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MODERATING EFFECT OF CEO DUALITY ON BOARD INDEPENDENCE–FINANCIAL HEALTH RELATIONSHIP: EVIDENCE FROM INDIAN SMALL-CAP TEXTILE FIRMS

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ABSTRACT

This study examines whether CEO duality moderates the relationship between board independence (BI) and financial health in Indian small-cap textile firms. Using panel data for 17 Bombay Stock Exchange–listed companies from 2015 to 2024 (170 firm-year observations), financial health is measured through a Composite Financial Health Index (CFHI) integrating the Altman Z-Score, Springate S-Score, Zmijewski X-Score, and Grover G-Score. Moderation analysis, conducted via Hayes' PROCESS macro (Model 1) with heteroscedasticity-consistent standard errors, reveals that BI alone has a positive but statistically insignificant effect on CFHI. However, CEO duality significantly weakens this relationship (B = −0.0156, p = .0126), supporting agency theory's view that concentrated leadership power undermines board oversight. Findings suggest that governance reforms in high-risk, small-cap sectors should prioritise CEO–chair separation and strengthen the functional capacity of independent directors. This research contributes to corporate governance literature by integrating a multidimensional financial health measure with a moderation framework in an underexplored emerging-market sector, offering actionable insights for regulators, boards, and investors.

Keywords: Corporate Governance; Board Independence; CEO Duality; Financial Health; Textile Sector; Emerging Markets

1. INTRODUCTION

Corporate governance is widely recognised as a key factor in determining firm performance, resilience, and long-term value creation (Grofcikova, 2020), helping to align managerial actions with the interests of shareholders and other stakeholders. Effective governance mechanisms enable companies to navigate complex markets, maintain investor confidence, and prevent managerial opportunism (Muhammad et al., 2016). Among these mechanisms, board independence is often considered a fundamental element of effective oversight (Boshnak et al., 2023). Independent directors, due to their external viewpoint and insulation from internal managerial pressures, are expected to improve decision-making quality, rigorously monitor executives, and reduce agency conflicts (Khan et al., 2024; Saeed et al., 2022). However, empirical evidence on the performance benefits of board independence remains mixed, indicating that its effectiveness may depend on other governance and contextual factors (Bhagat & Bolton, 2008; Krause et al., 2014).

One key factor is the leadership structure, particularly whether the roles of CEO and Board Chair are held by separate individuals or by the same person (Krause et al., 2014; Saidat et al., 2019). When one person holds both positions, known as CEO duality, decision-making is centralised, which proponents argue encourages unified leadership and facilitates quick strategic decisions (Krause et al., 2014; Wang & Deng, 2006). However, from an agency theory perspective, this concentration of power might weaken the board's independence, impairing its oversight and increasing the risk of self-interested managerial actions (Jensen & Meckling, 1976; Khan et al., 2024; Tanwer & Garg, 2024; Waris & Haji Din, 2023). Therefore, the effectiveness of independent directors in monitoring largely depends on how power is distributed at the top of the organisation (Fama & Jensen, 1983; Fernando et al., 2019; Vafeas & Vlittis, 2024).

Although governance debates are extensively studied in developed markets, they are even more critical in emerging economies (Abebe Zelalem et al., 2022; Donaldson & Davis, 1991). In these regions, firms frequently face weaker institutional enforcement, concentrated ownership, and changing regulatory frameworks (Kumar & Sahu, 2023; N. Kumar & Singh, 2013; Nasrallah & El Khoury, 2022). Small-cap companies, especially those in capital-intensive and globally oriented sectors, are particularly vulnerable (Hillman et al., 2009; Mubeen et al., 2021). Their limited financial reserves, dependence on external funding, and operational fluctuations make them highly sensitive to governance quality, which directly influences their ability to survive and expand (Fernando et al., 2019; Sharma, 2025).

The Indian textile industry exemplifies this situation well. As a major employer and exporter, it operates within highly competitive global value chains. Small textile firms face continuous financial challenges (Mubeen et al., 2021), which are now worsened by high tariffs imposed by key trading partners, such as the recent 50% tariff on Indian textile exports by the US. These high tariffs reduce the sector's price advantage, making Indian products less competitive compared to rivals like Bangladesh and Vietnam, which face lower tariffs. Additionally, shifts in raw material prices, exchange rates, and export demand further impact the industry. These issues underscore the necessity for board structures that safeguard financial stability, enable strategic flexibility, and bolster long-term competitiveness (Hillman et al., 2009; Sharma, 2025).

Despite extensive research on Board Independence and CEO duality, several gaps remain (Krause et al., 2014; Mubeen et al., 2021). First, much of the existing evidence is derived from large, developed-market firms, which limits its applicability to small-cap companies in emerging markets(Abebe Zelalem et al., 2022; Krause et al., 2014). Second, previous studies have primarily examined the direct effects of Board Independence on financial health, with limited focus on how internal power structures, such as CEO duality, may influence these relationships (Krause et al., 2014). Third, measures of firm financial performance often rely on single indicators, such as ROA, ROE, or Tobin's Q, which may not fully capture the multifaceted nature of financial stability (Mubeen et al., 2021; Sharma, 2025; Tanwer & Garg, 2024).

This study addresses existing gaps by concentrating on Indian small-cap textile firms and introducing a Composite Financial Health Index (CFHI), a novel, multidimensional measure developed by standardising and integrating four well-known financial distress prediction models: Altman Z-Score, Springate S-Score, Zmijewski X-Score, and Grover G-Score. This method offers a more comprehensive and reliable assessment of financial stability compared to traditional single-metric indicators. Additionally, the study examines whether CEO duality affects the relationship between Board Independence and CFHI, utilising agency theory to hypothesise that CEO duality may weaken or eliminate the benefits of having an independent board.

By integrating a newly developed financial health metric with a governance and moderation framework in a high-risk, small-cap, emerging-market sector, this study contributes to both the corporate governance and financial health literatures. The findings have implications for policymakers, regulators, and practitioners seeking to strengthen governance effectiveness and safeguard financial stability in similar contexts.

The rest of this paper is organised as follows: Section 2, Literature Review, covers the relevant theories, reviews past Empirical findings, and develops research hypotheses. Section 3, Research Methodology, explains the data sources, variable measurements, and analytical methods used. Section 4, Empirical Analysis, describes the procedures applied to analyse the dataset. Section 5, Results and Discussion, presents the findings and interprets them in consideration of theoretical perspectives and previous research. Section 6, Conclusion and Implications, summarises the main contributions and practical implications of the study. Finally, Section 7, Limitations and Future Research, discusses the study's limitations and suggests directions for future investigations.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Theoretical Foundations

Corporate governance research is grounded in multiple theoretical perspectives, with agency theory (Daily et al., 2003; Jensen & Meckling, 1976; Wanyama & Olweny, 2013) Being the most influential. Agency theory posits that the separation of ownership and control (Abebe Zelalem et al., 2022) Creates potential conflicts of interest, as managers may prioritise personal goals over shareholder value (Boshnak et al., 2023). Independent directors serve as monitoring agents, mitigating agency costs by exercising oversight, enhancing transparency, and holding management accountable (Khan et al., 2024; Tanwer & Garg, 2024; Vafeas & Vlittis, 2024; Wang & Deng, 2006).

An alternative perspective, stewardship theory (Donaldson & Davis, 1991) It considers managers as stewards whose interests naturally align with those of shareholders (Wanyama & Olweny, 2013). From this perspective, governance

structures that centralise authority, such as CEO duality, can facilitate unified leadership, expedite decision-making, and promote long-term value creation (Boyd, 1995). These competing views influence ongoing debates about the ideal composition of boards and leadership structures, and form the theoretical basis for this study (Daily et al., 2003; Krause et al., 2014; Mubeen et al., 2021).

2.2 Board Independence and Firm Financial Health

Board independence is widely regarded as a critical governance mechanism for enhancing firm performance and safeguarding financial stability (Krause et al., 2014). Independent directors bring external expertise, diverse perspectives, and objectivity to the strategic decision-making process (Bhagat & Black, 2002). Empirical evidence from developed markets often supports a positive association between Board Independence and firm outcomes, showing reductions in earnings manipulation (Saeed et al., 2022), improvements in firm value (Daily et al., 2003; Rosenstein & Wyatt, 1990), and lower bankruptcy risk (Elloumi & Gueyié, 2001; Fernando et al., 2019).

However, findings are not universally consistent. Some studies report no significant relationship (Krause et al., 2014), suggesting that independence in form may not always translate into independence in function(Khan et al., 2024). Contextual factors, such as regulatory frameworks (Tanwer & Garg, 2024), ownership concentration (Demsetz & Villalonga, n.d.)Industry-specific risks can influence the effectiveness of independent directors in contributing to a company's financial health.

Drawing on agency theory, we argue that independent directors can enhance a firm's financial health by improving monitoring and ensuring prudent strategic and financial decisions.

H1. Board independence is positively correlated with a firm's financial health.

2.3 CEO Duality as a Moderating Mechanism

CEO duality occurs when the same person holds both the CEO and Board Chair roles, combining leadership and oversight duties (Boyd, 1995; Mubeen et al., 2021). Supporters, aligned with stewardship theory, claim that CEO duality promotes unified control, more explicit strategic guidance, and quicker decision-making (Donaldson & Davis, 1991). Opponents, rooted in agency theory, warn that such power concentration can weaken the board's independence, reduce oversight, and increase the likelihood of managerial entrenchment (Jensen, 1993; Saeed et al., 2022).

Meta-analyses reveal mixed results for the performance effects of CEO duality, with outcomes often shaped by firm-specific and environmental contexts. Recent studies suggest that CEO duality can compromise the effectiveness of board independence, potentially diminishing the board's ability to challenge executive decisions and undermining its positive impact on firm performance (Krause et al., 2014).

In high-volatility sectors, such as small-cap textiles, CEO duality may limit the independent board's ability to manage financial risk, potentially weakening the benefits of independence for the company's financial health.

H2. CEO duality moderates the relationship between board independence and firm financial health, such that the positive association is weaker when CEO duality is present.

2.4 Governance in Small-Cap Firms and Emerging Markets

Small-cap firms in emerging markets face governance challenges due to limited capital, concentrated ownership, and resource constraints, which impact financial stability (Claessens & Yurtoglu, 2013). In India, regulatory reforms, such as SEBI's Listing Obligations and Disclosure Requirements SEBI, (2015)The Board aims to enhance Independence and transparency; however, gaps still exist. For instance, SEBI's decision to make the separation of the Chairperson and MD/CEO roles voluntary came after only 54% compliance among India's top 500 firms, highlighting resistance and internal factors that affect governance effectiveness.

The Indian textile sector, ranked sixth globally in textile and apparel exports, accounted for 8.21% of India's total exports in 2023–24 and represented 3.9% of international trade. It directly employs 45 million people and supports over 100 million livelihoods, including those of many women and rural workers (Ministry of Textiles annual report, page 1, 2024-2025). Operating within highly competitive global value chains, the sector sees around 47% of its exports absorbed by the USA and the EU. Challenges include raw material price fluctuations, particularly in cotton, where India is the largest producer by acreage (113.60 lakh hectares), as well as currency fluctuations and complex supply chains. For small-cap textile companies, these pressures heighten financial vulnerability, underscoring the need for robust governance to mitigate risks, enhance resilience, and sustain long-term competitiveness.

2.5 Measuring Financial Health

Traditional studies on governance and performance often rely on single accounting indicators, such as return on assets (ROA), return on equity (ROE), or return on capital employed (ROCE)(Rahmawati et al., 2023; Sahoo et al., 2022; Sharma, 2025). These indicators are beneficial, but they offer a narrow, short-term perspective on a firm's

financial health (Tanwer & Garg, 2024). Such isolated measures can overlook essential aspects of financial stability, particularly in volatile and resource-constrained environments. To address this limitation, the current study introduces a Composite Financial Health Index (CFHI), a new multidimensional measure that assesses profitability, liquidity, solvency, and operational efficiency in an integrated way. The CFHI is created by standardising and combining results from four well-established financial distress prediction models: Altman Z-Score, Springate S-Score, Zmijewski X-Score, and Grover G-Score. By combining these models, the CFHI provides a more comprehensive, accurate, and reliable evaluation of financial health, particularly for small-cap companies in high-risk sectors where early distress detection is crucial for maintaining competitiveness and ensuring long-term survival. (Mubeen et al., 2021).

3. RESEARCH METHODOLOGY

3.1 Research Design

The present study adopts a quantitative and explanatory research design to examine the moderating role of CEO duality in the relationship between board independence and the financial health of Indian small-cap textile firms. The empirical analysis is grounded in secondary panel data spanning ten years from 2015 to 2024, which allows for both cross-sectional and longitudinal insights. The dependent construct, financial health, is operationalised through a Composite Financial Health Index (CFHI) that consolidates multiple facets of financial performance and stability, thereby offering a more comprehensive measure than single-ratio indicators.

3.2 Sample Selection and Data Sources

The sample comprises 17 small-cap textile companies listed on the Bombay Stock Exchange (BSE), yielding a total of 170 firm-year observations. The classification of small-cap firms follows the guidelines of the Association of Mutual Funds in India (AMFI) and the Securities and Exchange Board of India (SEBI), which define small-cap companies as those ranked 251 and below by average market capitalisation on the most recent AMFI list during the period under review. Firm-level financial and governance data, including variables such as board composition, CEO role structure, and key financial ratios, were primarily extracted from the CMIE ProwessIQ database and cross-verified against company annual reports.

3.3 Variable Measurement

The study employs a structured measurement framework for dependent, independent, moderating, and control variables. The dependent variable, financial health, is captured through the Composite Financial Health Index (CFHI), which is constructed by integrating four widely recognised financial distress prediction models: Altman's Z-Score (1968), Springate's S-Score (1978), Zmijewski's X-Score (1984), and Grover's G-Score (2001). For each firm-year observation, these scores were calculated using their respective original formulae, standardised as z-scores to address scale heterogeneity, and subsequently averaged to form the CFHI. Higher index values indicate stronger financial health.

The independent variable, Board Independence (BI), is measured as the proportion of independent directors on the board in a given financial year, in accordance with the definition stipulated under SEBI's Listing Obligations and Disclosure Requirements (LODR) Regulations. The moderating variable, CEO duality, is represented by a binary indicator taking the value of 1 if the CEO (or Managing Director) also serves as the Board Chairperson in a given year, and 0 otherwise.

To mitigate omitted variable bias, the model incorporates five firm-specific control variables: firm size (measured as the natural logarithm of market capitalisation), profitability (measured as return on assets), liquidity (measured as the current ratio), leverage (measured as the debt-to-equity ratio), and efficiency (measured as the sales-to-assets ratio).

3.4 Data Analysis Approach

The empirical investigation follows a four-stage analytical process designed to ensure robust inference. First, descriptive statistics are calculated to summarise the central tendency, dispersion, and distributional properties of all variables, enabling the identification of potential outliers and data irregularities. Second, a correlation analysis is performed to examine pairwise relationships between variables and gauge preliminary support for the hypothesised connections. Third, collinearity diagnostics are conducted using Variance Inflation Factors (VIF) and tolerance statistics, with results showing all values remain within acceptable ranges, reducing concerns about multicollinearity. Finally, the central hypothesis is tested using Hayes' PROCESS macro (Model 1) in SPSS, applying heteroscedasticity-consistent standard errors (HC3) to estimate the conditional effect of Board Independence on CFHI at different levels of CEO duality. The model controls for firm size, ROA, current ratio, debt-to-equity ratio,

and sales-to-assets ratio. All continuous predictors are mean-centred before estimation to minimise multicollinearity between main and interaction effects and improve the interpretability of coefficients.

4. EMPIRICAL FINDINGS

4.1 Descriptive Statistics of Governance, Financial Health, and Control Variables

Table 1 reports the descriptive statistics for all study variables. The Composite Financial Health Index (CFHI) had a mean of 0.147 (SD = 0.508), indicating that, on average, sample firms exhibited slightly above-average financial health relative to the standardised mean of zero. Board Independence (BI) averaged 53.08% (SD = 6.67), while 42% of firm-year observations reflected the presence of CEO duality. Firm size, measured as the natural logarithm of market capitalisation, averaged 7.24 (SD = 1.15). The current ratio (M = 1.92, SD = 1.13) suggested generally adequate liquidity across firms, though variation was notable. Profitability, proxied by ROA, averaged 7.31% (SD = 9.67%), while efficiency (sales-to-assets ratio) averaged 1.00 (SD = 0.41). Leverage levels varied substantially, with a mean D/E ratio of 0.74 (SD = 2.41).

Table 1. Descriptive Statistics for Study Variables

Variable	Mean	SD	N
CFHI	0.15	0.51	170
Current ratio	1.92	1.13	170
SALESTA	1.00	0.41	170
ROA	0.07	0.10	170
BI	53.08	6.67	170
CEO duality (0 = No, 1 = Yes)	0.42	0.50	170
Ln(Market Cap)	7.24	1.15	170
D/E ratio	0.74	2.41	170

Note: CFHI = Composite Financial Health Index; SALESTA = Sales-to-assets ratio; ROA = Return on assets; BI=Board Independence; D/E Ratio = Debt-to-equity ratio.

4.2 Correlation Matrix of Study Variables

Bivariate correlations, presented in Table 2, indicate that no correlation exceeded 0.81, suggesting that multicollinearity was unlikely to distort regression estimates. The strongest association was between ROA and CFHI ($r = 0.806$, $p < 0.001$), consistent with profitability being a primary driver of financial health. Board Independence (BI) was positively correlated with firm size ($r = 0.313$, $p < 0.001$) and negatively correlated with leverage ($r = -0.163$, $p = 0.034$). CEO duality was negatively associated with efficiency ($r = -0.276$, $p < 0.001$). CFHI exhibited positive associations with liquidity ($r = 0.254$, $p = 0.001$) and firm size ($r = 0.325$, $p < 0.001$) and a negative relationship with leverage ($r = -0.152$, $p = 0.048$).

Table 2 Pearson Correlation Matrix for Study Variables (N = 170)

Variable	1	2	3	4	5	6	7	8
1. SALES/TA	—							
2. Current ratio	0.03	—						
3. ROA	0.02	0.18*	—					
4. BI	0.01	0.01	-0.06	—				
5. CEO duality	-0.28**	0.16*	0.12	-0.05	—			
6. CFHI	0.17*	0.25**	0.81**	0.04	0.01	—		
7. D/E ratio	0.27**	-0.16*	-0.01	-0.16*	0.04	-0.15*	—	
8.Ln(Market Cap)	-0.06	0.04	0.27**	0.31**	0.16*	0.33**	-0.14	—

Note: CFHI = Composite Financial Health Index; SALESTA = Sales-to-assets ratio; ROA = Return on assets; BI=Board Independence; D/E Ratio = Debt-to-equity ratio, N = 170. p < .05, **p** < .01**. *.

4.3 Collinearity Diagnostics

Collinearity diagnostics (Table 3) confirmed that multicollinearity was not an issue. All VIFs ranged from 1.107 to 1.264, well below the standard threshold of 5 and even under the more conservative cutoff of 3.3. Tolerance values were above 0.79 for all predictors, and condition indices remained below 30. These findings indicate that the

predictors are sufficiently independent to continue with regression analysis. With these diagnostics confirming the absence of multicollinearity, the analysis moved forward to test the moderation hypotheses using Hayes' PROCESS macro.

Table 3. Collinearity Diagnostics for Study Variables

Variable	Tolerance	VIF
Current ratio	0.903	1.107
Sales-to-Assets Ratio	0.827	1.209
Return on Assets (ROA)	0.873	1.145
Board Independence (BI)	0.858	1.165
CEO Duality	0.844	1.185
Ln (Market Cap)	0.791	1.264
Debt-to-Equity Ratio	0.845	1.183

Note. All tolerance values are above 0.79, and all VIF values are below 1.3, which are well within acceptable ranges, confirming the absence of multicollinearity.

4.4 Moderation Analysis

With multicollinearity ruled out in the previous step, the next stage of analysis tested the study's moderation hypotheses. Specifically, the aim was to examine whether CEO duality alters the relationship between board independence (BI) and the Composite Financial Health Index (CFHI). A moderation analysis was conducted using Hayes' PROCESS macro (Model 1) with heteroscedasticity-consistent (HC3) standard errors. The Composite Financial Health Index (CFHI) served as the dependent variable, Board Independence (BI) (mean-centred) acted as the predictor, and CEO duality served as the moderator. Firm size (lnMcap), return on assets (ROA), current ratio, debt-to-equity (D/E) ratio, and sales-to-assets ratio (SALESTA) were included as control variables to reduce omitted variable bias.

The overall model was statistically significant, with $R^2 = 0.7377$ and $F(8, 161) = 34.83$, $p < .001$, indicating that the combined predictors explained a substantial proportion of the variance in CFHI. Notably, the interaction term between BI and CEO duality was negative and statistically significant ($B = -0.0156$, $p = .0126$), suggesting that the association between BOARD INDEPENDENCE (BI) and CFHI depends on whether the CEO also holds the role of board chair. This interaction accounted for an additional 0.88% of explained variance ($\Delta R^2 = 0.0088$), a meaningful change given the model's complexity.

Table 4. Moderation Analysis Results Using Hayes' PROCESS Model 1 (HC3 SEs)

Predictor	B	SE (HC3)	t	p	95% CI LL	95% CI UL
Constant	−1.0855	0.1958	−5.5434	.0000	−1.4722	−0.6988
BI	0.0059	0.0043	1.3549	.1773	−0.0027	0.0145
CEO duality	0.7664	0.3334	2.2986	.0228	0.1080	1.4248
BI × CEO duality	−0.0156	0.0062	−2.5224	.0126	−0.0277	−0.0034
Ln(Market Cap)	0.0522	0.0242	2.1600	.0322	0.0045	0.1000
ROA	3.9870	0.9258	4.3063	.0000	2.1586	5.8154
Current ratio	0.0365	0.0228	1.6008	.1114	−0.0085	0.0816
D/E ratio	−0.0318	0.0114	−2.7929	.0059	−0.0543	−0.0093
SALES/TA	0.2274	0.0799	2.8455	.0050	0.0696	0.3853

Note. N = 170. BI = Board independence; SALESTA = Sales-to-assets ratio; ROA = Return on assets; D/E ratio = Debt-to-equity ratio; HC3 = heteroscedasticity-consistent standard errors (type 3). Model $R^2 = 0.7377$, $F(8, 161) = 34.83$, $p < .001$. R^2 change for interaction = 0.0088, $F(1, 161) = 6.3627$, $p = .0126$.

To further explore this moderating effect, conditional effects were computed for each level of CEO duality. Results (Table 5) reveal that when CEO duality was absent, Board Independence (BI) had a positive but non-significant association with CFHI ($B = 0.0059$, $p = .1773$). Conversely, when CEO duality was present, the relationship turned negative ($B = -0.0097$, $p = .0756$), indicating that combining the CEO and chair roles may weaken and even reverse the potential benefits of independent boards.

Table 5. Conditional Effects of BI on CFHI by CEO Duality

CEO duality	Effect (B)	SE (HC3)	t	p	95% CI LL	95% CI UL

0 (No)	0.0059	0.0043	1.3549	.1773	−0.0027	0.0145
1 (Yes)	−0.0097	0.0054	−1.782	.0756	−0.0204	0.0010

Note. N =170. BI = Board independence; CFHI = Composite Financial Health Index; HC3 = heteroscedasticity-consistent standard errors (type 3).

Taken together, these results provide mixed support for the study's hypotheses. H1 predicting a positive Board Independence (BI) - CFHI relationship is not supported, as the coefficient was positive but not statistically significant after controlling for other factors. H2 predicting that CEO duality moderates the Board Independence (BI) - CFHI relationship by weakening its positive effect—is supported, consistent with agency theory's assertion that concentrated leadership power can undermine board oversight effectiveness.

5. DISCUSSION AND IMPLICATIONS

The empirical results in Section 4 show mixed support for the study's hypotheses. H1, which expected a positive link between Board Independence (BI) and financial health (CFHI), was not confirmed. Although the BI coefficient was positive, it became statistically insignificant once firm size, profitability, liquidity, leverage, and efficiency were taken into account. This indicates that merely increasing the proportion of independent directors might not suffice to improve the financial health of Indian small-cap textile companies, aligning with prior research that indicates board independence does not always lead to better performance (Bhagat & Black, 2002; Fuzi et al., 2016; Khan et al., 2024; Rashid, 2018).

By contrast, H2 was supported. The negative and statistically significant interaction term between BI and CEO duality confirms that the impact of BI on CFHI is contingent on leadership structure. Specifically, when the CEO also serves as board chair, the potential benefits of BI are weakened or even reversed. This finding is consistent with agency theory's assertion that concentrated leadership power can undermine board oversight and diminish its effectiveness in safeguarding firm performance (Ali et al., 2022; Duru et al., 2016; Lew et al., 2018).

These results raise important questions about the contextual effectiveness of governance mechanisms in emerging markets. While Board Independence (BI) is often promoted as a safeguard against managerial opportunism, its actual impact appears dependent on whether the board's leadership is structurally independent from executive control.

5.1 Board Independence (BI) and Financial Health

Contrary to agency theory's proposition that independent directors enhance monitoring and protect shareholder interests, this study finds no statistically significant direct link between Board Independence (BI) and CFHI. Although the coefficient is positive, the effect is weak, indicating that the formal presence of independent directors does not necessarily translate into improved financial health in the small-cap textile sector.

This result is consistent with earlier evidence from Bhagat & Black (2002), who found no performance improvement in U.S. firms with more independent boards, and Rashid (2018), who reported no positive association between Board Independence (BI) and firm performance in Bangladesh. Similarly, Fuzi et al. (2016) observed mixed or negligible effects of BI across multiple countries, while studies in Kuwait and Pakistan (Al-Saidi, 2020; Khan et al., 2024) have even reported insignificant or negative relationships.

In India's small-cap context, characterised by high promoter ownership, concentrated control, and varied board practices, independent directors may lack both the institutional support and the autonomy necessary to influence firm outcomes. Weak enforcement mechanisms, limited access to reliable internal information, and restricted authority in strategic matters can further constrain their effectiveness. For small-cap firms, these constraints are often compounded by resource limitations and lower governance budgets, which reduce the ability of board Independence (BI) to positively influence financial performance.

5.2 Moderating Role of CEO Duality

The moderation analysis supports H2, indicating that CEO duality significantly diminishes the potential impact of Board Independence (BI) on CFHI. This aligns with agency theory, which posits that when the CEO also serves as board chair, the separation between management and oversight functions erodes, concentrating decision-making authority and limiting independent monitoring.

Conditional effects analysis reveals that in firms without CEO duality, BI has a small, positive (but statistically insignificant) relationship with CFHI. However, when CEO duality exists, the relationship turns negative and approaches statistical significance, indicating that structural independence is key to BI's effectiveness.

This finding is consistent with Lew et al., (2018), who reported that separating CEO and chair roles improved performance, while BI alone had no significant effect; Ali et al., (2022), who found that CEO duality negatively

moderated the positive relationship between board diversity and performance; and Duru et al., (2016), who demonstrated that leadership structure significantly shapes governance–performance linkages. Collectively, these studies underscore that concentrated leadership power can neutralise, or even reverse, the benefits of independent oversight.

5.3 Implications

From a sectoral perspective, the Indian textile industry operates in an environment characterised by high operational volatility, fluctuating raw material prices, intense global competition, and a reliance on export markets. These conditions demand agile, transparent, and well-informed decision-making. However, in small-cap textile firms where ownership is often concentrated and governance practices are inconsistent, CEO duality can restrict transparency and reduce the flow of independent information to the board, impairing timely strategic responses and increasing financial vulnerability.

From a policy and practice perspective, these findings suggest that regulators should strengthen enforcement of SEBI's LODR provisions on CEO–chair separation, particularly in small-cap, high-risk sectors where governance vulnerabilities are more pronounced. Boards should view the appointment of independent directors as a strategic decision, rather than merely a compliance task, ensuring that appointees possess the necessary expertise, resources, and authority to influence strategic and financial decisions effectively. Investors should assess governance quality comprehensively, taking into account both Board Independence (BI) levels and leadership structure, since formal independence may have limited influence when leadership power is concentrated in a single individual.

From a theoretical contribution perspective, this study advances corporate governance literature in three ways:

1. It demonstrates that BI's effect on financial health is conditional on leadership structure, emphasising the importance of examining moderation effects in governance research.
2. It introduces the Composite Financial Health Index (CFHI), a multidimensional measure integrating four established financial distress prediction models addressing the limitations of single-ratio performance measures.
3. It offers sector-specific evidence from the Indian small-cap textile industry, an underexplored emerging market, illustrating how industry conditions interact with governance mechanisms to shape firm outcomes.

6. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This study enhances understanding of how governance structures impact financial health in emerging markets by examining the moderating role of CEO duality in the Board independence (BI) – CFHI relationship. The findings suggest that while BI alone does not significantly predict financial health, CEO duality notably weakens this relationship, supporting agency theory's assertion that concentrated leadership power diminishes the board's monitoring effectiveness.

By developing and applying the CFHI, a composite measure that combines the Altman Z-Score, Springate S-Score, Zmijewski X-Score, and Grover G-Score, this research offers a robust, multidimensional framework for assessing firm health that addresses the limitations of traditional single-metric approaches. The sector-specific focus on Indian small-cap textile firms adds valuable contextual evidence to governance literature in emerging economies.

For future research, expanding the sample to include multiple sectors could facilitate comparative analysis across industries. Incorporating qualitative methods, such as interviews with independent directors or board disclosure analysis, could yield richer insights into how BI functions in practice. Examining alternative moderators, such as promoter ownership, institutional shareholding, or board diversity, would enhance the understanding of the contextual influences on the BI-financial health relationship. Applying the CFHI in cross-country studies could test its predictive validity in different institutional settings, and longitudinal studies could evaluate the causal effects of regulatory reforms on governance and performance.

Ultimately, the findings suggest that the effectiveness of BI is not universal but depends on the context, with leadership structure playing a crucial role. In high-risk sectors, such as the Indian small-cap textiles industry, separating the roles of CEO and chair becomes a vital governance mechanism, enabling independent directors to work effectively. Governance reforms should therefore go beyond mere formal compliance, creating the right conditions for independent directors to truly safeguard shareholder value.

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