

Influence of Firm Characteristics on the Impact of Disclosure and Transparency in the Performance of Companies Listed in Nairobi Securities Exchange

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Abstract:

The performance of companies listed in the Nairobi Securities Exchange (NSE) has come under intense scrutiny after a general decline in market share prices of a number of firms between the years 2011–2015 due to poor corporate governance practices. This study examined the relationship between disclosure & transparency and performance of listed companies at NSE with firm's characteristics as the moderating variable. The study was anchored on Agency theory and Signaling theory. The study adopted both descriptive and correlational research designs on all 60 companies listed in Nairobi Securities Exchange during the period 2011-2015. Primary data was collected from companies CEOs or their representatives whereas secondary data was obtained from the Capital Markets Authority and NSE. Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and multiple regression) were used to analyze the data. Findings showed a significant relationship between disclosure & transparency and performance of firms listed at the NSE and that firm's characteristics had a moderating effect on the relationship between disclosure and transparency and firm performance. Moderation was supported, since the calculated p value of the interaction was $0.000 < 0.05$, the null hypothesis was rejected, hence firm's characteristics variable has significant moderating effect on relationship between disclosure & transparency and performance of firms listed at the Nairobi Securities Exchange.

Keywords: Disclosure and Transparency, Firm characteristic, Firm Performance, Listed Firms

1.Introduction

The government of Kenya has over the last three decades implemented significant reforms to modernize the Nairobi Securities Exchange (NSE) in such critical areas like automation of trading, diversification of listed securities, and dematerialization of stocks and the development of regulatory and supervisory frameworks as a matter of improving the development prospects of the country (Ayako, Kungu & Githui, 2015). Further, the government has continued to implement reforms to both broaden and deepen the country's capital market and the performance of the firms listed in the NSE (Allen, Otchere & Senbet, 2011). The growth of the NSE has facilitated mobilization of resources to provide long term capital for financing investments, Ngugi, Amanja and Maana (2006), which has resulted to listed firms in the NSE registering improved performance, Mbuga and Okech (2015). However, others have experienced declining fortunes and some have even been delisted from the NSE over the last decade (Ayako, Kungu, & Githui, 2015; CMA, 2013; World Bank, 2014).

A case in point of those that have been on the decline is Kenya Airways, which after thirteen years of profitability, fell into questionable corporate governance practices, and reported an annual loss of Kshs. 10 billion as its fuel-hedging loss ballooned to Kshs. 8.9 billion equivalent to Kshs. 8.8 per share in 2013 (Nderu, 2013). In the financial year ending March 2015, Kenya Airways reported a loss of Kshs. 25.7 billion and subsequently a loss of Kshs. 26.2 billion for the year ending March 2016 (CMA, 2016). Other cases include Uchumi Supermarkets which reported a loss of Kshs. 3.2 billion in 2015; National Bank of Kenya

which made a loss of over Kshs. 1 billion in 2014; and Mumias Sugar Company that made a loss of Kshs 2.26 billion in the same year (Omondi, 2015). The CMC, whose stocks had been suspended in 2011, was finally de-listed in 2015 on account of continued poor performance due to non-adherence to the best corporate governance practises. As a pointer to a possible dysfunctional corporate governance structure, in the year 2015, only 13 out of 66 listed companies in the NSE registered an increase in stock value. Further, in 2015, the NSE Share Index fell from 5117 to 3994 (22%) points leading to investors losing at least Kshs. 300 billion of investment in the year (NSE, 2015).

As such corporate sector's stakeholders in Kenya have questioned the credibility of the existing corporate governance structures especially on their inability to comprehensively explain recent corporate failures among listed firms. Researchers have even questioned why significant efforts to turn around such companies or even liquidate them have mainly focused on financial restructuring (Ayako, Kungu, & Githui, 2015), when there is no systematic empirical evidence to support this view (Chebii, Kipchumba & Wasike, 2011) and when the managers and practitioners still lack adequate guidance for attaining optimal financing decisions (Kibet, et. al., 2011). Further, the decline in performance leads to lower economic development and loss of jobs in Kenya (RoK, 2014) thus becoming a major hindrance in the realization of Vision 2030. Following the dismal performance the debate on corporate performance is turning to the effectiveness of internal corporate governance mechanisms of public listed companies like boards, management compositions and boards operations and adherence to the globally acknowledged best corporate governance practices.

Organization of Economic Corporation and Development (OECD) in 1998 developed comprehensive principles that were issued in 1999 and revised in 2003 on corporate governance and agreed upon by OECD member countries in 2004 that were to cover six distinct areas (OECD, 2004). Key among them included disclosure and transparency which member countries were encouraged to incorporate in their legal and regulatory mechanisms. Though Kenya like many African countries, is not an OECD member country, efforts have been made to adopt best corporate governance practices as espoused by OECD. Despite this appreciation and the fact that several countries in Africa have lost opportunities to mobilize financial resources on domestic and international capital markets due to lack of good corporate governance, very few studies in Kenya have attempted to show the correlation between OECD principles and performance of the Kenyan corporate sector.

Most of the studies on corporate governance and corporate performance have been on narrow aspects of corporate governance or on isolated sectors, Wanyama and Olweny (2013), in their studies looked at listed firms in the insurance sector, Ongore in (2008), examined at the ownership concentration and the effectiveness of the board and how they affect performance of listed firms using one year data, (Bathula, 2008) looked at board characteristics with emphasis on gender, level of education, and ownership concentration and (Barako & Tower 2007) examined at foreign ownership, board composition and government ownership. Thus the clarity on how good governance affects the performance of companies listed in the NSE has been scanty. This paper is a summary of the aspects of disclosure and transparency and its impact on the performance of listed firms and to determine whether firm's characteristics have significant moderating effect on this relationship as extracted from a broad study that examined how all the OECD recommended principles are relevant to firms listed in NSE for the duration between 2011 and 2015.

2.0. Performance of Firms Listed at Nairobi Securities Exchange

Several scholars have studied the concept of the performance of the firm and have advanced several definitions on what constitutes the performance of a firm. Robbins and Coulter (2005) have stated that firm performance is the accumulated end results of all the organization's work processes and activities; Obiwuru *et al.* (2011) consider organizational performance as the ability of an organization to attain the set objectives such as quality products, high profits, desirable financial results, survival and large market share; while Wheelen *et al.* (2007) describe performance to be the end result of an activity. However they all concur that three primary outcomes are mostly analyzed when assessing the performance of a firm, namely, financial performance, market performance and stakeholder value performance.

Locke, Stajkovic and Latham (2010) and Guest *et al.*, (2003) state that performance measures are quantitative or qualitative ways to characterize and define performance. They add that such measures provide a tool for organizations to manage progress towards achieving predetermined goals, defining key indicators of organizational performance and customer satisfaction. Accordingly, performance measurement is the process of assessing the progress made (actual) towards achieving the predetermined performance goals (baseline). Hence, in doing so it is essential to measure strategic practices in terms of outcomes like return on assets (ROA), return on investments (ROI) and turnover; measures of output of goods and services such as number of units produced, number of clients attended to, number of errors in the process and customer satisfaction indexes.

According to Liang (2012), the balance sheet and income statements are the main instruments used to assess the performance of a firm in terms of its financial performance. Storey (2016) also cite Altman (1968) as stating that leverage ratios like liquidity ratios, long term solvency ratios, turnover ratios, and profitability ratios as useful instruments of measuring financial performance. Another useful tool is the stakeholder value performance which measures how well a firm is doing in delivering value for various stakeholders including customers, investors, employees and owners (Wicks & Harrison, 2013). Other instruments include market value measures like the price earnings ratio and the market to book ratio; another useful tool for measuring organizational performance is the balanced score card, which combines financial measures with operational measures of performance, and measures performance from four perspectives namely; financial, customer, internal business and innovation and learning perspectives (Wheelen & Hunger 2007). The customer perspective of the balanced score card requires that managers translate their general mission statements on customer service into specific measure that reflect factors that really matters to customers.

The customer perspective includes measures such as quality, cycle time, employee skills and productivity. The innovation and learning perspective represents a firm's ability to improve, innovate and learn. However, Talbot (2010) proposes a divergent view of the same arguing that performance of an organization is best determined by measuring the outcome of the output of employees' input. He dismisses traditional measures of financial performance like return on equity (ROE), return on asset (ROA), return on sales (ROS) and return on investment (ROI) for their failure to strongly correlate to shareholder wealth especially in the public domain where citizen satisfaction with leaders is measured differently.

The Nairobi Securities Exchange, which is considered to be the fourth-largest bourse in the Sub-Saharan Africa, Allen, Otchere and Senbet (2011), was established by a voluntary association of stockbrokers under the Societies Act in 1954 (Kamau, *et al.*, 2017). Over the past decade, the NSE among other things in September 2006 automated its trading platform, and from 2007 made it possible for stockbrokers to trade remotely away from the floor (Ngugi, Amanja and Maana 2006). At the end of 2015, the bourse had listed 60 firms in ten principal categories of agriculture, automobiles & accessories, banking, insurance, commercial & services, construction & allied, energy & petroleum, investment, manufacturing & allied, and telecommunications & technology (NSE, 2015). The bourse is mandated to list companies on the securities exchange and to enable investors to trade in securities of companies (Musiega, Chitiavi & Alala, 2013). It has licensed several brokers to operate in the market, and has been instrumental in the privatization of state-owned enterprises. However, like many bourses in other emerging markets the NSE suffers from lack of liquidity in the market, although the government has since January 1995 instituted several reforms aimed at attracting foreign investment through the NSE (Ngugi, 2003).

The NSE is regulated by the Capital Markets Authority (CMA), Ngugi (2003), and has been playing an instrumental role 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 (Lekaram, 2014). These guidelines aim to strengthen corporate governance practices of public listed companies in Kenya and to promote the standards of self-regulation to the level of 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.

In Kenya several researchers have attempted to study the determinants of the performance of the listed firms at the NSE. Ayako, Kungu and Githui (2015) analysed the factors affecting the performance of 41 non-financial companies listed in the NSE using panel data over the period 2003 to 2013. Their empirical results of the estimation of both ROA and ROE showed that corporate governance was statistically significant in determining the performance of firms and returned positive sign; and the leverage of the firm returned negative sign and was statistically significant in explaining the performance of companies. Firm size and liquidity were however found to be statistically insignificant in determining the performance of these firms. Omondi and Muturi (2013) investigated the factors affecting the financial performance of listed companies at the NSE in Kenya and concluded that leverage had a significant negative influence on financial performance while liquidity, company size and age of firm had a significant positive influence on financial performance.

Kihooto *et al.*, (2016) studied the financial distress in commercial and services companies listed at NSE and observed that Kenya has experienced its fair share of companies like Uchumi, Kenya Airways and several financial banks that are in financial distress and almost on the verge of collapse. They quoted Harlan and Marjorie (2002) stating that the advent of crisis is hard to predict because managers as agents of companies, focus on short term gains rather than the long term gains of a company. Kihooto *et al.*, (2016) also quote the study by Maringa and Wachira (2016) which showed the stock market in Kenya to be inefficient in semi-strong form. The thrust of this study is to examine the relationship between timely disclosure and transparency on performance of firms listed at the NSE, and the moderating effect of firm characteristics on that relationship.

2.1 Disclosure and Transparency

Smith (2014) defined disclosure and transparency in corporate governance as availing the truth to every stakeholder. Smith adds that by definition if a company is only to let the truth be known that presupposes a passive position on matter disclosure. He opines that the current corporate governance mechanism calls for active disclosure transparency of company's information bringing in a whole new meaning to a firm, as transparent actions put new responsibilities to a firm. According to OECD (2012), an appropriate governance framework should ensure timely and accurate disclosure of all material matters, including financial situation, performance, ownership and governance of a company at least once a year, or twice a year, or quarterly, and if possible every month. The quest for material development according to OECD is that users are bound to take up information that is omission or misstatement which could negatively influence economic decisions. The OECD also stipulates that firms should simultaneously disclose information to all shareholders without creating unreasonable administration or cost burdens. Further, according to Solomon and Solomon (2004) transparency in corporate governance is an important element of a well-functioning system. Disclosure therefore involves information emanating from the firm and ranges from financial statements; the profit and loss account, cash flow statement and balance sheet to other mandatory reports like AGM and management forecast (Healy & Palepu, 2001)

Indeed, studies on disclosure and corporate performance of firms have yielded various results. Bhagat and Bolton (2008), for instance, studied the importance of disclosure in preventing financial fraud in the money market, and established that when self-interest behavior veers into criminality, true transparency may cast light on financial malpractice activities that could lead to a change in behavior. The study further observed that increased transparency is important to the future success of corporate governance. The study underscored that transparent disclosure is the only practice that is likely to deter fraud, embezzlement and financial scandals – the necessary conduct that can enhance the fostering of efficiency in allocation of investments across companies and regions. The study concluded that rules, regulations, laws, concepts, structures, processes, best practices and most progressive use of technology cannot ensure transparency and accountability, which can only come about when individuals of integrity do the right thing.

A study by Patel, Balic and Bwakira (2002) found that when a firm embraces higher transparency and disclosure, the information asymmetry is considerably reduced. The findings suggested that firms with higher levels of disclosure and transparency are more valued than firms with lower disclosure and

transparency; meaning that improved disclosure and transparency implies strong corporate governance practices leading to better firm performance.

Chiang and Chia (2005) established that transparency and disclosure has a significant positive relationship with corporate performance and termed it as the most important indicator for measuring firm performance. On the same line, Fan and Wong (2005) argue that disclosure of material information like related-party transactions, external audit results and insider transaction are a priority in corporate governance.

Lewis and Mallat (2009) observe that disclosure and transparency in stock markets play crucial roles in corporate governance, allowing organizations to publish data on key management practices, such as financial and non-financial statements, CSR activities and audit reports. They add that, such an approach enable shareholders become aware of issues affecting their investments. This constitutes an important aspect of shareholder theory, that the directors of the company should manage it on behalf of the shareholders.

According to Epstein and Buhovoc (2006), shareholders need all information about the capital they have invested in a company that is managed by corporate directors in order to ascertain that their interests are being taken care of. Shareholders need also be familiar with procedures and strategies that have been put in place to reduce costs in the event of failure of management to perform its duties. Often times, disclosures have revealed faults within companies and conflicts of interests between management and shareholders. Finally, information disclosure is a key factor in the determination of the value of a company, the trading of its shares in the stock market, and the appointment and exemption of directors (Epstein & Buhovoc, 2006).

2.2 Firm's Characteristics

Studies have established that certain firm characteristics have a direct bearing on the corporate performance of a firm. According to Swanson (2009), the size of a firm is a potential explanatory determinant of differences in leverage among other firms. On top of governance practices, firms characteristics have 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, Swanson (2009), observed that two firms with similar characteristics and facing similar 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.

The age of a firm has also been empirically linked with various firm performance indicators. Teruel-Carrizosa (2009) carried out a descriptive analysis of Spanish firms and established that young firms are usually small in size, are less productive, and less profitable, and experience higher growth rates in terms of sales, productivity and profits in their early years. Teruel-Carrizosa (2009) observed 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 his results showed that the age 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.

Finally, researchers of industry (sector) and performance have paid attention to how changing market pressures affect firm's performance. According to Mason (1939) and Bain (1956) 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.

2.3 Theoretical Literature

This paper is anchored on two theories: the Signaling and the Agency Theory

2.3.1 Signaling Theory

Signaling theory is regarded as an extension of agency theory (Jensen & Meckling, 1976). The theory originated from the need to explain the existence of information asymmetry between managers and

shareholders (Morris, 1987). It presupposes that corporate insiders have more information about a firm than other stakeholders (Bebchuk & Weisbach, 2010), and can potentially exploit this information to maximize personal gains (Jensen & Meckling, 1976). Given their ‘conflicting’ goals in a firm, company managers and investors have clear and distinct responsibilities to discharge. Spence (1973) stated that where information asymmetry exist between company managers and investors, a company should endeavor to provide information to the investor to eliminate the asymmetry; for if the information gap is not bridged the investors might not understand the real company’s real operational situation (Ravid & Saring, 1991). As such, companies that have a high threshold of disclosure and transparency register better performance and register positive impression to prospective investors and customers.

2.3.2. Agency Theory

Agency theory is an appreciation of the contractual view of the firm. It is based on the assumption that the existence of conflict between the principal and the agent (Jensen & Meckling, 1976). The theory supposes that the agent, out of human opportunistic behavior, may make decisions that are incongruent to the best interests of the principal (Padilla, 2002). 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.

Fama and Jensen (1983) 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 (Melyoki, 2005). 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 (Turnbull, 1997). 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 Ongore (2008) had observed.

3. Research Methodology

This study was premised on positivist approach where quantitative data was collected on the basis of testing the relationship between the disclosure and transparency variable and 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 Companies
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 Anis (2013) and Nur'ainy *et al.*, (2013) in different countries to study corporate governance applied by 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. This research preferred a Likert type questionnaire because respondents understand it easily leading to consistent answers. Questionnaires were personally administered and any ambiguity and doubts that respondents had were immediately clarified (Sekaran, 2003). Secondary data inform of financial statements of listed companies from the year 2011 to 2015 was obtained from the CMA and NSE.

The researchers undertook a pilot study using 10% of the target population as proposed by (Sekaran, 2009). 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 (Balta, 2008). Cronbach alpha coefficient was used to assess the reliability of the constructs and to validate the questionnaire. As proposed by Tavakol and Dennick (2011), 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 Burgin and Meissner (2016) 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, bar charts and measures of central tendencies among them standard deviation.

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

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

Y = Firm Performance (performance of listed firms)

X₁ = Disclosure and transparency

β₀ = Constant

β₁ = 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 variable 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 disclosure and transparency 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;

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

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

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 moderating 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 Mugenda and Mugenda (2003) and also Kothari (2004) 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
Disclosure and Transparency	0.738	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 underpinning 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: Sectors of firm respondents

Sector	Frequency	Percentages
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 Disclosure, Transparency and Performance

The regression model of X_1 and Y was significant ($F(1, 54) = 31.939, P < 0.001$), disclosure & transparency is a valid predictor in the model as shown in Table 5 (b). The coefficient of determination R^2 of 0.372 or 37.2% of firm performance can be explained by the dimension of disclosure and transparency in corporate governance. The adjusted R^2 , explained 0.360 or 36.0%, the rest can be explained by other factors not present in the model. The R of 0.610 implies a strong positive correlation between disclosure, transparency and firm performance. The standard error of 0.263 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 disclosure & transparency and the performance of listed firms.*

The results revealed that there is positive relationship between disclosure & transparency and performance of listed firms in Kenya, ($\beta_1 = 0.483, t = 5.651, p\text{-value} < 0.001$). To test the relationship the Regression Model fitted was $Y = \beta_0 + \beta_1 X_1 + \varepsilon$.

The null hypothesis (H_{01}): There is no significant relationship between disclosure, transparency and the performance of listed firms or ($H_{01}: \beta_1 = 0$) is therefore rejected ($\beta_1 = 0.483, t = 5.651, p\text{-value} < 0.001$) and conclude that disclosure & transparency (X_1) significantly influences firm performance (Y). The Model equation is: $Y = 2.796 + 0.483X_1$. Where, Y , is Firm Performance while X_1 , is disclosure & transparency.

The beta coefficient for disclosure & transparency was significant ($\beta_1 = 0.483, t = 5.651, p\text{-value} < 0.001$). It implies that, one (1) unit increase in disclosure & transparency in corporate governance dimension leads to an increase of 0.483 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	.610	.372	.360	.2632615	.372	31.939	1	54	.000

(b) ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression		2.214	1	2.214	31.939
	Residual		3.743	54	.069	
	Total		5.956	55		

(c) Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.792	.290		9.612	.000		
	X_1	.483	.085	.610	5.651	.000	1.000	1.000

4.4.1 Regression analysis on the moderating effect of firm's characteristics on relationship between disclosure & transparency and firm performance

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

H_{02} : *Firm characteristics has no significant moderating effect on the relationship between disclosure & transparency and performance of firms listed at the Nairobi Securities Exchange*

To test the hypothesis the following models were fitted:

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

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

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

The first model was significant at $F(1, 54) = 31.939, P < 0.001$, the second model was also significant at $F(2, 53) = 88.945, P < 0.001$ and the third model was significant at $F(3, 52) = 100.435, P < 0.001$ as per Table 6 (b).

The coefficient of determination (R^2) for the first model was 0.372 [see Table 6 (a)] meaning that disclosure & transparency, on its own, contributed to 37.2% to the change in performance of firms listed at the Nairobi Securities Exchange. However, the nature of the relationship between disclosure & transparency 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 0.372 (37.2%) to 0.770 (77.0%) an increase of 0.398. This means disclosure & transparency and firm characteristics as predictor variables explain up to 77.0% of the performance of listed firms. With the addition of an interaction term ($X_1 * X_2$), the model experienced a considerable change in R^2 to 0.853, or an increase of 0.083. The model remained significant at (p-value <0.001).

This implied that X_2 (Firm Characteristics) has some predictive value but plays even a bigger role in moderating the relationship between disclosure & transparency (X_1) and performance of the firms (Y).

Model 1: $Y = 4.422 + 0.483X_1$

Model 2: $Y = 4.162 + 0.261X_1 + 0.455X_2$

Model 3: $Y = 4.144 + 0.170X_1 + 0.374X_2 + 0.773X_1 * X_2$

Regression results are shown in Table 6.

Table 6: Moderating effect of firm's characteristics on relationship between disclosure & transparency and firm performance

Model Summary (a)									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.610	.372	.360	.2632615	.372	31.939	1	54	.000
2	.878	.770	.762	.1606129	.399	92.080	1	53	.000
3	.923	.853	.844	.1298397	.082	29.100	1	52	.000

(b) ANOVA							
Model		Sum of Squares	Df	Mean Square	F		Sig.
1	Regression	2.214	1	2.214	31.939		.000
	Residual	3.743	54	.069			
	Total	5.956	55				
2	Regression	4.589	2	2.294	88.945		.000
	Residual	1.367	53	.026			
	Total	5.956	55				
3	Regression	5.080	3	1.693	100.435		.000
	Residual	.877	52	.017			
	Total	5.956	55				

(c) Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.422	.035		125.688	.000		
	X1c	.483	.085	.610	5.651	.000	1.000	1.000
2	(Constant)	4.162	.035		120.360	.000		
	X1c	.261	.057	.329	4.576	.000	.836	1.197
	X2	.455	.047	.691	9.596	.000	.836	1.197
3	(Constant)	4.144	.028		147.278	.000		
	X1c	.170	.049	.215	3.472	.001	.738	1.356
	X2	.374	.041	.567	9.073	.000	.724	1.382
	X1M	.773	.143	.349	5.394	.000	.674	1.483

Source: Research Data 2017

The beta for disclosure and transparency in Model 1 was 0.483 ($\beta=0.483$, $t=5.651$ p-value<0.001), that is, disclosure & transparency alone contributed 0.483 to performance of the firms. In Model 2, when firm characteristics was combined with disclosure & transparency, the beta decreased considerably from ($\beta=0.483$, $t=5.651$ p-value<0.001) to ($\beta=0.261$, $t=4.576$, p-value<0.001) hence statistically significant. Firm characteristics beta was ($\beta=0.455$, $t=9.596$ p-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 ($X_1 * X_2$) saw a decrease in beta and significant results ($\beta=0.170$, $t=3.472$ p-value=0.001). The interaction term ($X_1 * X_2$) showed positive and significant effects ($\beta=-0.773$, $t=05.394$ p-value<0.001). This means that firm characteristics is a predictor of performance but it plays even a bigger role by moderating the relationship between disclosure and transparency and performance of firms listed at the Nairobi Securities Exchange.

The results are consistent with the findings of Bhagat and Bolton (2008) who observed that when self-interest behavior veers into criminality, true transparency would cast a light on financial malpractice activities and lead to a change in behavior. Bhagat and Bolton (2008) further established that increasing transparency is important to the future success of corporate governance. The study further underscored transparent disclosure as the only practice that is likely to deter frauds, embezzlement and financial scandals and enhance foster efficiency in allocation of investments across companies and regions. Bhagat concluded that rules, regulations, laws, concepts, structures, processes, best practices and most progressive use of technology cannot ensure transparency and accountability, as it can only come about when individuals of integrity do the right thing, not just what is expedient or even necessarily what is permissible.

OECD (2012) further asserts that cooperate governance framework should ensure timely and accurate disclosure of all material matters, including financial situation, performance, ownership and governance of the company at minimum annually, semiannually, quarterly or even more. The quest for material development according to OECD is that information whose omission or misstatement could influence economic decisions taken by users of information. OECD stipulates that all relevant disclosures should be communicated simultaneous to all shareholders without creating unreasonable administration or cost burdens.

5.0 Summary

The objective of this study was to examine the relationship between disclosure & transparency and performance of firms listed at the Nairobi Securities Exchange, and how firm characteristics index moderates this relationship. The hypothesis H_{02} was formulated which hypothesized that firm characteristics has no significant moderating effect on the relationship between disclosure & transparency and performance of firms listed at the Nairobi Securities Exchange. The study established that disclosure and transparency had a fairly strong explanatory power on the variation in firm performance. Disclosure and transparency as a corporate governance principle as espoused by OECD significantly influence the performance of a firm. The aspects of disclosure and transparency among them preparation of financial and audit reports, ensuring rotation of audit partners and board and executive remuneration have varied degree of explaining the performance of the firm. It was established that financial and audit reports prepared as per laid down regulations played the greatest role in explaining the firm performance followed by rotation of audit partners, with the least contributor being board and executive remuneration. The interaction term was introduced in the regression equation along with firm characteristics, disclosure and transparency and performance of firms listed at the Nairobi Securities Exchange. The interaction between firm characteristics and disclosure and transparency had a significant influence on performance of firms listed at the Nairobi Securities Exchange. The study therefore found that though disclosure and transparency plays a role in explaining the performance of the firm, aspects of firm characteristics like the firm size, the firm age and the sector the firm operates in, significantly contribute to the strength of the relationship.

6.0 Conclusions

The results showed that the effect of disclosure and transparency on firm performance is moderated by firm characteristics. The results of tests provided sufficient statistical evidence in support of this moderation. Indeed a firm can attain a sustained superior performance if it chooses to practice disclosure and

transparency to all its stakeholders. Theoretical and empirical evidence in this study have shown that corporate performance of a firm can only be enhanced in a sustained manner if quality disclosure and transparency is a strong pillar of corporate governance. This research has contributed to further understanding of the relationship between corporate timely disclosure and transparency and the performance of firms listed in the Nairobi Securities Exchange.

The results also vindicate the signaling theory that given the conflicting aims of managers and the investors, either party have clear and distinct responsibilities to discharge in pursuance of those aims. Spence (1973) proposed that in case of conflict between the two parties, the company should endeavor to provide information to the investor in order to eliminate the asymmetry. This research holds the same view as that of Spence (1973) that companies that have a high threshold of disclosure and transparency register better performance and attract positive impression from the members of public. The study is further consistent with the view held by Lobo and Zhou (2001) that a firm that embarks on comprehensive disclosure of information usually tends to be highly valued and that investors are mainly willing to pay higher premiums for a firm that undertakes requisite disclosure (Mitton, 2002).

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