Corporate Governance and Corporate Financial Failures: Evidence From Pakistan Stock Exchange (PSX)

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ABSTRACT

The purpose of this study is to look into the impact of corporate governance on corporate business failure among Pakistan's publicly traded companies. The study utilized the publicly available corporate governance characteristics data representing explanatory variables along with the three-year negative position in earning per share for the determinant of the business success and failure representing an explained variable. Paired sampling based on 55 successful companies and 55 business failed companies has been used and empirically tested through logistic regression for the period 2010 to 2020. The results reveal that corporate governance mechanisms based on CEO duality and outsider ownership significantly explain the likeliness of business failures of firms. The designed study provides more likeliness of the business failures for the presence of the firms which have the evidence of larger board size and CEO duality. The business failed firms also lack board independence and become a more dispensable activity in the context of agency and stewardship theory. The results of the study support the recent modifications on account of renowned corporate failures to strengthen the adequacy of corporate boards, and their neglected committees. This research lessens the possibility of corporate failures and highlights the proposal of policymakers to enhance board and committee effectiveness. The earlier studies skip the incorporation of a categorical variable to project the corporate failures through logit modelling. This study is the first in its contextual settings to predict financial failures by logit modelling across various industrial sectors that insinuates corporate decision-makers to avoid practices exposing firms to failures.

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1. INTRODUCTION

Corporations play a vital part in the economy by creating employment opportunities, circulating income, contributing to the GDP (gross domestic product) and exports. It is logical to assume that the financial soundness of corporations is vital to enable them in contributing to the smooth functioning of the economy. Corporate failures not only hurt the external and internal shareholders, investors, creditors, and other stakeholders of the organization but also have repercussions for the economic system. In the global arena recent corporate scams urging corporate crises and monetary failures have drawn in the consideration of academicians, policymakers, researchers, and strategy producers to profoundly research the fundamental systems of corporate governance in corporate entities. It's anyone's guess whether the existing corporate administration methods are successful in keeping organizations safe from events leading to failures (Alabede, 2016).

Core, Holthausen, & Larcker, (1999) states that in an organization, the presence of inadequate corporate governance systems might increase the chance of agency issues. Financial failure or distress is sometimes perceived as the humiliating circumstance of being unable to pay mature debts and obligations on debts, which includes liquidity issues, shortage of fairness, default money owing, and a lack of current assets (Hui & Jing-Jing, 2008). The collapse of corporate entities in the majority of cases can pressure the corporations toward financial ruin or else pressured them into bankruptcy (Samanta & Johnston, 2019). Economically distraught organizations are not able to pay out their monetary obligations to the lenders. Furthermore, uncontrolled growth, expansion with inadequate operating capital, negative forecasting methodologies of money floating, and inability to anticipate and estimate cash flows are all factors that contribute to a firm’s bankruptcy. Corporate business failures create several issues which include organization’s income deterioration, higher cost of capital, overoptimistic financial forecasting, and valuation. The ensuing
businesses due to these causalities antagonises the constraint financial resources to run the enterprise processes evenly, inadequate money owed balance and bad debt management.

In response to this dilemma, the organizational theory also explains the theoretical connection of company governance with corporate business breakdown. When the organization is facing a decline in earnings, a mechanism shifts to centralized authority or BOD composition. The characteristic of the BODs, like the proportions of the board, board composition, CEO duality, and director independence would play an important part in helping the firm in steering through a difficult circumstance. The centrality of authority gives rise to the agency problem. According to agency theory, there must be parting of responsibilities amid of Board chairman and CEO (Chief Executive Officer) and is inclined towards separate leadership structure. The purpose is that, if the chairperson and chief executive officer are the same people, there would be no accountability of the CEO's actions which may lead to safeguarding personal interests at the cost of the stakeholders’ interests (Adebayo, Olsula, & Abidoun, 2013).

The current research is based on agency theory. According to the Agency Theory, separating ownership and control structures can improve a firm's financial performance. Berle and Means (1932) also stated that when shares are scattered among minority owners, shareholders cannot control or oversee managerial decisions, resulting in a conflict of interest between principal and agent. The agents (directors) are pursuing their self-interest, such as bonuses, pre-requisites, and other incentives, at the price of the shareholders’ wealth. Managers’ self-centered behaviour lowers the firm’s financial performance and increases the chance of financial difficulty. The association between corporate governance and financial devastation has piqued people’s curiosity, and it has gotten even greater attention in the wake of major company failures in both industrialized and developing nations (Udin et al., 2017 and Majeed, 2019).

Corporate failure is characterized by weaknesses in business operations, strategic decisions, and rapid changes in the business environment. According to Hambrick and Daveni (1992), the major reason for corporate failure is the degradation of the senior management team.

The underlying agency problems due to poor governance also hints at the necessity of accountability and the role of an appropriate audit committee that becomes vital in safeguarding owners’ interests. The literature suggests that an appropriate audit committee should include independent directors (Herbert & Agwor, 2021; Ahmad et al., 2013). There must be three-member of the audit committee. Though odd numbers of members selected they can enhance the position and resources of the audit committee and accomplish the monitoring role (Ahmad, Umer Quddoos Attari, Alban, Sajid Amin, & Umer Quddoos Assistant Professor, 2020 and Alawleq ; & Almsaria, 2021). Insiders refer to executives or directors, who are controlling and regulating administration. Inside directors are the main consideration of this research literature. Although many scholars concluded that the connection between inside directors' existence and an organization’s performance is not undisputed. According to resource dependency theory, it is expected that board size with many links to external surroundings is probable to progress an organizations’ success to numerous resources, which result in enhanced corporate governance and organization performance (Bhatt & Bhattacharya, 2015; Chen, Dyball, & Wright, 2009; Herbert & Agwor, 2021; Jackling & Johl, 2009).

The majority of the corporate financial failures in past arises due to the absence of proper governance mechanism and non-compliance of standard corporate governance framework by firms. This stance, (Wruck, 1990) demonstrates the underlying factors of economic turmoil, poor management, and decline in financial performance that would cause businesses to fail financially. Bad governance processes, according to the Organization for Economic Cooperation and Development (OECD) release, lead firms into a state of economic distress. Likewise, when a corporation is in a critical situation, contemporary regulations, plans, or procedures fail to provide the organization with the necessary monitoring and assessment tools to foster healthy business practices (Mohammad Ali & Mohammad Nasir, 2018). In developing as well as in developed nations, the majority of the scholarly inquiries are conducted to have a look at the relationship between company governance and corporate financial failures (G. & Muthu, 2015; Hassan Al-Tamimi, 2012; Laajili & Zéghal, 2010; Lee & Yeh, 2004; Sabir et al., 2015; Shareef et al., 2017). The study findings cited above uniformly concur that an organization's success is linked to good governance, commercial enterprise agreement openness, moral requirements, felony, and constitutional resolution, powerful decision-making, and genuine financial disclosure.

In industrialized countries, the impact of corporate governance standards on financial distress was empirically investigated in a variety of practical and legal circumstances (including in these countries are USA, Australia, Taiwan, and China). Yet very few inquiries were performed within the contextual settings of developing economies, particularly in emerging Asian economies (Mgammal, Bardai, & Ku Ismail, 2018; Awan, Shah, Khan, & Javeed, 2020). Furthermore, as compared to industrialized and fast-growing countries, developing market corporate governance standards, legal and compliance requirements, and financial disclosure requirements are diverse and vary. Still, the relationship between corporate governance characteristics and financial failures varies by industry and
geographical context. Pakistan's corporate governance mechanism, as an Asian rising market, is distinguished by its precise institutional history, focused ownership, family-controlled businesses, and Anglo-governance style, which creates a different business environment from that of advanced developed countries (Samanta, 2019). Conversely, very few research and scholarly inquiries were reported that empirically tests the relationship between company governance practices and company financial failures in the perspective of emerging economies representing Asia, mainly in the contextual backdrop of Pakistan.

Earlier research studies provide evidence that business failures are increasing due to non-compliance of corporate governance in the true sense (Ashbaugh-skaife & Collins, 2005; Tariq et al., 2014; Indarti, Widiatmoko, & Pamungkas, 2020; Mariano, Izadi, & Pratt, 2020; Ozili, 2021; Saleh, Khatib, & Ibrahim, 2021). The rising rate of bankruptcy is a serious concern for every country. Business failures that give rise to unemployment, and an overall inverse GDP growth. Financial distress happens before bankruptcy, and it is important to direct the attention to rule out the causes and practices that contribute to financial distress set-ups of organizations. Bankruptcy cost is higher for developing countries. Pakistan is a strategically important developing country in South Asia that is facing economic turmoil. The rising rate of bankruptcy can aggravate the problems that the country is facing at the macro and micro levels. Therefore, it is significant to test the connection between corporate governance practices and financially collapsed firms listed on Pakistan Stock Exchange (PSX). The current research finds out the significance of corporate governance practices with the corporate bankruptcy position of listed companies of the Pakistan Stock Exchange (PSX).

For examining the consequences of the poor corporate stature governance set-ups with corporate failures, this research has chosen from Pakistan Stock Exchange the Registered (listed) companies. The population is 563 organizations, and the sample includes 110 non-financial companies. Corporate governance is the independent variable while financial distress is the dependent variable. The study focused on the period of 2010-2020. The corporate governance act in Pakistan was formed in 2002 and it was implemented in the organizations in 2012. Therefore, the data period of 2010 to 2020 is an important period to recognize and identify the progression and impact of corporate governance on corporate failures in Pakistan.

The foremost objective of the research is to examine the standing positions of Pakistani organizations, for the connection between corporate governance set-ups with financial distress. The research outcomes verified that practicing good corporate governance activities can protect organizations from corporate financial failures and bankruptcy. The next section delimitates the comprehensive review of earlier studies on corporate governance and corporate financial failures, followed by the research design and methodology section, discussion of the empirical results and finishes the paper on conclusion and recommendations.

### 1.1 Research objectives

The research is based on the following objectives:

- To investigate the impact of board size on corporate financial failure.
- To investigate the impact of board independence on corporate financial failure.
- To investigate the impact of audit committee independence on corporate financial failure.
- To investigate the impact of audit committee size on corporate financial failure.
- To investigate the impact of CEO duality on corporate financial failure.
- To investigate the impact of liquidity and ownership concentration on corporate financial failure.

### 1.2 Research questions

The research is based on the following objectives:

- What is the Impact of corporate governance mechanism on corporate financial failure in the context of Pakistan?
- What is impact of corporate governance attributes on corporate financial failure?

### 2. REVIEW OF THE EMPIRICAL RESEARCH STUDIES

For the sustenance and nourishment of an organization, Corporate Governance schemes are the navigation agents. The organizations are being controlled and managed efficiently with the help of corporate governance practices. They make the organizations highly focused and directed. The structure of literature regarding corporate governance is based on agency theory and stewardship theory. Corporate Governance can be seen as a systematic way
through which the board of directors monitors the overall performance of the organization to reduce the problems which occur due to the connection of principal-agent to a greater level. It could also be deemed as a monitoring tool for the board of directors, principals, and managers (Mallin, 2004). Furthermore, the agency theory regarding corporate governance has two factors. The first factor is the organization which is the bridge between managers and shareholders. It is up to the organization to select and adopt between stakeholder’s perspective and shareholder’s perspective. Another factor is about those people who are not ready and hesitant to sacrifice their interests for the betterment of others (Daily, Dalton & Cannella, 2003).

Following the loss of significant firms in both developed and developing economies, the link between corporate governance and financial failure drew even more attention. (Udin et al., 2017). There are many causes of business failures but mostly flaws in the company operations, their wrong strategic decision, and abrupt changes in the business environment. Hambrick and Daveni (1992) discussed that one of the major reasons for business failure is the weakness of the strategic management team to take bold decisions for the company’s growth. Multiple studies can be traced out to see the relationship of business failure and corporate governance like Manzaneque et al. (2016) investigating Spanish firms; Miglani et al. (2015) examining Australian corporates; Li et al. (2008) analyzing the Chinese firms; Abdullah and Nahar (2006); and Elloumi and Gueyie (2001) observe the connection between corporate governance and corporate failures. In addition, each day and Dalton (1994), Al-Tamimi and Hassan (2012), Wang and Deng (2006), and Udin et al. (2017) located indecisive outcomes. Hodgson et al. (2011) worked on the same area and concluded that the best practice of CG boosts the financial performance of the company and lowers the risk of bankruptcy. Furthermore, good corporate governance protects shareholders’ interests while also improving the firm’s overall performance by minimizing the cost of capital (Reddy et al., 2010). In likewise study, Luqman et al. (2018) content the implementation of specific corporate governance standards lessons the risk of a company’s financial failure. Their findings show a strong link between corporate financial failures, director holdings, block holder ownership, and the audit committee. According to Donker et al. (2009), the collapse of an enterprise is due to a lack of strong corporate governance and poor shareholder interest. Furthermore, the thesis is bolstered by the findings of Lee and Yeh (2004), who found that weak corporate governance increases the risk of financial failure.

Murhadi et al. (2018) examined the impact of standard governance procedures on corporate failure utilizing 337 companies and 1,685 sample data observations using nonfinancial corporations listed on the Indonesian stock exchange (ISE) for the time frame of 2011 to 2015. The result of the study showed that there is a significant relationship between corporate governance and the firms’ financial failure. Atosh and Iraya (2018) also investigated in the same line and their results also show a significant link between corporate governance and the financial distress in Kenya. Company governance is measured by board size, ownership structure, non-government administrators, and gender diversity. They take a look at unearthed largely terrible affiliation amid non-government and the possibility of monetary debacles. Kalyani et al. (2019) used a sample of one hundred top-rated BSE businesses from the years 2015–2016 to investigate the association between corporate governance and financial distress. Secondary statistics were gathered from the databases of Prowess, Capitoline, CMIE Prowess, and financial statements for the investigation. Those one hundred companies were chosen using judgment sampling and non-random selection procedures. The influence of corporate failure on financial failure was studied using Pearson correlation, multi-regression analysis, and discrete statistics. Altman’s Z-score standard model is used to quantify corporate financial hardship, and the results show a substantial negative relationship between company governance reforms and the likelihood of corporate failure.

Darrat et al. (2016) worked on 217 listed companies for the period of 1996–2006 to examine the impact of CG practices on corporate failures. Their work concluded that a small board size increases the likelihood of financial failure, while a larger board of non-executive directors increases the likelihood of business failure and vice versa. Ernawati et al. (2018) used a sample of 310 Indonesian companies to examine the link between financial failure and CG and their financial performance. Their research worked on the 10 different financial indicators and five CG variables to see if audit committee opinion has a significant positive relationship with financial failure while negative with CEO duality.

Rashid (2020) discovered that foreign ownership and director ownership had a significant impact on both accounting and market-based company performance. He discovered that board length and independence play a role in mediating the link between ownership structure and firm performance. Abdullah et al. found a strong link between the quality of a company’s governance and the risk of economic distress (2019). Moreover, Khurshid et al. (2019) found that managerial ownership, institutional ownership, board length, and board independence all play a significant role in reducing the economic misery of firms listed on the Pakistan stock exchange (PSX). The empirical connection between organizational performance and corporate governance is critically examined by multiple researchers. They have drawn different conclusions (Klapper & Love, 2002; Anda et al, 2005; Gompers et al, 2003; Black et al, 2003;
Claessens et al., 2000; Yermack, 1996; Hafeez et al., 2019). Some researchers found a positive connection between organization performance and corporate governance (Bhagat et al., 2000; Weir et al., 1999). Otherwise, a negative relationship has been found (Albeit et al., 1998). Financial issues were faced by many organizations during the 70s and they also filed for insolvency (Li & Zhong, 2013).

Numerous research studies worked and explored the connection of financial failures with corporate governance from the 80s to the mid-90s. (Gales & Kesner, 1994; Hambrick & D’Aveni, 1988, 1992; Daily & Dalton, 1994; Gilson 1990). The conclusion pointed towards the increasing influence of the analytical forecasted model for insolvency. Overall, the amount of research work done on this literature is comparatively less (Platt & Platt 2012; Chang 2009, Lajili & Zeghal 2010, Fich & Sle Zak 2008, Donoher 2004). The board of directors is independent persons who are liable to answer about particularly different agendas. According to Aglietta and RiberiouX (2004), the knowledge of explicitness is the base of independent directors in any organization. On the other hand, Weisbach (1988) says that the independent director is superior in the hierarchy of organization so the activities of the CEO can easily be screened.

For the composition of the board, the structure is mostly dependent on independent directors (NEDs) of the board. The independent directors (NDs) have no disqualifying connection along with the organization as they are employed and engaged by the organization itself (Basiruddin & Ahmed, 2020; Indarti et al., 2020). CEO Duality means that a single individual is working as both chief operating executive as well as chairman of the corporate governance board (Al Momani, Nour, Jamaludin, & Abdullah, 2021; Alawlaqeh & Almasria, 2021; Borgholthaus, Iyer, & O’Brien, 2021; Gillani, Raza, Humara, & and Siddique, 2021). CEO duality enhances the cost of agency and reinforcement risk (Liu, Qi, & Wang, 2021). So, due to the CEO duality, the corporate board may not take effective decisions and may result in business failures (Gillani et al., 2021). Smaller size boards are working more effectively and efficiently as compared to larger board’s size (Belkhir, 2009; Rahman & Mohamed Ali, 2006; Shukeri, Shin, & Shaari, 2012; Tulung & Ramdani, 2018; Rehman et al., 2019). The composition of the board especially the ratio of the non-executive board members also termed as independent board members have a positive impact on the corporate governance and are likely to predict fewer business failures (Belkhir, 2009; Young, 2000; Yousaf, Jebran, & Wang, 2021).

Independent directors on boards, according to agency theory, can lower these agency costs by monitoring and supervising management’s decision-making (Fama & Jensen, 1983). Independent non-executive directors have reputational capital that incentivizes them to reduce restatement occurrences (Beasley, 1996), hence the board should be mainly made up of them (King Committee, 2016). In times of financial difficulty, independent boards are more inclined to dismiss incompetent management (Daily et al., 2003), therefore better-reflecting shareholders’ interests than inside directors (Fich & Sle Zak, 2008). Furthermore, such board members assist in reducing knowledge asymmetry and the issue of agency between investors and management (Fich & Sle Zak, 2008). Manzaneque et al. (2016) discovered that having fewer independent directors is linked to a higher likelihood of corporate failure. Other researchers, on the other hand, have discovered that independent boards have a detrimental impact on accounting performance (Ammari et al., 2016) and are linked to financial difficulty (Bhabra & Eissa, 2017). Inside directors are more driven to turn around a distressed corporation than independent directors in times of difficulty since they are more in danger of losing their jobs (Fich & Sle Zak, 2008). Furthermore, according to the management hegemony thesis, independent directors’ value contribution is hampered by a lack of strategic market expertise and a lack of time. As a result, independent directors obstruct the strategic vision of executives who are motivated to revive their failing firm. Due to their remoteness from the firm’s activities, Sewpersadh (2020) discovered that having a majority of independent board members reduces a firm’s profitability, amplifying information asymmetry. These constraints limit independent directors’ capacity to help in times of financial difficulty.

The majority of the earlier research studies that examined the association of corporate governance with financial distress were conducted in the context of developed economies. The relationship is relatively unexplored in the context of South Asia Economies, particularly Pakistan. Our research study is considered an important contribution in literature from Pakistan’s context that implemented the best practices as well as corporate governance code better than many developed countries. The given study endeavoured to explain the differences in the practices of corporate governance of financially healthy and financially distressed organizations of Pakistan. The main hypothesis of the study tests the empirical association between the various corporate governance practices and financial failures based on the premise of earlier theoretical and contextual literature.
3. RESEARCH DESIGN AND METHODOLOGY

3.1 Sample Selection

Research studies in the specified area applied mixed techniques, sampling strategies, and different time frames to test the association between corporate governance and financial failure. In our study, we considered all the listed companies in the Pakistan Stock Exchange that had been failed because of bad governance during the period from 2010 to 2020. The rationale for the selection of this time period is multifaceted, first, two leading financial crises occurred during the defined time period that shook the numerous business entities. The second reason is the reporting of leading corporate scams manifesting the implications of the absence of governance mechanisms and finally the introduction, adoption and implementation of corporate governance rules for the public limited entities.

We used Paired sampling technique to conclude the final sample of the study that includes a total of 110 firms out of which 55 represents failed and 55 non-failed firms. Each selected failed firm had a non-failed partner in the sample. The failed firms are paired with the non-failed firms based on the criteria: similar failed years, identical industrial sector, market capitalization, and equivalent asset size. This matching matrix was adopted and consistently used in other studies of corporate failures (Beaver, 1968; Casey and Bartczak, 1985; Charitou et al., 2004; Wilcox, 1973). The definition of the financial failure of the firm was taken from (Hopwood et al., 1988; Lee et al., 2003; Sori and Jalil, 2009 and Abou EI Sood, 2008). The firms in the sample are declared as financially failed if any of the given conditions are satisfied. First, the firm is consecutive reporting losses from the last five years or more, and second, the firm had reported negative cash flows from the last five years or more on a continuous basis. A total of 110 firms were identified and selected out of the given population during the years of determination and based on the sample matching matrix. The final total selected sample consisted of 110 firms: 55 failed and 55 non-failed firms based on defined criteria and for the identified time frame.

3.2 Research Methodology

For estimation purposes, our study used a binary logistic model to empirically test the association between corporate governance elements and financial failure. This is a suitable methodology when the dependent variable is categorical, as in this research study business success and failure are categorical. The model is also called the logit/logistic model or logistic regression. In our model, the dependent variable is made up of zero and one, but binary logistic regressions do not need the independent variable to be interval or unconstrained. Binary logistic regressions, on the other hand, do not require normally or even error terms. As a result, when the normality and homogeneity of variance-covariance assumptions are violated, logistic regression performs better (Hair et al. 1998, and McLeay and Omar 2000). The logistic regression model, according to Collins and Green (1982) and Lennox (1999), performs more correctly on discriminate analysis. Furthermore, compared to discriminate analysis, logistic regression is a better estimation approach (Einsenbeis, 1977). Finally, discriminant analysis was employed by several scholars (Altman and Sabato 2005). The binary logistic model is used to investigate the influence of corporate governance mechanisms on company financial distress in this study. The main rationale for employing a logit model is that it is commonly used in the finance field, and it is also used in economics. The second reason is that the AIC value is smaller (Akaike info criterion). The dependent variable is set to 1 for failed firms and 0 for non-failed firms.

In our research, the dependent variable is “Financial Failure” and is being premeditated through Earning per Share (EPS). In the model binary response for dependent variable EPS is 0 “zero” or 1 “one”, here “0” indicates non-failure organization and vice versa. Like Broye and Moulin (2010), Corporate governance characteristics of director and audit committee independence, size of board and audit committee, the duality of CEO, and recluse ownership are the defined independent variables while the control variables are firm leverage, firm size, and liquidity. The corporate governance index is created using panel logistic regression analysis to investigate the influence of corporate governance mechanisms on business financial distress (CGI). The creation of the index may be done in two ways: weighted and unweighted. The corporate governance index was developed using a weighted approach in this study. The reason for employing this strategy is that empirical data demonstrates that both procedures are closely linked and capture the same impact (Coombs and Tayib, 1998; Wallace and Naser, 1995). To test the link, a logistic regression model is created.

The following specified logistic regression model is used to test the study hypothesis.

\[ g(E(y)) = \alpha + \beta_1 BI_{t,t} + \beta_2 BOD_{t,t} + \beta_3 CD_{t,t} + \beta_4 ACl_{t,t} + \beta_5 ACS_{t,t} + \beta_6 OI_{t,t} + \beta_7 CV_{t,t} + \varepsilon_{t,t} \]  (1)
4. DISCUSSION OF THE EMPIRICAL RESULTS

Table 1 reported the summary descriptive statistics of the independent variables along with t-stat outcomes. The mean results indicate that board independence, the board size, CEO duality of non-failed firms is higher than the failed firms, although audit committee independence, audit committee size, and ownership concentrations are higher in failed firms than non-failed firms. This means that financially failed and non-failed firms report significant differences in terms of various corporate governance elements and as well as for control variables of liquidity, leverage, and firm size. Failed firms report less board independence relative to the non-failed firms. Board size reports relatively fewer differences for both failed and non-failed firms. Furthermore, the findings reveal that the mean difference of CEO duality is significantly positive for failed and non-failed firms. This means that among failed and non-failed firms, there exist significant differences in terms of management structure and CEO duality is practiced more in failed firms relative to non-failed firms.

In terms of the board, size mean values indicate fewer differences for both firms. The findings of the audit committee independence varied across both firms. The committee is more independent in non-failed firms relative to the failed firms. The mean values of the audit committee size and ownership reveal that both firms have identical committee size and ownership concentration. The failed firms are relatively lower in size relative to non-failed firms and in terms of leverage, the failed firms have higher leverage than the non-failed firms that expose those firms to financial distress and bankruptcy. The liquidity position of the failed firms is relatively better than the non-failed firms as indicated in the table. The overall findings suggest that failed firms largely differ from non-failed firms in terms of various governance elements along with key financial characteristics of liquidity, size, and financial leverage. There is a vibrant difference between the mean and standard deviations of the failed and non-failed, maximum and minimum also report the same difference in both groups.

4.1 Descriptive Analysis

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Failure Firms</th>
<th>BI</th>
<th>BOD</th>
<th>CD</th>
<th>ACI</th>
<th>ACS</th>
<th>OO</th>
<th>FS</th>
<th>FL</th>
<th>LIQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>76.35</td>
<td>7.087</td>
<td>0.118</td>
<td>81.905</td>
<td>3.366</td>
<td>0.799</td>
<td>14.80</td>
<td>4.97</td>
<td>2.32</td>
</tr>
<tr>
<td>Sd</td>
<td>20.707</td>
<td>1.604</td>
<td>0.323</td>
<td>23.665</td>
<td>0.766</td>
<td>0.319</td>
<td>1.628</td>
<td>0.236</td>
<td>2.988</td>
</tr>
<tr>
<td>Max</td>
<td>100</td>
<td>14</td>
<td>1</td>
<td>100</td>
<td>6</td>
<td>1</td>
<td>20.132</td>
<td>2.87</td>
<td>52.341</td>
</tr>
<tr>
<td>Min</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-2.857</td>
<td>11.182</td>
<td>0.031</td>
<td>0.047</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Failed Firms</th>
<th>BI</th>
<th>BOD</th>
<th>CD</th>
<th>ACI</th>
<th>ACS</th>
<th>OO</th>
<th>FS</th>
<th>FL</th>
<th>LIQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>80.151</td>
<td>7.861</td>
<td>0.256</td>
<td>79.241</td>
<td>3.206</td>
<td>0.716</td>
<td>15.49</td>
<td>2.63</td>
<td>2.17</td>
</tr>
<tr>
<td>Sd</td>
<td>19.959</td>
<td>1.609</td>
<td>0.437</td>
<td>25.429</td>
<td>0.504</td>
<td>0.554</td>
<td>1.966</td>
<td>1.466</td>
<td>4.792</td>
</tr>
<tr>
<td>Max</td>
<td>100</td>
<td>13</td>
<td>1</td>
<td>100</td>
<td>6</td>
<td>1</td>
<td>17.526</td>
<td>12.163</td>
<td>58.519</td>
</tr>
<tr>
<td>Min</td>
<td>12.5</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>-5.468</td>
<td>9.15</td>
<td>0.017</td>
<td>0.011</td>
</tr>
</tbody>
</table>

Note* Descriptive statistics are calculated for all variables from 2010 to 2020. The BI stands for Board Independence, BOD stands for Board Size, ACI stands for Audit Committee Independence, ACS stands for Audit Committee Size, CD stands for Chief Executive Officer Duality, LIQ stands for Liquidity, OO stands for Ownership, FL stands for Firm Leverage, and FS stands for Firm Size.
4.2 Correlation Analysis

Table 2 reports the results of pairwise correlation among the study variables. The correlation matrix shows that earnings per share is positively related to board independence, CEO duality, and firm leverage and is significant. The negative relationship between Board, Audit committee independence, audit committee size, ownership concentration, firm size, and liquidity with EP indicates that companies with a lack of focus on these governance parameters can confront dilution in performance. The negative association further indicates that the companies consider governance as the important parameter to drive the performance in both short-run and long-run, size and liquidity parameters tend not to be the key exigent of the corporate failure in line with the Abdallah and Ismail (2017). The negative association between board independence and EPS supports the implications of stewardship theory. The firms with serious agency issues are more likely to confront corporate and financial failures.

The relationship displayed among the explanatory variables reports mixed results. The matrix shows the positive and significant relationship of BOD with BI and significant negative of BI with CD whereas, other pair relation turns insignificant that eliminate the chance of autocorrelation among explanatory variables. Similarly, BOD shows a significant positive and negative relationship with CD, ACI, ACS, OO, and FS. CD reports a significant negative relation with ACI, ACS, and positive with FL. ACI reports a significant positive relationship with ACS, OO, and LIQ. The overall findings of the correlation matrix indicate that among the governance parameters BI, CD, ACI and OO can significantly turn the targeted companies either into success or into failures. The three control variables can also contribute to the distress of the identified companies if the matters of liquidity, leverage, and size are ineffectively managed. The correlation matrix is presented below in the table.

Table 2: Pairwise Correlation

<table>
<thead>
<tr>
<th></th>
<th>EPS</th>
<th>BI</th>
<th>BOD</th>
<th>CD</th>
<th>ACI</th>
<th>ACS</th>
<th>OO</th>
<th>FS</th>
<th>FL</th>
<th>LIQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>0.086*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD</td>
<td>-0.008</td>
<td>0.101*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>0.174*</td>
<td>-0.167*</td>
<td>-0.127*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACI</td>
<td>-0.051*</td>
<td>0.036</td>
<td>0.106*</td>
<td>-0.11*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACS</td>
<td>-0.106</td>
<td>0.056</td>
<td>0.371*</td>
<td>-0.136*</td>
<td>0.160*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OO</td>
<td>-0.095*</td>
<td>0.059</td>
<td>0.11*</td>
<td>-0.058</td>
<td>0.121*</td>
<td>0.09*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>-0.325*</td>
<td>-0.008</td>
<td>0.235*</td>
<td>-0.067</td>
<td>0.034</td>
<td>0.372*</td>
<td>0.183*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FL</td>
<td>0.328*</td>
<td>-0.046</td>
<td>0.038</td>
<td>0.261*</td>
<td>-0.063</td>
<td>-0.088*</td>
<td>0.035</td>
<td>-0.288*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>LIQ</td>
<td>-0.073</td>
<td>-0.045</td>
<td>-0.0168</td>
<td>-0.063</td>
<td>0.091*</td>
<td>-0.005</td>
<td>-0.006</td>
<td>-0.145*</td>
<td>-0.129*</td>
<td>1</td>
</tr>
</tbody>
</table>

1 * Indicates the significant at 0.05

4.3 Logistic Regression

The results of binary logistic regression are presented below, where the dependent variable is a dummy variable (main dummy = failure, reference dummy = non-failure). Results are shown for failed and non-failed firms. The null hypothesis is tested in which multiple R2 = zero, regression coefficients = zero. For missing values data has been screened, before analysis valuation of assumptions is taken. No missing data is there.

The logit analysis outcomes specify that variation in DV has a substantial percentage (failure companies as main dummy and non-failure as reference dummy) and is explained by IV (Independent Variable). IVs are B&ACI (board & audit committee independence), BS&ACS (Board & audit committee size), CD (duality of chief executive officer), OO (outcast ownership). Results indicate that board independence and CEO duality are significant predictors of the likeliness of the non-failure of the firms. The table below reported the odd ratios of the independent variables. If the odds ratio is greater than 1, it means that this variable is more likeliness related to the dependent variables than those of odd ratio less than 1. The table indicates that board independence and CEO duality is significantly explaining the variations of the dependent variables and their odd ratios also indicating that any unit change in these variables predicts more likeliness to the business failure of the firms. So, these corporate governance variables indicate more likeliness of the business failure than the remaining variables. These results are aligned with the results of Lakshnan and Wijekoon
Two control variables are also significant which are the use of financial leverage and firm size. The firm size odd ratio is less than 1 which indicates that although it is a significant variable but less likely to predict the business failure the odd ratio of the financial leverage is higher than all, which indicates that leverage is the highest likelihood to predict the business failure.

### Table 3: Binary Logistic Regression

<table>
<thead>
<tr>
<th></th>
<th>Odd ratio.</th>
<th>St. Err.</th>
<th>t-value</th>
<th>p-value</th>
<th>[95% Conf Interval]</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI</td>
<td>1.023</td>
<td>.007</td>
<td>3.45</td>
<td>.001</td>
<td>1.01</td>
<td>1.036</td>
</tr>
<tr>
<td>BOD</td>
<td>1.103</td>
<td>.089</td>
<td>1.22</td>
<td>.224</td>
<td>.942</td>
<td>1.293</td>
</tr>
<tr>
<td>ACI</td>
<td>.999</td>
<td>.005</td>
<td>-0.29</td>
<td>.775</td>
<td>.989</td>
<td>1.008</td>
</tr>
<tr>
<td>CD</td>
<td>2.076</td>
<td>.681</td>
<td>2.23</td>
<td>.026</td>
<td>1.092</td>
<td>3.948</td>
</tr>
<tr>
<td>ACS</td>
<td>1.142</td>
<td>.229</td>
<td>0.66</td>
<td>.507</td>
<td>.771</td>
<td>1.691</td>
</tr>
<tr>
<td>OO</td>
<td>.676</td>
<td>.166</td>
<td>-1.60</td>
<td>.111</td>
<td>.418</td>
<td>1.094</td>
</tr>
<tr>
<td>FS</td>
<td>.709</td>
<td>.059</td>
<td>-4.14</td>
<td>0</td>
<td>.603</td>
<td>.834</td>
</tr>
<tr>
<td>FL</td>
<td>120.172</td>
<td>66.886</td>
<td>8.60</td>
<td>0</td>
<td>40.368</td>
<td>357.741</td>
</tr>
<tr>
<td>LIQ</td>
<td>1.045</td>
<td>.031</td>
<td>1.51</td>
<td>.132</td>
<td>.987</td>
<td>1.108</td>
</tr>
<tr>
<td>Constant</td>
<td>.304</td>
<td>.413</td>
<td>-0.88</td>
<td>.381</td>
<td>.021</td>
<td>4.363</td>
</tr>
</tbody>
</table>

Pseudo r-squared | 0.327  
Chi-square | 233.023  
Number of obs | 571.000  
Prob > chi2 | 0.000  

*** p<.01, ** p<.05, * p<.1

The panel logit model was used to investigate the impact of corporate governance mechanisms on financial failures. The corporate governance index and control variables were used to model business financial failures. The findings of this study reveal that there are significant associations between corporate governance practices and financial failures, and our findings are in support of the research hypothesis. Our findings show that CEO duality has a negative and significant impact on financial distress, and these findings are backed up by Simpson et al., (1999) and Daily et al., (1994b), who discovered that CEO duality has a significant relationship with corporate failure probability while controlling for firm size and other factors. In the context of board compositions, our findings suggest that there are no meaningful relationships. Monk et al. (2000) study matched our findings. According to Liang (2000), the size of a company's board of directors has no bearing on corporate failures. Teall (1993); Diamond and Verrecchia, (1991); Verrecchia, (2001) found that corporate governance characteristics such as the proportion of independent directors, ownership structure, and other corporate governance traits such as managerial ownership, the board size, and CEO duality have an impact on corporate performance. Abdullah (2006) looked at ownership structure in Malaysia using shares owned by executive directors as a proxy; non-executive directors were used as a proxy and found no significant links between ownership structure and financial failures as found in our study.

Financial failure is also influenced by board independence. Our findings are backed up by Mangena and Chamisa (2008), Chung, and Kim (2005), who showed that board independence is adversely related to business survival and that independence minimize the likelihood of financial crisis and improve managerial efficiency. Another reason for the minimal results might be that businesses rely largely on debt funding. Furthermore, the Pakistani market is in a critical economic scenario. As a result, that macroeconomic issue has a stronger impact on the chances of a firm's survival (Cadbury, 2002).

The control factors (firm leverage and firm size) have a statistically significant influence on financial failure, according to these findings. As a consequence, these findings align with those of Parker et al. (2002) and Wang et al. (2006). They claim that inadequate liquidity circumstances in companies enhanced the likelihood of a financial crisis. Sales returns that are higher minimize the likelihood of discomfort (Cadbury, 2002). According to our findings, there is a statistically significant link between corporate governance procedures and the likelihood of financial trouble. However, our data show that company-specific variables such as return on sale and liquidity have a substantial effect on the likelihood of financial trouble.
5. CONCLUSION AND RECOMMENDATION

Despite the government's efforts to impose good corporate governance mechanisms, many Pakistani enterprises remain poorly controlled and ultimately collapse financially. This dilemma demands the imposition of effective governance reforms and their strategic implementation in corporate entities. In this stance, the results of our study indicate that board independence is significantly explaining the likeliness of the failure of the Pakistani companies. According to Dalton, Daily, Johnson, and Ellstrand (1999) external directors cannot be fully independent so they might not emulate independence as a definition we have. So, independence of BOD is the ability to show the directions to the company but not the use of the power of the CEO decisions which eventually may cause the organization failure in the company. Future research can be done to see the supremacy between the role of directors and CEOs in the same area of research.

CEO duality is also one of the major factors for the determination of the likeliness of the business failure, so it is also recommended that shareholders and government should focus on this issue and try their best to be a separate of CEO and board chairman in Pakistan firms. Thus, the study is useful for practitioners and regulatory bodies for enforcing good corporate governance practices to avoid financial failure. These practitioners can enhance their decision, policies, evaluations, and reformation process. However, there are several limits to our findings. Researchers believe that including more corporate governance criteria will increase the data's reliability and generalizability. Second, we investigate non-financial enterprises for 10 years (2010–2020); however, the results may alter if the sample size is raised, and the data set is extended. Other governance indicators, such as director salary, directors' shareholding, audit, remuneration, or other board committees, presence of women directors on the board, qualification, and age of the directors, may be included in the future to develop a corporate governance index.

In the perceptive of investors, this study helps to explore the likelihood of corporate failure. And provide an alternative measure for corporate failure. In addition, investors must consider the influence of large stakeholders on firm decisions. The current study also provides evidence that firm-specific characteristics could be useful in determining the likelihood of corporate failure. Our findings may be of interest to those academic researchers who wish to discover the quality of corporate governance practices in a developing market such as Pakistan and its impact on financial distress.

Forthcoming research studies on this area could investigate the period before and after the adoption of the code of corporate governance and governance reforms and corporate failures. Further to explore the cross-country and cross-continental differences in corporate governance practices and their impact on corporate financial performance.

REFERENCES
Shah et al. Corporate Governance and Corporate Financial Failure......


