THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

The Influence of Corporate Governance Practices on Financial Distress of Firms Listed at the Nairobi Securities Exchange: Moderating Influence of Financial Leverage

Manduku Ogwoka Geoffrey
Ph.D. Candidate, Department of Business Studies, Rongo University, Kenya
Dr. Jonathan M. Mulwa
Senior Lecturer, School of Business and Human Resource Development, Rongo University, Kenya
Dr. Jonathan W. Omolo
Senior Lecturer, School of Business and Human Resource Development, Rongo University, Kenya
Dr. Leonard Rang'ala Lari
Lecturer, School of Business and Human Resource Development, Rongo University, Kenya

Abstract:
Corporations across the world continue to experience financial distress, which has led corporate stakeholders to question the existing corporate governance mechanisms. Financial distress is not a good phenomenon and generally results in loss of wealth. Based on the agency theory, the resource dependence theory and the stewardship theory, the study sought to investigate the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress. The study used secondary data derived from the audited financial statements and annual reports of companies listed at the Nairobi Securities Exchange for a ten year period from 2008 to 2017. Panel regression analysis techniques and descriptive statistics were used to analyze data. The study was undertaken using an ex-post facto explanatory research design. The results of the study indicate that financial leverage has a significant moderating influence on the relationship between corporate governance practices and financial distress. Based on these findings, the study recommends that corporate managers should aim at achieving optimal debt levels that balance beneficial and adverse effects.

Keywords: *Corporate governance, financial distress, financial leverage*

1. Introduction

There has been an increasing interest in corporate governance over the last three decades to the extent that it has become a global phenomenon. The main driver of evolution of corporate governance has been corporate failures, (Martin, 2017). According to Alexandru and Iulia (2011) most corporations in the world have collapsed because of poor governance practices such as inflated earnings, expenses booked as capital expenditure, looting by management and improper share deals.The collapse of large and trusted corporations like Enron (2001),Worldcom (2002), Parmalat (2003), Global Crossing Limited (2002) and Tyco International Limited (2002) provide evidence of the consequences of weak corporate governance structures, (Victor, 2014).

Corporate governance refers to the process and structure used to direct and manage the business and affairs of a firm towards enhancing prosperity and corporate accountability with the ultimate objective of realizing the long term value of shareholders while taking into account the interest of other stakeholders, (The Capital Markets Authority, 2018). The main concern in the corporate governance framework is the accountability of key persons in corporations, (Abdullah, Muhammad and Karren, 2016). A good system of corporate governance guarantees that corporate activities and management policies are in line with the interest of shareholders and all stakeholders in general, (Bernard, 2003; Shleifer and Vishny, 1997). It concerns itself with the appropriate board structure, processes and values to cope with the ever increasing demands of stakeholders, (Alexandru and Iulia, 2011). Essentially, all firms need good governance to ensure that they are run well and that their managers are responsible and accountable, (Youssef and Bayoumi, 2015). However, bad corporate governance practices may results in firms experiencing the detrimental impact of financial distress.

Financial distress is a global problem that has afflicted both developed and developing economies, (Baimwera and Muriuki, 2014). Financial distress refers to a situation when a company is experiencing failure and in which the rate of return is less than the cost of capital, (Lakshan and Wijekoon, 2012). It refers to a state of affairs when a company's cash flows are not sufficient to repay principal and interest of debt and may occur when the firm's equity becomes negative,

(Lee and Yeh, 2004). Agrawal (2015) describe financial distress as the inability of an entity to meet its financial obligations as and when they fall due or does so with difficulties. Ching-Chun *et al*. (2017) argue that financial distress is not limited to a firm's ability to repay its debt obligations but a sequence of other events that may occur before a firm defaults. Such events reduce performance and eventually eat into equity of a firm to the extent that it's not able to service debt obligations. Wu, Liang and Yang (2008) view financial distress as a condition when the firm is faced with negative cumulative earnings for at least few consecutive years. Financial distress encompasses severe liquidity problems that can't be resolved without a sizeable rescaling of the entities structure or operations, (Odhiambo and Ochieng, 2018).

Kenyan has also witnessed a number of corporate collapses, which include Lonhro East Africa Ltd in 2009, Uchumi Super Markets Ltd in 2006, Kenya Planters Cooperative Union in 2006, East African Packaging Company in 2003 and Dunlop Kenya in 2001, (Capital Markets Authority, Statistical Bulletins-2000-2018). Besides, corporations in Kenya continue to experience financial distress as verified by the delisting of firms and the placement of some under statutory management, (Mwengei and Kosgei, 2017). The economic cost of financial distress is significant and impacts adversely on all stakeholders, (Bairathi, 2009). The major stakeholders in a company tend to lose most of their investment. Creditors may receive partial or no repayment of their initial loans depending on whether it was secured or unsecured, the government collects less corporate and personal taxes and social problems may abound, (Hafiz and Desi, 2017). Many firms in financial distress downsize their work force, resulting to households losing income vital for livelihood. In some instances, the government spends millions of public funds in bailouts. Stock prices of distressed firms decline leading to a reduction in the wealth of shareholders. Firms in the financial turmoil may not pay dividends and may not honor their debt obligations as and when they fall due. According to Julio and Luis (2005) when companies go through financial distress, they have a contagion effect and could negatively affect economic stability of other sectors. Further, the decline in performance of the listed firms leads to lower economic development thus becoming a significant hindrance to the realization of economic blueprints.

2. Theoretical Perspectives of Corporate Governance

The study used the agency theory, the resource dependency theory and the stewardship theory to explain the relationship between corporate governance practices and the likelihood of financial distress.

2.1. The Agency Theory

The agency theory, formulated by Jensen and Meckling (1976), is based on the idea that in modern corporations there is separation of ownership and control, resulting in agency costs associated with resolving conflicts between owners and agents. In this arrangement, the shareholders (principal) engages managers (agent) to run the corporation on their behalf and this involves delegating some decision making authority to them. Jensen and Meckling (1976) explains that since both parties to the relationship intend to maximize their utility, then it's more likely that the agent will not endeavor to uphold the interest of the principal. According to Trond, (1993) perfect alignment of interest between the shareholders and managers is impossible and consequently each party will always try to maximize his own interest to the detriment of the other party. Managers cannot be expected to exercise the same vigilance in the management of the firm as the owners and therefore there will always be a divergence of interest, (Jensen 1983). Nevertheless, the shareholders can decide to control divergences from their interest by incurring agency costs, which are the sum of monitoring costs, bonding costs and the residual loss, (Williamson, 1988).The agency theory views managers as opportunistic and inclined to consume perquisites at the expense of the shareholders and thus predicts a direct relationship between corporate governance and financial distress.

2.2. The Steward Theory

The theory, developed by Freeman (1984), describes a convergent relationship between corporate owners and managers. It's based on the assumption that there is no conflict of interest between owners and managers and therefore suggests that managers will always act in good faith, since they realize that they are active and mutual players. According to theory managers are not opportunistic agents, but good stewards, who will act in the best interest of the owners. Contrary to the agency theory which focuses on control and conflict, the stewardship theory focuses on cooperation and collaboration, (Sundaramuthy and Lewis, 2003). The directors acting as stewards are concerned with acting honorably and doing the right things. The gist of the theory is service for others and not self-interest, (Stout, 2003). The theory holds that managers, if left on their own, will act as responsible stewards of the assets of the firm they control, (Davis, Schoorman and Donaldson, 1997). The agent in the steward theory is self-actualizing and focused on higher needs. They place the organization ahead of their personal needs and are trusty, (Keay, 2017). The theory describes a convergence of interest between managers and owners and consequently predicts an inverse influence of corporate governance practices on financial distress.

2.3. Resource Dependency Theory

The resource dependency theory, by Pfeffer (1972), postulates that organizations have a varying degree of dependence on the environment, especially for the resources they need to operate. Uncertainty and dependence propel an organization to proactively manage its environment. The theory views the board of directors as the means to manage external dependency (Pfeffer and Salancik, 1978), reduce external uncertainty, (Pfeffer, 1972) and reduce the transactional costs associated with environmental interdependency (William, 1984). According to Pfeffer (1972) ownership structure and board size are not random or interdependent factors but are rational organizational responses to

the conditions of the environment. The theory concentrates on the external role and linkages of the board of directors, who come from diverse independent organizations and are supposed to play a critical role in securing essential resources for the firm, (Abdullah and Valentine, 2009). According to the theory, organizations can always respond to negative effects on their environment and thus predicts an inverse association between corporate governancepractices and financial distress.

3. Data and Methodology

The study used an *ex-post facto* explanatory research design and targeted all firms listed at the Nairobi Securities Exchange over the period 2008 to 2017.

The study utilized managerial shareholding, block ownership, board tenure, board size, board activity, board independence, board diversity and institutional investors as constructs of corporate governance practices.Board tenure was conceptualized by the average number of years a director has served as a member of the board of directors in line with studies by Mwengei and Kosgei (2017), Charbel and Nehme (2012), Maere *et al*. (2014) and Zahra, Jamal and Muhammad (2018). Board size was hypothesized by the number of members sitting on the board of directors. Consistent with studies by Mangena and Tauringana (2008), Dissanayke *et al.* (2017), Zahra, Jamal and Muhammad (2018) board activity was represented by the average number of meetings held by the board in a year. On the other hand, Board independence was represented by the proportion of independent members in the board. Board diversity includes characteristics of the board such as the mix of skills, gender, age, ethnicity and geographical orientation. The study adopted the gender perspective of diversity, which was measured by the ratio of female directors to the size of the board, (Sangeeta Mittal and Lavina, 2018; Salloum and Azoury, 2012; Carter, Simkins and Simpson, 2003).Managerial shareholding refers to the shareholding held by the company's management who actively participate in the making of corporate decisions, (Martin, 2017). Institutional investors are specialized financial institutions which manage savings on behalf of investors, (Ching-Chun *et al.*2017) and the variables were indicated by the proportion of their shareholding. Block owners refers to the owners of large volume of a firm's stock and are able to influence the company's decisions by virtue of their voting rights, (Ongore and K'obonyo, 2011; Donker, Santen and Zahir (2009). The study operationalized block ownership by the percentage of equity held by the largest five shareholders.

According to Balcsen and Ooghe (2006) several accounting and financial measures have been used to identify financially distressed firms. These include the suspension of payment of dividends, negative net operating income, negative earnings before interest and tax, negative shareholders' funds, major restructuring or retrenchment and low interest coverage ratio, (Sri, 2017;Manzaneque, Priego and Merino, 2016; Khalida, Muhammad, Sadaf, Umar and Imtiaz, 2018; Geng, Bose and Chen (2015). Nevertheless, the study used the reciprocal of the distanceto default Z score to measure the likelihood of financial distress. As proposed by Laeven and Levine (2009), the study computed the distance to default for each company as follows;

$$\text{Distance to Default Z score} = \frac{\text{CAR} + \text{ROE}}{\sigma\,(\text{ROE})}$$

Where:

CAR- is the firm's capital asset ratio, ROE is the return on assets, σ (ROE) is the standard deviation of return on equity

The study utilized financial leverage as moderator in evaluating the influence of corporate governance practices on financial distress. According to Fabozzi and Drake (2009) financial leverage encapsulates the extent to which an entity employs debt and equity in its capital structure. Consistent with studies by Frah, Muhammad and Zeenet (2013), George, Tabitha and Tobias (2018), Aideed and Muzaffar (2018) and Amirhossein and Ali (2017)financial leverage was indicated by the debt ratio.There isempirical evidence to suggest that firm size significantly influences the probability of financial distress, (Polsiri and Sookhanphibarn, 2009; Amato and Burson, 2007; Ooghe and Prijcker, 2008;Serrarsquerio and Nunes, 2008). Thus the study incorporated firm size as a control variable, which was measured by the natural logarithm of total assets.

The study conducted a moderator analysis in order to determine whether the relationship between corporate governance practices and financial distress depends (is moderated by) on financial leverage. As recommended by Baron and Kenny (1986) the study included the product terms of the moderator and the various indicators of corporate governance practices in the regression model as shown below;

$$Y_{it} = \alpha_i + \beta_1 SZ_{it} + \beta_2 BC_{1\,it} + \beta_3 BC_{2\,it} + \beta_4 BS_{1\,it} + \beta_5 BS_{2\,it} + \beta_6 BS_{3\,it} + + \beta_7 OS_{1\,it} + \beta_8 OS_{2\,it} + \beta_9 OS_{3\,it} + B_{10} L_{it} + \beta_{11} L*BC_{1\,it} + \beta_{12} L*BC_{2\,it} + \beta_{13} L*BS_1 + \beta_{14} L*BS_{2\,it} + \beta_{15} L*BS_{3\,it} + \beta_{16} L*OS_{1\,it} + \beta_{17} L*OS_{2\,it} + \beta_{18} L*OS_{3\,it} + \varepsilon_{it}$$

Where;

i= the company analyzed, ranging from 1 to 41, *t*= time in years from 2008 to 2017,

β_1- β_{18} are slope coefficients, α_i -the intercept coefficient, Εit – Error term, Y_{it} -Financial distress, SZ_{it} -Firm Size, $BC_{1\,it}$ - Board independence, L_{it} - Financial leverage, $BC_{2\,it}$ - Board diversity, $BS_{1\,it}$ - Board size, $BS_{2\,it}$ - Board tenure, $BS_{3\,it}$ - Board activity, $OS_{1\,it}$ -Block ownership, $OS_{2\,it}$ - Managerial ownership, $OS_{3\,it}$ - Institutional ownership.

Secondary panel data was obtained from the audited reports of the listed firms for ten years from 2008 to 2017. A census of all the 65 firms listed at the Nairobi Securities Exchange provided the population of the study. However, firms with incomplete information were eliminated in the final analysis, leaving a sample of 41 firms. Panel regression analysis technique and descriptive statistics were used to analyze data. Table 1 presents the descriptive statistics of the data.

Variable	Minimum	Maximum	Mean	Std. Deviation
Financial distress	-1.7533	9.0522	0.2398	0.0851
Board diversity	0.01	1.50	0.21	0.19
Board independence	0.42	0.87	0.51	0.16
Board size	4.00	16.00	8.29	2.68
Board Tenure	0.08	9.40	6.32	3.77
Board activity	3.00	16.00	5.81	2.70
Block ownership	0.35	0.92	0.67	0.19
Managerial ownership	000	0.30	0.05	0.025
Institutional ownership	0.32	0.98	0.71	0.14
Financial leverage	0.08	6.60	0.65	0.45

Table 1: Descriptive Statistics of Variables
Source: Research Data (2020)

4. Statistical Quality Tests

The study used panel data that requires testing for multicollinearity, normality of random errors and stationarity, (Field, 2009; Williams, Gomez and Kurkiewicz, 2013). The Augmented Dickey- Fuller unit root test (Dickey and Fuller, 1979) and Philips-Peron unit root test was used to determine whether a unit root is present in the panel data, (Gujarat, 2004). The variables were found to be stationery. The test for multicollinearity was conducted using correlation analysis and all the correlation coefficients were established to be below 0.8, (Gujarat (2004) .To test for the normality of errors the study used the Jarque-Bera test. The errors were normally distributed as the probability values for each variable was greater than the significance level of 5%.

The study conducted the Hausman test to determine the appropriate model between the random effect and the fixed effects. Bothe fixed and fixed models were initially estimated and the random effect was found to be the appropriate model, hence the results shown hereafter are based on the random model, (Hausman, 1978).

5. Results and Discussion

The results presented in table 2 shows that firm size has a significant influence on financial distress of firms listed at the Nairobi Securities Exchange, (p-value = 0.0400< 0.5). Additionally, the coefficient of firm size is positive, (β = 0.0335), signifying a direct control influence of firm size on financial distress. This implies that large firms, as measured by the magnitude of their assets, have a high likelihood to experience financial distress relative to small firms. This result concurs with prior empirical studies, (Amato and Burson, 2007; Parker, Peters and Turetsky, 2002). On the contrary, studies by Donker, Santen and Zahir (2009) document a statistically inverse influence of firm size on financial distress of firms listed on the Amsterdam Stock Exchange. Studies by other scholars such as Turetysky and McEwen (2001), Yu (2006) and Rommer (2004) did not find any evidence that firm size has a significant effect on the likelihood of financial distress.

The result shown in table 2 confirm that the product term between board diversity and financial leverage is significant as the p-value, (p = 0.025), is less than 5% level of significance. The coefficient of the relationship between board diversity and financial distress is 0.2519, which is further enhanced when the moderator is introduced, (β= 0.6566). The coefficient of the product term between board diversity and financial distress is positive, which suggest that financial leverage has a direct moderating influence on the relationship between board diversity and financial distress of firms listed at the Nairobi securities Exchange, (NSE) for the period 2008 to 2017. Moreover, the regression results indicate that the p-value of the product term between board independence and financial leverage is significant, (p- value = 0.016< 0.05). Based on this finding, the study submits that financial leverage has a significant moderating influence on the relationship between board independence and financial distress. The beta value for the relationship between board independence and financial distress is negative, (-2.0097). When the variable is subjected to moderation, the coefficient of the product between financial distress and board independence is reduced to -2.6195. In consequence, financial leverage has an inverse moderating influence on the relationship between board independence and financial leverage. This implies that increasing financial leverage, leads to reduction in the strength of the relationship between board independence and financial distress.

The relationship of the product between board size and financial leverage is significant as evidenced by the p-value of 0.018, which is below the level of significance. The coefficient of the product term between board size and financial leverage is positive, (β= 0.0613), which indicates that financial leverage has a direct moderating influence on the association between board size and financial distress. It's worth noting that the coefficient of board size prior to the introduction of the moderator is negative, (β = -0.0312), and the introduction of the moderator changes the relationship from inverse to direct. Nevertheless, this result contradicts the findings by Aideed and Muzaffar (2018) who found an insignificant moderation effect of financial leverage on the relationship between board size and financial distress. Results in table 2 shows that financial leverage has a significant moderating influence on the association between board tenure and financial distress. This assertion was arrived at by the examination of the p- value of the product term between board tenure and financial leverage, (0.032), which is less than the 0.05 significance level. Similarly, the coefficient of the product term between board tenure and financial leverage is negative, (β = -0.0803), implying an inverse influence of financial leverage on the association between board tenure and financial distress. An increase in the level of financial distress, leads to reduction in the strength of the relationship between board tenure and financial distress.

Table 2 provide evidence that financial leverage has a significant influence on the link between board activity and financial distress, (p-value = 0.001 < 0.05). This result confirms finding by Aideed and Muzaffar (2018) who found a significant moderating effect of financial leverage on the relationship between board activity and financial distress. Besides, the coefficient of the product term between board activity and financial leverage is negative, (β= -0.1747), suggesting an inverse moderating influence of financial leverage on the relationship between board activity and financial distress. An increase in the level of financial leverage leads to a reduction in the strength of the relationship board activity and financial distress. The coefficient of the primary relationship is direct, (β = 0.1026), which changes to inverse upon the introduction of the moderator. There is a significant moderating influence of financial leverage on the association of between block ownership and financial distress as the corresponding p-value (0.000) is below 0.05. The coefficient of the product term (block ownership and financial distress) is negative, (β = -6.2973), inferring an inverse moderating influence of financial leverage on the association between block ownership and financial distress. An increase in the level of financial leverage leads to a reduction in the strength of the relationship between block ownership and financial distress. Further, the results indicate that the introduction of the moderator reduces the coefficient of the primary model from -2.6403 to -6.2973 in the secondary model.

The p-value of the product term between managerial ownership and financial leverage, (0.0453), is below the significance level, signifying that financial leverage has a significant impact on the association between managerial ownership and financial distress. Besides, the coefficient of the product term between managerial ownership and financial leverage is positive, (β =0.8148), inferring a direct moderating influence of financial leverage on the relationship managerial ownership and financial distress. The result means that an increase in the proportion of financial leverage leads to an increase in the strength of the association between managerial ownership and financial distress. Furthermore, the introduction of the moderator to the primary model changes the relationship from inverse (β = -0.5316) to direct, (β =0.8148). Further, the regression results depict a significant influence of financial leverage on the link between institutional ownership and financial distress, (p- value = 0.000 < 0.05). The coefficient of the primary model is -4.162. However, the introduction of financial leverage decreases its value to -7.4089. The negative coefficient implies an inverse influence of the moderator on the relationship between institutional ownership and financial distress.

On its own financial leverage has a significant but direct influence on financial distress, (β= 0.7744, p-value= 0.015). This implies that for firms listed at the Nairobi Securities Exchange, the higher the level of financial leverage, the higher the risk of financial distress whereas low levels of financial leverage reduce the risk of financial distress. As pointed out by Amato and Burson (2007) financial leverage comes with a cost and one of the primary costs is the risk of financial distress. The scholars support a direct relationship between financial leverage and financial distress. In the opinion of Pratheepkanth (2011) financial leverage may not be solely responsible for financial distress, but it's a significant contributor. This is, however, contrary to proponents of the agency theory who see debt as a critical mechanism for solving agency problems and thus would minimize rather than increase the risk of financial distress, (Ward and Price, 2006). Similarly, thefindings of the study, in respect to the influence of financial leverage on financial distress, contradict prior empirical studies. Umar *et al*. (2012) in their study of firms listed on the Karachi Securities Exchange asserted that financial leverage had a significant but inverse influence of the degree of financial distress. Similar studies by Gupta, Srivastava and Sharma (2014) on firms listed on the Indian Stock Exchange found out that that financial distress is significantly but negatively related to financial leverage.

Overall, the results presented in 2 show that the coefficients of the interactive variables (product terms) are all statistically significant, which further testament that the interaction between corporate governance practices and financial leverage has a significant moderation effect on financial distress of firms listed in the Nairobi Securities Exchange, (Fairland Mackinnon, 2009). The results of the study confirms the findings by Aideed and Muzaffar (2018) who found a significant moderating effect of financial leverage on the relationship between corporate governance practices and financial performance. Similar findings were recorded by Amirhossein and Ali (2017) who report that financial leverage significantly moderates the relationship between corporate governance and financial performance. On the other hand, some scholars argue that financial leverage has no moderating impact on the relationship between corporate governance and financial distress. In particular, empirical studies by Frah, Muhammad and Zeenet (2013), George, Tabitha and Tobias (2018), Amirhossein and Ali (2017) suggest that financial leverage does not moderate the relationship between corporate governance and financial distress.

Variables	Coefficient	P>|t|
Constant	0.8023 (0.750)	0.454
Firm Size	0.0335 (1.700)	0.040
Board Diversity	0.2519 (0.570)	0.025
Board Independence	-2.0097 (-1.440)	0.049
Board Size	-0.0312 (-0.980)	0.028
Board Tenure	-0.0116 (-0.100)	0.918
Board Activity	0.1026 (2.600)	0.009
Block Ownership	-2.6403 (-2.330)	0.02
Managerial ownership	-0.5316 (-0.620)	0.532
Institutional Ownership	-4.162 (-2.680)	0.007
Financial Leverage (L)	0.7744 (0.560)	0.015
Board Diversity * L	0.6566 (1.110)	0.025
Board Independence * L	-2.6195 (-1.380)	0.016
Board Size * L	0.0613 (1.340)	0.018
Board Tenure * L	-0.0803 (1.340)	0.032
Board Activity * L	-0.1747 (-3.310)	0.001
Block Ownership * L	-6.2973 (-3.940)	0.000
Managerial ownership * L	0.8148 (0.620)	0.0453
Institutional Ownership * L	-7.4089 (-4.290)	0.000
Statistics		
R-squared	0.1529	
Wald-statistic	63.820	
Prob. (Wald-statistic)	0.000	

Table 2: Panel Regression Results
Notes: The Results Shown Are from Random Effects; T Value in Parenthesis
Source; Research Data, 2020

6. Conclusions and Recommendation

The study concludes that financial leverage has a significant moderating influence on the relationship between corporate governance practices and financial distress of firms listed at the Nairobi Securities Exchange. Therefore, the importance of leverage cannot be overemphasized since it's an important factor in determining the relationship between corporate governance practices and the likelihood of financial distress. Corporate managers, in consequence, need to establish the optimal levels of financial leverage that optimizes the benefits relative to its costs.

7. References

i. Abdullah, H., & Valentine, B. (2009). Fundamental Ethics: Theories of Corporate Governance, *Euro Journal Publishing, Middle Eastern Finance and Economics*, 4(92), 208-254.
ii. Aideed, B. & Muzaffar, A. (2018). Moderating Effect of Leverage on the Relationship between Board Size, Board Meetings and Performance: A Study on Textile Sector of Pakistan. *American Scientific Research Journal for Engineering, Technology and Sciences*, 19-29.
iii. Alexandru, P. & Iulia, P. (2011). Failure of corporate governance –intention or negligence. *Journal of Applied*

Business Systems, 2(4), 171-184.
iv. Agrawal, K. (2015). Default Prediction Using Piotroski's F-score. *Global Business Review*, 16(5), 175-186.
v. Amato, L. H., & Burson, T. E. (2007). The effect of firm size on profit rates in the financial services, *Journal of Economics and Economic Education Research*, 8(1), 67.
vi. Amirhossein, T. N., & Ali, T. N. (2017). The Mediation Effect of Financial Leverage on the Relationship between Ownership Concentration and Financial Corporate Performance, *Iranian Journal of Management Studies*, 10 (3), 697-714.
vii. Atty, A. M., Moustafasoliman, M. & Youssef, A. E. (2018) The Effect of Board of Directors Characteristics on Firm's Financial Performance: An Empirical Study on the Most Active Firms in the Egyptian Stock Exchange. *Open Access Library Journal*, 5.
viii. Balcaen, S. and Ooghe, H., (2006). 35 years of studies on business failure: An overview of the classic statistical methodologies and their related problems. *British Accounting Review.*
ix. Baimwera, B. & Muriuki, A. M. (2014). Analysis of corporate financial distress determinants: A survey of non-financial firms listed in the Nairobi Stock Exchange. *International Journal of Current Businessand Social Sciences*, 1(2), 58-80.
x. Bairathi, V. (2009). Corporate Governance: A Suggestive Code. *International Research Journal*, 11(6), 753-754.
xi. Baron, R. M., & Kenny, D. A., (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
xii. Cadbury, A. (1992). Codes of best practice, report from the committee on financial aspects of corporate governance. London, Gee Publishing.
xiii. Carter, D. A., Simkins, B. J. & Simpson, W. G. (2003). Corporate Governance, Board Diversity, and Firm Value. *Financial Review*, 38(1), 33-53.
xiv. Capital Markets Authority, (2018, December 31). Capital Markets Authority Quarterly Statistical Bulletin-Q4. *www.cma.or.ke*
xv. Charbel, S., & Nehme, A. (2012). Corporate governance and firms in financial distress: evidence from a Middle Eastern country, *International journal of Business Governance and Ethics*, 7 (1).
xvi. Ching-Chun*et al.*(2017). The Relationship between Ownership Structure and the Probability of a Financial Distress Warning Happening: Evidence of Listed Common Stock Companies in Taiwan. *Applied Economics and Finance*, 4 (1).
xvii. Davis, J., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47.
xviii. Dickey, D. A. & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association 74*: 427–431.
xix. Donker, H., Santen, B. & Zahir, S. (2009). Ownership structure and the likelihood of financial distress in the Netherlands. *Applied Financial Economics Journal,* 19(2), 1687-1696.
xx. Fabozzi, F. J. & Drake, P. P. (2009). *Capital markets, financial management, and investment management*, (178). London: John Wiley and Sons.
xxi. Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law & Economics,* 26(2), 327-349.
xxii. Field, A. (2009). *Discovering Statistics using SPSS*. (3rd ed), Sage, London.
xxiii. Fondas, N. & Sassalos, S. (2000). A different voice in the boardroom: How the presence of women directors affects board influence over management. *Global Focus12*: 13–22.
xxiv. Frah, S., Muhammad, B., S., & Zeenet, M. (2013). Corporate governance and financial performance: A study of moderating effect of firm size and leverage on the relationship between corporate governance and financial performance in banking sector in Pakistan. *Jinnah Business Review*, 1 (2), 40-46.
xxv. Freeman, R., E. (1984). *Strategic management: A stakeholder approach*. Boston, Pitman Publishers.
xxvi. Geng, R., Bose, I. & Chen, X. (2015). Prediction of Financial Distress: An Empirical Study of Listed Chinese Companies Using Data Mining. European Journal of Operational Research, 241, 236-247.
xxvii. George, G. M., Tabitha, M. N., & Tobias O. (2018). Does capital structure have a mediation effect on ownership structure and financial corporate performance? Evidence from Kenya. *International Journal of Economics, Commerce and Management*, 4 (9), 65-76.
xxviii. Gujarati, D. (2004). *Basic Econometrics* (4 ed.). New Delhi, DN: McGraw Hill.
xxix. Hafiz, M. A. & Desi, A. (2017). Corporate governance determinants for the mitigation of the likelihood of financial distress. *Advances in Economics, Business and Management Research*, 36.
xxx. Hausman, J. A. (1978). Specification Tests in Econometrics, *Econometrica*, 46 (6), 1251-1271.
xxxi. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics***,** 3(4), 305-360.
xxxii. Jensen, M. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *Journal of Finance*, 48, 831.
xxxiii. Johnsson, B. (2007). Does the size matter? The relationship between size and profitability of Icelandic firms. *Journal of Social Science*, Vol. 1, 43 – 55.
xxxiv. Julio P., & Luis F., R. (2005). Determinants of Financial Distress Costs. *Financial Markets and Portfolio Management*, 19(4), 341-360.

xxxv. Keay, A. (2017) Stewardship Theory: Is Board Accountability Necessary? *International Journal of Law and Management*, 59 (6). 1292-1314.

xxxvi. Khalida, M., Muhammad, K., Sadaf, E., Umair A. and Imtiaz, A. (2018). Board composition and size, firm ownership and performance. *Human Systems Management*, 37, 433–444.

xxxvii. Laeven, L. & Levine, R. (2009). Bank Governance, Regulation, and Risk Taking. *Journal of Financial Economics*, 93, 259–275.

xxxviii. Lakshan, A. M., & Wijekoon, W. H. (2012). Corporate governance and corporate failure. *Procedia Economics and Finance*, 2, 191-198.

xxxix. Lee, T. and Yeh, M. (2004). Corporate Governance and Financial Distress, Evidence from Taiwan, *Journal of Corporate Governance*, 12,378-388.

xl. Maere, J. D., Jorissen A. & Uhlaner, L., M. (2014).Board Capital and Downward Spiral in a Sample of Belgium Unlisted Firms. Corporate Governance. *An International Review,* 22 (5), 387-407.

xli. Manzaneque, M., Priego, A. M. & Merino, E. (2016). Corporate governance effect on financial distress likelihood: Evidence from Spain. *Revista de Contabilidad,* 19(1), 111–121.

xlii. Martin, S. P. (2017). The impact of good corporate governance on financial distress in the consumer goods sector. *Journal of Finance and Banking Review*, 294), 46-55.

xliii. Muth, M. M., and Donaldson, L. (1998). Stewardship Theory and Board Structure: a contingency approach. *Corporate Governance: An International Review*, 6 (1), 5– 28.

xliv. Mwengei, B. K. O. & Kosgei D. (2017). Board composition and financial distress of listed firms in Kenya. An Empirical Analysis. *Journal of Finance and Investment Analysis*, 6 (4), 75- 93.

xlv. Odhiambo, S. & Peter, O. (2018). Factors Contributing to Financial Distress in Commercial Banks of Kenya. *The International Journal of Business Management and Technology*, 2 (5), 2581-388.

xlvi. Parker, S., Peters, G. F. & Turetsky, H. F. (2002b). Corporate governance and corporate failure: a survival analysis. *The international Journal of Business in Society*, 2(2), 4-12.

xlvii. Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17(2), 218-228.

xlviii. Pfeffer, J. and Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York.

xlix. Pratheepkanth, P. (2011). Capital structure and financial performance: Evidence from selected business companies in Colombo Stock Exchange. *Journal of Arts, Science and Commerce*, 2(2), 171-183.

l. Rajhi, W., & Hassairi, S. A. (2013). Islamic Banks and Financial Stability: A Comparative Empirical, *Région et Développement*, 37.

li. Rommer, A. D. (2004). Firms in financial distress: An exploratory analysis, working paper, Denmark National bank and Centre for Applied Micro econometrics, *Institute of Economics, University of Copenhagen*, Copenhagen, 1-68.

lii. Sangeeta M. & Lavina (2018). Females Presence on the board and Financial Performance: A Study of Family Controlled Businesses. *Asian Journal of Management*, 9 (1).

liii. Salloum, C. and Azoury, N. (2012). Corporate governance and firms in financial distress: evidence from a Middle Eastern country. *International Journal of Governance and Ethics,* 7, (1), 1–17.

liv. Sri, M., P. (2017). The Impact of Good Corporate Governance on Financial Distress in the Consumer Goods Sector, *Journal of Finance and Banking Review*, 2 (4) 46 – 55.

lv. Shleifer, A. & Vishny, R. W. (1997).A survey of corporate governance. *The Journal of Finance*, 52, 737-783.

lvi. Stout, L., (2003). On the Proper Motives of Corporate Directors (Or Why You Don't want to invite Homo Economicus to Join Your Board). *Delaware Journal of Corporate Law*, 28, (1).

lvii. Sundaramurthy, C. & Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *The Academy of Management Review*. 397-415.

lviii. Susan, P., Gary F. P. & Howard, F. T. (2002). Corporate governance and corporate failure: a survival analysis, Corporate Governance. *The International Journal of Business in Society*, 2(2), 4-12.

lix. Trond, P. (1993). Recent developments in the economics of organization: the principal-agent relationship. *Acta Sociologica*, 36:277-293, 36 (3).

lx. Turetysky, H. E. & McEwen, R. A. (2001). An empirical investigation of firm longevity, a model of the Ex ante predictors of financial distress. *Review of Quantitative Finance and Accounting*, 16 (4), 323-343.

lxi. Victor, L. (2014). The Relationship of Corporate Governance and Financial Performance of Manufacturing Firms Listed at the Nairobi Securities Exchange. *International Journal of Business and Commerce*, 3(2), 30-57.

lxii. Wang, Z. & Deng, X. (2006). Corporate Governance and Financial Distress: Evidence from Chinese Listed Companies, *The Chinese Economy*, 39(5), 5-27.

lxiii. Ward, M. & Price, A. (2006). 'Turning Vision into Value,' Pretoria: Van Schaik Publishers.

lxiv. Williams, M.N., Gomez, C.A. & Kurkiewicz, D., (2013). Assumptions of multiple regression: Correcting two misconceptions. *Practical Assessment, Research and Evaluation*, 18 (11).

lxv. Williamson, O. E. (1988). Corporate finance and corporate governance. *Journal of Finance,* 43(3), 567-591.

lxvi. Wu D., Liang L., & Yang, Z. (2008). Analyzing the financial distress of Chinese public companies using probabilistic neural networks and multivariate discriminate analysis. *Socio-Economic Planning Sciences*, 42(3), 206-220.

lxvii. Zahra, K., Jamal M. K., & Muhammad A., W. (2018). CEO Characteristics and the Probability of Financial Distress: Evidence from Pakistan. *International Journal of Business and Management*, 13 (2), 117-124.