

Discharge of Responsibilities by Board of Directors, Firm Characteristics and the Performance of Firms Listed in Nairobi Securities Exchange

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Abstract: *Listed companies in Kenya are losing billions of shillings each year due to poor corporate governance practices. Available data from the World Bank and Capital Markets Authority (CMA) indicate that listed companies in Kenya have shown a decline in performance and market share prices have declined between the years 2007–2013. This research examined the relationship between discharge of responsibilities by corporate boards and performance of listed companies in Kenya, with firm characteristic as the moderating variable. The study was anchored on Agency theory and Resource Dependency theory. The study adopted both descriptive and correlational research designs on all 60 companies listed in Nairobi Securities Exchange during 2011-2015. Primary data was collected from Chief Executive Officers of the companies or their representatives whereas secondary data of financial statements of listed companies from the year 2011 to 2015 was obtained from the CMA and NSE. Descriptive and inferential statistics were used to analyze the data. The study found that there was a significant relationship between discharging of responsibilities by the board of directors and performance of firms listed at the NSE; and firm characteristics had no moderating effect on the relationship between discharging of responsibilities by the board of directors and the performance of the firm, with the calculated p value of the interaction term being $0.099 > 0.05$.*

Keywords: *Discharge of Responsibilities by Corporate Boards, Firm Characteristics, Firm performance, Nairobi Securities Exchange*

1. Introduction

Like in any other parts of the world, firms listed in the Nairobi Securities Exchange (NSE) exist to

maximize shareholders' wealth and eventually meet the interests of all stakeholders. Over the years of operations, shareholders of these firms have deployed 'enough' resources so that their companies register positive returns to compensate all stakeholders. In order to deliver on these expectations, shareholders have also instituted essential corporate governance structures that are essential to provide checks and balances to the executives accorded with the mandate of managing firms on behalf of shareholders. However, recent available statistics from the [1] and [2] indicate that between the years 2007–2013, listed companies in the NSE were characterized by a decline in performance. As an indication of a possible dysfunctional corporate governance structure, in year 2015 alone, only 13 out of 66 listed companies increased their stock value with more than half of the remainder registering a reduction in profit or recording a loss [2].

A notable case is Kenya Airways, which after thirteen years of profitability, got into questionable corporate governance practices that saw it register an annual loss of Kshs. 10 billion [3]. In the financial year ending March 2015, Kenya Airways reported a loss of Kshs. 5.7 billion and subsequently a loss of Kshs. 26.2 billion for the year ending March 2016 [4]. Other listed companies that exhibited monumental decline in 2015 include Uchumi Supermarkets which made a loss of Kshs. 3.2 billion, National Bank of Kenya which made a loss of over Kshs. 1 billion, and Mumias Sugar Company made a loss of Kshs. 2.26 billion. In related circumstances, CMC whose stocks had been suspended in 2011 was finally de-listed in 2015[2], due to continued poor performance believed to be as a result of lack of adhering to the best corporate governance practises. As such the NSE Share Index reduced by 22 percent from 5117 to 3994 points

representing an investor loss of at least Kshs. 300 billion in 2015 alone [5].

The continued corporate failures made corporate sector's stakeholders question the credibility of the existing corporate governance structures especially in their inability to comprehensively explain the recent phenomenon of poor performance. The ensuing debate even touched on the effectiveness of internal corporate governance mechanisms of public listed companies like boards, management composition and boards operations, with the prominent view asserting that the decline in performance which had a bearing on low economic development and loss of jobs in Kenya, was becoming a major hindrance to the realization of Vision 2030 [6].

While it may be difficult to pinpoint on one or two causes of poor corporate performance among listed firms in the NSE, the problems at the bourse may persist in the medium term because most studies that have tried to shed light on possible solutions have concentrated on narrow aspects of corporate governance, and none has yet studied the problem using all the predictor variables as espoused by OECD. One such study was carried out by [7] to examine ownership concentration and the effectiveness of the board and how they affect performance of listed firms using cross-sectional design on one year firm data. The study concluded that ownership concentration and board effectiveness had a negative significant relationship with firm performance. [8] also studied an aspect of corporate governance which mainly concentrated on characteristic of boards with emphasis on gender, level of education ownership concentration and duality. The study found out that board size, CEO duality and gender diversity had a positive relationship with firm performance.

Further, [9] study on corporate governance in Kenyan financial institutions dwelt only on foreign ownership, board composition and government ownership. Like majority of corporate governance studies, the study only concentrated on a small aspect of corporate governance. And [10] studied effects of corporate governance on financial performance of insurance firms listed in Kenya leaving out firms in other economic sectors. This study focused on firms from all sectors listed in the NSE as if corporate governance listing threshold is the same for all listed firms regardless of the economic sector. [11] looks at the relationship between the design and the roles of boards' performance of commercial state corporations. The study focused on the narrow aspect of the board and

the state corporations where the state plays a major role in determining who constitutes the board.

From the foregoing there existed the persuasion that there was a need to conduct research which would go a long way in examining the relationship between discharge of responsibilities by the board and performance of the listed firms in the NSE. This paper is a summary of research findings of a wider study that sought to examine the relationship between corporate governance and performance of firms listed at the NSE; and to determine whether firm characteristics have a significant moderating effect on the above objective.

2. Nairobi Securities Exchange

The Nairobi Securities Exchange was established in 1954 and is considered to be the fourth-largest bourse in the Sub-Saharan Africa. Initially, the bourse was constituted as a voluntary association of stockbrokers under the Societies Act. In 1990, a trading floor and secretariat was set up at the IPS building, before relocating to the Nation Centre in 1994 [12]. Over the past decade, the securities exchange has witnessed numerous changes, among them automating its trading in September 2006, and making it possible for stockbrokers to trade remotely from their offices, in 2007. Data from the NSE show that as at end of 2015, the bourse had 60 listed firms in ten principal categories of agriculture, automobiles & accessories, banking, insurance, commercial & services, construction & allied, energy & petroleum, investment, manufacturing & allied, and telecommunications & technology.

The NSE aims at supporting trading, clearing settlement of equities debt derivatives and other associated instruments. It is mandated to list companies on the securities exchange and to enable investors to trade in securities of companies [13]. The bourse, which has licensed several brokers to operate in the market, plays an important role in the Kenyan economy, especially in the privatization of state-owned enterprises. But although interest in investing in listed companies in Kenya has been phenomenal, as was proved by the listing of the first internet provider company – AccessKenya - in June 2007, which was oversubscribed by 363% by both individuals and institutional investors, the NSE like many bourses in other emerging markets suffers from lack of liquidity in the market. To correct the situation, the Kenyan government has made several reforms aimed at attracting foreign investment via the NSE by opening the doors to foreign investors in January 1995. Initially foreign investment in the NSE

was limited to a maximum of 20% shareholding for institutions and 2.5% for individuals, but it has since been increased to 40% for institutions and 5% for individuals, though only a relatively small percentage of listed companies are available to foreigners [14].

The NSE is regulated by the Capital Markets Authority (CMA) [14]. The NSE was instrumental in the development of a code of best practice for corporate governance in Kenya issued by the Centre for Corporate Governance formally Private Sector Corporate Governance Trust Kenya [15]. The objective of these guidelines is to strengthen corporate governance practices by public listed companies in Kenya and to promote the standards of self-regulation so as to bring the level of governance in line with international corporate governance practices. In this connection, the NSE expects the directors of every public listed company to undertake or commit themselves to adopt good corporate governance practices as part of their continuing listing obligations.

2.1 Firm Performance

Different scholars across the globe have their own sets of definition of firm performance. For instance [16] define firm performance as the accumulated end results of all the organization's work processes and activities. Another authority in [17], consider organizational performance as the ability of an organization to attain quality products, high profits, desirable financial results, survival and large market share. Yet [18] describe performance as the end result of an activity and hence the measures selected to assess performance therefore depend on the organizational unit to be appraised and the objectives to be achieved. There are three primary outcomes that are mostly analyzed in assessing the performance of a firm, namely, financial performance, market performance and stakeholder value performance.

The balance sheet and income statements are the main instruments used by those who assess the performance of a firm by its financial performance [19]. [20] as cited by [21] add that leverage ratios like liquidity ratios, long term solvency ratios, turnover ratios, and profitability ratios as useful instruments of measuring financial performance. Second, the stakeholder value performance measures how well a firm is doing in delivering value for various stakeholders including customers, investors, employees and owners. Lastly, the market value measures include ratios that can be directly calculated for publicly trading companies,

that is, the price earnings ratio and the market to book ratio.

Another useful tool for measuring organizational performance is the balanced score card. The balanced score card combines financial measures with operational measures of performance, and research has shown that non-financial assets explain 50 – 80 percent of a firm's value. The balanced score card approach measures performance from four perspectives namely; financial, customer, internal business and innovation and learning perspectives [18].

Several scholars have carried out studies on the financial performance of firms listed in the NSE. [22] in their study on financial distress in commercial and services companies listed at Nairobi Securities Exchange, Kenya observed that Kenya has experienced its fair share of companies like Uchumi, Kenya Airways and several financial banks which are in financial distress and almost on the verge of collapsing. The researchers quoted Harlan and Marjorie (2002) as stating that it was difficult to predict the crises could happen because the managers, who are agents of the companies, focus on short term profit goals rather than the long term wellbeing of the firm. [22] also quote Maringa and Wachira (2016) who found the stock market in Kenya to be inefficient in semi-strong form.

2.2 Corporate Governance among Listed Firms at the NSE

[23] has defined corporate governance as the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled. He adds that it also includes the relationships between all the stakeholders and the overall goals of the company. The principal stakeholders are usually the shareholders, management and the board of directors. Other stakeholders include employees, suppliers, customers, bankers and other lenders, regulators, the environment and the community [24]; [25].

Corporate governance in Kenya started gaining the attention of corporate world stakeholders in 1998 following a seminar that was organized by NSE, the CMA, Institute of Certified Public Accountants (ICPAK) and the Kenyan Chapter of the Association of Chartered Certified Accountants (ACCA) [26]. Buoyed by the appreciation of the role corporate governance plays in the success of the politico-economy of the country and its institutions, corporate governance players have since organized many seminars that stress on good corporate governance practices and the development guidelines

on good governance and corporate responsibility [26].

Further, Kenya's quest for enhanced corporate governance has been buttressed by the 2010 constitution of Kenya that has been termed by constitutional experts as a highly progressive legal framework that if properly implemented would act as a panacea to the many ills that have afflicted Kenya since independence in 1963. Chapter Six is particularly a big boost to good governance practices in Kenya's public sector and by extension the private sector. It emphasizes on ethics and integrity. It clearly spells out the national values and principles of good governance that all entities must abide by in their operations. The Kenyan government has further instituted regulatory frameworks that ensure that the corporate sector succeeds. These are spelled out in the Companies Act (2015) whereby a board of a firm is charged in ensuring company's ethical performance; ensuring a firm is a responsible corporate citizen; is responsible for the strategic direction and control; is responsible for both the financial performance of the company and the company's impact on the environment; the management aligns to the set values and adhered to in all aspects of business; and that it has a charter setting out its responsibilities and should meet as often as required to fulfil its duties, preferably four times per year [27].

But even with these regulations in place the country has in the recent past witnessed a number of companies experience strife within boards with the most recent case in point being CMC-Motors where transactions with related third parties were used to swindle the company's resources [28]. Several researchers have drawn diverse conclusions on the relationship between discharge of responsibilities by boards and firm performance. The most relevant to this study, however, is the proposal that good corporate governance framework eases financing, lower the cost of capital, and improves stakeholder favour of a firm [29].

2.3 Firm Characteristics

Various firm characteristics are believed to have implications on firms corporate performance. According to [30], the size of a firms is considered a potential explanatory determinant of differences in leverage among other firms. Other, than governance practices, firms characteristics has been empirically linked to efficiency of operations of a firm. In exploring the linkage between firms efficiency and performance of a firm with reference to returns on equity, [30] noted that two firms with similar characteristics and facing the same operational

conditions are presumed to have the same value and same rating as in corporate performance. However, a firm may be priced (lower) than the other implying that one firm is less efficient.

Age of a firm has also been empirically linked with various firm performance indicators. A descriptive analysis of Spanish firms in a study by [31] indicated that young firms were smaller, less productive, and less profitable, and in their early years experience higher growth rates in terms of sales, productivity and profits. [31] noted that as firms get older, the weight of external financial sources steadily decreases while equity ration steadily becomes more important financial source. The autocorrelation analysis of the results showed that its coefficient remain negative for older firms suggesting that firms growth remains an erratic process even for experienced firms. Erratic growth could be linked to erratic corporate firm performance. A vector auto regression results for different age groups suggest that young firms display a higher positive impact of employment growth on profits, sales and productivity, while older firms benefit more from sales growth.

Researchers of industry (sector) and performance have paid attention to how changing market pressures affect firm's performance. According to [32] [33] industry structures like entry barriers, concentration, product differentiation, market growth rate, determines firms' strategies including choice of key decision variables such as price and quality, which in turn determine firm performance - innovativeness, increased customer satisfaction and retention, market share, cost minimization, and profitability.

2.4 Theoretical Literature

This paper is anchored on two theories: the Resource Dependence Theory and the Agency Theory.

2.4.1. Resource Dependence Theory. Resource dependency theory is premised on the fact that dependence on resources increases uncertainty for an organization [34]; [35]. This theory espouses that for an organization to survive in the environment it must possess the ability to gather, alter and exploit raw materials faster than competitors in order for it to be successful. Thus the role of board of directors is primarily to provide access to resources needed by a firm [36], by appointing representatives, providing connections to major sources of finances, public, introducing new technology to the firm, and offering the overall strategic direction to the firm [37].

2.4.2. Agency Theory. Agency theory is an appreciation of the contractual view of the firm. It is based on the assumption of goal conflict between the principal and the agent [38]. Due to the human opportunistic behavior, the agent may make decisions that are incongruent to the best interest of the principals [39]. Agency theory therefore calls for close monitoring of the agents due to the prospect that they serve their own interest rather than those of the principal owner.

[40] looks at Agency theory as having decision management rights and decision control rights. The rights also include the decision-monitoring rights which are inclusive of a number of sub-rights, among them the right to measure the performance of the agents as well as the right to reward or punish an agent on the basis of the outcome of their decision [41]. The theory also has it that the value of a firm cannot be maximized as managers normally hold executive power which allows them to expropriate value for their own interest [42]. But in spite of the claim that the conflicts between the principal and the agent cannot be eliminated, the theory provides a broad analytical framework to examine how successful corporate governance systems can curb opportunistic managerial behavior, securing a fair return on investment for suppliers of finance. This paper assumes the existence of a conflict between the principals and agents as envisaged by Agency Theory and which tend to reduce considerably as the firm characteristics mainly the firm size increases as Porter (1985) as (cited by [7]) had observed.

3. Research Methodology

This study was premised on positivist approach, and quantitative data was collected on the basis of testing the relationship between the discharge of responsibilities by board of directors and in the performance of firms listed at the NSE, with firm characteristic as the moderating variable. The study used descriptive correlational research design to gather quantitative data from the Chief Executive Officers (CEOs) or their representatives of all 60 companies listed at the NSE dealing in agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied and energy and petroleum, as shown in Table 1 below.

Table 1. Listed Firms per Economic Sector

S. No	Sector	Number	% of the listed firms
1.	Agricultural	7	11.7

2.	Commercial and services	9	15
3.	Telecommunication and Technology	2	3.3
4.	Automobiles and Accessories	4	6.6
5.	Banking	10	16.7
6.	Insurance	6	10
7.	Investment	4	6.6
8.	Manufacturing and Allied	9	15
9.	Construction and allied	5	8.3
10.	Energy and Petroleum	5	6.6
	TOTAL	60	100%

Source: Nairobi Securities Exchange: Handbook 2015

This study used purposive sampling as used by [43] and [44] in different countries to study corporate governance by use of listed firms. Using a five-point Likert type scale questionnaire primary data pertaining to corporate governance practices in listed firms was collected from the anticipated 60 respondents. The Likert type questionnaire was preferred because respondents usually understand it easily and it leads to consistent answers. All the questionnaires were personally administered and any ambiguity and doubts that respondents had were immediately clarified [45]. Secondary data in form of financial statements of listed companies from the year 2011 to 2015 was obtained from the CMA and NSE.

Using 10% of the target population the researchers conducted a pilot study for this study was undertaken as proposed by [46]. Further, a reliability test, using questionnaires duly filled by 6 randomly chosen respondents, was undertaken to ensure that the research instrument had internal consistency over time [47]. Cronbach alpha coefficient was used to assess the reliability of the constructs and to validate the questionnaire. As proposed by [48], alpha coefficients of 0.50 or greater were considered adequate to accept the presence of internal consistency. Further, Cronbach coefficients of between 0.7 and 0.9 were an acceptable value as they indicated the gathered data had relatively high internal consistency and could be generalized to reflect the opinions of all respondents in the target population. Content validity including face validity, content validity and construct validity was used to examine the validity of the questionnaire. Descriptive analysis and multiple regressions were used for presentation of results. Descriptive analysis

was used to examine the relationships between variables by describing the direction and the association between them. The study adhered to the proposals of [49] who assert that a correlation coefficient is very low if it is under 0.20, it is low if it is between 0.21 and 0.40, moderate between 0.41 and 0.70, high between 0.71 and 0.91 and very high if it is over 0.91. Quantitative data collected was analyzed through the use of SPSS version 23. The findings was presented using statistical techniques which include frequency tables, pie charts, bar charts and measures of central tendencies among them standard deviation.

Multiple regression analysis was done by regressing discharge of responsibility and firm characteristics against firm performance. The analytical model of the direct relationship between corporate governance practices and listed firms performance;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Y = Firm Performance (performance of listed firms)

X₁ = Discharge of responsibility

X₂ = Firm characteristics (Hypothesized Moderator)

β₀ = Constant

β_i = {1,2} Regression coefficients

ε = Error term

The study was premised on the assumption that the highlighted independent variable explains the dependent variable. However, it was anticipated that there could be other factors that may affect the subject of study apart from the variables being investigated, hence the error term to cater for factors arising from omitted variables, nonlinearities, measurement errors and unpredictable effects. The study also used Moderated Multiple Regression (MMR) to determine whether the relationship between discharge of responsibilities by board of directors and performance of firm is moderated by firm characteristics. To determine whether a moderating effect exists, a linear interaction term was introduced to the multiple regression model. The Moderated Multiple Regression (MRR) model indicating the moderating effect of firm characteristic on the relationship between corporate governance and performance of firms listed at Nairobi Securities Exchange;

$$Y_m = \beta_0 + \beta_1 X + \beta_2 M + \mu$$

$$Y_m = \beta_0 + \beta_1 X + \beta_2 M + \beta_3 X.M + \mu$$

Y_m = Moderated performance of listed firms

X = (X₁) Independent variable

M = (X₂) Moderating variable

The coefficient of X (β₁) is the main effect of X when M equals zero while (β₃) is the coefficient of interaction of X and M and measures moderation effect. The test of moderation was therefore

operationalized by the product term (XM), that is, the product of the independent variables and the moderation variable. A number of diagnostic tests were also conducted to ensure compliance with assumptions of linear regression model among them multi-collinearity test, linearity test, normality test and heteroscedasticity test.

4. Results

Out of the 60 questionnaires that were administered, 56 of them, representing 93.33% response rate were properly filled and used for the study (Table 2). According to [50] and also [51] a response rate of above 50% is adequate for a descriptive study.

Table 2. Response Rate

Response	Frequency	Percentages
Returned	56	93.33%
Unreturned	4	6.67%
Total	60	100.00%

Source: Research Survey 2017

4.1. Reliability Analysis

Cronbach's alpha was utilized to test the reliability of the measures in the survey questionnaire (Cronbach, 1951). The results are summarized in Table 3.

Table 3. Reliability coefficient of variables

Variable	Cronbach's Alpha	No. of Items	Comment
Discharge of Board Responsibilities	0.906	9	Reliable
Firm Characteristics	0.817	3	Reliable
Firm Performance	0.923	17	Reliable

Source: Research Survey (2017)

Results in Table 3 above show that the Cronbach's alpha for the three variables was above the threshold of 0.7, meaning that the entire questionnaire was reliable. Content validity test was done by subjecting the questionnaire to a double check, and ensuring that it covered all the main areas of the study. Construct validity was ensured through operationalization of terms to guarantee that the study variables reflect the theoretical assumptions that underpin the conceptual framework for the study.

4.3 Background Information of Respondents

The data was obtained from all sectors; banking sector (11), Manufacturing and allied (9), Commercial service (8), Agricultural Sector (6), Automobiles and accessories (3), Construction and allied Sector (5), Energy and Petroleum (4), Insurance (6), Investment (3), and Telecommunication and Technology (1) (Table 4 below).

Table 4. Sector of firm respondents

Sector	Frequency	Percent
Agricultural Sector	6	10.7
Automobiles and accessories	3	5.4
Banking	11	19.6
Commercial and Services	8	14.3
Construction and allied Sector	5	8.9
Energy and Petroleum	4	7.1
Insurance	6	10.7
Investment	3	5.4
Manufacturing and allied	9	16.1
Telecommunication and Technology	1	1.8
Total	56	100

Source: Field Research (2017)

4.4 Discharging of Responsibilities by the Board and Firm Performance

The regression model of X_1 and Y was significant ($F(1, 54) = 29.638, P = 0.000$), discharging of responsibilities by the board is a valid predictor in the model as shown in Table 5 (b). The coefficient of determination R^2 of 0.354 or 35.4% of firm

performance can be explained by the dimension of discharging of responsibilities by the board in corporate governance. The adjusted R^2 , explained 0.342 or 34.2%, the rest can be explained by other factors not present in the model. The R of 0.595 implies a strong positive correlation between discharging of responsibilities by the board and firm performance. The standard error of 0.269 shows the deviation from the line of best fit shown in Table 5 (b).

The study hypothesized H_{01} : *There is no significant relationship between discharging of responsibilities by the board and the performance of listed firms.*

The results revealed that there is positive relationship between discharging of responsibilities by the board and performance of listed firms in Kenya, ($\beta_1 = 1.107, t = 5.444, p\text{-value} < 0.001$). To test the relationship the Regression Model fitted was $Y = \beta_0 + \beta_1 X_1 + e$. The null hypothesis (H_{01}): There is no significant relationship between discharging of responsibilities by the board and the performance of listed firms or ($H_{01}: \beta_1 = 0$) is therefore rejected ($\beta_1 = 1.107, t = 5.444, p\text{-value} < 0.001$) and concludes that discharging of responsibilities by the board (X_1) significantly influences firm performance (Y).

The Model equation is: $Y = -0.095 + 1.109X_1$

Where, Y , is Firm Performance, X_1 , discharging of responsibilities by the board

The beta coefficient for discharging of responsibilities by the board was significant ($\beta_1 = 1.107, t = 5.444, p\text{-value} < 0.001$). It implies that, one (1) unit increase in discharging of responsibilities by the board in corporate governance leads to an increase of 1.107 in listed firm performance index. This is as shown in Table 5.

Table 5. Regression Analysis

(a) Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.595	.354	.342	.2668585	.354	29.638	1	54	.000

(b) ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.111	1	2.111	29.638	.000 ^b
	Residual	3.846	54	.071		
	Total	5.956	55			

(c) Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.095	.830		-.114	.909		
	X_1	1.107	.203	.595	5.444	.000	1.000	1.000

Source: Research Data (2017)

4.4.1 Regression analysis on moderating effect of firm characteristics on relationship between discharging of responsibilities by the board of directors and firm performance

Regression analysis was run to determine whether firm characteristics influenced the relationship between discharging responsibility by the board and performance of listed firms. The study hypothesized that:

H₀₂: Firm characteristics has no significant moderating effect on the relationship between discharging of responsibility by the board and performance of firms listed at the Nairobi Securities Exchange

To test the hypothesis the following models were fitted:

Model 1: $Y = \beta_0 + \beta_1 X_1 + \epsilon$.

Model 2: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$.

Model 3: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 * X_2 + \epsilon$.

The first model was significant at $F(1, 54) = 29.638$, $P < 0.001$, the second model was also significant at $F(2, 53) = 76.197$, $P < 0.001$ and the third model was significant at $F(3, 52) = 53.485$, $P < 0.001$ as per the Table 6. The coefficient of determination (R^2) for the first model was 0.354 as shown in Table 6(a) meaning that discharging responsibility by the board,

on its own, contributed 35.4 % to the change in performance of firms listed at the NSE. However, the nature of this relationship between discharging responsibility by the board and firm performance changed significantly with the introduction of firm characteristics as a predictor. Table 6(a) indicates that the R^2 before the introduction of firm characteristics was 0.372. However upon introduction of firm characteristics as a predictor, R^2 significantly changed from 0.354 (35.4%) to 0.742 (74.2%) an increase of 0.388. This means discharging of responsibility by the board and firm characteristics as predictor variables explain up to 74.2% of the performance of listed firms. With the addition of an interaction term ($X_1 * X_2$), the model experienced a marginal change in R^2 to 0.755, an increase of 0.013 however the term becomes insignificant at (p -value=0.099). This implies that X_2 (Firm Characteristics) has some predictive value but does not moderate the relationship between discharging responsibility by the board (X_1) and performance of the firms (Y).

Model 1: $Y = 4.421 + 1.107X_1$

Model 2: $Y = 4.159 + 0.520X_1 + 0.460X_2$

Model 3: $Y = 4.141 + 0.328X_1 + 0.457X_2 + 0.493X_1 * X_2$

Regression results are shown in Table 6.

Table 6. Moderating effect of firm characteristics on relationship between discharging of responsibilities and performance of listed firms

(a) Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.595	.354	.342	.2668585	.354	29.638	1	54	.000
2	.861	.742	.732	.1702896	.388	79.611	1	53	.000
3	.869	.755	.741	.1674360	.013	2.822	1	52	.099

(b) ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.111	1	2.111	29.638	.000
	Residual	3.846	54	.071		
	Total	5.956	55			
2	Regression	4.419	2	2.210	76.197	.000
	Residual	1.537	53	.029		
	Total	5.956	55			
3	Regression	4.498	3	1.499	53.485	.000
	Residual	1.458	52	.028		
	Total	5.956	55			

(c) Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.421	.036		123.978	.000		
	X1c	1.107	.203	.595	5.444	.000	1.000	1.000
2	(Constant)	4.159	.037		111.804	.000		

	X1c	.520	.145	.280	3.575	.001	.796	1.257
	X2	.460	.052	.698	8.922	.000	.796	1.257
	(Constant)	4.141	.038		108.927	.000		
3	X1c	.328	.183	.177	1.795	.079	.486	2.057
	X2	.457	.051	.693	9.000	.000	.794	1.259
	X1X2	.493	.293	.156	1.680	.099	.544	1.838

Source: Research Data (2017)

The beta for discharge of responsibilities by the board in Model 1 was 1.421 ($\beta=1.107$, $t=5.444$, $p\text{-value}<0.001$), that is, discharge of responsibilities by the board alone contributed 1.421 to performance of the firms. In Model 2, when firm characteristics was combined with discharge of responsibilities by the board, the beta decreased considerably from ($\beta=1.107$, $t=5.444$, $p\text{-value}<0.001$) to ($\beta=0.520$, $t=3.575$, $p\text{-value}=0.001$) hence statistically significant. Firm characteristics beta was ($\beta=0.460$, $t=8.922$, $p\text{-value}<0.001$), it was concluded that firm characteristics as a predictor was significant in the model. In Model 3, the introduction of the interaction (X_1*X_2) resulted in a slight decrease in beta and insignificant results ($\beta=0.328$, $t=1.795$, $p\text{-value}=0.079$). The interaction term (X_1*X_2) showed positive and significant effects ($\beta=0.493$, $t=1.680$, $p\text{-value}<0.099$). This means that firm characteristics is a predictor of performance but has no moderating role in the relationship between discharge of responsibilities by the board and performance of firms listed in NSE.

This study is consistent with that of [52] who observed that the board is the management body in a firm responsible for suggesting and implementing major policies, a responsibility that may lead to agency problems between the management and shareholders. [53], [54]; and [55] agree that the board of directors is one of the several mechanisms that can mitigate agency conflicts within the firm, moreover, in the dynamic business environment, boards are important smooth function of organizations. Among the functions of the board include, monitoring of management to mitigate agency costs [54] hiring and firing of management, providing and giving access to resources [56], and providing strategic direction for the firm [57]. Boards are also said to seek to protect shareholders' interests in a competitive environment while maintaining accountability to attain good firm performance [56]; [58]).

4.5 Summary

The study sought to establish the relationship between corporate governance operationalized as discharge of responsibility by the

board and performance of firms listed at the NSE. The findings revealed that discharge of responsibility by the board as corporate governance dimension was significant predictor of firm performance. The results support the findings of [59] that established that appropriate hybrid of good corporate governance practices influenced the corporate performance of large listed Spanish firms. The results are also consistent with the study by [7] that found that the effectiveness of corporate boards and their adherence to corporate governance have an effect on firm performance, and that firm characteristic moderates firm ownership and board effectiveness.

Similarly, [10] found a link between some aspects of corporate governance and financial performance of listed insurance firms, findings that are consistent with those of this study. Other studies that made similar observations include [9] that established a link between foreign ownership, board composition and government ownership on all Kenyan financial institution listed at the Nairobi Securities Exchange and their performance. [11] also found out that performance of commercial state corporations was affected by some aspects of corporate governance, that is, the design and the role of the board.

4.5.1 Relationship between discharging of responsibilities by the board of directors and firm performance

The main objective of this study was to examine the relationship between discharging of responsibilities by the board of directors and performance of firms listed at the NSE. The study hypothesized that discharge of responsibilities by the board of directors has no significant relationship with financial performance of the firms at NSE. Simple linear regression was carried out to test this hypothesis. The results revealed that there is positive relationship between discharging of responsibilities by the board and performance of listed firms in Kenya

The second objective was to establish the moderating effect of firm characteristics on the relationship between discharging of responsibilities by the board of directors and performance of the listed firms. To investigate the relationship, an

interaction term between firm characteristics and discharging of responsibilities by the board of directors and performance of firms listed at the NSE was introduced. It was established that though discharging of responsibilities by the board of directors had a significant role in influencing the performance of firms listed at the Nairobi Securities Exchange aspects of firm characteristics considered in this study; the firm age, firm size and the economic sector had no significant influence on the strength of the relationship between discharging of responsibilities by the board of directors and firm performance. However, when firm characteristic was used as a predictor variable it was noted to have a significant explanatory power on firm performance.

5. Conclusions

Resource dependency theorists perceive a board of directors as a provider of resources among them provision of legitimacy, advice and counsel as well as links to other organizations [60]. Key among the resources is the board capital which includes the skills, experience and status brought into the organization. The board also provides relational capital which is the network of ties to other firms and external contingencies. Resource dependency theory is important in appreciating the role the board plays. It asserts that board contributes important assets and resources among them personal abilities and connections with others in their professional circles. Therefore, proper discharge of responsibilities by the board of directors is a key aspect of corporate governance which is an important ingredient in enhancing firm performance.

The study was also anchored on agency theory in appreciation of the contractual view of the firm. Agency problem therefore arises in the conflicting interests of suppliers of capital and the management of the firm. This study assumes the existence of a conflict between the principals and agents as envisaged by agency theory and which tend to reduce considerably as the firm characteristics mainly the firm size increases as Porter (1985) as (cited by 7) had observed. Porter further observed that industry structure has great influence on corporate performance a position this study failed to confirm. This arises as a result of industry structure conferring certain advantages and disadvantages to stakeholders which do not necessarily affect firms in other industries. Agency conflicts are also rare in firms that are in a highly competitive industry.

6. References

1. World Bank. (2014). *Corporate Governance of State - owned Enterprises*. The World Bank: Washington D.C
2. CMA (2015). CMA Annual Report for the year 2015.
3. Nderu, M. (2013). Influence of Survival Strategies on the Organizational Performance of Kenya Airways. *International Journal of Social Sciences and Entrepreneurship*, 1(2), 496-512.
4. CMA (2016). CMA Annual Report for the year 2016.
5. NSE (2015). Annual Report of the Nairobi Securities Exchange for the year 2015.
6. RoK. (2013). *Millennium Development Goals: Status Report*.
7. Ongore, V. (2008). *The effects of ownership structure, board effectiveness and managerial discretion on performance of listed companies in Kenya*. Unpublished Phd Thesis, University of Nairobi, Kenya.
8. Bathula, H. (2008). *Board Characteristics and Firm Performance: Evidence from New Zealand*. AUT University, New Zealand: Unpublished PhD Thesis.
9. Barako, DG & Tower, G 2007. (2007). 'Corporate governance and bank performance: Does ownership matter? Evidence from the Kenyan banking sector', *Corporate Ownership and Control*.
10. Wanyama, D. & Olweny, T. (2013). Effects of Corporate Governance on Financial Performance of Listed Insurance Firms in Kenya. *Public Policy and Administration Research*, 3(4).
11. Kamaara, W. (2014). *Relationship between the design and roles of boards and performance of commercial state corporations in Kenya*. Unpublished Phd Thesis, Jomo Kenyatta University of Agriculture and Technology.
12. Kamau, D. I., and Ali, A. I. (2017). Determinants of Capital Adjustment Speed for Companies Listed on the Nairobi Securities Exchange. *Imperial Journal of Interdisciplinary Research*, 3(5).
13. Musiega, G. M, Chitiavi, S. M. & Alala B. O. (2013). Capital structure and performance: Evidence from listed non-financial firms on Nairobi Securities Exchange (NSE) Kenya. *International Journal for Management Science and Technology*, 1(2).
14. Ngugi, R. W. (2003). *Development of the Nairobi Stock Exchange: Historical Perspective*. Discussion Paper, KIPPRA.
15. Lekaram, V. (2014). The Relationship of Corporate Governance and Financial Performance of Manufacturing Firms Listed in the Nairobi Securities Exchange. *International Journal of Business and Commerce*, 3(12).
16. Coltman, Devinney and Midgrey. (2009, April 16). Customer Relationship Management and Firm Performance. Retrieved November 12, 2016, from <https://ssrn.com/abstract>
17. Obiwuru, T. C., Okwu, A. T., Akpa, V. O., & Nwankwere, I. A. (2011). Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research*, 1(7), 100.
18. Wheelen, T. L., and Hunger, D. J. (2007). *Strategic Management and Business Policy* (13 ed.). Pearson

19. Liang, B. C. (2012). *The Pragmatic MBA for Scientific and Technical Executives*. Academic Press.
20. Friedman, M. (1970, Sept. 13). The social responsibility of business is to increase its profits. *N.Y. Times, Section 6*, p. 30.
21. Storey, D. J. (2016). *Understanding the small business sector*. Routledge.
22. Kihoto, E., Omagwa, J., Wachira, M. & Emojong, R. (2016). Financial Distress in Commercial and Services Companies Listed at Nairobi Securities Exchange, Kenya. *European Journal of Business and Management*, 8(27).
23. Knell, A. (2006). *Corporate Governance: How to add Value to your Company: A Practical Implementation Guide*. Oxford: Elsevier.
24. Adrian, H. (1992). *Adrian Cardbury Report for Corporate Governance*. University of Cambridge, Judge Business School, Cambridge.
25. Akinpelu, O. (2012). *Corporate Governance Framework: An International Review*. Bloomington: iUniverse.
26. Mukabwa, J. (2016). A Brief History of Corporate Governance. *Corporate Governance in Kenya*
27. Tricker, B. (2011). Re-inventing the Limited Liability Company. *Corporate Governance: An International Review*, 19(4), 384. Retrieved November 2016
28. Gakeri, J. K. (2013). Enhancing Kenya's Securities Markets through Corporate Governance: Challenges and Opportunities. *International Journal of Humanities and Social Science*, 3(6), 1-24. Retrieved November 12, 2016, from <http://www.ijhssnet.com/journals>
29. Claessens, S., Djankov, S., Fan, J., & Lang, L. (2002). Disentangling the incentive and Entrenchment Effects of Large Shareholdings. *Journal of Finance*, 57, 2741-2771.
30. Swanson, R. (2009). *Analysis for improving performance. Tools for Diagnosing organisations and documenting workplace expertise*. Beijing
31. Teruel-Carrizosa, M. (2010). *Gibrat's Law and learning process, Small Business Economics, forthcoming*. doi:DOI 10.1007/s11187-008-9127-9
32. Mason, E. (1939). Price and Production Policies of Large-Scale Enterprise. *American Economic Review*, 29, 61-74.
33. Bain, J. (1956). *Barriers to New Competition*. Cambridge Mass: Harvard University Press.
34. Aldrich, H. E., & Pfeffer, J. (1976). Environments of organizations. *Annual review of sociology*, 2(1), 79-105.
35. Pfeffer, J. & Salancik, G. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper and Row.
- Robbins, S. P., & Coulter, M. (2005). *Management*.
36. Hillman, A., Cannella Jr, A., & Paetzold, R. (2000). The Resource Dependency Role Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change. *Journal of Management Studies*, 37(2), 235-256.
37. Brown, W. (2007). Board Development Practices and Competent Board Members: Implication for Performance-Non-Profit Management and Leadership. 7(3), 301-317.
38. Jensen, M., & Meckling, W. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-350.
39. Padilla, A. (2002). Can Agency Theory Justify the Regulation of insider Trading. *The Quarterly Journal of Austrian Economics*, 5(1), 3-38.
40. Jensen, M. (1993). Presidential address: The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems. *Journal of Finance*, 48(3), 831-850.
41. Melyoki, L. (2005). *Determinants of Effective Corporate Governance in Tanzania*. Published Phd dissertation of the University of Twente, The Netherlands.
42. Turnbull, S. (1997). Corporate governance: Its scope, concerns & theories. *Corporate Governance: An International Review*, 5(4), 180-205.
43. Anis, I. (2013). Corporate Governance-Driven to Intellectual Capital and Corporate Performance: Empirical study in Indonesian Banking Industry. *Paper presented to the 2013 IBEA, International Conference on Business, Economics and Accounting*. Bangkok-Thailand.
44. Nur'ainy, R, Nurcahyo, B, Kurniasih, SA & Sugiharti. (B 2013). 'Implementation of good corporate governance and its impact on corporate performance: the mediation role of firm size (empirical study from Indonesia)'. *Global Business and Management Research: An International Journal*, 5, 91-104.
45. Sekaran, U & Bougie, R. (2010). *Research methods for business: a skill-building approach*, (5th ed.). Wiley, Chichester.
46. Sekaran, K. (2009). *Research Methods for Business: A Skills Building Approach*. New Delhi: John Wiley and Sons Publishers
47. Balta, M. (2008). *The impact of Business Environment and Boards of Directors on Strategic Decision-Making: A Case Study of Greek Listed Companies*. Unpublished PhD Thesis, Brunei Business School.
48. Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2(53).
49. Burgin, M. & Meissner, G. (2016). Extended Correlations in Finance. *Journal of Mathematical Finance*, 6, 178-188. doi:<http://dx.doi.org/10.4236/jmf.2016.61017>
50. Mugenda, O. & Mugenda, A. (2003). *Research Methods Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
51. Kothari, C. (2010). *Research Methodology: Methods & Techniques*. New Age International Publishers.
52. Bonn, I. (2004). Board Structure and Firm Performance: Evidence from Australia. *Journal of the Australian and New Zealand Academy of Management*, 10(1), 14-24.
53. Eisenhardt, K. (1989). Agency Theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
54. Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond Agency Conceptions of the Work of Non-Executive Director: Creating Accounting in the Boardroom. *British Journal of Management*, 16(1), 5-6.
55. Shleifer, A. & Vishny R. (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(2), 737-783.

56. Hendry, K. & Kiel, G. (2004). The role of the Board in Firm Strategy: Integrating Agency and Organisational Control Perspectives. *Corporate Governance: An International Review*, 12(4), 500-520.
57. Kemp, S. (2006). In the driver's seat or rubber stamp? The role of the board in providing strategic guidance in Australian Boardrooms. *Journal of Management Decision*, 44(1), 56-73. Retrieved from <http://dx.doi.org/10.1108/0025174061041463>
58. McIntyre, M., Murphy, S. & Mitchell, P. (2007). The top team: Examining board composition and Firm performance. *Corporate Governance*, 7(5), 547-561.
59. Brown, L. D., & Caylor, M. L. (2004). *Corporate governance and firm performance*.
60. Hillman, A. & Dalziel, T. (2003). Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *Academy of Management Review*, 28(3), 383-396.