

## Corporate Governance as Antecedent of Financial Distress: Case Study of Textile Industry of Pakistan

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### ABSTRACT

**Purpose:** The present research studies the effect of corporate governance practices on the level of financial distress of the Textile companies listed at PSX.

**Design/Methodology:** Data from 2019 to 2022 from a sample of 43 companies operating in the weaving, spinning and composite textile industry was assessed in the study. Regression analysis was used to predict the impact of board independence, board size, audit committee independence and duality in the role of CEO and chairman on the financial distress.

**Findings:** The findings reveal that board independence, board size and the duality in the role of Chairman and CEO impacts the financial distress level of the companies and that in companies wherein governance structure is strong, the likelihood of financial distress is lower. However, the effect of Audit committee independence is found to be insignificant in this study.

**Originality:** This study provides support to the companies in understanding the importance of governance structure and its significance in reducing financial distress level. The findings of the study will be of value to the companies operating in textile sector by enabling them to strengthen their governance structure to address the financial distress situation. Further, this study will help the regulators in drafting the governance requirements for the companies and also educating them about the importance of the latter. In future, other studies using different proxies of corporate governance like gender diversity in the board, number of board meetings and characteristics of audit committee may be conducted..

**Keywords:** Audit Committee Independence, Board Independence, Board Size, CEO/ Chairman Duality, Financial distress

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## INTRODUCTION

The performance of the corporate sector is of prime importance to any developed or developing country as it is one of the indicators of the development of the countries (Mustafa et. al, 2017). It is the efficiency of the corporate sectors that defines their performance and ultimately contributes to the overall national development. The performance of the industries is the major revenue generating source for a country and is a major factor that influences the overall output in an economy. This in turn influences GDP of the country which is a prime indicator of the development of the country. Hence, it is of utmost importance to detect signs of financial distress early (Paula-Vianez et. al., 2020).

Financial distress is a point where the company is unable to fulfill its financial obligations (Badlin & Scot, 1983). According to Zaki et. al. (2011), financial distress is a period wherein a borrower does not have sufficient funds to meet the contractual liability of its creditor. The reasons of distress can be factors specific to the borrower like earnings instability, reputation, or it may be due to the factors specific to the market such as economic conditions, political instability or shift in taste. Financial distress is a state wherein a company has problems paying its debts and faces serious solvency problems (Constantin et al., 2018).

There are many factors that can lead an organization towards financial distress. Corporate governance is one such factor that can impact the financial distress and hence remains one of the areas that has captured the attention of researchers (Younas et. al., 2021). Corporate governance can also be defined as the principles and processes that will provide a strategic direction to the operations of a company (Abdullahi, 2000). According to Jarbouei et. al. (2015), corporate governance is the system to monitor and direct the managerial actions in an organization. In the recent past, there have been many cases of company failure due to poor governance (Alabede, 2016). According to Core et al. (1999), incidences of agency problem can increase in companies with a weak corporate governance system. When a company has a weak governance structure, there is high probability of the company falling into financial distress (Wruck, 1990; Permatasari, 2000).

The major portion of the GDP of Pakistan is generated from the textile industry. In the past, Pakistan was the leading exporter of goods produced by textile industry. The textile industry is considered the backbone of the country's economy due to three main reasons. The first is its connection with the Pakistan's agriculture sector, which is the most important sector of Pakistani economy. Textile industry is the largest buyer of cotton generated by the agriculture industry. Secondly, Textile industry is the biggest manufacturing industry of the country. Its contribution is identifiable in the development of both the large-scale sector and the SME sector. The textile sector generates the largest employment in the manufacturing sector of Pakistan. Thirdly, it is the country's largest exporting industry. Despite this, Memon et. al (2020) note that the textile industry of Pakistan is in distress as the government is not serious in addressing its needs. One such gap is the governance requirements of the industry. It also includes defining internal governance parameters for the industry so that it can

take decisions in this state of distress which can ultimately lead to its revival. The reason of crisis of a company can be macroeconomic factors like exchange rate, inflation, monetary policy and unemployment in the country. On the other hand, the reasons can be firm-specific, ranging from governance structure and poor financial management to poor relations with business partners (Michalkova et. al., 2018). The role of governance structure in industries facing financial distress such as the textile industry of Pakistan is unexplored in the literature. Hence, this research is an attempt to study the impact of corporate governance practices of textile industry of Pakistan on the financial distress level.

## **Hypothesis Formation**

### **Corporate Governance and Financial Distress**

Worldwide corporate failures have assayed the need for the strong corporate governance practices was highlighted (Wahab et. Al, 2011). Earlier research has also pointed to a direct relationship between the bankruptcy of a company and corporate governance characteristics, comparing financially distressed firms with financially healthy firm and concluding that company's CG policies and the financial distress faced by them are linked (Daily and Dalton,1994).

Studies within the Chinese context have found the existence of the negative connection between board characteristics and financial distress (Li et al, 2008) and the effect of corporate governance (CG) on financial distress of the companies in Taiwan (Lee & Yeh, 2004). The results of both studies reveal the possibility of financial distress rises in the businesses having weaker CG practices. In the context of Egypt, Shahwan (2015) investigated the connection between the CG practices and the financial distress level, revealing the incidence of a negative connection between the CG practices and the chance of the financial distress in a company while cautioning that the conclusiveness of the findings is limited due to the sample size. Shahwan suggests that such relationship may be studied in different time frame and different sample size to better generalize the relationship between the practices of good CG and the financial distress.

### **Board Size and Financial Distress**

Board parameters are believed to be the key area of corporate governance (Bhagat & Black, 2001). With more directors in the company, the level of experience and the knowledge in the company's board increase and such boards are likely to take better strategic decisions (Hillman & Dalziel, 2003). Hence it is claimed that boards that has more number of members have higher expertise, experience, gender diversity, nationality and the level of education. This implies that such companies that have a higher board size have a better capacity to make better strategic level decisions that lead them to gain competitive advantage in the industry. Previously, number of researchers have investigated that higher boards tend to have better financial

performance which in turn lead to low level of financial distress in the companies (Kiel & Nicholson, 2003). It can be argued that the firms that have larger board size are lesser financially distressed compare to the firms with the lower number of board members. Based on the arguments, it is hypothesized that:

*H1: Board size has a negative effect on the financial distress of a company in Textile Sector of Pakistan.*

### **Duality and Financial Distress**

Hambrick and D'Aveni (1992) argued that dominance of a CEO is a weak practice in CG and can lead to greater level of financial distress and chances of bankruptcy in organizations. Elloumi and Gueyie (2001) stated that the powerful CEO may not influence change even when required. This leads to worsening of financial distress level of an organization. When the CEO of a company is not able to achieve as per the hopes of the BODs, the board is left with two choices, whether they can demote the CEO of the business or sack him/her. Evidence is more in favor CEO dismissal when the CEO is not able to meet the expected performance level and company reaches a stage of financial distress (Weisbach, 1988). In the companies with the stronger boards, there are often split of the posts of CEO and chairman so that CEO can concentrate on the company's operation and regulatory matters are dealt by the chairman (Malette & Fowler, 1992). The CEO in such companies is free from the worries of regulatory issues and can put all his efforts so improve the company's processes. Such companies have a better chance of increase financial results and such corporations are least likely to find themselves in the situation of financial distress. Rechner and Dalton (1991) analyzed the profitability ratios of different companies and concluded that the firms that have different positions for the CEO and the chairman perform better than the companies with joint position. On the basis of above arguments, following hypothesis can be proposed:

*H2: Duality in the role of CEO and Chairman negatively affects the financial distress level of listed Textile companies of Pakistan*

### **Composition of Board and Financial Distress**

Many advocates of corporate governance reforms have suggested that to increase the effectiveness of the board, boards need to have a higher proportion of independent directors. (Zahra & Pearce, 1989; Monks & Minow, 1991). Board independence is a key to improve the financial conditions of organizations (Elloumi & Gueyie, 2001). It is argued that independent directors do not have conflict of interests with that of shareholder and therefore shareholders are likely to desire more independent directors to take strategic decisions in an unbiased (Hermalin & Weisbach, 1988). By this companies can also resolve agency problem that they are facing. In boards, where percentage of non-executive directors is high are likely to make brave choices in case company reaches state of financial distress like the change of CEO because their all

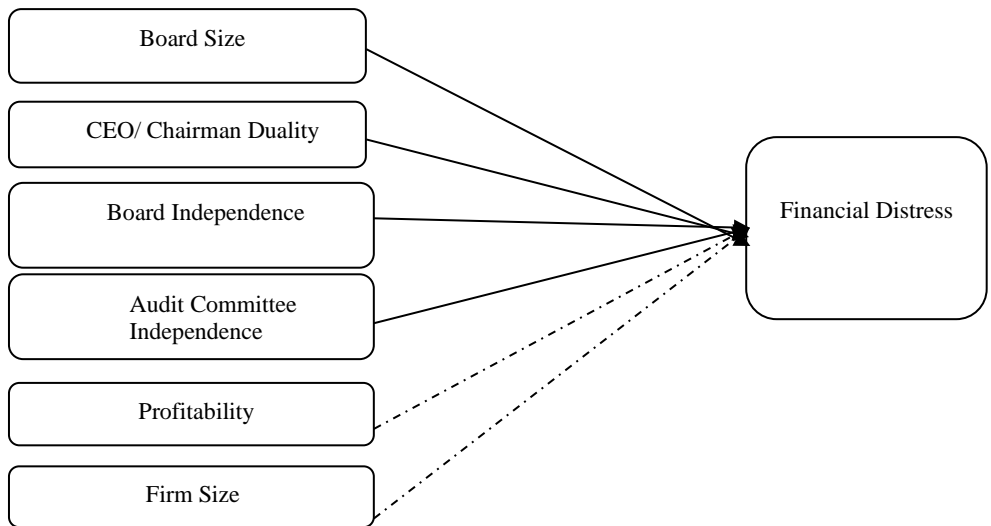
the emphasis is on reviving the company rather than benefitting the management personnel at the cost of shareholders' wealth (Shivdasani, 2004). Hence, the companies that have higher non-executive directors in their board are more determined and their planning is adequate for avoiding any situation of financial distress that can deter the image of the business publicly. Hence, the following hypothesis is proposed:

*H3: Higher proportion of the non-executive directors in the board has a negative effect on the financial distress in Pakistani Textile Companies*

### **Audit Committee Independence and Financial Distress**

According to Smith and Liou (2007), most of the corporate failures are due to the discrepancies between the expected results claimed by the management and then disappointed actual financial results. Audit committee is formed in companies to monitor internal audit functions and to ensure the integrity of financial statements (Darko et. al. 2016). The role of the audit committee is critical as it looks at the overall process of financial reporting and ensures to prevent any fraudulent financial results (Johl et. al., 2012). It is evident that financial distress level increases in a company if any fraudulent financial reporting is done and it becomes publicly know. According to Huang and Chang (2013), independent directors are critical for the enhancing the efficiency of audit function. The directors who are not directly involves in the operations of a company acts more objective in their decision making and are more concerned about the overall betterment of the company rather than a few stakeholders (Husnin et. al. 2016). Therefore, audit committee independence is critical to ensure the integrity which is essential to avoid the situation of bankruptcy and financial distress. It is the desire of the shareholders that the company's board may comprise of more independent directors so that conflict of interest in minimized in the decision making process and best decisions for the company can be taken (Hermalin & Weisbach, 1988). One of the most important committees working under the supervision of the board is the audit committee. Hence, it is better to have a greater proportion independent directors in the audit committee for supervision of internal and external audit functions of the company and ensuring of unbiased and transparent committee decision making. Hence, the probability of predicting any adverse situation at right time is higher and timely steps can be taken by the company to avoid any state of financial distress. The better CG reduces the inherent risk and the control risk in an entity, which leads to reduced level of audit efforts. Hence, the agency cost reduces and the overall efficiency of a company increases in financial terms (Yatim et. al., 2006). Hence, following hypothesis is proposed:

*H4: Higher representation of independent directors in the audit committee of Pakistani Textile Companies negatively affects the financial distress level*



*Figure 2.1: Model of the study*

## **Research Methodology**

This research is quantitative in nature and applies positivism based as it is on the analysis of quantitative secondary data. The population of the study includes all the listed companies in the Textile Sector of Pakistan. Pakistani textiles industry can be split into 3 main segments: spinning, weaving and composites. The focus of this study is Textile Companies of Pakistan and hence data of the listed companies in the Textile Industry has been used. In total, there are 129 companies in the Textile Industry of Pakistan that are listed at PSX. Random sampling is employed to select the company. Companies are arranged in order of their market capitalization. Every third company was selected for analysis randomly. Hence, sample size includes 43 companies. In total 43 companies were analyzed for the years 2019 to 2022. Hence, total observations for analysis were 172. In this study, data from year 2019 to 2022 is used for analysis over the latest four years in order to ensure applicability of results. Secondary data is obtained from the financial statements of each company. The financial statements were available in the annual report of each company which were extracted from each company website.

### ***Measures of variables***

In total, study involves 7 variables. 6 variables are independent and one is the dependent variable. Measurement used for the variables are listed below:

#### ***Board Size***

It is the arithmetical sum of the board members of the company. It is argued that more quantity of members in the board leads to better corporate performance (Abor, 2007).

### ***Board Independence***

Board independence is the proportion of the no. of non-executive directors in the company's board.

### ***Audit Committee Independence***

No. of non-executive members in the Audit committee of a company is called Audit Committee Independence.

### ***CEO/Chairman Duality***

CEO/ Chairman Duality mean that the post of CEO and Chairman in a company is kept by two different individuals. To measure CEO/ Chairman Duality, dummy variable is used in our study. If post of CEO and Chairman is held by two different persons value "1" is given to the company otherwise value "0" is given.

### ***Profitability***

Ability of a firm to earn profit is called profitability. Company's success is often measured by profitability (Zubairi, 2010). In this study, profitability has been used as a controlled variable. Profitability is measured by the ratio 'Return on Assets (ROA)'.

### ***Firm Size***

Firm size is measured by taking the natural log of total sales of the company in the particular financial year.

### ***Financial Distress***

Financial distress is the state of the company when they lack ability to payback its loans. Altman Z-score is the most used proxy for measuring the financial distress level of a company (Yi, 2012). One of the techniques that is widely used to measure financial soundness of a company is Altman Z-score (Moreno, 2021). In this research, Altman Z-score is calculated for each company to measure the state of financial distress of the company. The original model introduced by Altman (1968) to predict the state of financial distress in a company.

It should be noted that calculated Z-Score value is a negative measure of financial distress i.e. the lower Z-Score implies that there is more likelihood of bankruptcy and it can be said that such company is more financially distressed. Altman suggested that if the values of the z-score for the company is lower than 1.80, such company is highly distressed firm. If the score for the firm is above 3, such company is in good financial state.

Measurement of variable used in the study is precisely given in the table as follows:

*Table 3.1: Measurements*

Variable	Measurement
Board Size (BS)	Natural logarithm of no. of directors in the company's board

Board Independence (BI)	$\frac{\text{No. of Non – Executive Directors in Board}}{\text{Total Number of Board Members}}$
CEO/ Chairman Duality (DUAL)	Dummy Variable that has value “1” when CEO and Chairman are not the same persons otherwise “0”
Audit Committee Independence (ACI)	$\frac{\text{No. of Non – Executive Directors in Audit Committee}}{\text{Total Number of Members of Audit Committee}}$
Profitability (PROF)	$\frac{\text{Net Profit}}{\text{Total Assets}}$
Firm Size (FZ)	Natural log of total sales
Financial Distress (FD)	Altman Z-Score

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### *Econometric Model*

The econometric model tested in the study is shown below:

$$FD_{it} = \alpha + \beta_1(BS)_{it} + \beta_2(BI)_{it} + \beta_3(DUAL)_{it} + \beta_4(ACI)_{it} + \beta_5(PROF)_{it} + \beta_6(FZ)_{it} + \varepsilon_{it}$$

## **Results**

### *Descriptive Statistics*

The table includes mean and median of the data. Maximum and minimum value for each variable is also given. Standard deviation is show to report the variability in the data. “Column N” represents the number of observation for the data. In our study, number of observation is 172 i.e. 43 companies from 2019 to 2022.

*Table 4.1: Descriptive Statistics*

Variables	N	Mean	Median	Max	Min	Std. Dev.
FD	172	1.981	1.934	2.581	1.006	0.194
ACI	172	0.830	1.000	1.000	0.000	0.224
BI	172	0.686	0.714	1.000	0.000	0.218
BS	172	2.123	2.079	2.639	1.945	0.203
DUAL	172	0.104	0.000	1.000	0.000	0.306
FZ	172	15.440	15.35	19.78	11.99	1.475
PROF	172	0.288	0.229	1.800	-0.23	0.278



### Correlation Matrix

Analyzing the relationships of independent variables with financial distress, the association between audit committee independence and financial distress is approximately 18% and is positively correlated. Here it is again stressed that measure of financial distress in Altman Z-score. Score is higher for lesser financially distressed firm. So the relationship means higher the Audit Committee independence lower the financial distress. Similarly board size, CEO duality and profitability have a positive correlation with financial distress measure. It actually means that board size, CEO duality and board size increase will mean lower financial distress. Only firm size is showing negative relationship with financial distress and this means financial distress was found higher in the higher sized firms. A detail of the correlation between the variables is given in the table given below:

Table 4.2: Correlation Matrix

Variables	Financial Distress	Audit Committee Independence	Board Independence	Board Size	CEO/Chairman Duality	Firm Size	Profitability
FD	1						
ACI	0.188	1					
BI	0.201*	0.780	1				
BS	0.223***	0.261*	0.275***	1			
DUAL	0.134**	-0.130**	-0.153*	-0.173	1		
FZ	-0.162***	0.027*	0.080	0.223**	-0.078	1	
PROF	0.168**	-0.007	-0.163*	-0.065	0.258**	-0.118	1

\*\*\* Significant at 1%, \*\* Significant at 5%, Significant at 10%

### Regression Results

Regression results of the study are reported via Table 4.3 given below:

Table 4.3: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Intercept	1.73	0.190	9.087	0.000
ACI	-0.010	0.100	-0.103	0.918
BI	0.183	0.104	1.749	0.082
BS	0.241	0.072	3.317	0.001
DUAL	0.096	0.047	2.036	0.043
FZ	-0.026	0.009	-2.80	0.005
PROF	0.108	0.052	2.04	0.042
R <sup>2</sup>	0.175			

Adj - R <sup>2</sup>	0.145
S.E.	0.179
RSS	5.32
Log likelihood	54.86
F-statistic	5.85
Probability	0.000

### **Dependent Variable: Financial Distress**

The audit committee independence on the financial distress is insignificant so we can say that financial distress in the Textile companies of Pakistan do not depend of Audit committee independence. The board independence has a significant positive relationship with the financial distress. Altman Z-score value is higher when the financial distress is less in the firm. Hence, it is interpreted from the results that board independence impact to lower the financial distress level of the company. Similarly, board size has a positive impact of the financial distress values that means in firm where the board size is higher financial distress is lesser. CEO/ Chairman duality is also showing the positive impact on the financial distress values (measure through Altman Z-score) that again mean duality in the role CEO and Chairman leads to lower financial distress in a company. Firm size and profitability was used as the controlled variables for the study. Results showed that higher size of the firm impacts financial distress values negatively that means higher the size of the firm more will be the financial distress level of the company. Profitability however leads to lower financial distress levels in the companies.

### **Discussion**

Drawing upon analysis of data from a sample of 43 companies listed at Pakistan stock exchange (PSX), the study examined the effect of CG practices on the financial distress level of the listed Pakistani Textile companies. The study found that higher board size decreases the financial distress level in a company. Larger boards tend to have more skill, knowledge, education and experience with them and hence they are skilled to take better decisions and grab the opportunities in the environment. These boards use their diverse knowledge and experience to foresee and take countermeasures to avoid financial distress. However, these results are inconsistent with the findings of studies carried out by some researchers (e.g. Lipton & Lorch, 1992; Yermack, 1996).

Duality in the role of CEO and chairman also causes reduction in financial distress level. These results are in agreement with Daily and Dalton (1994) and Parker et al. (2002). Duality in the role of CEO and Chairman means that the conflict of interest is lower in such companies and such companies can take decisions on merit and keeping in view the overall strategic goals of the company (Younas et. al., 2021). Further, when the role of chairman and CEO is not segregated CEO become much more influential

and can exert pressure on the decisions of the independent directors. Hence, companies where CEO and chairman role is segregated are much more likely to avoid the situation of financial distress as the decisions are likely to be taken for the best interests of the overall company and not in the interest of any particular group of stakeholders. In companies where the role of CEO and the Chairman is segregated, CEO can focus on the strategic and operational decisions better and hence such companies are less likely of being financially distressed.

Existence of more independent directors in the board has found to cause a decrease in financial distress. This is consistent with the arguments of number of previous researchers (Daily & Dalton, 1994; Li et al., 2008). Board independence means that conflict of interests in such boards is minimized and such boards are more inclined to undertake unbiased decisions. Muranda (2006) has argued that independence level of the board reduces the imbalance of power and hence the purposes of board meet effectively leading to lower financial distress level. The findings of this study are consistent with his results. Salloum and Azoury (2012) also had similar finding when tested on the companies of Lebanon.

Statistically, no effect of Audit committee independence was found on financial distress of the Textile companies listed at PSX. This may be because in reality the decisions of the audit committee are dependent on the performance of other factors like internal controls of the company and the strength of internal audit department. The factors are more dependent on the management decisions rather than on the independence of audit committee. Therefore, our study found no impact of audit committee independence on the financial distress of a company. The result of the study is consistent with that of Jamal and Shah (2017).

### *Recommendations*

On the basis of the outcomes and conclusion of the study, it is recommended that a stronger governance structure of the companies can help them avoid the situation of financial distress. Even if they experience financial distress, companies with the good CG structure have stronger chances of resolving the situation. So it is recommended that companies must construct a strong governance structure for sustainability of their operations. In current situation, where in Textile industry of Pakistan, most companies are facing financial distress. It is the duty of the regulator to intervene and influence textile industry in transforming their governance structure in a way that they can make better decisions for the sustainable operations and profitability. Currently, the governance requirements are not optimal in Pakistan. As there is public company involved in listed companies, government can induce necessary governance requirements for listed companies so that they can have optimal governance structure to deal with the state of financial distress.

### *Limitations of the study*

Firstly, this study used certain measures of CG while excluding other measures due to limitations of scope. Secondly, this study is specific to the textile sector of Pakistan,

thus limiting the generalizability of the findings to other industries. Thirdly, within the present study, Altman Z-score is used as a measure of financial distress which is an internal measure. To extend the research, external measures such as reports published by the regulators to classify firms in state of financial distress could be used.

### *Future Research Directions*

In the future, more studies can be conducted using different proxies of corporate governance like gender diversity in the board, number of board meetings and characteristics of audit committee. Also comparative studies can be done making inter-industry comparisons or inter-country comparisons with the developed countries. More studies can be conducted in different contextual environment to justify the relationships between the variable. Furthermore, such studies can be done at different time span to confirm that the relationship between the variables remain same in the long run. Future studies can also segregate the financially distressed firms from firms which are financially stable and then compare the effect of governance structure within those firms.

### **References**

- Abdullahi, S.A. (2000). Distress in Nigerian Banking Sector: A critical assessment of its nature, causes and extent. *Unpublished manuscript. Department of Business Administration.*
- Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms. *Corporate Governance, 7*(1), 83-92.
- Alabede, J.O. (2016). Effect of board diversity on corporate governance structure and operating performance: evidence from the UK listed firms. *Asian Journal of Accounting and Governance, 7*, 67-80.
- Altman, E. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance, 23*(4), 589-609.
- Baldwin, C. & Scott, M. (1983). The resolution of claims in financial distress: the case of Massey Ferguson. *Journal of Finance, 38*, 505-16.
- Bhagat, S. & Black, B. (2001). Non-correlation between board independence and long-term firm performance. *Journal of Corporation Law, 27*, 231-274.
- Constantin, A., Peltonen, T.A. & Sarlin, P. (2018). Network linkages to predict bank distress. *Journal of Financial Stability, 35*, 226-241.
- Core, J.E., Holthausen, R.W. and Larcker, D.F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics, 51*(3), 371-406.
- Daily, C.M. & Dalton, D.R. (1994). Bankruptcy and corporate governance: the impact of board composition and structure. *Academy of Management Journal, 37*, 1603-1617.
- Darko, J., Aribi, Z.A, & Uzonwanne, G.C. (2016). Corporate governance: the impact of director and board structure, ownership structure and corporate control on the performance of listed companies on the Ghana stock exchange. *Corporate Governance, 16*(2), 259 - 277

- Elloumi, F. & Gueyié, J.P. (2001). Financial distress and corporate governance: an empirical analysis. *Corporate Governance: The International Journal of Business in Society*, 1(1), 15 – 23
- Hambrick, D.C. & D'Aveni, R.A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38(10), 1445-1466.
- Hermalin, B.E. & Weisbach, M.S. (1988). The determinants of board composition. *RAND Journal of Economics*, 19(4), 589-606.
- Hillman, A.J. & Dalziel, T. (2003). Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383-396.
- Huang, H.H. & Chan, M.L. (2013). Long-term stock returns after a substantial increase in the debt ratio. *Applied Financial Economics*, 23(6), 449-460.
- Husnin, A.I., Nawawi, A. & Salin, A.S.A.P (2016). Corporate governance and auditor quality – Malaysian evidence. *Asian Review of Accounting*, 24(2), 202 – 230
- Jamal, A.H. & Shah, S.Z.A. (2017). The impact of corporate governance on the financial distress: Evidence from Pakistani listed companies. *Jinnah Business Review*, 5(2), 49-53
- Jarboui, S., Guetat, H. & Boujelbène, Y. (2015). Evaluation of hotels performance and corporate governance mechanisms: empirical evidence from the Tunisian context. *Journal of Hospitality and Tourism Management*, 25, 30-37.
- Johl, S.K., Subramaniam, N. & Zain, M. (2012). Audit committee and CEO ethnicity and audit fees: some Malaysian evidence. *The International Journal of Accounting*, 47(3), 302-332.
- Kiel, G.C. & Nicholson, G.J. (2003). Board composition and corporate performance: how the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11(3), 189-205.
- Lee, T. S. & Yeh, Y. H. (2004). Corporate governance and financial distress: evidence from Taiwan. *Corporate Governance*, 12(3), 378-388.
- Li, H., Wang, Z. & Deng, X. (2008). Ownership, independent directors, agency costs and financial distress: Evidence from Chinese listed companies. *Corporate Governance*, 8(5), 622-636.
- Lipton, M. & Lorsch, J. (1992). A modest proposal for improved corporate governance. *Business Lawyer*, 48, 59–77.
- Mallette, P. & Fowler, K.L. (1992). Effects of board composition and stock ownership on the adoption of poison pills. *Academy of Management Journal*, 35(5), 1010-1035.
- Memon, J.A. & Aziz, A. & Qayyum, M. (2020). The Rise and Fall of Pakistan's Textile Industry: An Analytical View. *European Journal of Business and Management*, 12(12), 136-142
- Michalkova, L., Adamko, P. & Mišanková, M. (2018). The Analysis of Causes of Business Financial Distress. 10.2991/feb-18.2018.12.
- Monks, R. A. G. & N. Minow (1991). Power and Accountability. *Harper Business*, New York.

- Moreno, I., Parrado-Martínez, P. & Trujillo-Ponce, A. (2022). Using the Z -score to analyze the financial soundness of insurance firms. *European Journal of Management and Business Economics*. ahead-of-print. doi: 10.1108/EJMBE-09-2020-0261.
- Muranda, Z. (2006). Financial distress and corporate governance in Zimbabwean banks. *Corporate Governance: The International Journal of Business in Society*, 6(5), 643 – 654.
- Mustafa, G., Fatima, S., Noor Ul Ain & Saleem, S. (2017). The Role of Corporate Governance on the Performance of Pakistan Textile Industry. *Sci.Int.(Lahore)*, 29(1), 291-296
- Parker, S., Peters, G.F. & Turetsky, H.F. (2003). Corporate governance and corporate failure: A survival analysis. *Corporate Governance: The International Journal of Business in Society*, 2(2), 4 – 12
- Paule-Vianez, J., Gutiérrez-Fernández, M. and Coca-Pérez, J.L. (2020). Prediction of financial distress in the Spanish banking system: An application using artificial neural networks. *Applied Economic Analysis*, 28(82), 69-87. <https://doi.org/10.1108/AEA-10-2019-0039>
- Permatasari, I. (2020). Does corporate governance affect bank risk management? Case study of Indonesian banks. *International Trade, Politics and Development*, 4(2), 127-139. <https://doi.org/10.1108/ITPD-05-2020-0063>
- Rechner, P. & Dalton, C. (1991). CEO duality and organizational performance: a longitudinal analysis. *Strategic Management Journal*, 12, 155–160.
- Salloum, C. & Azoury, N. (2012). Corporate governance and firms in financial distress: evidence from a Middle Eastern country. *International Journal of Business Governance and Ethics*, 7(1), 1-17.
- Shahwan, T.M. (2015). The effects of corporate governance on financial performance and financial distress: evidence from Egypt. *Corporate Governance*, 15(5), 641 - 662
- Shivdasani, A. (2004). Best practices in corporate governance: what two decades of research reveals. *Journal of Applied Corporate Finance*, 16(2), 29-41.
- Smith, M. & Liou, D. (2007). Industrial sector and financial distress. *Managerial Auditing Journal*, 22(4) 376 – 399.
- Wahab, E.A.A., Zain, M.M. & James, K. (2011). Political connections, corporate governance and audit fees in Malaysia. *Managerial Auditing Journal*, 26(5), 393 - 418
- Weisbach, M. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20(2), 431-460.
- Yatim, P., Kent, P. & Clarkson, P. (2006). Governance structures, ethnicity, and audit fees of Malaysian listed firms. *Managerial Auditing Journal*, 21(7), 757-82.
- Yermack, D. (1996). Higher market valuation of companies with a small board of Directors. *Journal of Financial Economics*, 40(2), 185–211.
- Younas, N., UdDin, S., Awan, T. & Khan, M.Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. *Corporate Governance*, 21(4), 702-715. <https://doi.org/10.1108/CG-04-2020-0119>

- Yi, W. (2012). Z-score model on financial crisis early-warning of listed real estate companies in China: A financial engineering perspective. *System Engineering Procedia*, 3(1), 153-157.
- Zaki,E., Bah, R. & Rao, A. (2011). Assessing probabilities of financial distress of banks in UAE. *International Journal of Managerial Finance*, 7(3), 304 – 320.
- Zahra, S. A. & J. A. Pearce (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15, 291-334.
- Zubairi, H. J. (2010). Impact of working capital management and capital structure on profitability of automobile firms in Pakistan. *Finance and Corporate Governance Conference 2011 Paper*.