonomy and expertise.

Furthermore, the study results show that audit committee size has a negative but statistically insignificant relationship with financial distress. This means that while larger audit committees are generally expected to strengthen oversight and reduce financial instability, in study sample of Pakistani manufacturing firms, the effect is weak and not significant enough to support H3. From an agency theory standpoint, larger audit committees should enhance monitoring, reduce managerial opportunism, and improve financial reporting quality. Prior studies such as Klein et al. (2002)**,** Burke et al. (2008)**,** Mohid et al. (2009), and Salloum et al. (2014) confirm this expectation, showing that larger committees can reduce financial distress by improving transparency and internal controls. These findings contrast with the study results, which suggest that in Pakistan, the mere size of the audit committee does not guarantee effective monitoring. This gap can be explained by the quality rather than the quantity of audit committee members. While larger committees may bring diverse skills and perspectives, they may also suffer from coordination problems or inactive participation. This aligns with the resource dependence theory, which suggests that committees are valuable not only for their size but also for the expertise and external linkages of their members. If members lack financial expertise or independence, a larger size may not translate into stronger oversight.

The stewardship theory further adds explanation: it assumes managers act as responsible stewards and emphasizes trust rather than control. In such contexts, the effectiveness of audit committees might depend less on their size and more on how well management collaborates with them to ensure transparency. In emerging markets like Pakistan, where family ownership is high and regulatory enforcement is still developing, the symbolic presence of larger audit committees may not be sufficient to mitigate distress. Other studies also highlight the inconsistency of this relationship across markets. Yousaf et al. (2024) reviewed multiple countries and found that results were mostly insignificant, suggesting that the impact of audit committees is highly context-dependent. Similarly, Damayani et al. (2025) argued that the role of audit committees evolves with time and depends on the maturity of governance systems. Taken together, these findings suggest that while the literature generally supports the agency theory view that larger audit committees improve financial health, this study results highlight that in Pakistan, size alone is not enough. The effectiveness of audit committees may rely more on independence, financial expertise, and active involvement of members than on the number of members.

The study findings show that CEO duality has insignificant negative effect on financial health, partially supporting H4 and suggesting that when the CEO also holds the position of board chair, the company faces higher financial distress risk. This result highlights how concentration of power in one individual can undermine oversight and decision-making, weakening the firm's resilience in times of financial challenge. This finding is consistent with earlier research. Younas et al. (2021) and Saleh and Natalia (2023) both emphasized that CEO duality worsens financial distress because it reduces the independence of the board and makes monitoring less effective. Similarly, Abiad et al. (2025) found that dual leadership structures reduce firm performance, particularly return on assets, which indirectly increases the likelihood of distress. These studies reinforce the idea that separating the CEO and chair positions can improve checks and balances within governance structures. However, not all literature aligns with the study findings. Yousaf et al. (2024), in their review, reported mostly insignificant or mixed relationships, noting that market and cultural contexts matter. Croci et al. (2024) also concluded that CEO duality does not significantly affect financial outcomes during disruptive events. Chen et al. (2020) and García and Herrero (2021) also highlighted insignificant effects, suggesting that CEO duality's impact is far from uniform across markets. On the other hand, some studies even suggested potential benefits of CEO duality: for instance, Rahim et al. (2024) reported a significant role of duality in reducing distress in Indonesia, while Ud-Din et al. (2020) argued that combining the roles may allow faster decision-making, thus benefiting the firm.

5. Conclusion and Recommendation

5.1 Conclusion

This study examined the role of corporate governance mechanisms—board size, board independence, audit committee size, and CEO duality—in mitigating financial distress among Pakistani manufacturing firms. The analysis provides important insights into how governance operates in an emerging market context, where regulatory enforcement, cultural norms, and ownership structures differ markedly from those in developed economies. Anchored in agency theory, stewardship theory, and resource dependence theory, the findings reveal a complex and context-dependent picture of governance effectiveness.

The results for board size (H1) showed a positive and significant relationship with financial distress, suggesting that larger boards tend to increase rather than reduce vulnerability. This outcome diverges from much of the international literature (Celiktas et al., 2025; Rahim et al., 2024; Croci et al., 2024), which generally supports the protective role of larger boards by providing diverse expertise and broader oversight. Instead, the evidence in Pakistan resonates more with classical agency theory perspectives (Meckling & Jensen, 1976), highlighting how oversized boards may create coordination challenges, free-rider problems, and diluted accountability (Lipton & Lorsch, 1992). The results also suggest that in weak institutional settings, larger boards may be symbolic rather than functional, reflecting political ties, family influence, or compliance-oriented expansion without genuine capability. These findings contribute to the literature by emphasizing that board effectiveness depends on governance quality rather than mere size, and that in emerging markets, larger boards may exacerbate distress if independence and enforcement are weak.

For board independence (H2), the study found no significant effect on financial distress. This contradicts the agency theory expectation that independent directors enhance oversight and protect shareholder interests (Deng & Wang, 2006; Mangena et al., 2020). Instead, the findings align with those of Lajili and Zéghal (2010) and Croci et al. (2024), who argue that independence may be ineffective in volatile or weakly regulated environments. In Pakistan, where family ownership is dominant and independent directors may lack genuine autonomy, their presence appears more symbolic than substantive. This aligns with the resource dependence perspective, which views directors as sources of external connections and legitimacy rather than active monitors. Stewardship theory further explains why independence may be muted in this context—if managers are considered responsible stewards, boards may defer to them rather than exercising rigorous oversight. Thus, H2 is not supported, reinforcing the idea that independence must be meaningful and empowered to mitigate financial risks.

The results for audit committee size (H3) revealed a negative but statistically insignificant relationship with financial distress. While theory and prior studies (Klein et al., 2002; Mohid et al., 2009; Salloum et al., 2014) suggest that larger audit committees should improve oversight and financial transparency, the findings imply that in Pakistan, size alone does not guarantee effectiveness. This inconsistency can be explained by quality issues: without financial expertise, independence, or active participation, larger committees may remain ineffective. From a stewardship perspective, the symbolic existence of committees may be insufficient if trust between management and auditors is prioritized over control. Similarly, resource dependence theory stresses that it is the expertise and external linkages of committee members—not the number—that determine effectiveness. These findings echo Yousaf et al. (2024), who reported that the relationship between audit committees and distress is highly context-dependent. Hence, H3 is not supported in the study.

Finally, CEO duality (H4) showed an insignificant negative effect, partially supporting the hypothesis. This suggests that combining the roles of CEO and board chair may increase distress risk, but not significantly. The result aligns with agency theory, which stresses the dangers of power concentration, as confirmed by Younas et al. (2021) and Saleh and Natalia (2023). Yet, the insignificance reflects the mixed evidence globally: while some studies suggest dual CEO role reduce oversight (Abiad et al., 2025), others find neutral or even positive effects (Rahim et al., 2024; Ud-Din et al., 2020), depending on context. Stewardship theory provides a counterpoint, suggesting that in trust-based environments, unified leadership may streamline decision-making. Resource dependence theory further highlights that dual leaders may attract stronger networks, potentially offsetting risks. In Pakistan, however, where boards often lack independence, the absence of significant effects suggests that structural separation of roles alone is insufficient without complementary enforcement and institutional support. Overall, the study concludes that governance mechanisms affect financial distress unevenly in Pakistan. Larger boards appear counterproductive, board independence and audit committee size are largely symbolic, and CEO duality has mixed effects. These results contribute to the broader governance literature by highlighting the importance of context: governance tools that reduce distress in developed economies may not translate effectively into emerging markets without genuine independence, expertise, and enforcement. The findings underscore that in Pakistan, the quality and functionality of governance structures matter more than their formal existence or size, offering both theoretical and practical insights into corporate resilience in emerging markets.

5.2 Recommendation

The findings of this study have several policy, theoretical and practical implications.

Policy Recommendations: Regulators in Pakistan, such as the Securities and Exchange Commission of Pakistan (SECP), should prioritize the quality over quantity of governance structures. Merely expanding board or committee size does not guarantee improved oversight. Instead, regulatory frameworks should emphasize director independence, financial expertise, and active participation. Strengthening the enforcement of disclosure requirements and ensuring transparent nomination processes can help curb symbolic appointments. For audit committees specifically, policy should mandate a minimum proportion of members with accounting or financial backgrounds, ensuring that committees serve as effective oversight bodies rather than compliance checkboxes. Additionally, separating the roles of CEO and chair should be enforced in high-risk industries to reduce concentration of power and align with global best practices.

Theoretical Contribution: This study contributes to the corporate governance literature by demonstrating that the effectiveness of governance mechanisms is highly context-dependent. While agency theory predicts that larger boards, independent directors, strong audit committees, and role separation all reduce financial distress, the results from Pakistan show that these mechanisms may fail or even backfire, when institutional enforcement and director independence are weak. By integrating agency theory with stewardship and resource dependence perspectives, the study shows that governance outcomes depend not only on structure but also on institutional quality, cultural norms, and firm-specific practices**.** This contribution advances the debate by clarifying that governance effectiveness in emerging markets cannot be assumed from developed-market evidence, but must be evaluated through the lens of local contexts.

Practical Implications: The findings offer important guidance for regulators, corporate boards, and investors. For regulators, the results emphasize the need to strengthen the quality, independence, and expertise of board members rather than relying solely on structural compliance. Clear criteria for appointing independent directors, stronger enforcement of governance codes, and greater disclosure of director qualifications can improve governance effectiveness. For corporate boards, the evidence shows that board size and independence alone do not prevent financial distress**.** Firms should focus on maintaining an optimal board size, ensuring genuinely independent directors, and strengthening audit committees through members with strong financial and accounting expertise. Separating the roles of CEO and board chair can also enhance accountability and reduce power concentration. For investors, the study highlights the value of assessing the actual effectiveness of governance practices rather than just compliance. Evaluating board expertise, true director independence, CEO duality, and audit committee effectiveness can provide clearer signals of a firm's financial resilience. Greater transparency in governance reporting will further support informed investment decisions.

5.2.1 Limitations and Future Research

This study has several limitations that offer opportunities for future research. First, the analysis relies on secondary data from publicly listed firms in Pakistan, which may not capture informal governance practices or the dynamics of privately held, family-owned, or SME firms. Future studies could extend the sample to include these categories for broader generalizability. Second, although robust techniques were used, potential endogeneity—such as reverse causality between governance structures and financial distress cannot be completely ruled out. Future research may address this more rigorously using dynamic panel models or instrumental variable approaches. Third, the single-country focus limits cross-country comparability, as Pakistan's institutional and regulatory context may shape governance outcomes. Comparative studies across other emerging and developed markets would help validate whether these findings hold in different settings. Finally, the study examined core governance variables including board size, board independence, CEO duality, and audit committee characteristics but did not include other relevant dimensions such as ownership structure, gender diversity, board tenure, or executive compensation. Incorporating these variables could provide a more comprehensive view of how governance influences financial distress.

Declaration of generative AI:

During the development of this manuscript, the authors utilized AI assistance to enhance language clarity and fluency. Following this process, the authors thoroughly reviewed and made the necessary edits to the content, ensuring that they retain full responsibility for the final version of the publication.

Acknowledgments

Not applicable.

Authors contributions

Sample: Mr. Muhammad Danial and Mr. Waqas Ahmad were responsible for study design, data collection and drafting manuscript. Assistant Prof. Dr. Nadia Iftikhar, Sidra Jamal and Ahmad Ali were responsible for data analysis, their expert review and conceptualization. All authors read and approved the final manuscript.

Funding

Not applicable.

Competing interests

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.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

Copyrights

References

Abdu, E. (2022). Financial distress situation of financial sectors in Ethiopia: A review paper. *Cogent Economics & Finance, 10*(1), 1996020. https://doi.org/10.1080/23322039.2021.1996020

Abdullah, S. N. (2006), Board structure and ownership in Malaysia: the case of distressed listed Companies. *Corporate Governance: The International Journal of Business in Society, 6*(5), 582-594. https://doi.org/10.1108/14720700610706072

Abiad, Z., Abraham, R., El-Chaarani, H., & Binsaddig, R. O. (2025). The impact of board of directors' characteristics on the financial performance of the banking sector in Gulf Cooperation Council (GCC) countries: The moderating role of bank size. *Journal of Risk and Financial Management, 18*(1), 40. https://doi.org/10.3390/jrfm18010040

Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms.

Corporate Governance: The International Journal of Business in Society, 7(1), 83-92 https://doi.org/10.1108/14720700710727131

Adams, R. B., & Ferreira,D. (2007). A theory of friendly boards. *The Journal of Finance, 62*(1), 217-250. https://doi.org/10.1111/j.1540-6261.2007.01206.x

Ahmed, M. A. R., & Govind, D. (2018). An evaluation of the Altman Z-score model in predicting corporate bankruptcy for Canadian publicly listed firms.

Akram, F., & Abrar Ul Haq, M. (2022). Integrating agency and resource dependence theories to examine the impact of corporate governance and innovation on firm performance. *Cogent Business & Management, 9*(1), 2152538. https://doi.org/10.1080/23311975.2022.2152538

Aldamen, H. & Duncan, K. (2012). Does good corporate governance enhance accruals quality during financial crisis? *Managerial Auditing Journal, 31*(4/5), pp. 434-457. https://doi.org/10.1108/MAJ-06-2015-1206

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

Aliahmadi, S. (2024). Does CEO power moderate the link between labor productivity and financial performance: Agency theory or stewardship theory. *Asian Journal of Accounting Research, 9*(1), 47-56. https://doi.org/10.1108/AJAR-04-2022-0111

Al-Tamimi, H. A. H. (2012). The effects of corporate governance on performance and financial distress: The experience of UAE national banks. *Journal of Financial Regulations and Compliance, 20*(2), 169-181. https://doi.org/10.1108/13581981211218315

Bae, J. K. (2012). Predicting financial distress of the South Korean manufacturing industries. *Expert Systems with Applications, 39*(10), 9159-9165. https://doi.org/10.1016/j.eswa.2012.02.058

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance, 14*(3), 257-273. https://doi.org/10.1016/j.jcorpfin.2008.03.006

Brédart, X. (2014). Financial distress and corporate governance: The impact of board configuration. *International Business Research, 7*(3), 72. https://doi.org/10.5539/ibr.v7n3p72

Bui, H., & Krajcsák, Z. (2024). The impacts of corporate governance on firms' performance: from theories and approaches to empirical findings. *Journal of Financial Regulation and Compliance, 32*(1), 18-46. https://doi.org/10.1108/JFRC-01-2023-0012

Burke, F. M., Guy, D. M., & Tatum, K. W. (2008). Audit committees: A guide for directors, management, and consultants. CCH.

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing, 25*(8), 652-661. https://doi.org/10.1177/1744987120927206

Celiktas, M., Ugurlu, M., & Yilmaz, N. (2025). Corporate governance, blockholders, and financial distress: Global evidence. *Accounting & Finance, 65*(2), 1347-1398. https://doi.org/10.1111/acfi.13371

Chang, C. (2009). The corporate governance characteristics of financially distressed firms: Evidence from Taiwan. *Journal of American Academy of business, 15*(1), 125- 132.

Chen, C. C., Chen, C. D., & Lien, D. (2020). Financial distress prediction model: The effects of corporate governance indicators. *Journal of Forecasting, 39*(8), 1238-1252. https://doi.org/10.1002/for.2684

Croci, E., Hertig, G., Khoja, L., & Lan, L. L. (2024). Board characteristics and firm resilience: Evidence from disruptive events. *Corporate Governance: An International Review, 32*(1), 2-32. https://doi.org/10.1111/corg.12518

Damayani, F., Fuadah, L. L., & Yuniarti, E. (2025). Development Analysis of Good Corporate Governance in Its Role on Financial Distress: Systematic Literature Review. *Jurnal Akuntansi, 14*(1), 88-104. https://doi.org/10.46806/ja.v14i1.1405

Danial, M., Iftikhar, N., & Shah, S. Q. A. (2023). Analyzing the performance of Pakistan equity mutual funds using multifactor models: Pre-covid analysis. *Business Management and Strategy, 14*(2), 296-328. https://doi.org/10.5296/bms.v14i2.21409

Deng, X., & Wang, Z. (2006). Ownership structure and financial distress: evidence from public-listed companies in China. *International Journal of Management, 23*(3), 486.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of management, 16*(1), 49-64. https://doi.org/10.1177/031289629101600103

El-Chaarani, H., Abraham, R., & Skaf, Y. (2022). The impact of corporate governance on the financial performance of the banking sector in the MENA (Middle Eastern and North African) region: An immunity test of banks for COVID-19. *Journal of Risk and Financial Management, 15*(2), 82. https://doi.org/10.3390/jrfm15020082

El-Chaarani, H., Abraham, R., Khalife, D., & Salameh-Ayanian, M. (2023). Corporate governance effects on bank profits in Gulf Cooperation Council countries during the pandemic. *International Journal of Financial Studies, 11*(1), 36. https://doi.org/10.3390/ijfs11010036

Elloumi, F., & Gueyié, J. P. (2001). Financial distress and corporate governance: an empirical analysis. *Corporate Governance: The international journal of business in society, 1*(1), 15-23. https://doi.org/10.1108/14720700110389548

Fakhar, S., Mohd Khan, F., Tabash, M. I., Ahmad, G., Akhter, J., & Al-Absy, M. S. M. (2023). Financial distress in the banking industry: A bibliometric synthesis and exploration. *Cogent Economics & Finance, 11*(2), 2253076. https://doi.org/10.1080/23322039.2023.2253076

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics, 26*(2), 301-325. https://doi.org/10.1086/467037

García, C. J., & Herrero, B. (2021). Female directors, capital structure, and financial distress. *Journal of Business Research, 136*, 592-601. https://doi.org/10.1016/j.jbusres.2021.07.061

Gerged, A. M., Yao, S., & Albitar, K. (2023). Board composition, ownership structure and financial distress: insights from UK FTSE 350. *Corporate Governance: The International*

Journal of Business in Society, 23(3), 628-649. https://doi.org/10.1108/CG-02-2022-0069

Guizani, M., & Abdalkrim, G. (2023). Does gender diversity on boards reduce the likelihood of financial distress? Evidence from Malaysia. *Asia-Pacific Journal of Business Administration, 15*(2), 287-306. https://doi.org/10.1108/APJBA-06-2021-0277

Jamal, A. H., & Shah, S. Z. A. (2017). The impact of corporate governance on the financial distress: evidence from Pakistani listed companies. *Jinnah Business Review, 5*(2), 49-53. https://doi.org/10.53369/KDDL1000

Kalbuana, N., Taqi, M., Uzliawati, L., & Ramdhani, D. (2022). The effect of profitability, board size, woman on boards, and political connection on financial distress conditions. *Cogent Business & Management, 9*(1), 2142997. https://doi.org/10.1080/23311975.2022.2142997

Khalid, M., Abbas, Q., Malik, F., & Ali, S. (2020). Impact of audit committee attributes on financial distress: Evidence from Pakistan. *International Journal of Financial Engineering, 7*(01), 2050005. https://doi.org/10.1142/S242478632050005X

Klein, L. S., O'Brien, T. J., & Peters, S. R. (2002). Debt vs. equity and asymmetric information: A review. *Financial Review, 37*(3), 317-349. https://doi.org/10.1111/1540-6288.00017

Lajili, K., & Zéghal, D. (2010). Corporate governance and bankruptcy filing decisions. *Journal of General Management, 35*(4), 3-26. https://doi.org/10.1177/030630701003500401

Lee & Yeh. (2004). corporate governance and financial distress: evidence from Taiwan. Journal of finance, pp. 22-26.

Li, Z. (2021). Exploring the role of organizational slack in the COVID-19 pandemic: an empirical study of the manufacturing industry. *Corporate Governance: The International Journal of Business in Society, 21*(6), 996-1010. https://doi.org/10.1108/CG-09-2020-0401

Li, Z., Crook, J., Andreeva, G., & Tang, Y. (2021). Predicting the risk of financial distress using corporate governance measures. *Pacific-Basin Finance Journal, 68*, 101334. https://doi.org/10.1016/j.pacfin.2020.101334

Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The business lawyer,* 59-77.

Mangena, M., Priego, A. M., & Manzaneque, M. (2020). Bank power, block ownership, boards and financial distress likelihood: An investigation of Spanish listed firms. *Journal of Corporate Finance, 64,* 101636. https://doi.org/10.1016/j.jcorpfin.2020.101636

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/10.1016/0304-405X(76)90026-X

Mohid Rahmat, M., Mohd Iskandar, T., & Mohd Saleh, N. (2009). Audit committee characteristics in financially distressed and non-distressed companies. *Managerial Auditing Journal, 24*(7), 624-638. https://doi.org/10.1108/02686900910975350

Mulatsih, L. S., Dharmawan, D., Tumiwa, R. A. F., Judijanto, L., & Alfiana, A. (2024).

Investigation of Determinants of Financial Distress in Manufacturing Companies. *International Journal of Artificial Intelligence Research, 8*(1.1).

Munmun, S. A., Moktadir, M. A., Tiwari, S., Abedin, M. Z., & Jabbour, C. J. C. (2023). Investigation of key performance indicators for performance management of the manufacturing industry in the era of the COVID-19 pandemic. *Annals of Operations Research*, 1-44. https://doi.org/10.1007/s10479-023-05717-4

Muranda, Z. (2006). Financial distress and corporate governance in Zimbabwean banks. *Corporate Governance: The international journal of business in society, 6*(5), 643-654. https://doi.org/10.1108/14720700610706126

Murhadi, W. R., Tanugara, F., & Sutejo, B. S. (2018, March). The Influence of Good Corporate Governance (GCG) on Financial Distress. In *15th International Symposium on Management* (INSYMA 2018) (pp. 76-79). Atlantis Press.

Natalia, I., & Rudiawarni, F. A. (2022). The Effect of Board Size, Institutional Ownership and Insolvency Risk on Financial Distress Before and During Covid-19. *Jurnal Dinamika Akuntansi, 14*(2), 13-29. https://doi.org/10.15294/jda.v14i2.35466

Naz, M. A., Ali, R., Rehman, R. U., & Ntim, C. G. (2022). Corporate governance, working capital management, and firm performance: Some new insights from agency theory. *Managerial and Decision Economics, 43*(5), 1448-1461. https://doi.org/10.1002/mde.3466

Neves, M. E., Santos, A., Proença, C., & Pinho, C. (2023). The influence of corporate governance and corporate social responsibility on corporate performance: An Iberian panel data evidence. *EuroMed Journal of Business, 18*(4), 552-574. https://doi.org/10.1108/EMJB-01-2022-0002

Nursiva, K., & Widyaningsih, A. (2020). Financial distress in Indonesia: Viewed from governance structure. Jurnal Riset Akuntansi Dan Keuangan Vol, 8(2), 205-20. https://doi.org/10.17509/jrak.v8i2.27796

Parkinson, M. M. (2016). Corporate governance during financial distress-an empirical analysis. *International Journal of Law and Management, 58*(5), 486-506. https://doi.org/10.1108/IJLMA-08-2015-0045

Pfeffer, J., & Salancik, G. (2015). External control of organizations-Resource dependence perspective. In *Organizational behavior* 2 (pp. 355-370). Routledge.

Pramudena, S. M. (2017). The impact of good corporate governance on financial distress in the consumer goods sector. *J. Fin. Bank. Review, 2*(4), 46-55. https://doi.org/10.35609/jfbr.2017.2.4(6)

Rahim, R., Anggriani, P., & Wiranda, N. A. (2024). The Impact of the Board, Political Connections on Financial Distress in Indonesia: Effects of Corporate Governance. *International Journal of Business, 29*(1), 1-16. https://doi.org/10.55802/IJB.029(1).001

Rahman, S., Tan, L. H., Hew, O. L., & Tan, Y. S. (2004). Identifying financial distress indicators of selected banks in Asia. *Asian Economic Journal, 18*(1), 45-57. https://doi.org/10.1111/j.1467-8381.2004.00181.x

Saleh, S., & Natalia, A. R. (2023, September). The Influence of Board Size, CEO Duality and Bank Specific on Financial Distress. In Indonesian Annual Conference Series (pp. 309-324).

Salloum, C., Azzi, G., & Gebrayel, E. (2014). Audit committee and financial distress in the middle east context: Evidence of the Lebanese financial institutions. *International Strategic Management Review, 2*(1), 39-45. https://doi.org/10.1016/j.ism.2014.09.001

Sameera, T. K. G. & Separate, S. (2015). Impact of Corporate Governance Practices on Probability and Resolution of Financial Distress of Listed Companies in Sri Lanka. Matara, 4th International Conference on Management Economics, University of Ruhuna.

Schultz, E. L., Tan, D. T., & Walsh, K. D. (2010). Endogeneity and the corporate governance-performance relation. *Australian journal of Management, 35*(2), 145-163. https://doi.org/10.1177/0312896210370079

Sewpersadh, N. S. (2022). An econometric analysis of financial distress determinants from an emerging economy governance perspective. *Cogent Economics & Finance, 10*(1), 1978706. https://doi.org/10.1080/23322039.2021.1978706

Shahwan (2015). The effect of corporate governance of financial performance and financial distress: evidence from Egypt. *Journal of finance*, pp. 56-60.

Smith, M., & Liou, D. K. (2007). Industrial sector and financial distress. *Managerial Auditing Journal, 22*(4), 376-391. https://doi.org/10.1108/02686900710741937

Tahir, M., Jan, A. A., Shah, S. Q. A., Woon, L. F., Shad, M. K., & Danial, M. (2023). Energy Consumption and Economic Growth Nexus in the SAARC Region. *KnE Social Sciences,* 151-164. https://doi.org/10.18502/kss.v8i20.14600

Ud-din, S., Khan, M. Y., Javeed, A., & Pham, H. (2020). Board structure and likelihood of financial distress: An emerging Asian market perspective. *The Journal of Asian Finance, Economics and Business, 7*(11), 241-250. https://doi.org/10.13106/jafeb.2020.vol7.no11.241

Wang & Deng. (2014) corporate governance and financial distress: Evidence from Chinese listed companies. *Journal of finance*, pp. 34-36.

Wu, L., Shao, Z., Yang, C., Ding, T., & Zhang, W. (2020). The impact of CSR and financial distress on financial performance-evidence from Chinese listed companies of the manufacturing industry. *Sustainability, 12*(17), 6799. https://doi.org/10.3390/su12176799

Younas, N., Ud, Din, S., Awan, T., & Khan, M. Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. *Corporate Governance: The International Journal of Business in Society, 2*1(4), 702-715. https://doi.org/10.1108/CG-04-2020-0119

Yousaf, U. B., Jebran, K., & Ullah, I. (2024). Corporate governance and financial distress: A review of the theoretical and empirical literature. *International Journal of Finance & Economics, 29*(2), 1627-1679. https://doi.org/10.1002/ijfe.2752

Zelie, E. M. (2019). Determinants of financial distress in case of insurance companies in Ethiopia. *Research Journal of Finance and Accounting, 10*(15), 2222-1697.