IOSR Journal of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925.Volume 11, Issue 5 Ser. II (Sep. – Oct. 2020), PP 22-33
www.iosrjournals.org

Board Characteristics and Financial Distress of Listed Commercial Banks in Kenya

Sammy Njoroge Maina[1] & Job Omagwa, PhD[2]
[1](MBA Student, Kenyatta University, P.O Box 43844 - 00100 Nairobi Kenya;
[2](School of Business, Kenyatta University, P.O Box 43844 - 00100 Nairobi Kenya)
Corresponding Author: *Sammy Njoroge Maina*

Abstract
Commercial banks have pivotal role in economic development. They not only create wealth but also, the custodian of resources mobilization and allocation. Global business environment has amplified the need for effective corporate governance which maximizes shareholder wealth and minimize possibilities of financial distress. Corporate governance aids with the protection of investors' interest against stakeholders and management exploitation. Board members have critical role in enhancing clarity on their role in company's management through monitoring and advising chief executive officers. Successful governance is reflected in quality of financial and non-financial performance. Investment confidence is dependent on financial health situation of a firm. The specific objectives for the study were: to determine the relationship between ownership structure, board structure, audit committee and independent directorship and financial distress of commercial banks listed at Nairobi Securities Exchange, Kenya. The study was based on agency theory, information asymmetry theory and signalling hypothesis. Correlation research design was adopted. A Census study of 11 listed commercial banks was adopted. Secondary data was collected for the period 2011 to 2018. Panel regression analysis, correlation analysis and descriptive statistics were used to analyse data which was presented in tables, graphs and figures. The study found a positive and significant relationship between ownership structure and financial distress (β = 0.458, p-value = 0.000). Board structure had a positive and significant relationship with financial distress (β = 0.054, p-value = 0.00). Moreover, the study established a positive and insignificant relationship between audit committee structure and financial distress (β = 0.021, p-value = 0.086). The study further found a positive and insignificant relationship between independent directorship and financial distress (β= 0.216, p-value = 0.078). The study recommends that the government (through the relevant regulatory agencies) should regularly update listed company's guidelines on governance to enhance transparency. Current and potential investors should be guaranteed of sustainable investment opportunity through healthy corporate governance practices. Since their goals differs and may be attributed to demographic characteristics and behavioral attributes calls for exercise of caution on issues that may trigger financial distress.

Key Words*: Financial distress, ownership structure, board structure, independent directorship, audit committee and Nairobi Securities Exchange.*

Date of Submission: 04-09-2020 Date of Acceptance: 19-09-2020

I. Introduction and Background

Though financial system comprises of heterogeneous players such as insurance and investment banks, commercial banks have pivotal contribution in achievement of their goals and objectives (Olalekan & Adeyinka, 2013). In addition, they argued that healthy commercial banks are congruent to sustainable and stable economic development. Poudel (2012) posited for development of robust risk management strategies which would aid in achievement of high performance and boost in investor's confidence due to decline in cases of bank panic and run. Board characteristics causality with corporate governance has a fundamental value. According to Bredart (2014), board of directors have value contribution on sustainability and survival chances of corporate entities since they are delegated to oversee their operations. Corporate governance principles must be fully adopted to mitigate possibilities of financial distress. According to Fernandes (2005), corporate policy documents should be aligned with acceptable governance principles which eliminate likelihood of financial distress. This mirrored conclusion by Eyenubo (2013) who argued that appointments of board of governance in corporation minimized agency costs and was contingent to decreased chances of accounting malpractices which was dominant in institutions with weak governance.

Board characteristics are unique characteristics describing those mandated in management of corporate entities. They include age, education qualifications, gender, board structure like board size, gender diversity and board tenure (Mwengei & Kosgei, 2017). Empirical scholars have documented that these features have an

impact on corporation performance (Breadart, 2014). Despite there being several board characteristics, the current study limited its investigation on relationship between ownership structure, board size, audit committee structure and independent directorship. The ownership structure was represented by the shareholding owned by top ten shareholders (Ayoola & Obokoh, 2017). The average of board tenure in listed banks was employed to represent the board structure (Bredart, 2014). Audit committee structure was operationalized as the average attendance of meetings per annum by audit committee members of listed commercial banks (Muhama, 2015). Independent directorship was the proportion of non-executive directors (Witiastuti & Suryandari, 2016).

Financial distress refers to the inability of a corporation to pay financial dues as they fall due or meeting them with challenges such as delays, or alteration of credit terms and conditions (Miglain, 2014). Financial distress can be examined using different credit default models which have been developed empirically, the most dominant are the Altman's Z score (1968) and UK based model by Agarwal and Taffler (2008) who predicted model failure using hazard model approach, Campbell *et al.* (2005). The justification for their use is based on their ability to capture variations on chances of financial distress which can act as a benchmark against which variations in stock expected returns can be explained (George & Hwang, 2009).

Kenya has 40 commercial banks and 13 microfinance banks being regulated by the CBK and those that are listed are also oversighted by capital market authority (CBK Annual Report, 2017). Compared to other countries like Nigeria and South Africa with their respective population, Kenya has more banks in relative terms. Over the recent years, Kenya has witnessed growth and failure of banks. The growth may be linked to liquidity ratio that rose over the statutory requirement. As at 2013, commercial bank in Kenya reported an increase of 20% in profit while non-performing loans (NPL) grew by 13.3% to 61.6 billion shillings (Irungu, 2013). Based on the Cytonn report for the year 2015 credit risk, as assessed by NPL, has continued to increase despite reporting profits. Loans being the greatest source of credit risk signifies a worrying trend since credit risk threaten not only the highest degree of loan losses but even bank failure (Odunga, 2016). In this regard, CBK has developed risk management guideline and supervision strategy approaches for the financial institutions.

The banks performance could be attributed to insider lending, giving loans to high risk borrowers and macroeconomic instability (Gathigia, Waweru & Muturi, 2016). As last kicks, some of banks opted to sell off government securities to cover cash shortfalls signalling financial distress that banks were facing. As aforementioned, at least three commercial banks have been either liquidated or placed under receivership due to financial distress by the CBK. From Gathigia *et al.,* (2016), it has been suggested that economic factors could be contributing to the bank's poor performance.

II. Research Problem

Commercial Banking sector plays a pivotal role in economic development of Kenya. The sector not only creates wealth but it remains key in effecting resource mobilization and allocation. Commercial banks achieve this by forming capital through consolidation of scattered small savers resources; these institutions create credit which amplifies production, sales, employment and prices, channel funds to profitable and optimal project, aid in identification of appropriate industries to invest in at a given time and finance the government through treasury bills and bonds and entrepreneurs through loan facilities (Kaplana & Rao, 2017). Global business environment has amplified the need for effective corporate governance, this will not only maximize shareholder wealth but also minimize possibilities of financial distress. Through corporate governance, investors' interest will be fully protected against stakeholders and management exploitation. Board members have a critical role in enhancing clarity on their role in company's management through monitoring and advising chief executive officers (CEOs). Successful governance is reflected in quality of financial and non-financial performance (Wei *et al.,* 2017).

Listed commercial banks are mandated by their stakeholders to maximize their wealth through profit generation (Bredart, 2014). The situation is not guaranteed since there are upward and downward trends in commercial banks profitability. Distressed situations will hamper business community negatively and erode economic development gains. Long-term financial distress in developing economies has led to liquidation of commercial banks for example Imperial and Chase banks in Kenya. Cases of them collapsing locally necessitate empirical investigation on causality between board characteristics and financial distress of listed in Kenya. It is anticipated that conceptualized model would shed insights on measures to be undertaken to protect investment in Kenyan commercial banks (Kaplana & Rao, 2014).

Empirical enquiries have reported inconsistent findings with some positive, negative and others not significant. For instance, Rahani, Kamarun, Rohaida and Zarina (2013) applied logistic regression in Malaysian listed companies and found positive influence of ownership on financial distress. The study failed to examine diagnostics prior to fitting the model. Ayoola and Obokoh (2018), documented a positive influence of board size and management shareholding on financial distress in Nigeria but they applied ordinary least squares model. Salloum, Azoury and Azizi (2013) used binary logistics in Lebanon and documented insignificant influence of CEO duality, percentage of women in board, inside directorship and financial distress. Bredart

(2014) documented inverse board size influence on financial distress and used binary logistics in the study of US quoted firms. Hence, the aforementioned empirical gaps formed a good basis for this study.

III. Objectives of the Study

The specific objectives of the study were:

i. To determine the relationship between ownership structure and financial distress of listed commercial banks in Nairobi Securities Exchange, Kenya.
ii. To evaluate the relationship between board structure and financial distress of listed commercial banks in Nairobi Securities Exchange, Kenya.
iii. To establish the relationship between audit committee structure and financial distress of listed commercial banks in Nairobi Securities Exchange, Kenya.
iv. To find out the relationship between independent directorship and financial distress of listed commercial banks in Nairobi Securities Exchange, Kenya.

***Null hypotheses were tested for each respective specific objective at 0.05 significance level.**

IV. Significance of the Study

Government agency could be provided with guideline for controlling operations of Nairobi Securities Exchange, Kenya by coming up with an effective governance structure to be adopted by commercial banks sector to mitigate against financial distress. Specifically, capital market authority (CMA) could be assisted in implementation of governance initiatives. Through CMA, they could examine possibilities of conflicts which may emerge due to increased shareholding amongst board members. To enhance investors' confidence there is need to ensure that their investments are secure. This would be achieved through documentation of the role of board characteristics on financial distress. There is need for development of measures geared towards examination on sustainability of listed companies. Even though, there are only 11 commercial banks listed their financial distress status will act as yardstick for evaluating non-listed commercial banks. The results and findings of the study could enable prospective investors to acquire tools which are aimed at evaluating financial health status of listed corporations. Further, the causal effect of board characteristics on financial distress could be empirically explored. Academically, the study creates demand for further empirical investigation. Also, empirical foundation for exploration of corporate governance could be important to other researchers.

V. Literature Review

The section reviews key theories (which anchor the study) as well as empirical studies linked to the study variables.

a. Theoretical review

The study was anchored on agency theory, information asymmetry theory, signalling theory and wrecker's theory of financial distress and have been summarised below:

Agency theory was documented by Jensen and Meckling (1976) and explained the benefits and conflicts arising from delegation of authority in a company by the principal, the business owners and the agents who are the managers of the firm. Due to the different interests of the parties that make up a company, agency costs may arise. Therefore, the shareholders employ monitoring tools at their own cost to inhibit further deterioration while on the other side managers have incurred bonding cost to convince the principals that no harm that would emerge owing to their activities and decisions. The theory is appropriate for the study since board characteristics provides avenue for agency costs management. Successful, board and audit committee operations deters management from undertaking investments which are detrimental to optimal profitability and also attract costs associated with preparations of meetings and facilitation of reports which may be used to guide on possibilities of financial distress.

Information asymmetry theory was developed by Akerlof (1970). The theory argues that decision making in an organization are dependent of market statistics information available. There is contrasting degree of information access between buyer and seller of goods and services. The former has limited information as compared to the later. This inhibits pricing of goods and services and places the seller in a disadvantaged position. Board of management is perceived to be custodian of market statistics and they should ensure there is low likelihood of information asymmetry. The theory is relevant for the study since there is need for listed commercial banks to cluster and disseminate information to members of the public and bridge information gaps. Failure to provide information amongst current and potential investors would increase possibilities of listed commercial banks experiencing financial distress and erode investor's wealth and confidence. Information asymmetry can be minimized by board members through frequent attendance of their board meetings and audit committee deliberations to identify possibilities of information asymmetry for remediation.

Signalling theory was documented by Arrow (1972) and Spence (1973). The theory supports generalization of economic based information. It is argued that information transmitted by listed companies is anticipated to create value amongst different stakeholders. Dissemination of positive information signals good

performance while negative information is an indicator of underperformance. Information asymmetry alters inequality of transaction costs. This theory supports the study since disclosure of ownership structure, board structure, audit committee structure and independent directorship is anticipated to maximize shareholder wealth. Despite disclosing profitability, there is need for detailed analysis on status of financial distress of listed commercial banks.

b. Empirical Review

Empirical studies on ownership structure and financial distress have revealed mixed results based on various sectors and countries. Bredart (2014) investigated the effect of financial distress on corporate governance for US quoted firms. Board size negatively affected financial distress. Though, board independence had negative effect it was not significant. The results were similar to studies undertaken in developing and emerging countries. Mwengei and Kosgei (2017) who investigated the effect of board composition and financial distress of 39 firms listed in Kenya from 2004 to 2013 documented that board independence inversely affected financial distress. This was corroborated by Rahani, Kamarun, Rohaida and Zarina (2013) whose study documented inverse causality of independent directorship, executive directorship, family ownership, foreign ownership and financial distress.

Salloum, Azoury and Azizi (2013) studied the effect of board of directors on financial distress of family owned enterprises in Lebanon. The effect of outside directorship, CEO duality, insider equity ownership, women directorship, tenure of board members, debt value, number of employees, percentage of outside directors on financial distress was evaluated. Findings indicated positive and non-significant effect between inside directors and financial distress. This was confirmed by Udin, Khan and Javid (2017) who investigated the effect of ownership structure on likelihood of financial distress in Karachi securities exchange for period 2003 to 2012 for 146 companies. Government ownership positively affected financial distress. This was justified by government and private entities conflicting interest whereby government is meant to solve social needs as opposed to shareholders' wealth and profit maximization.

Rohani, Kamarun, Rohaid and Zarina (2013) investigated ownership structure and financial distress in Malaysia. Logistics regression model was fitted on secondary data gathered from 2004 to 2009. Study findings documented positive effect of board ownership and leverage on financial distress. Further, it was inversely affected by independent ownership and executive directorship. The findings mirrored Murhadi, Tanugara and Sutejo (2018) who assessed the influence of good corporate governance on financial distress of listed companies in Indonesian Securities Exchange. Panel data was gathered from 2011 to 2015 among 337 firms. Logistics regression model was fitted. Study findings documented that financial distress was affected by good corporate governance, audit opinion and ownership type. Post-hoc analysis would have been carried out to evaluate robustness of fitted model.

Alba, Montserrat and Elena (2014) investigated the relationship between corporate governance and accuracy of financial distress prediction models among companies listed in Spanish securities exchange. Study findings documented positive and non-significant effect of ownership concentration, CEO duality and financial distress. There was an inverse and non-significant relationship between board ownership, board size and financial distress of listed companies. The study should have presented post hoc analysis so as to evaluate robustness of the model. The study contradicted Khurshid, Sabir, Tahir and Abrar (2018) who investigated the impact of corporate governance on likelihood of financial distress of non-financial companies in Pakistan. Particularly, the study examined the effect of board composition, ownership structure, audit quality, board size, CEO's duality, board independence, insider's directorship, institutional investment and financial distress. Binary logistics model was fitted on secondary data gathered from 2009 to 2016. Study findings documented that there was significant negative impact on likelihood of financial distress between board size, insider director's ownership and audit quality.

Mahama (2015) analyzed the effect of financial distress on companies listed in Ghana for period 2007 to 2013. Secondary data of listed companies was collected for the period from annual financial statements. Univariate and multivariate methods were used to analyse the data. It was documented that prudent financial and working management policies amongst listed companies minimized possibilities of financial distress. Since the study fitted binary logistic there was need to fit post-hoc test so as to examine model stability. Further, Dissanayke, Somathilake, Madushanka, Wickramasighe and Cooray (2017) assessed the effect of board configuration on financial distress of listed firms in Colombia securities exchanges. Bivariate methods analysed the data. Study findings established non-significant relationship between CEO duality and financial distress. Though, classical modelling analysed the data, no diagnostic test was executed thus there were high chances of drawing biased conclusions. In addition, it was appropriate to adopt panel data analysis instead of fitting ordinary least squares regressions. Thirdly, Colombia securities exchanges is at different stage of economic and technological development consequently it may be better placed on data and information gathering as compared to Nairobi Securities Exchange.

VI. Methodology

The study adopted correlation research design. Sekaran and Bougie (2013) supports this design as it is appropriate whenever the researcher seeks to explore causality between variables under examination. Secondary data for eight years was gathered through use of data collection sheet for eleven commercial banks listed in the Nairobi Securities Exchange, Kenya.

The data was collected using a document review guide. The data collection sheet and was cleaned and coded to make inferences using descriptive, Pearson's correlation and panel regression analysis. Consequently, the data was analysed using STATA software. The Altman's z-score model adopted to measure financial distress is captured below;

$$Z_{it} = \beta_0 + \beta_1 BO_{it} + \beta_2 BS_{it} + \beta_3 A_{it} + \beta_4 ID_{it} + v_i + \varepsilon_{it}$$

With the following areas of discrimination; Z > 2.6 'safe' zone, 1.1 < Z < 2.6 'grey area' and Z < 1.1 'distress' zone.
Where:

Z_{it} - financial distress (as measured using Altman's Z score for bank i at time t)

BO - Ownership structure
BS - Board structure
A - Audit committee meetings
ID - Independent directorship

$\beta's$ - coefficients of explanatory variables

v_i - unit-specific residual that differs between individual banks but for any bank i, its value is constant

ε_{it} - normal error term that is assumed to have a mean of zero and constant variance.

VII. Results and Findings

4.1 Descriptive Statistics

Descriptive statistics is meant to provide distribution of variables under examination. Descriptive statistics included mean, skewness, kurtosis and standard deviation. These results are in Table 4.1 where the analysis and interpretation are given.

Table 4.1 Descriptive Statistics

	Z Score	Ownership Structure	Board structure	Audit Committee Structure	Independent Directorship
Mean	5.9	0.7	8.8	0.8	0.7
Median	5.5	0.7	8.6	0.7	0.8
Maximum	11.5	0.9	18	0.9	0.9
Minimum	2.9	0.3	4	0.6	0.4
Std. Dev.	1.8	0.1	2.3	0.1	0.1
Skewness	0.9	-1.1	1.4	-0.2	-0.6
Kurtosis	3.7	5.9	11.6	2.1	2.5
Sum	518.3	64.8	776.9	67.3	64.1
Sum Sq. Dev.	297.7	0.9	454.7	0.6	1.3
Observations	88	88	88	88	88

Source: Study Data, (2020)

As shown in Table 4.1 the average distress score for listed commercial banks is 5.9, with a maximum of 11.5 and 2.9. This indicated that most listed commercial banks are stable since they fall in stable region as documented by Altman's Z score. These findings concur with Githira, Muturi and Nasieku (2019) who found

that most companies listed at Nairobi Securities Exchange were not in financial distress. The findings also confirmed Gitau (2016) findings which indicated that most of listed companies in Nairobi Securities Exchange were financially stable.

The average ownership structure of listed commercial banks was 70%, which indicated that the highest percentage of shareholding was owned by first ten shareholders in order of shareholding proportionate. This would ease decision making process since they can easily ratify decisions which are meant to save the corporation from financial distress. Average board structure was approximately nine years, with a maximum of 18 years and minimum of 4 one amongst those who were newly recruited. This indicates most board members have served for long in their respective companies and this would aid them in understanding business trends and performance in their respective listed commercial banks. The mean audit committee structure was 0.8 (80%), which indicates commendable attendance of audit committee meetings. This should be recommended so as to aid in identification of loopholes that may lead to spillage of resources and financial distress. The average independent directorship was 0.7, which indicates availability of an opportunity to benefit from heterogeneity of skills provided by independent directors.

Board composition complied with stewardship theory since it had heterogeneous skills hence it could allow nurturing of quality board room discussions due to diversity of skills. This was in agreement with Atosh (2017) who supported the need for gender diversity, board independence, executive directorship and ownership concentration as yardsticks for eliminating odds for corporate financial distress. Moreover, Montserrat *et al.,* (2016) argued in favor of optimization of board size, differentiation of ownership type, independent directorship. Accumulation of appropriate board skills would enhance quality of committees such as audit, human resources and risk management that would be prudent in enhancing continuity of listed companies.

4.1.1 Descriptive Statistics on Financial Distress

Financial distress was estimated using alternative ratios. The ratios examined working capital management, proportion of retained earnings, sales turnover and equity fair value to liabilities. Summary of findings are in Table 4.2. and interpreted

Table 4.2 Descriptive Statistics on Financial Distress

	Working Capital to total assets	Retained Earnings to Total assets	Profit before tax to Total Assets	Book value of equity to Total assets
Mean	0.69	0.20	0.28	0.19
Std. Deviation	0.50	0.10	0.11	0.06
Minimum	0.08	0.1	0.08	0.08
Maximum	0.92	0.37	0.5	0.36
Skewness	1.91	-0.57	0.01	1.16
Kurtosis	4.68	0.42	-0.56	1.97

Source: Study Data, (2020)

From Table 4.2 the average working capital to total assets was 0.69, with a minimum of 0.08 and maximum of 0.92. Since the ratio is positive it indicates listed banks have positive working capital. The working capital has an effect on corporate long-term investment effectiveness and its financial strength to honour financial liabilities. The average retained earnings to total assets was 0.20, this indicates that listed commercial banks retained significant portion of their earnings. This would cushion them against floatation costs when in financial needs and adherence to pecking order theory which is the most optimal decision. On average, listed commercial banks had positive return on their assets as shown by an average of 0.28, on the ratio of earnings before interest and taxation to total assets. This indicates compliance with wealth maximization principle and optimization of profitability. The average of equity par value to liabilities was 0.19, which indicates positive return on borrowed funds invested by listed commercial banks.

4.4 Correlation Analysis

Pearson's correlation analysis was carried out to show the strength of variables under examination. According to Baltagi (2005), correlation is measured using correlation coefficient that range from -1 to + 1, negative correlation coefficient indicates an increase in independent variable leads to decrease on dependent and

vice versa. Positive correlation depicts co-movement between variables under examination. Correlation coefficients greater than 0.5 are an indication of a strong relationship while those less than 0.5 indicate a weak relationship (Sekaran & Bougie, 2013). Correlation coefficient of -1 indicates perfect inverse relationship and +1 shows perfect positive relationship. Results are in Table 4.3.

Table 4.3 Correlation Analysis

		Z score	Ownership structure	Board structure	Audit Committee Structure	Independent directorship
Z score	Pearson Correlation	1				
Ownership structure	Pearson Correlation	0.723***	1			
	Sig. (2-tailed)	0.000				
	N	88	88			
Board structure	Pearson Correlation	0.765***	0.605	1		
	Sig. (2-tailed)	0.000	0.405			
	N	88	88	88		
Audit Committee Structure	Pearson Correlation	0.558	-0.236	0.156	1	
	Sig. (2-tailed)	0.325	0.327	0.427		
	N	88	88	88	88	
Independent directorship	Pearson Correlation	0.546	-0.209	0.325	.235	1
	Sig. (2-tailed)	0.245	0.423	0.632	0.221	
	N	88	88	88	88	88

Source: Study Data, (2020)

There was a positive and significant relationship of ownership structure and financial distress of listed commercial banks in Nairobi Securities Exchange (*rho* = 0.723, *p-value* = 0.000). Board structure had significant positive relationship with financial distress of listed commercial banks in Nairobi Securities Exchange (*rho* = 0.765, *p-value* = 0.00). Audit committee structure had positive and insignificant relationship with financial distress of listed commercial banks in Nairobi Securities Exchange (*rho* = 0.558, *p-value*=0.325). Independent directorship had positive and insignificant relationship with financial distress of listed commercial banks in Nairobi Securities Exchange (*rho* = 0.546, *p-value* = 0.245).

These findings supported Rahani *et al.,* (2013) who found positive though non-significant influence of ownership structure on financial distress. Further, they concurred with Udin *et al.,* (2017) who found positive effect of ownership structure on financial distress. Ayoola and Obokoh (2018) documented a positive and significant effect of ownership structure on financial distress of listed companies in Nigeria. Bredart (2014) and Mwengei *et al.,* (2017) documented a positive and significant effect of board structure on financial distress of listed companies. Muhandi *et al.,* (2018) and Mahama (2015) documented a positive and significant effect of audit committee structure on financial distress. These was a conflict with Luqman *et al.,* (2018) who documented inverse effect of audit committee characteristics on financial distress.

4.5 Regression Analysis

Multiple regression analysis indicates the nature of relationship between variables. Adjusted R squared depicted model explanatory power, F statistics indicated overall significance of the model and T statistics documented the significance of respective board characteristics on financial distress. Model summary is in Table 4.4.

Table 4.4 Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.79	0.6241	0.6134	0.0041

Source: Study Data, (2020)

Regression model summary in Table 4.5 had an Adjusted R-square of 0.6134 that indicates that 61.34 percent of changes in financial distress of listed commercial banks in Kenyan are explained by ownership structure, board structure, audit committee structure and independent directorship while extraneous factors accounted for 38.66 percent.

ANOVA was used to show the overall significance of the model as shown in Table 4.11.

Table 4.5 Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig
Regression	55.235	4	13.809	22.229	0.000
Residual	51.56	83	0.621		
Total	**106.795**	**87**			

Source: Study Data, (2020)

Results in Table 4.6 indicate that the model overall is significant. Hence, ownership structure, board structure, audit committee structure, independent directorship collectively significantly affected financial distress of listed banks in Kenya, (F = 22.229, p-value = 0.00).

Coefficients of regression model in Table 4.6 shows the nature of relationship between board characteristics and financial distress. T statistics was used to show the significance of the relationship and if it greater than + or – 1.96 then there was significant relationship and vice versa.

Table 4.6 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	β	Std. Error	Beta		
(Constant)	2.516	1.134		2.218	0.029
Ownership structure	0.458	0.139	0.215	3.289	0.000
Board Structure	0.054	0.013	0.024	4.274	0.000
Audit Committee Structure	0.021	0.020	0.015	1.027	0.086
Independent Directorship	0.216	0.205	0.241	1.056	0.078

Source: Study Data, (2020)

The beta value (β) gives the nature of the relationship between each board characteristics and financial distress in terms of the ownership structure, audit committee structure, board structure and independent directorship in firm's financial distress levels. Study model is as:

$Y_{i\,t} = 2.516 + 0.458X_{1\,i,t} + 0.054X_{2,\,i,t} + 0.021X_{3,\,i,t} + 0.216IX_{4,\,i,t}$

Where

Y = Financial Distress of bank i at time t

$X_{1,\,i,t}$ = Ownership Structure of bank i at time t

$X_{2,\,i,t}$ = Board Structure of bank i at time t

$X_{3,\,i,t}$ = Audit Committee Structure of bank i at time t

$X_{4,\,i,t}$ = Independent Directorship of bank i at time t

Results shown in Table 4.6 documents that ownership structure has significant effect on financial distress of listed commercial banks. Further, this effect was positive (β = 0.458, t= 3.289, p-value = 0.000). This indicates that unit increase in ownership structure (while holding constant board structure, audit committee structure and independent directorship) increases financial distress by 3.289 units. Since the p-value is 0.000 which is less than 0.05. Hence, an indication that ownership structure has a significant effect on financial distress. Therefore, we reject the null hypothesis that ownership structure has no significant effect on financial distress of listed commercial banks in Kenya. The study therefore shows that ownership structure has significant effect on financial distress of listed commercial banks in Kenya. These findings contradict those of Rahami *et al.,* (2013) who documented positive and not significant effect of ownership structure on financial distress of listed companies. Moreover, the findings concurred with Udin *et al.,* (2017). These findings also concurred with agency theory and confirmed those charged with governance involvement in management of corporation activities.

Board structure has positive and significant effect on financial distress of listed commercial banks in Kenya ($\beta = 0.054$, $t = 4.274$, p-value = 0.00). This indicates that unit increase in board structure while holding constant (ownership structure, audit committee structure and independent directorship) increases financial distress score of listed commercial banks by 0.054 units. Since the p-value is 0.000 which is less than 0.05. Hence, an indication that board structure has a significant effect on financial distress of listed commercial banks in Kenya. Therefore, we reject the null hypothesis that board structure has no significant effect on financial distress of listed commercial banks in Kenya. The study therefore shows that board structure has significant effect on financial distress of listed commercial banks in Kenya. These findings refuted Salloum *et al.,* (2013) who documented positive and not significant effect of board structure on financial distress. Further, the findings confirmed Bredart (2014) and Mwengei *et al.,* (2017) who documented positive and significant effect of board structure on financial distress.

Board structure should act in interest of all stakeholders and minimize likelihood of deteriorating financial performance of their respective corporations. According to Ciampi (2015), company distress is negatively affected by ownership concentration, reduced proportion of independent directors and CEO duality. Also, it was noted that likelihood of financial distress could be evaluated through examination of quality of corporate governance. This was in line with Darrat, Gray, Park and Wu (2014) who argued that there is need to uphold corporate governance principles.

Audit committee structure has a positive and not significant effect on financial distress score of listed commercial banks in Kenya, ($\beta = 0.021$, $t = 1.027$, p-value = 0.086). Since the p-value is 0.086 which is greater than 0.05. Hence, an indication that audit committee structure has a significant effect on financial distress of listed commercial banks in Kenya. Therefore, we do not reject the null hypothesis that audit committee structure has no significant effect on financial distress of listed commercial banks in Kenya. Hence, the study shows that audit committee structure had no significant effect on financial distress of listed commercial banks in Kenya. These findings contrasted Luqman *et al.,* (2018) who reported negative and significant effect of audit committee structure on financial distress. Further, they contradict Muhadi *et al.,* (2018) and Mahama (2015) who reported positive effect of audit committee structure on financial distress.

Independent directorship has positive and not significant effect on financial distress of listed commercial banks in Kenya ($\beta = 0.216$, $t = 1.056$, p-value = 0.078). Since the p-value is 0.078 which is greater than 0.05. Hence, an indication that independent directorship has an insignificant effect on financial distress of listed commercial banks in Kenya. Therefore, we do not reject the null hypothesis that independent directorship has no significant effect on financial distress of listed commercial banks in Kenya. Hence, the study shows that independent directorship has no significant effect on financial distress of listed commercial banks in Kenya. The findings differed with Witiastuti and Suryandari (2016) and Wei *et al.,* (2017) who documented positive and significant effect of independent directorship. The findings also showed that an increase in non-executive board members leads to a decrease in financial distress of listed firms. Non-executive board members enhance governance of the firm thus decreasing the chances of a firm being financially distressed. The findings are consistent with Manzaneque, Priego and Merino (2016) who established that percentage of independent directors has a significant effect on business failure likelihood. The findings are however not consistent with Aggarwal (2013) who found that governance rating has a positive but insignificant influence on corporate profitability of the listed firm.

VIII. Conclusions and Recommendations

Based on study findings the following conclusions can be drawn. Since ownership structure has positive and significant relationship with financial distress of listed commercial banks. The study, therefore, concludes that there is need to ensure measures aimed at enhancing investors' confidence and protecting minority investors are instituted among all parties. The study documents significant and positive relationship between board structure and financial distress of listed commercial banks in Kenya. Hence the study concludes that there is need to define measures aimed at limiting the board tenure irrespective of the board members. The study documented positive and not significant relationship between audit committee structure and financial distress of listed commercial banks. In the view of this the study calls for measures aimed at improving quality of audit. Since independent directorship insignificantly affected financial distress listed banks in Kenya, listed commercial banks should have requisite skills composition which aid in capturing and maintaining market share. Through independent directorship listed banks should mix and match their board skills with those that they lack internally.

The management of listed commercial banks should devise measures that are aimed at promoting healthy corporate governance. This can be achieved through creation of information sharing platforms with top shareholders of whom majority are institutions. The government through Capital Markets Authority should regularly update listed company's guidelines on governance. This would alleviate likelihood of conflict of interest and nurture investors' confidence. Additionally, the Central Bank of Kenya should build adequate personnel capacity to enhance monitoring of banks showing signs of distress thus ensuring remediation actions

are taken immediately to prevent further deterioration. Evaluation of the level of governance disclosure would aid in optimization in wealth through investment in companies whose information access is low. Finally, there is need for board of management of commercial banks in Kenya to develop measures geared towards adoption of healthy working capital, increase the asset base and venturing into business opportunities that are profitable.

IX. Contribution to the Knowledge

The study has documented new evidence on the relationship between board characteristics and financial distress of listed commercial banks. The study lays foundation on future research on examination of the influence of ownership structure, board structure, audit committee structure and independent directorship on financial distress of listed commercial banks in Kenya. The study findings support agency and wrecker's theory. In line with agency theory there is need for listed companies to develop measures aimed at enhancing information access among investors. Through increased information access, quality of decision making among investors would be improved and minimize likelihood of financial distress.

References

[1]. Abri, A. F., Arumugam, D., & Balasingam, S. (2019). Impact of the corporate governance on the financial statement fraud: A study focused on companies in Tanzania. *International Journal of Recent Technology and Engineering, 7*(5), 336-341.

[2]. Ahmad, H. M., & Adhariani, D. (2017). Corporate governance determinants for the mitigation of the likelihood of financial distress. *Advances in Economics, Business and Management Research, 36*(17), 1-11.

[3]. Alba, M. P. C., Montserrat, M. L., & Elena, M. M. (2014). Corporate governance and accuracy level of financial distress prediction models. *International Business & Economics Research Journal, 13*(7), 1619-1624.

[4]. Alkilani, S. Z., Hussin, W. N. W., & Salim, B. (2019). The influence of audit committee characteristics on modified audit opinion in Jordan. *Journal of Finance and Accounting, 7*(3), 95-106.

[5]. Aman, E. E. (2019). Determinants of financial distress in Ethiopia banking sector. *International Journal of Scientific and Research Publications, 9*(5), 98-107.

[6]. Assenga, M. P., Aly, D., & Hussainay, K. (2018). The impact of board characteristics on the financial performance of Tanzanian firms. *The International Journal of Business in Society, 10*(18), 1-14.

[7]. Atosh, A. M. (2017). *Effect of corporate governance practices on financial distress among listed firms at Nairobi securities exchange.* Unpublished Masters in Business Administration, University of Nairobi, Kenya.

[8]. Ayoola, T. J., & Obokoh, L. O. (2017). Corporate Governance and Financial Distress in the Banking Industry: Nigerian Experience. *Journal of Economics and Behavioral Studies, 10*(1), 182-193.

[9]. Bhagat, S., & Black, B. (2002). The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law, 27*(2), 231–274.

[10]. Bilge, L. E., Mesut, D., & Mustafa, K. (2017). The relationship between financial distress and ownership structure: A research in İstanbul Stock Exchange. *Journal of Business Research Turk, 9*(4), 787-804.

[11]. Bredart, X. (2014). Financial distress and corporate governance: The impact of board configuration. *International Business Research, 7*(3), 72-80.

[12]. Campbell, J.Y., Hilscher, J.D., & Szilagyi, J. (2011). Predicting financial distress and the performance of distressed stocks. *Journal of Investment Management, 9* (2), 14-34.

[13]. Chairunesia, W., & Bintra, R. (2019). The effect of good corporate governance and financial distress on earnings management in Indonesian and Malaysia companies entered in ASEAN corporate governance scorecard. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 9*(2), 224-236.

[14]. Cooper, D. R., & Schindler, P. S. (2014). *Business research methods.* (12th Ed.). New York: McGraw-Hill/Irwin

[15]. Dharma, S. Y. C., & Nugroho, P. I. (2013). *Corporate governance, financial distress, and voluntary disclosure.* Retrieved from https://www.researchgate.net

[16]. Dissanayke, T., Somathilake, H., Madushanka, K., Wickramasighe, D., & Cooray, N. (2017). Board configuration on financial distress. *Global Scientific Journals, 5*(5), 107-119.

[17]. Dissanayke, T., Somathilake, H., Wickramasinghe, K., & Cooray, H. (2017). Board configuration on financial distress. *Global Scientific Journals, 5*(5), 107-119.

[18]. Dragana, R., & Nemaja, S. (2016). Financial distress and ownership structure: the case of Serbia. Acta Oeconomica, Akadémiai Kiadó, Hungary, 67(1), 21-41.

[19]. Eyenubo, O. A. (2013). Board characteristics and company performance: Evidence from Nigeria. *Journal of Finance and Accounting, 2*(3), 81-89.

[20]. Fakhari, H., & Pitenoei, Y. R. (2017). The impact of audit committee and its characteristics on the firms' information environment. *Iranian Journal of Management Studies, 10*(3), 577-608.

[21]. Fashan, M. R., & Fitriana, V. E. (2018). The influence of corporate governance and intellectual capital towards financial distress (Empirical study of manufacturing company in IDX for the period of 2014-2016). *Journal of Applied Accounting and Finance, 2*(2), 163-179.

[22]. Fuad, N. S. (2017). The impact of audit committee characteristics on financial distress. *Diponegoro Journal of Accounting, 6*(2), 1-9.

[23]. Greene, W. H. (2008). *Econometric analysis* (6th Ed.). Upper Saddle River, N.J.: Prentice Hall.

[24]. Gujarati, D., & Porter, D. (2009). Essentials of econometrics. (4th Ed.). McGrawHill/Irwin.

[25]. 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.

[26]. Jensen, M. C. & Meckiling, W. H. (1976). Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics, 3*(76), 305-360.

[27]. Kaplana, B. A., & Rao, T. V. (2017). Role of commercial banks on economic development in India. *International Journal of Management and Applied Science, 3*(4), 1-4.

[28]. Kazemian, S., Shauri, N. A. A., Sanusi, Z. M., Kamaluddin, A., & Shuhidan, S. M. (2017). Monitoring mechanisms and financial distress of public listed companies in Malaysia. *Journal of International Studies, 10*(1), 92-109.

[29]. Khabir, R., & Vatanparast, M. R. (2016). Evaluating the impact of corporate governance indices on bankruptcy risk in Tehran stock exchange companies. *International Journal of Management Research & Review, 6*(5), 576-585.

[30]. Khurshid, K. K., Sabir, M. S., Tahir, H. T., & Abrar, A. (2018). Impact of corporate governance on the likelihood of financial distress: Evidence from Non-Financial firms of Pakistan. *Pacific Business Review International, 11*(4), 133-149.

[31]. 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

[32]. Kishor, M., & Henok, G. (2019). Impact of determinants of the financial distress on financial sustainability of Ethiopian commercial banks. *Banks and Bank Systems, 14*(3), 187-201.

[33]. Kothari, C. R. (2011). *Research methodology. Methods and techniques.* New Age International Publishers. New Delhi. India.

[34]. Luqman, R., Masood, H., Shanza, T., Maria, S. K. & Sadia, I. (2018). Probability of financial distress and proposed adoption of corporate governance structures: Evidence from Pakistan. *Accounting Corporate Governance and Business Ethics, 3*(8), 23-53.

[35]. Mahama, M. (2015). Assessing the state of financial distress in listed companies in Ghana: signs, sources, detection and elimination – a test of Altman's z-score. *European Journal of Business and Management, 7*(3), 1-10.

[36]. Maina, A.W. (2005). *The effect of board composition on firm's performance,* (Unpublished MBA Project) University of Nairobi, Nairobi, Kenya

[37]. Mak, Y. T., & Li, Y. (2001). Determinants of corporate ownership and board structure: evidence from Singapore. *Journal of Corporate Finance, 7*(3), 235-256.

[38]. Mardani, M., Fallah, R., & Golestani, R. (2016). A review of the relationship between the structure of corporate governance and financial distress (financial crisis) in companies listed in Tehran Stock Exchange. *Account and Financial Management Journal, 1*(4), 208-226.

[39]. Miglani, S. (2014). Voluntary audit committee characteristics in financially distressed and healthy firms: a study of the efficacy of the ASX corporate governance council recommendations. *Corporate Ownership & Control, 12*(1), 308-321.

[40]. Moghaddam, R. J., & Filsaraei, M. (2016). The impact of corporate governance characteristics on the financial distress. International Finance and Banking, 3(2), 162-176.

[41]. Montserrat, M., Alba, M. P., & Elena, M. (2016). Corporate governance effect on financial distress likelihood: Evidence from Spain. *Spanish Accounting Review, 19*(1), 111-121.

[42]. Muhadi, W. R., Tanugara, F., & Sutejo, B. S. (2018). *The influence of good corporate governance on financial distress. Advances in Social Science, Education and Humanities Research (ASSEHR).* Retrieved from http://www.academia.edu

[43]. Murhadi, W. R., Tanugara, F., & Sutejo, B. S. (2018). The influence of good corporate governance on financial distress. *Advances in Social Science, Education and Humanities Research, 186*(18), 76-79.

[44]. Mwengei, K. B. 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.

[45]. Mwengei, K., Ombaba, B., & 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.

[46]. Norziaton, I. K., & Hatizah, S. (2019). Audit committee characteristics and financially distressed firms in Malaysia. *International Journal of Accounting, Finance and Business, 4*(18), 92 –107.

[47]. Odunga, R. M. (2016). Specific performance indicators, market share and operating efficiency for commercial banks in Kenya. *International Journal of Finance and Accounting, 5*(3), 135-145.

[48]. OECD (2004). *Organization for economic co-operation and development.* Retrieved from http://www.oecd.org

[49]. Olalekan, A., & Adeyinka, O., (2013). Capital adequacy and banks' profitability: An empirical evidence from Nigeria. *American International Journal of Contemporary Research, 3*(10), 87-93.

[50]. Ombok, B., Oima, D., & Sande, D. (2013). An empirical study of the relationship between corporate information disclosure and financial distress. *International Journal of Education and Research, 1*(8), 1-10.

[51]. Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International Journal of Economics and Financial Issues, 3*(1), 237-252.

[52]. Oso, W.Y. & Onen, D. (2009). *Guidelines on writing research proposal and report*. Nairobi: Sitima

[53]. Partha, I. M. B., Widanaputra, A. A. G. P., Ratnadi, N. W. D., & Mimba, S. P. S. H. (2019). Effect of audit committee characteristics on relationship between financial distress and income maximization actions. *International Journal of Social Sciences and Humanities, 3*(3), 28-35.

[54]. Pernamasari, R., Purwaningish, S., Tanjung, J., & Rahayu, D. P. (2019). Good corporate governance and prediction of financial distress to stock prices: Atman Z score approach. *International Journal of Economics and Management Studies, 6*(11), 56-62.

[55]. Poudel, R. P. S. (2012). The impact of credit risk management on financial performance of commercial banks in Nepal. *International Journal of Arts and Commerce, 1*(5), 9-15.

[56]. Rabia, L., Masood, U. H., Shanza, T., Maria, S. K., & Sadia, I. (2018). Probability of financial distress and proposed adoption of corporate governance structures: Evidence from Pakistan. *Cognet Business and Management, 18*(5), 1-14.

[57]. Rahani, M. R., Kamarun, T. M., Rohaida, A. Z., & Zarina, N. A. (2013). Ownership structure and financial distress. *Journal of Advanced Management Science, 1*(4), 363-367.

[58]. Rohani, M. R., Kamarun, N. T. M., Rohaid, A. L., & Zarina, N. A. (2013). Ownership structure and financial distress. *Journal of Advanced Management Science, 1*(4), 363-367.

[59]. 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*(10), 1 - 17.

[60]. Salloum, G., Azzi, G., & Gebrayez, E. (2019). Audit committee and financial distress in the Middle East context: Evidence of the Lebanese financial institutions. *International Strategic Management Review, 2*(14), 41-47.

[61]. Samanhyia, S., Oware, K. M., & Yaansah, F. A. (2016). Financial distress and bankruptcy prediction: evidence from Ghana. *Expert Journal of Finance, 4*(16), 52-65.

[62]. Saputra, M., Nadirsyah, N., & Hanifah, H. (2017). The influence of ownership structures, financial distress, and tax loss carry forward on tax avoidance (Study on Manufacturing Company Listed in Indonesia Stock Exchange). *Journal of Resources Development and Management, 17*(31), 21-31.

[63]. Seema, M., Kamran, A., & Darren, H. (2015). Voluntary corporate governance structure and financial distress: Evidence from Australia. *Journal of Contemporary Accounting and Economics, 11*(15), 18-30.

[64]. Spence, M. (1973). Job market signalling. *Quarterly Journal of Economics, 87*(3)355–374.

[65]. Stock, J. S., & Watson, W. W. (2018). Introduction to econometrics. (4th Ed.). Pearson.

[66]. Tamer, M. S. (2014). The effects of corporate governance on financial performance and financial distress: evidence from Egypt. *Emerald Group Publishing Limited, 15*(5), 641-662.

[67]. Thuranira, M. (2019). *Effect of corporate board structure on financial distress of non-financial firms listed at Nairobi Securities Exchange*. Unpublished Masters in Business Administration Thesis, USIU-Africa, Nairobi.
[68]. Titman, S., & Opler, C. T. (1994). Financial distress and corporate performance. *The Journal of Finance*, 5(8), 1015-1040.
[69]. Udin, S., Khan, M. A., & Javid, A. Y. (2017). The effects of ownership structure on likelihood of financial distress: An empirical evidence. *Corporate Governance Internal Journal of Business in Society*, *17*(2), 589-612.
[70]. Wooldridge, J. M. (2012). *Econometric analysis of cross section and panel data*. Cambridge, MA: MIT Press.

Sammy Njoroge Maina, et. al. "Board Characteristics and Financial Distress of Listed Commercial Banks in Kenya." *IOSR Journal of Economics and Finance (IOSR-JEF)*, 11(5), 2020, pp. 22-33.