

**Effect of Corporate Governance Practices on Financial Distress among Listed Firms at Nairobi Securities Exchange**

**Abdulahi Mohamed Atosh<sup>1</sup> & Cyrus Iraya<sup>2</sup>**

<sup>1 & 2</sup> Department of Finance and Accounting, School of Business, University of Nairobi, Kenya

**Corresponding Author email:** atosher123@gmail.com

**To cite this article:**

Atosh, M.A. & Iraya, C. (2018). Effect of Corporate Governance Practices on Financial Distress among Listed Firms at Nairobi Securities Exchange. *Journal of International Business, Innovation and Strategic Management*, 1(6), 70-90

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**Abstract:** The role of corporate governance in enhancing financial performance and reducing financial distress has been termed as significant. Good corporate governance is expected to reduce financial distress but poor corporate governance practices leads to higher probability of financial distress. The financial distress facing listed firms in Kenya such as Uchumi Supermarkets, CMC motors and Mumias Sugar for instance was blamed on poor governance. Furthermore, the publicized huge losses and numerous unresolved disputes resulting to court cases by Kenya Airways and Kenol Kobil have also thrust corporate governance practices into the spotlight. Corporate governance of firms listed at NSE is hence a topic of concern. The study hence sought to establish the effect of corporate governance practices on financial distress among listed firms at Nairobi Securities Exchange with a focus on number of non-executive directors, board size, board gender diversity, ownership concentration and the control effect of net profit and capital structure. The study used Agency theory, Stakeholder theory, Stewardship theory and Transaction theory in building a theoretical argument. The study employed a descriptive research design. The target population of the study was the listed firms at the NSE by the year ending December 2016. Altman Z score model was used to score the financial distress. Applying ordinary least square regression model, the study established that net profit has a negative significant effect on financial distress, management concentration and financial distress are negatively and significantly related, non-executive board members has a negative and significant effect on financial distress and board size has a positive and significant effect on financial distress and board diversity has a positive but not significant effect on financial distress. Capital structure on the other hand has a positive but insignificant effect on financial distress of firms listed.

**Key Words:** *Number of Non-Executive Directors, Board Size, Board Gender Diversity, Ownership Concentration, Net Profit, Capital Structure, Nairobi Securities Exchange.*

## Introduction

Every decision made by management, determines the direction the firm takes in future. However, decisions are based on shareholding composition, financial prospects based on current firm potential, corporate governance and the economic condition prevailing in the market (Changing, 2011). Financial distress relates to a broad concept with several situations in which a firm faces financial difficulty. These common situations defining financial distress include bankruptcy, insolvency and failure (Maina & Sakwa, 2012). Knell (2006) states that corporate governance is a number of processes, customs, fixed policies, laws as well as institutions influencing how an institution is run, administered or controlled. According to Ashbaugh *et al* (2004), corporate governance most importantly eliminates the issue of information asymmetry to shareholders who are not in a position to directly observe and monitor the actions of management leading to ethical risk and poor selection difficulties. Corporate governance reduces the effects of agency costs that are the outcome of information asymmetry as it embodies a set of mechanisms that effectively tackle agency problems. The overall desirable effect of good governance structures is the attraction of preferred investors, creation of competitive as well as efficient companies and business enterprises; increasing accountability and performance of the company top management team as well as promoting efficient and effective utilization of the company's limited resources (Moche, 2014).

According to Emery, Finnerty and Stowe (2007), financial distress is the detrimental outcome of weakening in a firm's business caused by the quantity of things that may contain any of the following: unwise expansion, poor management, and cut-throat business competition, huge amounts of business debt, court lawsuit and unfavorable contracts. Labie and Périlleux (2008) assert that financial distress is a situation where a company finds it difficult in paying off its financial obligations. It is a state that is experienced by firms due to internal and external challenges thus leading to bankruptcy and even liquidation. Outecheva (2007) argue that indicators of financial distress among firms can be; declined profits, declined market share, poor service delivery, demotivated employees and inability to adapt to changes. NSE was started as a charitable organization for stockbrokers in 1954, under the Societies Act. It has undergone many variations ever since where it is presently. In 2006, it automated trading and in the following year, stock brokers were able to trade from their offices. In the year 2011, the NSE changed this name given at commencement to Nairobi Securities Exchange. This move was one of its strategies to be full-service dividends barter that aids transaction and payment of credit, derivatives, loans and other related facilities. It carries out its business every day from 9.am to 3 pm. It has the sole mandate of listing companies (NSE, 2016). A number of companies have, over the past three decades, faced financial difficulties leading to suspension of their stocks, delisting and restructuring. The most recent cases of financial distress among firms listed on the NSE are those faced by Uchumi Supermarkets, Mumias sugar, Eveready, Lonho East Africa, Pearl dry cleaners, East African Packaging and CMC Motors (Warutere, 2013).

## Statement of the Problem

The role of corporate governance in enhancing financial performance and reducing financial distress has been termed as significant (Bhagat & Black, 2002). Wang and Deng (2006) argue that good corporate governance decrease financial distress but bad business governance activities results in greater likelihood of financial distress (Bhagat & Black, 2002). As result of superior corporate governance a company is protected from vulnerability to prospective financial distress (Bhagat & Black, 2002). To this end, studies reveal positive effects of corporate governance on performance ultimately reducing financial distress. Corporate governance of the firms listed at NSE has been in the lime light in the recent years where managers and directors have been accused of poor corporate governance resulting to financial distress among listed firms. The financial distress facing Uchumi Supermarkets, CMC motors and Mumias Sugar for instance was blamed on poor governance (Kigotho, 2012).

Furthermore, the recently publicized huge losses and numerous unresolved disputes resulting to court cases by Kenya Airways and Kenol Kobil have also thrust corporate governance practices into the spotlight (Kakah, 2015). To this end, corporate governance of firms listed at NSE is hence a topic of concern. Financial distress which has led to failure of firms under unforeseen circumstances has been on the increase (Schmidt, 2010). Despite good rating and aggressive strategies, firms still encounter financial distress problems. For better performance, businesses rely heavily on sound decisions made by the corporate governance body. Financial distress is a global problem affecting both developed and developing economies (Wangige, 2016). The performance of firms listed at NSE has been mixed for the last five years. Several firms have been delisted from stock market such as Mumias sugar, Eveready, Lonho East Africa, Pearl dry cleaners, East African Packaging and Uchumi supermarkets as a result of financial distress (Mburu, 2014).

Even after being delisted in the year 2006 and being bailed by the government to be relisted back at NSE in the year 2010, Uchumi supermarket has continued to face financial distress which has seen it continue to close down some of its branches and default payments of its creditors. In as much as the financial distress continuous to increase, its determinants is still subject to mixed and inconclusive results. A study by Memba and Abuga (2013) concluded that financial distress is caused by poor capital decisions, poor internal management shortage of skilled labor and lack to access of credit, another study by Mandi (2014) on the other hand indicated that financial distress is caused by financial factors, while a study by Talian (2012) also indicated that the main causes of financial distress were financial factors. A study conducted by Maina and Sakwa (2012) concluded that the main determinants of financial distress were management style and capacity, and government policies. It is therefore evident that what causes financial distress is a topic of controversy and breeds the knowledge gap upon which this study seeks to fill. With the argument by Changing (2011) that every decision made by management, determines the direction the firm takes in future, there was a demand to assess the impact of business governance on financial distress of firms listed at NSE. This research thus sought to answer the question, what is the impact of corporate governance practices on financial distress among listed firms at Nairobi Securities Exchange?

## Objectives of the study

- i. To establish the effect of number of non-executive directors on financial distress of firms listed at Nairobi Securities Exchange
- ii. To determine the effect of board size on financial distress of firms listed at Nairobi Securities Exchange
- iii. To establish the effect of board gender diversity on financial distress of firms listed at Nairobi Securities Exchange
- iv. To find out the effect of Ownership Concentration on financial distress of firms listed at Nairobi Securities Exchange
- v. To examine the effect of net profit on financial distress of firms listed at Nairobi Securities Exchange
- vi. To determine the effect of capital structure on financial distress of firms listed at Nairobi Securities Exchange

## Theoretical Literature Review

### Agency Theory

The proponent of the theory was Jensen and Meckling in 1976. They argued that there must be two parties for any contract to be successful. Generally, the theory is concerned with the problem that arises when collaborating parties are after varying goals and are also practicing separation of labor. The theory explicitly emphasizes on the association whereby one or more principals involves the agent to accomplish some job on their behalf. The underlying principle of this theory is that the participants are pre-supposed as rational economic-optimizing bodies (Landström, 1993). What this implies therefore is that there will be decisions made by the agent that may not necessarily reflect the interests of the principal due to the segregation of ownership as well as control between the two parties and this will eventually lead to agency costs that are incurred in bringing the agents behavior into control. The association between the participants always determines the performance of any organization in the dynamic business environment.

Whitfield and Landeros (2006) posit that good relations between the employer and employee enhance organizational productivity. In modern competitive firms, good management practices ranging from management styles, policies, culture, structure, board of directors and technology can enhance employee motive to work towards organizational goals. The theory is pertinent to this study in the sense that firms and specifically those firms listed in NSE are likely to maintain long term relations with their customers if they provide accurate market information to customers, have customer non-peripheral policies, have good leadership and brand image. Therefore, characteristics of board members will enhance decisions formulated by the shareholders and promote customer relations in the long term period.

## Stakeholder Theory

Freeman (1984) originated the Stakeholder theory. The theory assumes the existence of a diversity of groups that collectively have a common stake in the affairs and activities of the company. These groups separately ought to be considered by the management especially during the process of decision-making. According to him, a stakeholder is construed as any group or individuals capable of affecting or being influenced by the realization of the aims of the institution. Donaldson and Preston (1995) argue that the theory incorporates 3 features, normative, instrumental and descriptive that is nested within each other. Organizational management is founded upon principles of business ethics that addresses issues of various stakeholders in the changing business environment. The theory identifies models which should guide the behavior of employees to work towards organizational goals. Business codes of ethics are developed by firms to guide and give employees the expected code of conduct at the work place. The stakeholder expectation is that agents of the firm should have moral integrity to make decisions that will enable the firm to maximize profits with minimal harm to the society (Ongore & Kusa, 2013). They argue that systems are likely to achieve goals through recognition of stakeholder's interests and needs in the competitive business environment. Managers should always formulate decisions that do not conflict with stakeholder expectations. Competitive firms should make decisions that represent all stakeholders because of social corporate responsibility of business enterprises in the changing business environment.

## Stewardship Theory

Davis (1997) advanced this theory that postulates that representatives of the organization or stewards should always strive to enhance firm performance thereby protecting and maximizing shareholders wealth. The ability of managers to have multiple skills like entrepreneurship, innovative and risk management will help firms to maximize profits for the benefit of shareholders. Shareholders always expect employees to acquire relevant skills and knowledge to utilize scarce resources of the firm to achieve long term goals more efficiently and effectively. Organizational managers or stewards are likely to be motivated if there is good corporate governance and vice versa (Davis, 2012). In order to protect corporate image, managers should develop policies that promote the welfare of workers without discrimination. The theory being an alternative dimension to agency theory provides an accurate interpretation of the principal-agent connection. Shareholders as is often argued have overriding rights and statuses that are also advocated by this model even as it adopts the assumption that managers' welfare almost always side with those of their seniors.

Senior managers are referred in this theory as good stewards of the corporation who can demonstrate adequate self-enticements to achieve greater levels of business returns and profits for the investors and not just opportunists as they are commonly and mistakenly depicted (Donaldson & Davis, 1991). During instances of financial turmoil, the unaccountability of directors as well as managers shows an absence of stewardship reinforcing the argument that ultimate powers of corporate control may not be practically offered to directors/managers. All the same it will be imprudent to discard the theory despite its obvious weakness especially given the diversity and intricacy of principals' interests as it effectively complements agency theory.

## Transaction Cost Theory

This first proponent to this theory was Cyert and March (1963). Williamson (1996) thereafter hypothetically illustrated and exposed it. Transaction costs occurs when making an economic exchange the transaction cost occurrence divided into different categories like search for lower cost of collecting information and Bargaining costs paid commission. Williamson (1996) argues that transaction cost occurs when management pays commission for providing the services and gives extra benefits. According to Williamson (1996), the transaction cost theory states that directors are opportunists and make transactions to their interests. Corporate governance improves monitoring effectiveness and makes manager accountable (Abdullah 2006). According to him the corporate governance is instruments that can be used by management for checking accountability and be able to control transaction cost.

## Empirical Literature Review

Campbell, John, Hilscher and Jan (2011) conducted a study that focused on forecasting monetary distress and the cost effectiveness of distressed shares in the USA. They presented a corporate failure model that predicts the probability of future financial distress through accounting as well as market-based measures. The model was deemed more precise in measuring corporate failure risk contrary to other measures of the same that provided inaccurate forecasts. They used a computation of financial distress to look at the cost effectiveness of distressed shares since 1981 to 2008. They established that distressed shares had bigger variable proceeds and that these shares tend to underperform secure shares by more now and then of greater market instability and risk avoidance. Despite bearing these significant risks, investors in distressed stocks did not enjoy any particular rewards. Even after significantly adjusting for their high risk, distressed stocks relative to other market stocks had very low returns. The study by Campbell, John, Hilscher and Jan (2011) presents contextual knowledge gap since the conditions of USA (developed economy) cannot be compared to Kenya hence the findings cannot be generalized to Kenya.

Shah (2016) conducted a study that looked at the effect of corporate governance on financial distress in Pakistan. The research empirically investigated the corporate governance practices of KSE 100 index listed non-financial firms and their effect on financial distress in the perspective of Pakistani market. In this research the effect of administrative ownership, organizational ownership, size of the panel, interdependence of the directors and Audit committee on financial distress were examined. Panel logit analysis based on 10-year data of the non-monetary firms for the year 2004 to 2005 was employed in this research. Results indicated that there was an insignificant relationship among corporate governance activities and the prospect of financial distress. There is a contextual knowledge gap which this study sought to fill since it focused on Pakistan economy. Azeez (2015) looked at the association among corporate governance and the performance of companies in Sri Lanka. Data was collected on a three year period and analyzed using an ordinary least square regression model. The results showed that size of the board inversely affected performance. However CEO duality positively affects Performance. Wanjiku (2011) conducted a study to determine the Corporate Governance activities of companies and its association with the development of firms listed at the NSE. The study adopted the underlying relative study design. The focus of the research was on business contact, management as well as technology use.

Results of the study indicated a positive linear association linking expansion and Corporate Governance. The study presents conceptual knowledge gap since the focus is on firm growth. This study links corporate governance to financial distress. Mang'anyi (2011) assessed the effect of ownership formation and Corporate Governance on the performance of firms. The central focus of the study was selected banks in Kenya. The findings of the study revealed a significant variation among Corporate Governance and financial performance of banks. The study findings therefore implied that corporate entities ought to promote corporate governance in an effort to send potential investors positive signals as well as promotion of corporate governance by regulatory agencies including the government. The study presents conceptual knowledge gap since the focus is on firm performance. This study links corporate governance to financial distress.

### Research Methodology

Descriptive research design was adopted by the study. The study design was suitable in explaining the situation regarding financial distress. The study population consisted of 66 listed firms at the Nairobi Securities Exchange by the year ending December 2016. The study conducted a census on all the 66 listed firms at NSE since the firms are few. A census is suitable when the target population is small, that is, less than 200 (Finchman, 2008). This study used secondary data. The data was obtained from the yearly financial statements of all the companies listed at NSE. More data was collected from the NSE handbook reports which are published yearly. The data collected was secondary in nature. Quantitative analysis methodology was hence adopted for this study. To test the effect of corporate governance on financial distress, inferential statistics was adopted. The particular inferential statistics was correlation and regression analysis. The study tested for multicollinearity to establish whether the predictor variables were highly correlated. The study also performed F-tests to establish the model significance. An ordinary least square regression model was used to establish the relationship between the study variables, that is, corporate governance practices and financial distress. Because of the presence of more than one predictor variable, a multivariate regression analysis was suitable. The model is as indicated:  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \epsilon$

Where Y – dependent variable (Financial distress),  $X_1$  – Number of Non-executive directors,  $X_2$  – Board Size,  $X_3$  – Board Gender Diversity,  $X_4$  – Ownership Concentration,  $X_5$  – Net profit,  $X_6$  – Capital Structure,  $\epsilon$  – Is the error term,  $\beta$  – Predictor variables coefficients.

### Results

#### Descriptive Results of the Study

The subsection presents the descriptive results of the minimum, maximum and standard deviation of the 7 variables for the study period between the year 2012 and the year 2016. The findings are presented in Table 1.

**Table 1 Descriptive Statistics**

Variable	Minimum	Maximum	Mean	Std. Deviation
Financial Distress	.850	7.88	3.758	2.174
Net profit	-7228723639	1811082276	(36,353,729.29)	595135458.133
Capital Structure	0	8	1.21	1.763
Management Concentration	0	4	0.01	0.231
Non-Executive Board Members	0	4	1.77	0.836
Board size	1	9	6.09	1.910
Diversity	0	4	0.89	0.952

The study findings in Table 1 revealed that there was a high variation in the financially distressed firms as shown by a high standard deviation (Standard Deviation = 2.174). The findings also revealed an average of loss in net profits among the listed firms in the study period as shown by a mean of 36.3 Million. The variation in the net profits was also high over the study period as indicated by a high standard deviation of 595.1 Million. The results indicated that the on average, the management owns up to 1% of the shares of the listed firms at NSE between the year 2012 to the year 2016 as shown by a mean of 0.01. The standard deviation of 0.231 revealed a high variation in the percentage ownership by the management.

A mean of 1.77 of non-executive board members reveals that on average, the listed firms between the year 2012 and 2016 had two non-executive members with a low variation as shown by a standard deviation of 0.836. The mean of 6.09 of board size reveals that on average, the listed firms had 6 board members on average over the study period of 2012 to 2016 with a small variation in the board size as shown by a standard deviation of 1.910. The findings also revealed that on average, 0.89 female sat on the board of the listed firms between the year 2012 and 2016 which indicated that there were few female in the board. There was a high standard deviation revealed high variation in the number of female board members among the listed firms.

### **Trend Analysis**

The trends were established to show the changes in the study variables over the study period of 5 years from the year 2012 to the year 2016. The trends were established for all the variables apart from financial distress which is a binary variable.

### **Trend Analysis of Net Profits**

The findings indicated that the financial performance of the listed firms over the study period in terms of net profits has been decreasing on average. These findings reveal that the listed firms have undergone poor performance for the last five years on average.



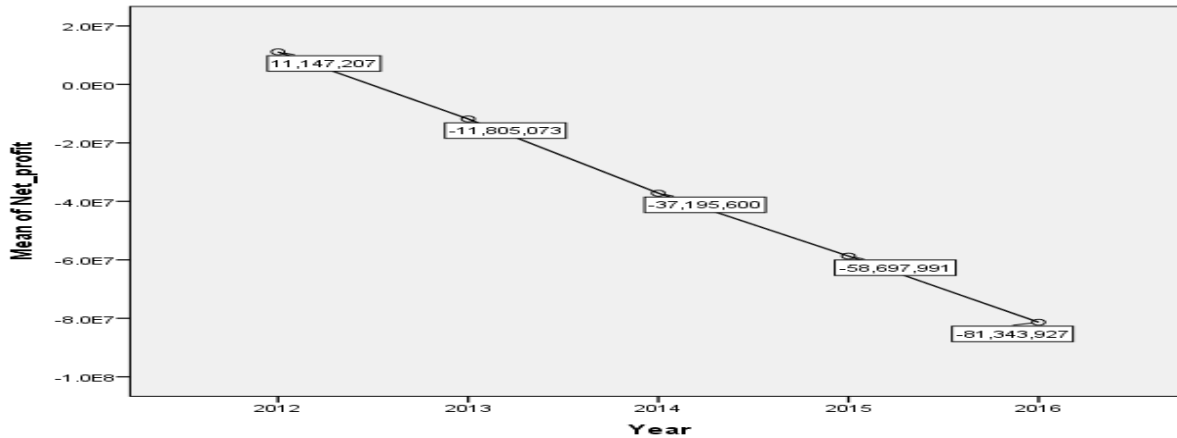


Figure 1 Trend Analysis of Net Profit

### Trend Analysis of Capital Structure

The trends of capital structure measured in terms of debt to equity were increasing over the study period. The results reveal that the listed firms between the year 2012 and 2016 had more debts than equity on average which reveals that on average, most of the firms were being financed by debts than equity.

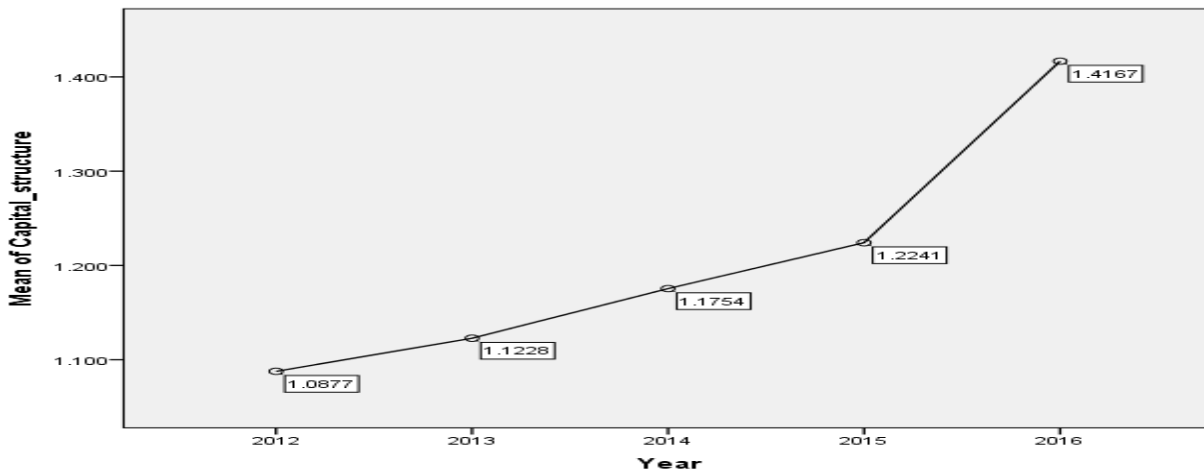


Figure 2 Trend Analysis of Capital Structure

### Trend Analysis of Non-Executive Members

The trends in non-executive members were unsteady in the study period as shown in Figure 3. From the year 2013, there was an increase in non-executive members steadily but on average, the number remained below 2 members. The results reveal that on average, there were more non-executive than executive board members.

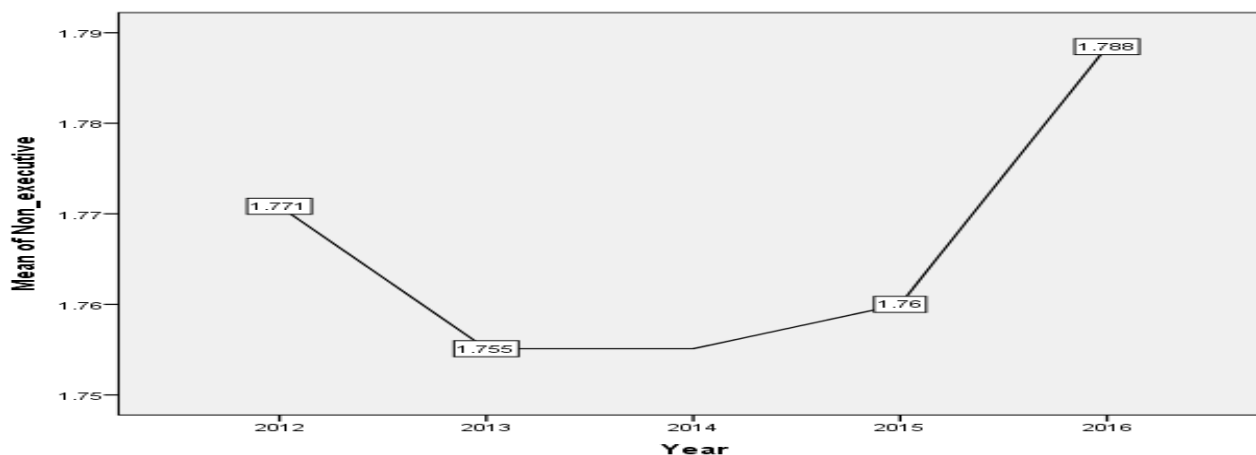
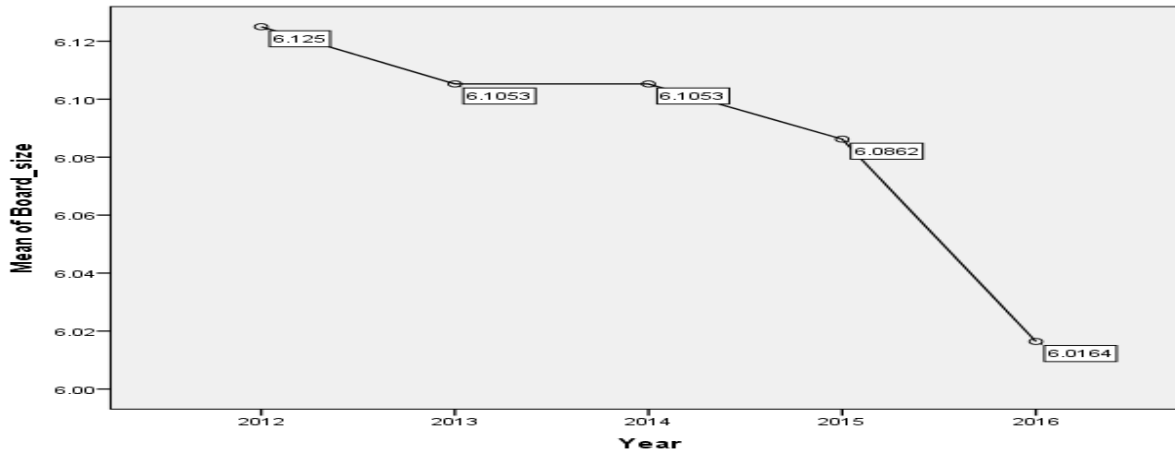


Figure 3 Trend Analysis of Non-Executive Members

### Trend Analysis of Board Size

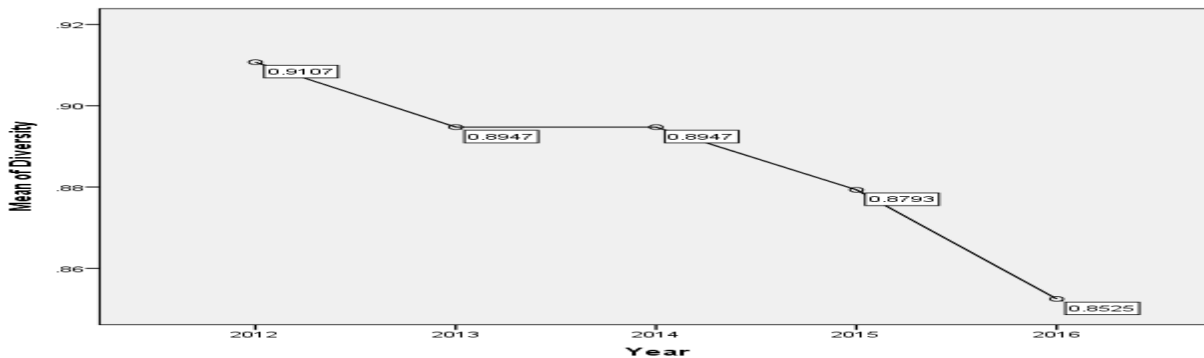
The results reveal that the on average, the board size of the firms listed at the NSE over the study period between the year 2012 and 2016 showed decreasing trends. On average, the number remained 6 on average.



**Figure 4 Trend Analysis of Board Size**

### Trend Analysis of Board Diversity

The trends indicating the board diversity for the listed firms at NSE as shown in Figure 5 revealed that the number of female board members has been decreasing. The highest average number was recorded in the year 2012 while the lowest was recorded in the year 2016 although the figure has been less than 2 on average.



**Figure 5 Trend Analysis of Board Diversity (Female Board Members)**

### Diagnostic Tests

The study tested for multicollinearity to establish whether the predictor variables were highly correlated. The study also conducted a Mann-Whitney Wilcoxon test to establish whether there was a statistically significant

difference in the study indicators of corporate governance among the financially distressed and non-financially distressed firms in the study period. The study was adopted because the dependent variable is not normally distributed hence it was suitable to use a non-parametric test.

### Multicollinearity Test

A variance inflation factor (VIF) was used to test for the presence of multicollinearity test among the predictor variables. Multicollinearity refers to the presence of highly intercorrelated predictor variables in regression models, and its effect is to invalidate some of the basic assumptions underlying their mathematical estimation. It is not surprising that it is considered to be one of the most severe problems in multiple regression models and is often referred to by social modelers as the "familiar curse". Collinearity diagnostics measure how much regressor is related to other regressors and how this affects the stability and variance of the regression estimates. There was no multicollinearity within the variables as the mean VIF was less than 10. This is in line with the informal rule of thumb which states that if condition number is less than 10, then there is no multicollinearity (Field, 2007).

**Table 2 Variance Inflation Factor Test of Multicollinearity**

Variable	Tolerance	VIF
Net profit	0.989	1.011
Capital structure	0.899	1.113
Management Concentration	0.991	1.009
Non-executive Board members	0.982	1.019
Board size	0.879	1.137
Board Diversity	0.873	1.145

### Mann-Whitney Wilcoxon test

The Wilcoxon-Mann-Whitney test is a non-parametric analog to the independent samples t-test and can be used when one does not assume that the dependent variable is a normally distributed interval variable. It is normally referred as the Mann-Whitney U test or the Wilcoxon rank sum test. The test was developed jointly by Mann, Whitney and Wilcoxon. Therefore, present studies refer these two tests as the Mann-Whitney-Wilcoxon (MWW) test. The Wilcoxon-Mann-Whitney test was carried and the results are presented Table 2. The study sought to test whether there was a significant statistical difference between net profits, number of non-executive directors, board Size, board gender diversity, ownership concentration, net profit as well as capital structure be-

tween the financially distressed and non-financially distressed firms listed at the NSE between the year 2012 and 2016. The findings revealed a significant difference in the net profits and capital structure between the financially distressed and non-financially distressed listed firms at NSE between the year 2012 and 2016. The net profits of financially distressed firms was significantly less than that of the non-financially distressed firms (Sig = 0.000). The findings further revealed that capital structure of the financially distressed firms was significantly higher than that of the non-distressed firms (Sig = 0.004). There was no statistical difference in corporate governance indicators of number of non-executive members, board size and board diversity among the financially distressed and non-financially distressed firms. This revealed that corporate governance does not have a significant effect on financial distress.

**Table 3 Mann-Whitney Wilcoxon test**

	Net profit	Capital structure	Management	Non executive	Board size	Diversity
Mann-Whitney U	5464	7350	9850.5	6724.5	8826.5	9080
Wilcoxon W	10315	11815	14800.5	19444.5	13776.5	27035
Z	-6.07	-2.893	-0.704	-0.602	-0.816	-0.44
Asymp. Sig. (2-tailed)	0.000	0.004	0.482	0.547	0.415	0.66
Grouping Variable: Financial Distress						

### Correlation Results

The study carried out a Pearson correlation analysis at 5% level of significance and the results were presented in the Table 4 to determine the relationship between the study variables. The findings reveal that net profit has a negative significant effect on financial distress ( $r = -0.177$ ,  $0.046$ ) respectively. This reveals that an increase in net profits decreases the chances of a firm being financial distressed. The results also showed that the association between management concentration in terms of the shares owned by the management and financial distress is negative and significant ( $r = -0.193$ ,  $\text{Sig} = 0.009$ ) which reveals that an increase in management concentration leads to a decrease in chances of financial distress. When the management has more shares in a firm, there is good governance of the firm which decreases the chances of financial distress.

The results also revealed that non-executive board members has a negative and significant effect on financial distress ( $r = 0.241$ ,  $\text{Sig} = 0.000$ ). 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. Furthermore, the results showed that board size has a positive

significant association with financial distress ( $r = 0.233$ ,  $Sig = 0.000$ ). This shows that when the board size increases, the chances of financial distress also increases. This can be attributed to slow decision making process when the board size is big and thus plays a role in affecting the performance of the firm thus increasing the chances of financial distress. The correlation findings also showed that board diversity has a positive significant association with financial distress ( $r = 0.203$ ,  $Sig = 0.000$ ). This shows that when there is an increase in the number of female board members, the chances of financial distress also increases. The correlation between capital structure and financial distress was however negative but not significant ( $r = -0.056$ ,  $Sig = 0.307$ ).

**Table 4 Correlation Analysis**

		Net profit	Capital Structure	Management	Non-Executive	Board size	Board Diversity	Financial Distress
Net profit	Pearson Correlation	1						
Capital Structure	Pearson Correlation	0.042	1					
Management concentration	Pearson Correlation	0.011	.252**	1				
Non-Executive	Pearson Correlation	-0.051	.209**	.222**	1			
Board Size	Pearson Correlation	-0.024	0.071	.280**	.265**	1		
Board Diversity	Pearson Correlation	0.086	0.033	.170**	-0.041	.405**	1	
Financial Distress	Pearson Correlation	-0.177*	-0.056	-0.193*	-.241**	.233**	.203**	1
	Sig. (2-tailed)	0.046	0.307	0.009	0.000	0.000	0.000	
	N	330	330	330	330	330	330	330
** Correlation is significant at the 0.01 level (2-tailed).								

**Regression Analysis**

Coefficient of determination was used to show the changes in financial distress which can be attributed to cor-

porate governance practices that is board size, board diversity, management concentration and non-executive members as well as net profits and capital structure. The regression analysis results presented in Table 5 indicates that the coefficient of determination (R squared) was 0.161 which implies that 16.1% of the changes in financial distress is explained by corporate governance practices that is board size, board diversity, management concentration and non-executive members as well as net profits and capital structure.

An adjusted R square value of 0.161 on the other hand revealed that 16.1% of the changes in financial distress is explained by only the significant variables that is board size, management concentration and non-executive members as well as net profits.

**Table 5 Model Summary**

<b>R</b>	<b>R-Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
.420	0.177	0.161	2.00115

**Analysis of Variance (Model Significance)**

The study also established the model significance of the regression model linking corporate governance to financial distress of firms listed at NSE. The study findings in Table 6 revealed that the overall model was significant. The F statistic for the model of 11.241 was significant (Sig = 0.000), hence it was concluded that the model linking corporate governance to financial distress of firms listed at NSE was significant. To corroborate the findings, the study also used the F-distribution table to obtain the F-critical value ( F 0.05 (6,329)) calculated at = 5%, using denominator degrees of freedom of 329 and numerator degrees of freedom of 6 and compared against the F-calculated value of 11.241. The rule of the thumb is that if F-calculated is greater than the F-critical, then the model is significant. The F-critical value from the F-distribution table was 2.126 which is less than 11.241 hence it confirms the previous findings that the model linking corporate governance to financial distress of firms listed at NSE was significant.

**Table 6 Analysis of Variance (Model Significance)**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	270.101	6	45.017	11.241	.000
Residual	1257.444	323	4.005		
Total	1527.545	329			

The findings revealed that net profit has a negative significant effect on financial distress (Sig = 0.044) respectively. This reveals that an increase in net profits decreases the chances of a firm being financial distressed. The results also showed that management concentration in terms of the shares owned by the management and financial distress are negatively and significantly related (Beta = -0.862, Sig = 0.022) which reveals that an increase in management concentration leads to a decrease in chances of financial distress. When the management has more shares in a firm, there is good governance of the firm which decreases the chances of financial distress.

The results also showed that non-executive board members has a negative and significant effect on financial distress (Beta = -0.623, Sig = 0.000). 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. Furthermore, the results also showed that board size has a positive and significant effect on financial distress (Beta = 0.42, Sig = 0.000).

This shows that when the board size increases, the chances of financial distress also increases. This can be attributed to slow decision making process when the board size is big and thus plays a role in affecting the performance of the firm thus increasing the chances of financial distress. Findings also indicated that board diversity has a positive but not significant effect on financial distress (Beta = 0.195, Sig = 0.115). This shows that when there is an increase in the number of female board members, the chances of financial distress also increases but insignificantly. Capital structure also has a positive but insignificant effect on financial distress of firms listed (Beta = 0.016, Sig = 0.640). This shows that when the ratio of debt to equity increases, financial distress of firms listed at NSE increases but not significantly.

**Table 7 Regression coefficients**

Predictors	B	Std. Error	t	Sig.
(Constant)	1.827	0.481	3.799	0.000
Net Profit	-3.54E-10	1.64E-10	-2.151	0.044
Capital Structure	0.016	0.033	0.468	0.640
Management Concentration	-0.862	0.376	-2.297	0.022
Non-Executive Directors	-0.623	0.12	-5.197	0.000
Board Size	0.42	0.081	5.205	0.000
Board Diversity	0.195	0.124	1.58	0.115
Dependent Variable: Financial Distress				

### Interpretation of Study Findings

The findings revealed that an increase in net profits decreases the chances of a firm being financial distressed. The results also showed that an increase in management concentration leads to a decrease in chances of financial distress. When the management has more shares in a firm, there is good governance of the firm which decreases the chances of financial distress. 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 Manzanque, 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 out that governance rating has a positive but insignificant influence on corporate profitability of the listed firm.

Furthermore, the results also showed that when the board size increases, the chances of financial distress also increases. This can be attributed to slow decision making process when the board size is big and thus plays a role in affecting the performance of the firm thus increasing the chances of financial distress. Findings also indicated that when there is an increase in the number of female board members, the chances of financial distress also increases but insignificantly. The findings are consistent with Shah (2016) whose study showed that there was an insignificant association between corporate governance practices and probability of financial distress among Pakistan firms. The results also revealed that when the ratio of debt to equity increases, financial distress of firms listed at NSE increases but not significantly.

### **Conclusion of the Study**

The study concludes that net profits has a significant and negative relationship with financial distress indicating that higher profits leads to a decrease in financial distress. The study also concludes that when the management owns a high number of shares in a firm, it leads to a decrease in financial distress. The study further concludes that non-executive board members has a negative significant effect on financial distress an indication that non-executive board members enhance governance of the firm thus decreasing the chances of a firm being financially distressed. The study further concludes that board size has a positive and significant effect on financial distress implying that higher number of board members led to high financial distress. The study findings also led to the conclusion that board diversity has a positive but not significant effect on financial distress implying that the number of female board members don't significantly affect financial distress of a firm. The study also concludes that capital structure has a positive but insignificant effect on financial distress of firms listed implying that capital structure does not affect the financial distress of firms listed at NSE

### **Recommendations of the Study**

The recommends that since an increase in management concentration in terms of shares owned by the management leads to an increase in the odds of a firm being financially distressed, there is a need for firms listed at NSE to come up with policies and regulations that limit the number of shares being owned by the management in terms of directors and managers so as to avoid the agency problem which is exists. The study also recommends that since non-executive board members are associated with a decrease in financial distress of firms listed at NSE, the firms listed at NSE are advised to increase the number of non-executive board members so as to enhance governance and improve their financial distress position. The study also recommends that since board size is associated with a significant increase in financial distress, the firms listed at NSE are advised to come up with policies to reduce and manage their board members so as to enhance faster decision making process and in so doing decrease the possibility of being financially distressed.

### Conflict of Interest

No potential conflict of interest was reported by the authors

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