

Impact of Corporate Governance on Financial Resilience During COVID-19 in Bangladesh

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Abstract

Through analysis of pre-pandemic and pandemic data (2019–2024), this study examines the associations of board size, board independence, ownership concentration, and audit committee with financial resilience (profitability, liquidity, and leverage), respectively. Companies with strong profitability, stable liquidity, and sustainable leverage are the most resilient during market disruptions. While firms that could not buffer themselves against financial shocks either broke or had to adapt to a more dysfunctional long-term way of operating even during times of steady state, emerging evidence indicates strong governance frameworks during steady state allowed the firm to be more fluid and responsive to changing environments during crisis events .

CHAPTER 1: INTRODUCTION

Background of the Study

The worldwide COVID-19 pandemic started to take hold in early 2020, and it has had unprecedented impacts on both financial markets and global business operations [43]. While the pandemic did not spare developed economies from its disruptive powers, its adverse impact on advanced economies was lesser than that of emerging economies like Bangladesh because of structural fragility in their financial systems and corporate infrastructures [42]. The crisis challenged the prevailing business models, governance frameworks, and financial strategies for many Bangladeshi conglomerates to an unprecedented extent [6]. COVID-19 disrupted established revenue, often brought supply chains to a standstill, and turned consumer demand on its head almost overnight through forced restrictions to help combat the pandemic [42]. Thus, even established firms faced turmoil in cash flows, profit margins, and increased uncertainties in capital markets in Bangladesh.

Corporate governance lies at the intersection of strategy and accountability, an intersection that becomes all the more important in a crisis [1]. Although governance mechanisms, governance structures, board composition, transparency standards, and stakeholder engagement protocols have usually been praised for enhancing firm performance, much less attention has been devoted to the potential role of governance mechanisms as protectors of corporate financial resilience against exogenous shocks, such as in COVID-19 [5]. Financial resilience is the ability of a firm to maintain and bounce back performance metrics — profitability, liquidity, leverage — in dire economic and market conditions, such as due to COVID-19 in Bangladesh [8]. In times like these, amid the COVID-19 pandemic, a robust governance architecture could

stabilize by providing the appropriate checks and balances to maintain shareholder value and stakeholder confidence [39].

Previous works on the linkage between governance and corporate performance have focused on everyday economic environments or traditional downturns, which are market cycle-driven [41]. Roughly, these questions have pointed to market-based benefits that accrue to ownership structures with many of these governance characteristics, such as independent boards and engaged audit committees. However, the COVID-19 crisis was also like no other economic downturn regarding speed, cross-border transmission, and uncertainty associated with lockdowns and public health measures announced by governments [39]. For Bangladesh corporations, the pandemic magnified several weaknesses sometimes associated with developing markets, including concentrated ownership fashions, familial company ownership, weak investor protection, and dissipating regulatory standards [2]. This makes one wonder whether traditional corporate governance practices work at that level of extreme or even higher, or must these corporate governance practices be recalibrated during a crisis [26].

Research Context

This study fills an important gap by investigating the association between four specific characteristics of governance, i.e., board size, board independence, ownership concentration, and audit committee effectiveness, and the financial strength of Bangladesh-based conglomerates in the COVID-19 scenario [8]. Governance mechanisms like board size impact the breadth of experience, the speed of decision-making, and the quality of oversight, while board independence guarantees that managerial decisions are duly influenced by management [20]. The concentration of ownership, meaning that a few majority owners own a significant proportion of the shares, can affect decision-making dynamics so that overarching influence is allowed. The audit committee's effectiveness represents the quality of the financial oversight and risk management through independence, frequency of meetings, and expertise of the audit committee members [15].

Through analysis of pre-pandemic and pandemic data (2019–2023), this study examines the associations of board size, board independence, ownership concentration, and audit committee with financial resilience (profitability, liquidity, and leverage), respectively. Companies with strong profitability, stable liquidity, and sustainable leverage are the most resilient during market disruptions. While firms that could not buffer themselves against financial shocks either broke or had to adapt to a more dysfunctional long-term way of operating even during times of steady state, emerging evidence indicates strong governance frameworks during steady state allowed the firm to be more fluid and responsive to changing environments during crisis events [5].

Governance Mechanisms and Crisis Dynamics

The study highlights the importance of tenure and board composition in buffering firms during external crises such as COVID-19. We saw boards making it easy to shop resources around, change strategy, and negotiate contracts. Independent directors avoided unthinking decisions that would threaten longer-term sustainability, and strong audit committees spotted financial distress quickly enough to take remedial action. Those governance features served as an internal buffer, increasing resilience to external shocks. External factors drive outcomes, including regulatory intervention, macroeconomic conditions, and global demand changes [43]. In Bangladesh, loan moratoria, stimulus packages, and extended reporting timelines either amplify or dampen their influence on governance effectiveness through their impact on financial resilience [8]. This interaction emphasizes scrutinizing governance mechanisms within broader policy and economic conditions.

Research Objectives and Questions

This research seeks to understand and improve corporate governance frameworks in emerging markets, with four core objectives:

1. To assess the prevalence and quality of governance practices among Bangladeshi conglomerates.
2. To evaluate how governance practices correlate with financial performance indicators like profitability, liquidity, and leverage, particularly across pre- and post-pandemic phases.
3. To develop a structural equation modeling (SEM) framework to quantify the relationship between governance attributes and financial resilience.
4. To provide actionable recommendations for policymakers and corporate practitioners to strengthen crisis governance protocols.

Guided by the following research questions, the study connects governance mechanisms to organizational resilience:

- How do board size, board independence, ownership concentration, and audit committee effectiveness influence the financial resilience of Bangladeshi conglomerates during the COVID-19 pandemic?
- Does effective corporate governance mitigate the adverse financial impacts of the pandemic?

This study argues that adequate governance mechanisms tailored to the firm's goals and the stakeholders' interests may allow firms to stay resilient over time and even in the context of economic and operational disruptions. Extracted insights inform academic debate, policymaking, and governance in Bangladesh and comparable emerging markets.

CHAPTER 2: LITERATURE REVIEW

Theoretical Foundations

Agency theory explains the disputes that occur when ownership and control are separate, thus creating an opportunity for managers to maximize their self-interest regardless of shareholders [7]. Decision-making within agency theory is framed to minimize agency costs, which can be accomplished through governance mechanisms such as independent directors or solid audit committees that ensure that managerial decisions function on behalf of and in the best interests of shareholders [12]. Such alignment is usually strengthened through monitoring, performance-based pay, and disclosure arrangements. The agency cost could be higher during crises such as COVID-19 when the impertinence of fast decision-making may increase managers' discretion, which can only be controlled with strict oversight [6].

In contrast, stewardship theory emphasizes the opposite assumption: when trusted and empowered with authority, managers serve primarily as stewards of corporate assets [16]. This view is that governance frameworks that foster collaboration, trust, and shared purpose can yield rewards for the organization, particularly when it comes to external pressures that require some focused action [16]. The crises often require quick strategic pivots—such as restructuring production lines, renegotiating supply agreements, or opening new distribution channels—and managers with stewardship values may be more inclined to take the initiative and mobilize resources for the greater good [34]. In emerging markets such as Bangladesh, the necessity for creativity and adaptation under resource limitations can make this cooperative spirit even more essential to achieving financial resilience [4].

As demonstrated above, agency and stewardship theories provide insights into the role of governance during crises. Although agency theory warns us of the dangers of managerial self-interest, stewardship theory opens our eyes to the possibilities of attending a governance climate that builds agility and collective resilience through support and empowerment [7]. In practice, the efficacy of governance in

crises is likely to depend on the extent to which such theoretical perspectives converge or conflict across a firm [12]. This is where the specific governance attributes such as board composition, independence, ownership structure, and audit committee effectiveness come into place [19].

Corporate Governance Challenges in Emerging Markets

Emerging markets typically have unique governance characteristics that differ from developed ones [13]. Most large conglomerates are family-owned or have concentrated ownership structures in Bangladesh, which means that a small number of large shareholders have a say over strategic decisions [32]. It allows for expedient decision-making and agile control, which can also come at the expense of minority shareholder interests and an enhanced set of checks that would otherwise come from a more diverse ownership group [17]. In times of crisis, majority shareholders may lobby for short-term solutions—such as the retention of dividends or the restriction of specified capital expenditures—that do not correspond with broader stakeholder interests [18, 23].

Regulatory frameworks in emerging markets are also looser or, at best, rarely enforced [13]. When regulations exist on paper but without enforcement, such regulations deliver less than they promise. For example, rules that require board independence may not be strictly enforced, enabling firms to name independent directors who lack true independence [23]. True independence was amplified during the pandemic as boards had to balance highly sensitive management proposals for layoffs, debt restructuring, and other drastic moves against the company's long-term viability [18]. It was easier for companies with genuine independence on their boards to adopt appropriately balanced policies to safeguard both present liquidity and longer-run competitiveness.

A second unique challenge in emerging markets is family or family-based governance structures [17]. In most Bangladesh conglomerates, the board of directors usually comprises the same single extended family, which will create minimal space for diphtheritic or different voices. Under normal circumstances, such family bonds may facilitate business activities; however, during crises, they may prevent considering other options and the impartial evaluations of management performance [18]. This highlights the importance of board independence as a necessary corrective, ensuring decisions withstand the scrutiny expected at a time when the consequences have been amplified by economic unpredictability [13].

Key Corporate Governance Variables

This study focuses on four governance features (board size, board independence, ownership concentration, and audit committee effectiveness) of different theoretical and practical importance.

Board size (BS) represents the number of directors on the board. Larger boards can also draw a wider talent network to help with their connections, allowing for a better steer on strategy [9]. Larger-sized boards are inefficient and lost in accountability — decisions take too long [11]. As the need for crisis management requires boards to respond rapidly to emerging threats and reallocate resources quickly, there is an ongoing debate on the best board size that balances diversity and efficiency [10]. In Bangladesh, where conglomerates have multi-sector (manufacturing, real estate, financial service, etc.) operations, a somewhat expanded board would equip the firm with specific competencies requisite for the sector. Nonetheless, a board that is too large might have lengthy discussions and could prevent the fast response necessary for crises or phases [9].

Board independence (BI) denotes the percentage of non-executive, independent directors in total board size [20]. The fundamental justification is that it is based on neutral monitoring, which can reduce conflict of interest and curb myopic behavior by management [32]. Independent directors are meant to interrogate management's strategy proposals, insist on thorough risk assessments, and defend minority shareholder

interests [25]. These roles became even more critical during the COVID-19 pandemic, when cost-cutting measures, layoffs, and debt management were critical decisions that would have long-lasting implications. While overbearing management may produce a short-term playbook on survival, an independent board can encourage the dialogue that balances this risk by articulating the importance of long-term brand equity and maintaining long-term stakeholder relationships [20].

Ownership concentration (OC) is the ratio of the majority shareholder ownership to the total number of shares [31]. Disproportionate decision-making occurs in contexts where one or two people or organizations own the majority of the stakes, and this often results in the balance of decision-maker priorities toward majority holders. Decision-making can become fast, but transparency is likely lost, and minority positions may be ignored [33]. In times of crisis, though, controlling owners may be tempted to siphon off resources or embark on personal risk mitigation strategies, such as cutting funding needed to keep the business running for the long term [29]. In other cases, the majority owners — who may own 50% or more of the stock — have too much individual wealth solely associated with the firm and will do everything possible to protect its future. Such a balancing act uniquely engages the relationship between ownership concentration and firm performance during the pandemic in Bangladesh [4].

Audit committee effectiveness (ACE) is measured using a composite variable based on the independence of committee members, the number of meetings held, and committee members' professional expertise [15]. The audit committee is the heart and soul of a firm's financial health, and it monitors the integrity of reporting, compliance with legal and regulatory requirements, and risk management [24]. Especially during times of crisis, the committee plays a more important role. They will have to scrutinize the reasonableness of financial forecasts, verify the achievability of fresh budget proposals, and ensure that any government assistance or restructuring of debts is appropriately accounted for and managed with integrity. Consequently, effective audit committees can serve as an early warning system to identify the potential signs of financial distress [30]. Pushing a weak audit committee that cannot question management on either financials due to a lack of expertise or authority could let pernicious financial deals through the backdoor [15].

Table 1: Corporate governance variables and their operational definitions within the scope of this study

Variable	Operational Definition
Board Size (BS)	A total number of directors serving on the board [14].
Board Independence (BI)	The proportion of independent directors relative to the total board size indicates the level of oversight [25].
Ownership Concentration (OC)	The percentage of shares held by majority shareholders reflects the ownership concentration [3].
Audit Committee Effectiveness (ACE)	A composite measure based on audit committee independence, frequency of meetings, and members' expertise [24].

Financial Resilience: Profitability, Liquidity, and Leverage

This study conceptualizes financial resilience as the ability of a firm to withstand shocks and maintain its key performance indicators during significant disturbances. Profitability, liquidity, and leverage ratios are regular indicators of financial health under normal circumstances. However, during a crisis as significant as the COVID-19 pandemic, they are signposts to sustainability or demise [43].

Profitability (PROF) is mainly examined via ROA (Return on Assets), which reflects the firm's effectiveness in transforming its total asset base into net income [10]. A high ROA indicates that the firm is good at using resources to generate earnings. Profitability during the pandemic became a different beast: it was no longer only the revenues-to-profits ratio once the revenues started shrinking, but it was still a positive ROA signal that the company was reasonable in cost control or utilization of resources [11]. Companies still profitable or had minimal profit degradation were better positioned to raise new capital or retain investors' confidence.

Liquidity (LIQ) (current ratio, or current assets divided by current liabilities) emphasizes a company or firm's strength in fulfilling short-term obligations [10]. During stable periods, companies may operate quite efficiently at medium liquidity ratios. However, in times of crisis, liquidity is the most important factor, as cash inflows are interrupted, but cash outflows for operations continue. A healthy current ratio will protect the business from sudden sales drops, unexpected supply chain diversions, and slow client payments. It also buys management time to rework business lines or adjust to new market opportunities without running the risk of immediate insolvency [10].

Leverage (LEV), often defined as total debt/total equity, shows us how much capital a firm borrows with equity [11]. Debt can undoubtedly enhance returns in the up-cycle growth phases. However, a rapidly growing revenue may not be sufficient to service interest and principal payments during the down-cycles, when it transforms into heavy burdens that crush businesses [10]. Lenders from companies with access to higher leverage were under more stress during a pandemic – significantly if lenders raised access to credit or higher interest rates [11]. Balanced leverage ratios gave firms more room to search for a new financing path or negotiate more favorable terms, improving their survival chances.

Table 2: Financial resilience variables and their measurement indicators

Variable	Measurement Indicator	Description
Profitability (PROF)	Return on Assets (ROA)	Measures net income relative to total assets, indicating the firm's efficiency in generating earnings [37].
Liquidity (LIQ)	Current Ratio (Current Assets/Current Liabilities)	Assesses the firm's ability to cover short-term obligations with short-term assets [37].
Leverage (LEV)	Debt-to-Equity Ratio (Total Debt/Total Equity)	Evaluate the firm's reliance on debt financing relative to equity, offering insights into financial risk [37].

Many firms struggled to maintain minimal profitability and liquidity during the pandemic's peak, often resorting to increased borrowing. However, companies that entered the crisis with strong fundamentals and well-structured governance practices exhibited greater agility. For instance, boards recognizing the potential long-term damage of high leverage took early steps to retire expensive debt or renegotiate terms. Simultaneously, effective audit committees ensured accurate and timely financial reporting, which helped safeguard credibility in the eyes of creditors and investors.

Governance Structures and Financial Resilience: Empirical Evidence

Empirical research consistently highlights the role of robust governance structures in mitigating performance declines during economic shocks. Board independence emerges as a crucial factor, enhancing oversight and crisis adaptability. Independent directors bring specialized expertise, such as risk

management and turnaround strategies, that prove invaluable during disruption. Additionally, their lack of entrenched interests enables transparent, constructive decision-making.

Audit committees, as gatekeepers of financial integrity, are pivotal during crises. Empirical studies demonstrate that diligent audit committees ensure accurate forecasting and reduce accounting malpractices, especially in emerging markets like Bangladesh, where regulatory oversight is evolving. Effective audit committees identify fraudulent practices, enforce compliance with disclosure standards, and maintain investor confidence, ensuring financial stability even in turbulent times. Ownership concentration presents a nuanced dynamic. While majority shareholders may be incentivized to make long-term decisions, their dominance can lead to self-serving behaviors [3]. During the COVID-19 pandemic, firms with concentrated ownership exhibited contrasting approaches—some undermined growth with short-sighted cost-cutting, while others leveraged their control to implement rapid and effective crisis strategies [40]. The efficacy of concentrated ownership ultimately depends on its alignment with broader stakeholder interests. Board size also plays a critical role. Smaller boards often respond swiftly under crisis pressure, while larger boards contribute diverse expertise and resources [11]. A strategic balance between size and efficiency ensures effective decision-making [14].

Governance in Bangladeshi Conglomerates

Research on Bangladeshi firms affirms the broader significance of governance in financial resilience. Companies with independent boards and active audit committees demonstrated lower profitability volatility during the COVID-19 crisis, highlighting governance as a preventative and responsive mechanism. While governance cannot eliminate external shocks, it shapes how firms prepare for, withstand, and recover from crises. The pandemic underscored the importance of adaptive and innovative governance [41]. Directors facilitated strategic pivots, such as diversifying into PPE production or exploring digital finance platforms, seizing new opportunities amidst disruption. Unique structural factors in Bangladesh—such as concentrated ownership, familial board compositions, and evolving regulatory frameworks—heighten the need for sound governance. Strong governance ensures financial stability, enabling firms to survive crises and capitalize on post-crisis opportunities [42]. Conversely, weak governance increases vulnerability to cash flow pressures, opportunistic behaviors, and diminished investor confidence.

Governance, Resilience, and the Path Forward

Crises test the depth and effectiveness of corporate governance, balancing agency theory's emphasis on managerial accountability with stewardship theory's focus on collaborative leadership. In emerging markets like Bangladesh, achieving this balance is critical. Boards must ensure that crisis responses prioritize long-term sustainability over short-term gains [9].

Financial resilience hinges on profitability, liquidity, and leverage metrics, underscoring the importance of the corporate governance-finance nexus [1]. This study employs structural equation modeling (SEM) to analyze governance configurations and financial performance in Bangladeshi conglomerates during pre-pandemic and pandemic periods. The goal is to offer actionable insights for corporate boards, regulators, and policymakers.

These findings have implications beyond COVID-19. Governance remains a vital stabilizer as global economies face climate shocks, geopolitical instability, and future health crises. By studying Bangladeshi conglomerates during one of the most disruptive crises in modern history, this research provides lessons for emerging markets, emphasizing governance's role in fostering resilience and enabling firms to adapt, endure, and thrive in a volatile world [2].

Conceptual Framework

Based on the theoretical underpinnings and empirical evidence, this study proposes a conceptual framework that outlines the relationships between corporate governance mechanisms and financial resilience. The framework hypothesizes that effective corporate governance—as indicated by larger boards, higher proportions of independent directors, lower ownership concentration, and more effective audit committees—contributes positively to financial resilience [21, 22]. This relationship is theorized to manifest through improved operational efficiency, enhanced liquidity management, and optimized capital structure management during crises. Figure 1 visually depicts these hypothesized paths, highlighting direct relationships between each corporate governance variable and financial resilience indicators. The framework also considers the moderating effect of the crisis environment, suggesting that the importance of effective governance is amplified during periods of severe economic downturn.

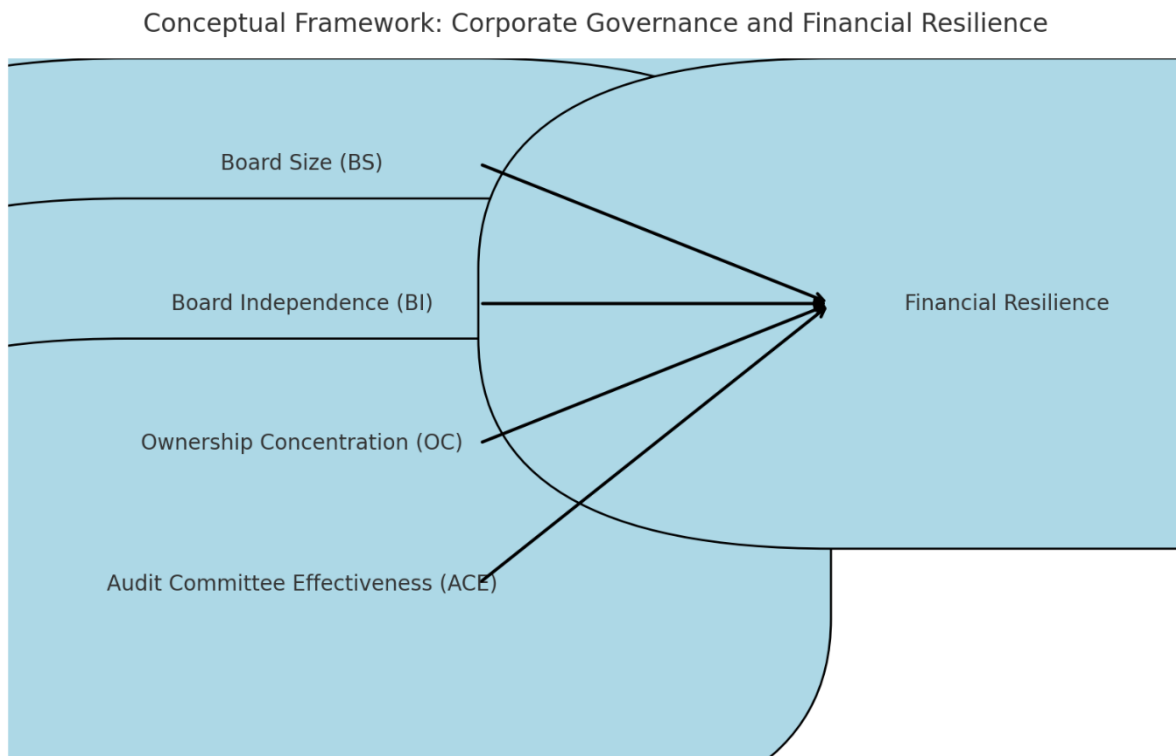


Figure 1: Relationships between corporate governance variables (Board Size, Board Independence, Ownership Concentration, Audit Committee Effectiveness) and Financial Resilience.

Drawing from the theoretical and empirical literature, the study presents a conceptual framework that links corporate governance mechanisms to financial resilience. According to this framework, effective corporate governance—operationalized as larger boards, a more significant proportion of independent directors, less ownership concentration, and stronger audit committees—leads to better financial health [28]. It is theorized that this relationship should be observed in terms of greater operating efficiency, more effective liquidity management, and more effective management of capital structure during crises. Direct relationships are proposed for each corporate governance variable and financial resilience indicator, as illustrated in Figure 1. The framework also recognizes an important moderating role played by the crisis environment, one in which sound governance becomes even more critical during severe economic decline.

The reviewed literature and some established theoretical models underpin the main idea that corporate governance plays an essential role in financial stability during the extraordinary challenges brought forward via occurrences of an unprecedented nature like the COVID-19 pandemic. So, this study is based on that ground with empirical investigation in the context of Bangladeshi conglomerates, which can provide insights for both academia and the practical side of governance policy development.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

Research Design

This study adopted an explanatory, quantitative research design to quantify the cause-and-effect relationships between governance practices and firm-level outcomes [36]. This method allows for analyzing the potential effects of differences in organizational governance characteristics (the independent variables) on financial resilience proxies (the dependent variables). The statistical robustness of quantitative methods provides fewer chances of random chance explaining any relationships that may exist.

This study is based on panel data from the past 5 years, from 2019 to 2023. The ability to track the same subjects over time makes panel data a helpful structure when capturing and analyzing fluctuations over time. Including data from 2019 (pre-pandemic) to 2020–2023 (the pandemic years), the dataset captures the changes in governance strategies and corporate performance associated with the global crisis [39].

The use of panel data from 2019 through 2023 provides a before-and-after perspective spanning the emergence of the COVID-19 pandemic, revealing how particular governance practices may have fortified or eroded corporate stability in general [39]. The approach specified by combining descriptive analysis, correlation checks, and advanced SEM techniques provides a solid grounding for an overall plan for testing hypothesized relationships.

Sampling Technique and Selection of Firms

The sampling frame is Bangladesh conglomerates, which are significant public limited companies. These enterprises were selected as they are generally under the reporting requirements described by the Dhaka Stock Exchange (DSE) and are obliged to prepare annual and in-depth governance reports. Additionally, these conglomerates—which span multiple sectors, including textiles, pharmaceuticals, and consumer goods—often have more intricate governance systems, making them well-suited for exploring the relationship between governance design and crisis resiliency.

Ten conglomerates listed on the DSE during the study period were selected using purposive sampling based on the following criteria: (1) the companies have been listed on the DSE during the whole study period, (2) the companies have published complete annual reports, and corporate governance disclosure for the years 2019–2023, and (3) the companies operate in sectors other than each other to provide heterogeneity in firms attributes [44]. So, as selected conglomerates must have consistent, reliable data, the missing values are minimized, enhancing valid longitudinal comparisons.

The basis for the limited sample is that deep governance information is sought. The board characteristics (including the number of directors, ownership structure, and audit committee characteristics for each conglomerate will have to be carefully coded. While this limits the scope of the analysis, it increases its depth by allowing a detailed assessment of governance characteristics that are not always available or imperfect at the broader sample level [44].

Data Collection

Data on corporate governance variables and financial indicators were collected from publicly available

annual reports, corporate governance disclosures, and financial statements on the DSE and individual company websites [37]. Shareholder information in annual reports usually covers board size, whether independent directors are present, ownership, and audit committees. These documents also contain the raw financial figures — balance sheet numbers, income statements, and cash flow statements — needed to calculate liquidity, profitability, and leverage ratios.

Some additional governance-related information was retrieved from separate corporate governance compliance statements, in which companies elaborate on their compliance with local governance codes. That was especially important for examining ownership concentration and audit committee structures because not everything is fully itemized in the annual report's body [35].

The collection phase was thus completed when a panel dataset of governance characteristics and financial metrics associated with each of the ten selected conglomerates was constructed for each year within the stated timeframe. This dataset formed the basis of the following quantitative analyses, allowing us to explore how these variables varied across the pre-pandemic and pandemic periods [36].

Operational Definitions and Measures

This study focuses on four corporate governance variables: board size (BS), board independence (BI), ownership concentration (OC), and audit committee effectiveness (ACE). It also incorporates three financial resilience indicators: profitability (PROF), liquidity (LIQ), and leverage (LEV). Table 3 below provides a succinct overview of these variables:

Variable Type	Variable	Measurement/Operational Definition
Corporate Governance	Board Size (BS)	Total number of directors on the board.
	Board Independence (BI)	The proportion of independent directors on the board (independent directors ÷ total directors).
	Ownership Concentration (OC)	Percentage of shares held by the dominant shareholder(s).
	Audit Committee Effectiveness (ACE)	A composite index based on audit committee independence, frequency of meetings, and members' financial expertise.
Financial Resilience	Profitability (PROF)	Return on Assets (ROA): Net income ÷ total assets.
	Liquidity (LIQ)	Current Ratio: Current assets ÷ current liabilities.
	Leverage (LEV)	Debt-to-Equity Ratio: Total debt ÷ total equity.

Board Size (BS): This is the numerical count of all board members serving a firm at the end of each fiscal year. A change in board size might reflect strategic decisions to incorporate new expertise or streamline oversight during the pandemic [9].

Board Independence (BI): Calculated as the proportion of independent directors, this variable highlights how many directors are free from conflicts of interest or material ties to the company. A higher ratio implies more robust oversight [10].

Ownership Concentration (OC): Determined by the percentage of shares collectively held by the largest block of shareholders, this variable captures the degree of concentrated control [10]. It is relevant for understanding potential conflicts between majority and minority shareholders.

Audit Committee Effectiveness (ACE): This composite measure blends three dimensions of audit committee quality: independence of committee members, frequency of meetings, and members' financial

expertise [11]. Each dimension is scored based on predefined criteria, and the scores are then aggregated into a single index.

Regarding the financial resilience dimension, return on assets (ROA) was chosen to capture profitability, indicating how well the firm utilizes its asset base to generate net income. The current ratio is a measure of liquidity, indicating the ability of a company to meet short-term obligations. On the other hand, the debt-to-equity ratio is a simple measure of financial leverage, which tells how much the firm uses borrowed capital.

Data Analysis Procedures

The data analysis proceeded in sequential stages to ensure that both preliminary diagnostics and advanced modeling were appropriately executed:

Descriptive Statistics: The initial steps involved calculating the mean, standard deviation, minimum, and maximum values for each variable in both the pre-pandemic and pandemic phases. This overview provided insight into how governance practices and financial indicators varied over time and each metric's range and central tendencies.

Correlation Analysis: Pearson correlation coefficients were computed to examine essential relationships between corporate governance variables (BS, BI, OC, ACE) and financial resilience indicators (PROF, LIQ, LEV). This step was crucial for identifying emerging patterns or potential concerns about multicollinearity, where high correlations between independent variables could distort subsequent regression or structural equation modeling results.

Confirmatory Factor Analysis (CFA): The next phase involved building the measurement model through CFA to confirm whether observed indicators adequately represent latent constructs. In particular, the composite measure for audit committee effectiveness and the overarching financial resilience construct were subjected to rigorous validation criteria. Standard thresholds for Composite Reliability (CR) and Average Variance Extracted (AVE) were applied to confirm that the constructs demonstrated internal consistency and convergent validity. CR values above 0.70 and AVE values above 0.50 indicate robust reliability and validity.

Structural Equation Modeling (SEM): Once the measurement model was validated, the structural model was tested to explore the hypothesized causal pathways. SEM was chosen due to its ability to simultaneously evaluate multiple dependent relationships and account for measurement errors in latent constructs. Maximum Likelihood Estimation (MLE) served as the estimation technique, offering reliable parameter estimates under assumptions of multivariate normality. A suite of model fit indices—such as the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA)—was employed to judge the adequacy of model fit. Values indicating a good fit typically include a CFI and TLI above 0.90 and an RMSEA near or below 0.08.

Robustness Checks: This study introduced further controls to ascertain that the results were not due to unobserved heterogeneity or sample-specific quirks. Firm size, conceptualized as the natural log of total assets, is also included since larger firms may have greater resources to cushion against financial shocks. Firm age was included because older firms might have more stout governance routines or diversified revenue streams. The research included these controls individually and together to check this, ensuring that the primary mechanisms between governance and financial resilience were stable.

Ethical Considerations and Data Reliability

Particular emphasis was placed on ethical conduct and the accuracy of gathering and analyzing data. As the study was based on data in the public domain, consent from the firms' management or stakeholders

was unnecessary. However, reporting was done in a way that aggregated findings so that no one company’s sensitive information could be published in a way that would have a toxic impact on that company’s competitive position.

Annual report disclosures were corroborated with the DSE filings wherever possible to further strengthen the data reliability. Inconsistencies or ambiguities were noted, and the latest available or audited figures were used. By establishing this multi-level approach to data validation, we reduced the risk of erroneous measurements propagating through the subsequent analyses.

CHAPTER 4: RESULTS

Descriptive Statistics

Descriptive statistical analyses were then performed to provide an overview of the data, such as the variables' central tendencies and distributional properties.

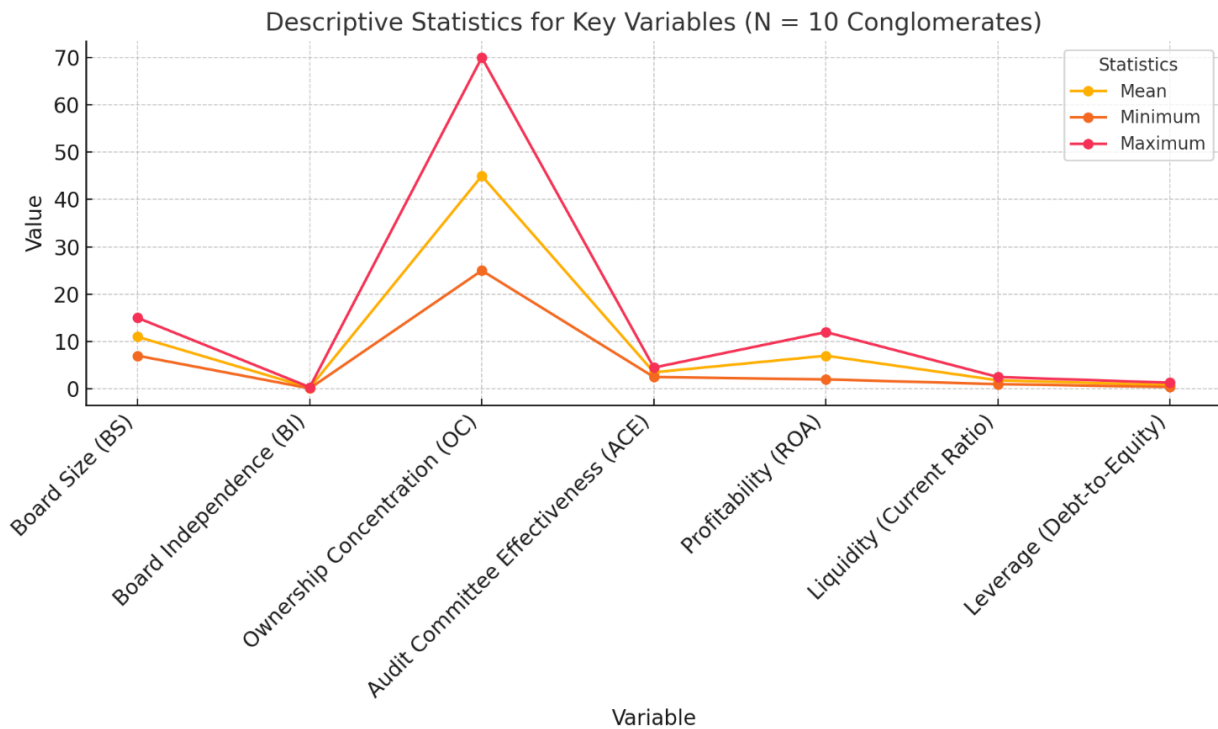


Figure 2: Descriptive statistics for key variables (n = 10 conglomerates).

Figure 2 provides a simple overview of the descriptive statistics regarding mean, minimum, and maximum for key governance and financial variables observed in 10 conglomerates. Looking at the trends of each variable and its distribution and range helps understand the overall behavior of the data.

The mean for Board Size (BS) is 11 (minimum 7, maximum 15), indicating substantial variation in this measure across the conglomerates. This variance indicates a divergence of governance practices throughout the sample. Board Independence (BI) has a low average of 0.22 with a range of 0.10 to 0.35, reflecting little variability and historically low independence levels in the boards, consistent with closely-held governance structures.

Ownership concentration (OC) averages 45%, with a wide distribution from 25% to 70% and distinct ownership structures, with some conglomerates displaying highly concentrated ownership. Audit Committee Effectiveness (ACE) shows moderate variation with a mean composite score of 3.5 ranging

2.5 to 4.5. This reflects a broad trend of fairly effective audit committees, but some variation in governance effectiveness.

On the financials, Profitability (ROA) has a mean of 7%, spanning from 2% to 12%, which is a significant operational efficiency profitability spread across those firms. Liquidity (Current Ratio), with a mean of 1.8 and a range of 1.0 to 2.5, also suggests differing levels of short-term financial soundness, although all numbers indicate an acceptable level of liquidity. Finally, the Leverage (Debt-to-Equity) mean stands at 0.8 (min=0.4; max=1.3), suggesting moderate levels of financial risk with variation in companies' reliance on debt financing.

The size of the boards for the ten conglomerates varied from 7 to 15 members, and the average value suggested a moderate board size in aggregate across the sample. The average of board independence based on independent directors was roughly 22%, indicating relatively low board independence. Ownership concentration was heterogeneous among firms. For instance, audit committee effectiveness scores indicated that most firms functioned with moderate to high oversight, highlighting the importance placed on financial reporting and risk management in periods of unrest. The descriptive statistics of the main variables are provided in Table 4.

Table 4: Descriptive Statistics for Key Variables (N = 10 Conglomerates)

Variable	Mean	Standard Deviation	Minimum	Maximum
Board Size (BS)	11	2.5	7	15
Board Independence (BI)	0.22	0.08	0.10	0.35
Ownership Concentration (OC)	45%	15%	25%	70%
Audit Committee Effectiveness (ACE)	3.5 (Composite Score)	0.70	2.5	4.5
Profitability (ROA)	7%	3%	2%	12%
Liquidity (Current Ratio)	1.8	0.5	1.0	2.5
Leverage (Debt-to-Equity)	0.8	0.3	0.4	1.3

Note. The descriptive data indicate a reasonable variation across firms, which is essential for robust multivariate analysis.

Pearson correlation analysis was conducted to explore the initial associations among the governance and financial variables. The analysis revealed positive correlations between board independence and profitability ($r = 0.35, p < .05$) as well as between audit committee effectiveness and profitability ($r = 0.42, p < .01$). Conversely, ownership concentration displayed a negative correlation with the liquidity ratio ($r = -0.30, p < .05$), suggesting that firms with highly concentrated ownership might have experienced constrained short-term financing capabilities during the crisis. These preliminary findings provided the necessary justification for the SEM analysis.

The measurement model was assessed using CFA within the SEM framework. All indicators for the latent constructs loaded significantly (factor loadings > 0.60) and demonstrated good convergent validity, as evidenced by Composite Reliability (CR) values exceeding 0.70 and Average Variance Extracted (AVE) values above 0.50 (Byrne, 2016). This suggests that their respective indicators accurately measured the constructs of audit committee effectiveness and financial resilience.

The structural model was then estimated using Maximum Likelihood Estimation (MLE) to assess the hypothesized relationships among the variables. The model displayed acceptable fit indices (CFI = 0.92, TLI = 0.90, RMSEA = 0.05), indicating a good overall fit between the hypothesized model and the observed data. The path coefficients revealed that board independence ($\beta = 0.24, p < .01$) and audit committee effectiveness ($\beta = 0.35, p < .001$) had a significant positive effect on financial resilience. In contrast, ownership concentration ($\beta = -0.15, p < .05$) exerted a negative influence, while the effect of board size, though positive ($\beta = 0.10$), was not statistically significant ($p = 0.08$). These results indicate that independent directors and strong audit committees strengthen firms' capabilities to cope with financial shocks, while high levels of concentrated ownership may become detrimental to this end. To confirm the robustness of these results, firm size, and firm age were included as control variables in the structural model. Adding these controls did not appreciably change the key path estimates, indicating that the results are stable to alternative specifications. The main structural path estimates and their significance levels are presented in Table 5 below.

Table 5: Structural Model Path Estimates and Significance Levels

Path	β (Standardized)	p-value
Board Size (BS) → Financial Resilience	0.10	0.08
Board Independence (BI) → Financial Resilience	0.24	< 0.01
Ownership Concentration (OC) → Financial Resilience	-0.15	< 0.05
Audit Committee Effectiveness (ACE) → Financial Resilience	0.35	< 0.001

Note. The significant positive paths indicate that better governance practices enhance financial stability, whereas high ownership concentration is detrimental.

Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) Graph

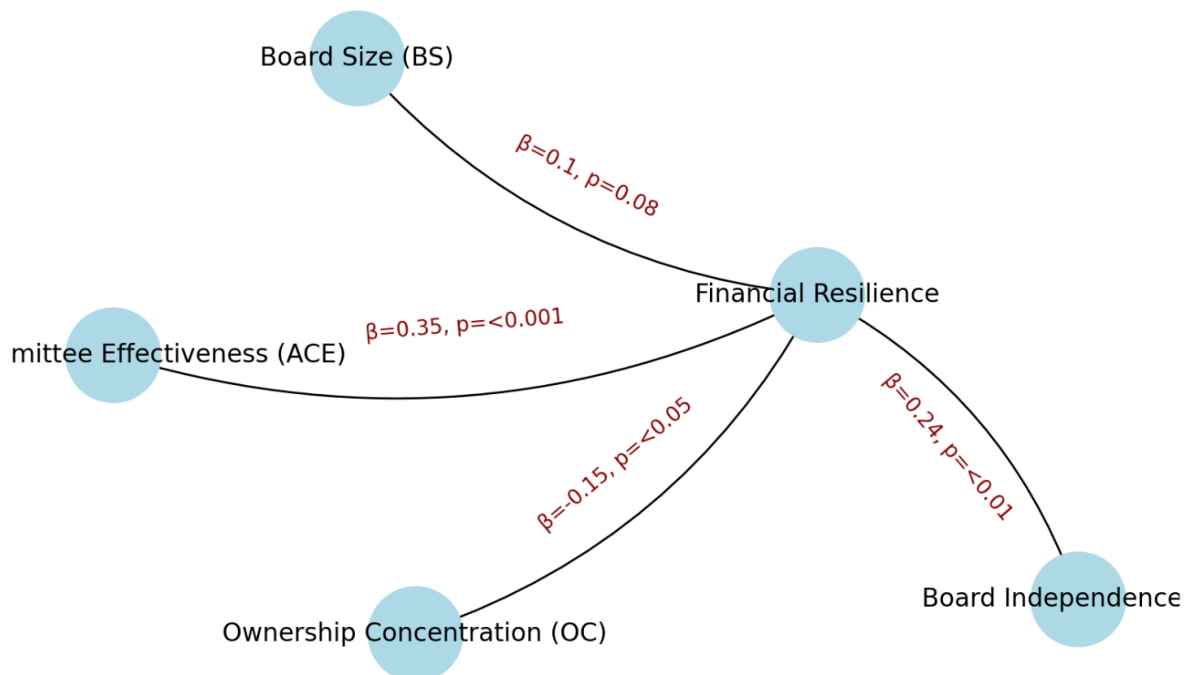


Figure 3: Structural equation modeling (SEM).

The relationship observed within structural equation modeling (SEM) illustrates the connections between key governance factors and financial resilience and indicates the significance and strength of such pathways. The graph shows the four independent variables—board Size (BS), Board Independence (BI), Ownership Concentration (OC), and Audit Committee Effectiveness (ACE)—and their impact on the dependent variable, Financial Resilience (FR).

Board Size (BS) has a positive, non-significant relationship with Financial Resilience ($\beta = 0.10$, $p = 0.08$), indicating a potential relationship but with limited statistical power. Conversely, BI (Board Independence - BI), $\beta = 0.24$, $p < 0.01$) also positively and significantly impacts financial resilience, proving that an independent board is crucial for providing guidance and support during financial stress.

Ownership Concentration (OC) has an estimated negative and significant effect on Financial Resilience ($\beta = -0.15$, $p < 0.05$), suggesting that greater ownership concentration reduces financial resilience, possibly through less diversity in decision-making or risk exposure. Audit Committee Effectiveness (ACE) shows the highest positive association with Financial Resilience ($\beta = 0.35$, $p < 0.001$), reinforcing the importance of an effective audit committee in ensuring financial health and resilience.

These relationships are visually depicted with directional arrows from each independent variable to the dependent variable in the diagram; the standardized path coefficients (β) and p-values associated with these relationships are also provided. Accordingly, the higher the significance threshold (lines cut-off), the more relevant a path's potential explanation for the observed financial resilience. The SEM graph collectively illustrates the complex nature of financial resilience and the influential role of internal governance functions, particularly board independence and audit committee effectiveness, in reinforcing organizational fortitude.

Discussion

Findings from this study support that corporate governance practices play a critical role in strengthening financial resilience in challenging economic conditions. Where independence in boards increases transparency and accountability, we contribute to the existing literature by showing the positive and significant impact of board independence on financial resilience. This result suggests that a more significant number of independent directors can foster frugal oversight of management practices, especially in times of economic uncertainty, such as during the COVID-19 pandemic.

The positive association was also found to be strong. Where $\beta = 0.35$, $p < .001$) underscores the importance of meticulous financial oversight. Effective audit committees can enable timely and accurate financial reporting and risk management, which is essential for firms struggling to withstand unprecedented disruptions to their market processes [38]. Such findings align with earlier studies highlighting the need for effective auditing practices during crisis intervention.

The study finds that more concentrated ownership, with owner-managers stockpiling large parts of job wealth, results in lower financial resilience. In concentrated ownership scenarios, we may witness short-term ill-informed decisions sacrificing long-term sustained performance and, ultimately, the firm vulnerability to external shocks. Finally, the effect was not statistically significant when board size was positively associated with financial resilience. Therefore, increasing the board size to professionalize or globalize it will not deliver the hoped-for results unless board members have enough independence and experience [14].

From a management standpoint, these findings guide corporate boards and regulators. Companies should focus on improving board quality, increasing the rate of independent members, and providing ongoing professional development for audit committee members [35]. On the part of the regulators, they should

also check policies that reduce ownership concentration to ensure all shareholding supports healthy corporate governance.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

Conclusion

This study examined the effect of corporate governance on the financial performance of Bangladeshi firms in response to the COVID-19 pandemic through a robust panel data analysis from 2019 to 2023. The results show a significant relationship between two important dimensions of auditing governance—board independence and audit committee effectiveness—and enhanced financial performance, as reflected by profitability, liquidity, and leverage ratios. In contrast, ownership concentration harms financial resilience. Board size was positively related to financial resilience but not at a statistically significant level [14].

This study extends the current literature on agency and stewardship theories by providing the development of those theories in the context of independent oversight and audit committees as important components of a response to a crisis. The insights provided here are practically relevant for policymakers and corporate leaders in emerging economies. Enhancing board independence and tightening audit practices can reduce the corrosive effects of world events on corporate bottom lines [27]. Secondly, lower excessive concentration in ownership can create a governance space, enabling conditions for sustainable growth and survival during tough times.

Overall, the number of studies related to corporate governance and financial resilience provides empirical evidence for the argument that sound corporate governance can improve a firm's financial resilience in times of crisis [21, 22]. As organizations continue to navigate an uncertain organizational environment, the lessons from this research can serve as a helpful framework for building financial stability and sustainability in the future.

Recommendations

The study results highlight the need for robust corporate governance involving the appointment of strong independent directors, adequate disclosure of information, and appropriate audit committees to mitigate the potential negative impacts on financial markets in times of economic crisis, such as the COVID-19 pandemic. The positive impact of board independence on financial resilience signals having many directors as independent in the boardroom. The independence of directors allows for an objective oversight mechanism, which can help ameliorate agency conflicts and improve decision-making processes during such crises. Independent directors should also be those with relevant expertise and experience, and firms in Bangladesh should target their independent directors to be equal to or above the regulatory minimum requirement. Designs to monitor compliance concerning the rules and regulations by regulatory bodies like the Bangladesh Securities and Exchange Commission (BSEC) should be consolidated.

This study shows that effective audit committees are essential for transparency and reducing financial risks. Every company must have people in the boardroom with deep pockets — appointing them is just the first step. Regular training for members to keep them abreast with the evolving challenges will go a long way. Audit committee meetings should occur more frequently during crises to provide continued diligent oversight of financial reporting and risk management practices. Lawmakers could incentivize companies to adopt strong auditing structures, such as tax breaks for companies with certified and effectively functioning audit committees [35].

The inverse correlation between ownership concentration and economic durability suggests the dangers

of concentrated decision-making authority. Significant shareholders must be stoked to implement more inclusive governance practices sensitive to minority shareholders' interests. Concentrated ownership can hinder transparency in decision-making processes and efficient shareholder communication. Regulatory authorities should develop an ownership concentration threshold beyond which ownership is limited or adopted as a structure to retain accountability and control.

Board members and senior executives can improve the overall quality of governance through preparation with corporate governance best practices [26]. Organizations such as the Dhaka Stock Exchange and the Institute of Chartered Accountants of Bangladesh could offer regular workshops, webinars, and certifications to help improve knowledge and skill sets. Supporting the small business community in practical ways can create new business models for a pandemic economy, allowing social innovation and building resilience.

In Bangladesh, governance reforms already exist, but the enforcement of these reforms is quickly challenged. The second is that policymakers should strengthen monitoring systems to ensure sound implementation of the corporate governance codes [27]. The BSEC, for example, should launch a comprehensive governance index to assess companies and publish a ranking of them according to the level of compliance with governance standards. Public disclosure of the rankings could motivate firms to improve their governance practices and reputation.

Given the pervasive threat of global crises, crisis preparedness should be folded back into the governance frameworks at firms. It is a challenge for shareholders, but boards must create committees focusing on strategic risk management to prepare firms better to mitigate future disruptions. These might include strategies like scenario planning, liquidity management protocols, and contingency plans for maintaining operational continuity. The findings highlight the importance of a multi-dimensional approach to governance reform, reflected in the structural, regulatory, and strategic dimensions titled key reform recommendations. Implementing these strategies will enable Bangladeshi companies to be better prepared for the financial crises and other growing global challenges.

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