

“Corporate governance and financial distress: Moderating role of firm complexity in an emerging economy”

AUTHORS

Ngoc Mai Tran 

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Ngoc Mai Tran, Ph.D., Finance Faculty,
Banking Academy, Vietnam.



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Ngoc Mai Tran (Vietnam)

CORPORATE GOVERNANCE AND FINANCIAL DISTRESS: MODERATING ROLE OF FIRM COMPLEXITY IN AN EMERGING ECONOMY

Abstract

Corporate governance has been widely applied in developed countries to promote accountability, transparency, and efficiency within corporations. In Vietnam, as the country transitions toward integrating international standards, corporate governance has become an emerging and critical area of focus. Therefore, this study aims to examine the relationship between corporate governance characteristics and corporate financial distress. The study utilizes the dataset of about 500 listed companies in the Vietnam stock exchange during 2014–2022. Feasible generalized least squares regression (FGLS) is employed to account for the heteroskedasticity and autocorrelation problems. Regression results show that frequent board meetings and more gender-diverse boards improve corporate financial health, while an increase in board members and duality roles have negative effects. Duality is often associated with increased agency problems, inefficient capital usage, and higher risk levels that reduce financial health. However, the impact is different in complex firms measured by book-to-market ratio and operating cycles. In complex firms, duality proves valuable by providing unified leadership and enabling active, clear management strategies. This can be explained by the fact that clear and flexible strategies outweigh the benefits of separation between the chairman and Chief Executive Officer.

Keywords

corporate governance, financial distress, business complexity

JEL Classification

G34, G33, G32

INTRODUCTION

Nowadays, corporate governance has become more and more important in managing corporate financial performance. This is one of the efficient tools to mitigate principal-agent problems, reduce conflicts of interest between shareholders and managers, and propose strategic decisions and business operations. The global trend has emphasized the need for strong corporate governance and its critical role in promoting transparency and accountability within corporations. In developed countries, corporate governance has emerged as a widely adopted framework within companies, enhancing efficiency, accountability, and monitoring capabilities. In developing countries, the distinct characteristic of the market makes the impact of corporate governance different from the developed one (Bebchuk & Hamdani, 2008).

As for the impact of corporate governance on financial distress, there have been many studies examining this relation in developed countries but the results depend on different contexts and other confounding factors. In developing countries, there have been limited studies on this topic (Younas et al., 2021; Awan et al., 2020). This may be due to the fact that corporate governance is a relatively new concept for top man-

agers and government or data unavailability (Arora & Sharma, 2016). The implementation of corporate governance in these countries is not well incorporated into the business and not prioritized (Nurunnabi, 2020). Different regulatory systems and high levels of corruption make firms hesitant to adopt corporate governance (McGee, 2009). Managers do not well recognize the advantages of good corporate governance in capital structure, capital budgeting, and financial management (Nurunnabi, 2020).

In Vietnam, corporate governance shares many similar characteristics with developing countries. Vietnam is at the first stage of carrying out corporate governance, thus the legislation system, oversight, and penalties are not adequately developed. Traditional business practice also reduces the adoption and practice of corporate governance to international standards. These challenges necessitate a study to examine the role of corporate governance in overcoming financial distress in the context of Vietnam.

1. LITERATURE REVIEW AND RESEARCH HYPOTHESES

Corporate financial distress is the situation in which a company is unable to meet its obligations as it matures. This can happen when the firm defaults on the payment or the situation in which the firm has to restructure the debt to reduce the default situation (Andrade & Kaplan, 1998). Financial distress encompasses several difficulties in meeting debt obligations, managing liquidity, profitability, and how the company reacts to external factors. It is the result of political uncertainty, economic cycles, and poor corporate governance (Wruck, 1990). The relationship between corporate governance and financial distress can be analyzed using both theoretical frameworks and empirical analyses.

When it comes to the role of corporate governance in financial distress, different theoretical underpinnings have been used, including agency theory, stewardship theory, resource dependence theory, and entrenchment theory, each offering different perspectives on its influence. Agency theory uses the conflicts of interest between shareholders and managers to argue the role of corporate governance in alleviating financial distress. Large boards, gender diversification, and the involvement of independent directors help mitigate the distress by reducing the agency problem (Elloumi & Gueyie, 2001; Fama & Jensen, 1983; Udin et al., 2017). These board configurations have improved the monitoring and advising role of the management team, and improve the financial health (Reddy et al., 2010).

Resource dependence theory considers corporate governance as a bridge between a firm and its need for resources. Firms need key resources to survive in a competitive environment, therefore, good corporate governance configurations such as diverse boards, independent directors, and board members help firms gain access to high-quality resources such as skills, connections, and expertise, which results in a better position (Baker & Anderson, 2010). Management literature also views corporate governance as an important resource (Nicholson & Kiel, 2007). However, Jackling and Johl (2009) document the failure of the resource dependence theory that outside directors with many directorships may reduce the effectiveness of the governance. There may be other characteristics linked with the resource dependence theory (Jackling & Johl, 2009) in explaining the relationship between corporate governance, firm performance, and financial distress.

Stewardship theory favors the contribution of managers, they work hard to contribute to the organization (Donaldson & David, 1991). There is no difference in the actions of managers in distressed and non-distressed firms (Khanna & Poulsen, 1995). In firms with a duality between the Chief Executive Officer (CEO) and the chairman, ambiguities and conflicts are removed (Finkelstein & D'aveni, 1994). Smaller boards and inside directors are believed to positively impact performance and risk management, which contrasts with the findings of resource dependence theory.

Entrenchment theory suggests that managers prioritize their own benefits, such as job security or personal incentives, over those of shareholders (Fama & Jensen, 1983). To preserve their position

and authority, they may seek power and make investments primarily to increase their personal compensation. These value-reducing activities divert company resources inefficiently, ultimately harming shareholder value and overall company performance (Shleifer & Vishny, 1989). In this perspective, stronger corporate governance such as increasing independent directors is considered a strategy to reduce the channel of impact (Yousaf et al., 2024).

When it comes to empirical studies, there is no consensus on the findings regarding the relationship between corporate governance and financial distress. Yousaf (2024) examines 41 studies in this field and suggests that a one-size-fits-all approach is not applicable. Adams and Ferreira (2009) and Green and Homroy (2018) relate diverse and independent boards with enhanced oversight and decision-making. Independent directors control and monitor the managers' actions to shareholders' interest rather than their power and benefit (Manzaneque et al., 2016). Elloumi and Gueyie (2001) believe that independent directors are key determinants in enhancing firm value and financial conditions. A diverse board with a greater number of members and gender diversity leads to more cautious decisions, lower risk-taking, and higher financial health (Huang & Kisgen, 2013). Diverse boards are better at problem-solving skills and more innovative, which leads to better productivity and performance (Bernile et al., 2018). A diverse board is useful in complex firms that require special knowledge and broader perspectives. However, Darrat et al. (2016) propose the advantage of a large board with more board members in complex firms, while a smaller board is useful for simpler firms. Li and Wu (2014) argue that diversity can generate more conflicts and lower cohesion. Diversity is associated with lower risk-taking due to the conflicts among members and a longer decision-making process that would be problematic in case firms need to react quickly and make optimal decisions.

As for CEO duality where the CEO is also the chairman, mixed results have been found. Duality means no separation between the CEO and chairman; ownership concentration increases default probability and firm performance (Kolias et al., 2019). CEO dualities are common in bankrupt

firms (Elloumi & Gueyie, 2001). The dual role weakens the monitoring role and increases agency problems. Holding both positions can result in excess power and reduce accountability and efficiency. However, Kolias et al. (2019) and Hassan et al. (2023) advocate the benefit of the duality in bringing consistent decisions. Finkelstein and D'Aveni (1994) suggest that the effects depend on different contexts and confounding factors. Firms in low corporate governance environment quality can suffer from the duality while in a strong environment, the risk or negative effect of CEO duality is moderated.

As for the board meetings, frequent meetings improve the financial health in general. Frequent meetings demonstrate ability and effort in monitoring, and performing the managers' duties, they can actively participate in managing the business thus reducing the business failure and financial difficulties (Ntim, 2009). The impact is similar to the other determinants in strengthening corporate governance, thus having a positive impact on financial performance and financial health. Mandala (2019) proposes the optimal number of meetings between 11 and 15. Too many meetings may overwhelm directors, and reduce their efficiency (Gray & Nowland, 2018).

Overall, factors contributing to good corporate governance such as frequent board meetings, a higher number of board members, and gender diversity generally improve financial health and reduce financial distress by strengthening supervision and improving decision-making quality. Weaker corporate governance systems are associated with lower efficiency and financial performance, making firms more vulnerable to financial distress. However, in different contexts, the impact might differ (Li & Wu, 2014; Finkelstein & D'Aveni, 1994; Gray & Nowland, 2018). Faleye (2007) examines organizational complexity and argues that complex firms can benefit from combining the CEO and chairman. The duality improves the CEO flexibility and asymmetric information problem, duality is associated with improved performance. The author suggests that firms should consider the benefits and costs of various governance characteristics to determine the appropriate corporate governance.

With the aim of measuring the impact of corporate governance on financial distress and the moderating role of corporate complexity, two main hypotheses are as follows:

H1: *Corporate governance characteristics affect financial distress.*

H2: *Firm complexity influences the relationship between corporate governance and financial distress*

2. METHODOLOGY AND DATA

To investigate the impact of corporate governance on financial distress, the study follows Udin et al. (2017) and Younas et al. (2021) using the baseline following regression model:

$$FD_{it} = \alpha + \beta \text{Corporate Governance}_{it} + \delta \text{Control}_{it} + \mu_{it} \quad (1)$$

In this model, FD_{it} is financial distress measurement from the Z-score model (Altman, 1968). Altman (1968) is considered the most effective proxy for the financial distress of listed companies and widely applied in studies by Udin et al. (2017) and Younas et al. (2021) with the calculations:

$$Z\text{-score} = 1.2 \frac{\text{Net working capital}}{\text{Total assets}} + 1.4 \frac{\text{Retained earnings}}{\text{Total assets}} + 3.3 \frac{\text{EBIT}}{\text{Total assets}} + 0.6 \frac{\text{Book value equity}}{\text{Book value debt}} + 1.0 \frac{\text{Sales}}{\text{Total asset}} \quad (2)$$

The explanatory variable, *Corporate Governance*, is a set of different measures, which are calculated as shown in Table 1.

Control variables represent the firm's characteristics having a potential impact on the financial distress including firm size (natural logarithm of total assets), growth rate (percentage changes in the sales), and leverage (ratio between total debt and total assets). The market-to-book ratio (MBR) is considered to have a great impact on corporate performance and financial distress (Udin et al., 2017). Foreign ownership is added to the model following Udin et al. (2017), and Younas et al. (2021) due to the role of foreign ownership in enhancing firm performance. Firm, year, and industry fixed effects are used in the regressions.

Apart from the baseline regression, the study also incorporates complexity measurements to examine whether there is any moderating role in the relationship. The proxies are the ratio of the book-to-market value and the number of days in the cycle. As for the book-to-market value, a higher ratio suggests fewer unexplored growth opportunities and lower corporate complexity (Dolde & Mishra, 2007). Besides the measurement of the book-to-market ratio above, this study proposes using the operating cycle to proxy for business complexity. On the one hand, the cycle reflects the capital flow, capital invested, and capital at risk (Groth, 1992) in terms of cash rather than the concept of accounting profit. On the other hand, the cycle reflects the characteristics of the flow and the nature of the business (Groth, 1992). Therefore, the cycles can be a good proxy for firm characteristics in general and firm complexity in particular. A high operating cycle is associated with larger investment in working capital assets, larger amount of capital at risk, and reduced management flexibility (Groth, 1992). A high conversion cycle is associated with the higher complexity and vice versa. d_mtb represents the dummy variable for the market-to-book ratio, d_cycle represents the dummy for the operating cycle.

Table 1. Calculation of the variables

Variables	Meaning	Calculation
bsize	The total number of directors on BoD	Logarithm of the total number of directors
bind	Proportion of independent directors	$\frac{\text{Number of independent directors}}{\text{Total number of directors}}$
bmeet	Number of board meetings in a fiscal year	Logarithm of the number of board meetings
bfemale	Proportion of female directors	$\frac{\text{Number of female directors}}{\text{Total number of directors}}$
CEO	CEO duality	CEO is also the chairman

The new model with corporate complexity included in the regression is as follows:

$$FD_{it} = \alpha + \beta Corporate\ Governance_{it} + \delta Control_{it} + \gamma Complexity_{it} + \theta Corporate\ Governance \times Complexity_{it} + \mu_{it} \tag{3}$$

Financial data are collected on an annual basis for listed companies from the FIINPRO database. They are winsorized at 1% and 99% percentiles to remove any problems of outliers and data errors. Information on corporate governance is collected from annual reports and available from 2014–2022.

3. RESULTS

3.1. Descriptive statistics

The variables are statistically summarized and tested for correlation in Table 2 and Table 3. The pairwise correlation values are much lower than 0.7, showing that multicollinearity is not a problem in the regression.

Table 2. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
zscore	4455	3.233	2.862	-3.196	18.729
bmem	4455	1.686	.225	0	2.565
bmeet	4452	2.088	.717	0	5.631
bgender	4455	.164	.18	0	1
bind	4455	.01	.059	0	.6
CEO	4455	.022	.145	0	1
FO	4455	.1	.141	0	.949
fs	4455	27.459	1.576	23.33	31.592
growth	4455	1.449	2.986	-5.686	7.552
lev	4455	.486	.216	.011	1.157
d_mtb	4455	.5	.5	0	1
d_cycle	4455	.5	.5	0	1
d_cor	3942	.4	.716	-1	1

Descriptive statistics have a *Zscore* mean of 3.233, which is larger than 2.99, showing that the company is in a safe zone. The logarithm of *bmem* has a mean of 1.686, which means the average number of directors in BoD is 6. The logarithm of *bmeet* is 2.088, meaning that the company has organized an average of 11 meetings. The mean of *bgender* is 0.164, meaning that the proportion of female directors is quite small. As for *bind*, the mean 0.01 does not satisfy the requirement that at least 20% of the members must be independent. However, this low reported number may arise from the fact that the law was enacted in 2020, while our dataset spans from 2014 to 2022. Furthermore, there is no consistent reporting format requirement, which makes it difficult to identify the independent and dependent members. Therefore, this variable, *bind*, is not employed in the regression.

3.2. Baseline regression results

Table 4 shows the baseline regressions with five different versions: columns (1) to (4) focus on the impact of each corporate governance’s characteristics, while column (5) documents the results when accounting for all characteristics. In all regressions, the financial variables – firm size, firm growth, leverage, and foreign ownership – are documented as statistically significant for the financial health. The negative coefficients of firm size and firm leverage suggest that large firms with high financial leverage experience lower financial health, *zscore*, and higher financial risk. It coincides with Campbell et al. (2008) and Alfaro et al. (2017), and contradicts Udin et al. (2017) and Younas et al. (2021) who relate large firms with lower risk due to economy of scale and operational efficiency. This can be explained by the fact that large firms are more vulnerable to the economic changes. Large

Table 3. Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) <i>zscore</i>	1.000									
(2) <i>bmem</i>	-0.019	1.000								
(3) <i>bmeet</i>	-0.112	0.056	1.000							
(4) <i>bgender</i>	0.099	-0.081	0.047	1.000						
(5) <i>bind</i>	-0.042	0.025	0.029	0.003	1.000					
(6) <i>CEO</i>	0.001	0.032	-0.074	0.016	-0.026	1.000				
(7) <i>FO</i>	0.104	0.292	0.003	0.035	0.037	0.045	1.000			
(8) <i>fs</i>	-0.280	0.284	0.313	-0.029	0.054	0.007	0.253	1.000		
(9) <i>growth</i>	-0.028	0.156	0.192	0.014	0.013	0.017	0.185	0.456	1.000	
(10) <i>lev</i>	-0.622	0.015	0.140	-0.151	0.000	-0.024	-0.148	0.323	0.181	1.000

Table 4. Baseline regression

Variables	(1)	(2)	(3)	(4)	(5)
	zscore	zscore	zscore	zscore	zscore
FO	.762*** (.118)	.841*** (.116)	.761*** (.114)	.742*** (.114)	.859*** (.119)
fs	-.254*** (.013)	-.27*** (.013)	-.256*** (.013)	-.255*** (.013)	-.268*** (.014)
growth	.066*** (.005)	.064*** (.005)	.065*** (.005)	.066*** (.005)	.063*** (.005)
lev	-6.055*** (.099)	-6.031*** (.099)	-6.026*** (.1)	-6.066*** (.099)	-6.022*** (.1)
bmem	-.054 (.072)				-.006 (.073)
bmeet		.068*** (.019)			.062*** (.019)
bgender			.2** (.084)		.178** (.085)
CEO				-.463*** (.125)	-.431*** (.127)
_cons	14.314*** (.379)	14.54*** (.383)	14.238*** (.377)	14.269*** (.376)	14.464*** (.386)
Observations	4455	4452	4455	4455	4452

Note: Standard errors are in parentheses. *** $p < .01$, ** $p < .05$, * $p < .1$.

Table 5. Summary statistics: mean, median, and standard deviation by firm size

firm_size	mean	Median	sd
0	.424	.407	0.217
1	.548	.572	0.197

firms in Vietnam have higher financial leverage (Table 5), making them more reliant on external financing and more exposed to economic shocks, which results in higher financial risk.

The growth rate has a positive impact on the financial health, *Zscore*, meaning that companies with higher growth tend to experience lower financial risk. High-sales-growth firms have better financial health through higher sales and strong cash flow. Enhanced investor confidence allows these firms to access capital at a low cost and reduce financial distress (Udin et al., 2017).

As for the corporate governance variables, the coefficient related to the duality role is negative and statistically significant, meaning that the CEO duality reduces financial health. A company experiences higher agency costs, inefficient capital usage, lower financial performance, and higher risk of default when the CEO is also the chairman (Fama & Jensen, 1983; Darrat, 2016; Ali & Nasir, 2018; Aktas et al. 2019). The other coefficients, *bmeet* and *bgender*, are positive suggesting the positive effect

of board meetings and women on board (Adams & Ferreira, 2009; Green & Homroy, 2018). Good corporate governance, as measured by board non-duality and diversity, improves financial health and reduces financial distress, thereby confirming hypothesis *H1*.

3.3. Regression results when having complexity measurement

To account for the impact of business complexity in the model, *d_mtb* is added to the model. *d_mtb* has a positive coefficient, meaning that firms that have higher market-to-book ratios have higher financial health and are less prone to financial distress. In other words, a decrease in equity value, which reduces the market-to-book ratio, will increase distress and firm failure (ElBannan, 2021). Firms with high market-book ratios can raise equity easily, they can borrow more, often at a lower cost (Chen & Zhao, 2004; Chen & Zhao, 2006).

When considering the interaction between the measure of firm complexity, *d_mtb*, and the cor-

Table 6. Regression with complexity measurement (*d_mtb*)

Variables	(1)	(2)	(3)	(4)	(5)
	zscore	zscore	zscore	zscore	zscore
<i>d_mtb</i>	1.024*** (.238)	1.517*** (.097)	.852*** (.039)	1.053*** (.032)	1.078*** (.252)
<i>bmem</i>	-.146 (.094)				-.044 (.098)
<i>d_mtb x bmem</i>	.031 (.138)				.09 (.14)
<i>bmeet</i>		.117*** (.03)			.101*** (.03)
<i>d_mtb x bmeet</i>		-.209*** (.043)			-.19*** (.043)
<i>bgender</i>			-.691*** (.116)		-.751*** (.121)
<i>d_mtb x bgender</i>			1.237*** (.178)		1.29*** (.182)
CEO				-.723*** (.082)	-.76*** (.071)
CEO x <i>d_mtb</i>				.488** (.237)	.415* (.237)
FO	.542*** (.126)	.475*** (.123)	.401*** (.124)	.491*** (.124)	.369*** (.128)
fs	-.297*** (.012)	-.302*** (.012)	-.309*** (.012)	-.301*** (.012)	-.307*** (.013)
growth	.072*** (.006)	.071*** (.006)	.074*** (.006)	.072*** (.006)	.072*** (.006)
lev	-6.106*** (.096)	-6.077*** (.096)	-6.166*** (.096)	-6.107*** (.096)	-6.139*** (.095)
Observations	4455	4452	4455	4455	

Note: Standard errors are in parentheses. *** $p < .01$, ** $p < .05$, * $p < .1$.

porate governance variables, the results are statistically significant both in regressions with individual proxies and when considering them simultaneously. BoD meetings increase the financial health but the coefficient of the interaction term, *d_mtb x bmeet*, is -0.19, meaning that more BoD meetings reduce the financial health of complex firms. This finding coincides with Zajac and Westphal (1994) relating higher cost of monitoring in complex firms. An increased number of board meetings can overwhelm directors with a heavier workload, potentially reducing their availability and attendance at meetings. The benefit of board meetings, therefore, is likely to be eroded in complex firms (Gray & Nowland, 2018).

As for gender, the positive coefficient related to the interaction term, *d_mtb x bgender*, means that the female on board has a positive impact on the financial health of high market-book companies. A more diverse BoD is less likely to default due to

improved operating performance and reduced risk-taking, which can be attributed to enhanced monitoring functions (Adams & Ferreira, 2009; Green & Homroy, 2018), and more cautious decision-making (Huang & Kisgen, 2013).

For the CEO duality, the coefficient of the CEO is negative and statistically significant, meaning that the duality reduces financial health. The coefficient of the interaction term, *CEO x d_mtb*, is positive, suggesting that the duality in complex firms positively impact financial health. In other words, the negative impact of duality depreciates for complex firms. Duality is very common in bankrupt firms (Elloumi & Gueyie, 2001), it increases the agency cost and the the risk of entrenchment (Fama & Jensen, 1983; Ali & Nasir, 2018). Nevertheless, duality is valuable during a crisis, especially when the information cost is expensive (Hassan et al., 2023). The dual role of CEO and chairman allows them to have clear strategies (Donaldson & David,

Table 7. Regression with dummy reflecting complexity measurement: *d_cycle*

Variables	(1)	(2)	(3)	(4)	(5)
	zscore	zscore	zscore	zscore	zscore
<i>d_cycle</i>	-2.648*** (.215)	-1.412*** (.084)	-1.073*** (.035)	-1.192*** (.027)	-2.564*** (.228)
<i>bmem</i>					-438*** (.099)
<i>bmem</i> x <i>d_cycle</i>					.776*** (.126)
<i>bmeet</i>					-.029 (.029)
<i>bmeet</i> x <i>d_cycle</i>					.073** (.035)
<i>bgender</i>					.991*** (.134)
<i>bgender</i> x <i>d_cycle</i>					-.787*** (.165)
CEO					-.504** (.215)
CEO x <i>d_cycle</i>					.484** (.23)
FO					.372 (.249)
<i>fs</i>	.271** (.108)	.341*** (.11)	.355*** (.103)	.331*** (.105)	.374*** (.112)
<i>growth</i>	-.193*** (.011)	-.197*** (.011)	-.199*** (.01)	-.194*** (.01)	-.211*** (.011)
<i>lev</i>	.05*** (.005)	.05*** (.005)	.051*** (.005)	.05*** (.005)	.051*** (.005)
<i>lev</i>	-5.869*** (.083)	-5.759*** (.085)	-5.849*** (.083)	-5.83*** (.083)	-5.799*** (.086)
Observations	4455	4452	4455	4455	4452

Note: Standard errors are in parentheses. *** $p < .01$, ** $p < .05$, * $p < .1$.

1991) and quickly alter strategies and corporate practices to adapt to new conditions, which supports the stewardship theory (Hassan et al., 2023). Holding both roles makes CEOs more concerned about their reputation, they act more cautious, which in turn reduces corporate risk exposure (Lin et al., 2023). The finding is consistent with Faleye (2007) who highlights the benefit of duality in complex organizations. Complex organizations appreciate the CEO's flexibility. The costs associated with flexibility restrictions and information sharing outweigh the benefits of separating these roles; therefore, complex firms find it more effective to combine these roles (Faleye, 2007).

3.4. Robust test for other complexity measurement

To confirm the robustness of the results, this study uses the operating cycle as another measure of firm complexity, *d_cycle*. The interaction between *d_cycle*

and *bmem* shows that in complex firms, large board size has a positive impact on financial health. Large board size is beneficial for complex firms due to the benefit of consultations outweighing the problems associated with communications and decision-making (Coles et al., 2008). As for the number of meetings, the interactions between board meetings and the *d_cycle* show that in complex firms, regular meetings bring a positive impact on financial health. In high-operating cycle firms, there is an increasing demand for active management (Gill & Biger, 2013). Longer operating cycles are associated with higher uncertainty and complexity levels, requiring regular oversight and unified leadership (Jose et al., 1996). The impact of CEO/Chairman duality and their interaction is similar to the previous models, confirming the negative impact of duality and moderating impact in complex corporations.

When it comes to gender composition, the negative sign of the interaction means that an increase

in the presence of women on board is not useful for financial health. Firms with long cycles require more sophisticated and aggressive working capital management thus the risk-averse women and their conservative approach have a moderating impact

on financial health (Guizani & Abdalkrim, 2022; Faccio et al., 2016). However, the overall impact of gender is positive ($.991 + -.787 = .204$), which coincides with the previous regression on the overall benefit of women's composition on boards.

CONCLUSION

The study examines the impact of corporate governance characteristics on corporate financial distress, considering the interaction with corporate complexity. The results show that board members, board meetings, and board diversity contribute to good corporate governance, thereby improving financial health and reducing financial distress. BoD meetings are necessary for maintaining good financial health, but the impact is eroded in complex firms. Women's participation in the BoD brings a positive impact in both the baseline regression and in the models with interaction variables, but the impact differs depending on the complexity gauge. Firms with high-growth opportunities are less likely to default as the presence of women on the board increases. However, the increased involvement of women reduces financial health in firms with long cycles due to their risk-averse and conservative approach. As for the duality between the CEO and chairman roles, this combination increases agency costs, leads to suboptimal capital allocation, and poses a higher risk of default. Nevertheless, complex firms appreciate the duality, as it allows for clear and quick reaction strategies. The cost of information sharing and flexibility restrictions is higher than the benefits of separating these roles, highlighting the need to combine the CEO and chairman roles in complex firms.

The findings provide useful information for corporate managers and investors when making decisions. As for managers, they should tailor the governance structure to align with the level of the firm's complexity. The presence of women on the board should be emphasized due to their positive impact on financial health, particularly in simple, high-growth firms. However, in complex firms characterized by long operating cycles, increasing women's presence should be carefully considered, as their risk-averse tendencies may hinder the aggressive strategies often required for such firms. As for the duality, it raises financial distress for listed companies in Vietnam but demonstrates value in complex firms.

AUTHOR CONTRIBUTIONS

Conceptualization: Ngoc Mai Tran.
Data curation: Ngoc Mai Tran.
Formal analysis: Ngoc Mai Tran.
Investigation: Ngoc Mai Tran.
Methodology: Ngoc Mai Tran.
Project administration: Ngoc Mai Tran.
Resources: Ngoc Mai Tran.
Software: Ngoc Mai Tran.
Supervision: Ngoc Mai Tran.
Validation: Ngoc Mai Tran.
Visualization: Ngoc Mai Tran.
Writing – original draft: Ngoc Mai Tran.
Writing – review & editing: Ngoc Mai Tran.

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