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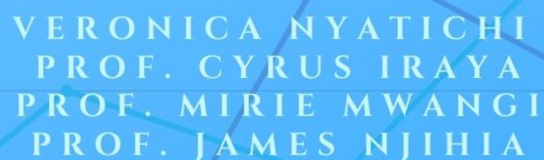

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CORPORATE GOVERNANCE, FIRM CHARACTERISTICS AND EARNINGS MANAGEMENT OF COMPANIES LISTED AT NAIROBI SECURITIES EXCHANGE

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Abstract

The relationship between corporate governance and earnings management may not be direct due to the varying characteristics of firms. The objective of the research was to establish the moderating influence of firm characteristics (size, leverage and profitability) on the relationship between corporate governance and earnings management of companies listed at the Nairobi Securities Exchange. This study utilized hypotheses as a means of testing the objective and a sample of 56 companies for the period 2008 to 2017 was selected. Panel data methodology was adopted and correlational descriptive research design. The sample entailed 517 firm year observations. The findings revealed that firm profitability and firm size moderates the relationship between corporate governance and earnings management while leverage has no significant effect on the relationship. The findings contribute to the debate of corporate governance effectiveness as it is evident that despite the board of directors composition, size of firm and its profitability influences the managers engagement in earnings management practices.

Key words: Corporate governance, firm size, leverage, profitability , earnings management.

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1. Introduction

Corporate governance is the process that influences managers decisions in case of control and ownership separation (Larcker, Richardson & Tuna, 2007). An effective corporate governance structure separates power and initiate space for checks and balances that enhances fairness and transparency in the relationship of management and shareholders (Ogbulu & Emeni, 2012). Earnings are considered a significant component in financial reporting because it provides information about company's performance to various stakeholder groups (Almahrog, Marai & Knezevic, 2015). Earnings management occurs when managers select accounting policies which affects earnings with an aim of achieving some specific reported earnings objectives (Scott, 2015).

Scott (2015) defines executive compensation plan as agency contract linking the managers and firm that aims at bringing together owners and managers interests. This is attained by determining manager's compensation based on his or her performance in the company. Compensation is the monetary and non-monetary benefits given to top managers of a firm in exchange for their services to an organization (Mallin, 2010). The distinctive features that differentiates one firm from another can be defined as firm characteristics. There is inconclusive result on firm characteristics impact on relationship between corporate governance and earnings management. Firm size, leverage and profitability are elements that represents firm characteristics for this study. These three characteristics were selected because they are the ones that can directly influence the practises of managers to take part in earnings management.

Various literature on how corporate governance influences earnings management have had contradictory results (Abed, Al-Attar & Suwaidan, 2012; Waweru & Riro, 2013; Latif & Abdullah, 2015; Buniamin, Johari, Rahman & Rauf, 2012; Iraya, Mwangi & Muchoki, 2015; Nugroho & Eko, 2011). This could be attributed to the fact that the relationship between corporate governance and earnings management is not direct but could be intervened or moderated by other factors. This motivated the paper to analyze the moderating influence of firm characteristics (size, profitability and leverage) on the relationship between corporate governance and earnings management.

Despite continuous emphasis being placed on corporate governance as a device for safeguarding shareholders wealth, cases of corporate scandals are still rife both internationally and locally. Internationally, cases include Enron, WorldCom and Ahold in the USA (Norwani, Mohamed & Chek, 2011) and bankruptcy of Pramuka Bank (Kalainathan & Vijayarani, 2014) in Sri Lanka among others. Locally, Imperial Bank was placed on receivership and Dubai Bank closed in 2015 (CBK, 2015). These cases have led to questioning of the effectiveness of corporate governance as a monitoring tool for managing firm earnings. Therefore, this study looks into the influence of corporate governance on earnings management in Kenyan context with emphasis being placed on the possible moderating influence of firm characteristics on this relationship.

Empirically, influence of firm characteristics on corporate governance and earnings management relationship is still not conclusive. Studies by Kapoor and Goel (2017); Sun and Rath (2009) found that firm

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size and profitability influences earnings management practices while studies by Latridis and Kadorinis (2009); Waweru and Riro (2013); Latif and Abdullah (2015); Uwuigbe et al. (2015) revealed that leverage may have negative, positive or no influence on earnings management. Conflicting empirical studies results is an indication that direct association between corporate governance and earnings management does not exist. This is attributed to the possible moderating influence of firm characteristics in the relationship. This study therefore analysed the moderating influence of firm characteristics on the relationship between corporate governance and earnings management of listed companies in Kenya.

2. Theoretical Review

The study was anchored on positive accounting theory. The development of this theory was pioneered by Watts and Zimmerman (1978) with an attempt to explain how firms make choices on particular accounting methods and their influence on reported earnings. The theory proposes that managers always select accounting approaches that enable them maximize their personal wealth. The accounting choices of the managers can be understood by understanding the three key hypotheses proposed by the theory which include bonus plan hypothesis, political cost or size hypothesis and debt/equity covenant hypotheses (Watts & Zimmerman, 1978).

The bonus plan hypothesis indicates that when managers are paid compensation inform of bonuses that are linked to earnings, they have a high chance of engaging in earnings management practices. Debt/equity covenant hypothesis state that a high debt equity ratio may result to high chances of firms violating its debt covenants which may result to the managers using their discretion to conduct earnings manipulation. On the other hand, the theory as per size hypothesis indicates that firm size influences earnings management practices and managers of large sized firms are likely to influence earnings reported for a period in comparison to small sized firm managers.

Positive accounting theory supports the assertion that opportunistic behaviours of managers to participate in earnings management can be monitored when the company adheres to effective corporate governance practises. It also supports the expectation that the nature of executive compensation will determine the managers motivation to focus on stakeholders' concerns. In addition, effective governance structure assists investors by first, bringing together affairs of shareholders with those of managers and secondly, increasing financial information credibility and trustworthiness of financial reporting process (Watts & Zimmerman, 1978). This theory is concerned with explaining how various accounting practices influences management decisions in relations to reported earnings but does not give guideline on the appropriate accounting practices to be adopted when situations require use of judgment and estimates.

3. Empirical Review

Nalarreason et al. (2019) analysed impact of firm size and leverage on discretionary accruals of manufacturing firms at Indonesia for periods 2013 to 2017. The study findings concluded that firm leverage and size had significant positive influence on earnings management. The study only measured pairwise association of size and leverage on earnings management but not it's possible moderating influence on association between corporate governance

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and earnings management. Ghaffar (2014) analysed how corporate governance influence profitability in Islamic banks at Pakistan. Using convenience sampling technique, a sample of five Islamic banks was selected. The findings revealed that corporate governance positively influences profitability.

Veronica (2015) analysed the extent that firm size and financial leverage impacts earnings management for manufacturing firms listed in Indonesia. The findings revealed firm size, firm leverage does not affect earnings management of manufacturing firms listed in Indonesia. Enofe, Iyafekhe & Eniola, (2017) analysed influence of female gender, foreign directorship, board size, firm size and board independence on earnings management of Nigerian listed companies. Their documented findings state that a negative relationship exists between foreign directors on board, female directors and board independence with earnings management. This implies, when number of foreign directors, female directors and independent member on board is high the practises of earnings management are reduced. Additionally, size of board and firm have positive relationship with earnings management.

Kapoor and Goel (2017) investigated association between firm profitability, board attributes and earnings management for companies listed in Bombay securities exchange in India for the period 2007 to 2012. It was found that size of the board positively influences earnings management, board independence does not significantly impact earnings management while firm profitability moderates the association between audit committee independence and earnings management. Bassiouny et al. (2016) assessed the influence of firm characteristics on earnings management of listed firms in Egypt. Sample that constituted 60 non-financial active firms for periods 2007 to 2011 that gave 300 firm years' observations were utilized. Their findings indicated that it is only firm's financial leverage which had a significant positive influence on earnings management. Rauf, Johari, Buniamin and Rahman (2012) analysed the influence of board attributes on earnings management for listed companies at Malaysia in the year 2008. By using Spearman's Rho to test for multicollinearity, the results revealed that association between firm size and earnings management was positively significant, operational cash flows and earnings management relationship was negative while influence of race and board size on earnings management was not significant.

Analysis of corporate governance effect on earnings management of firms in various Asian stock exchange market was done by (Shen & Chih, 2007). By utilizing firms governance data of nine Asian countries obtained from Credit Lyonnais Security Asia and classifying earnings management to include earnings smoothing and aggressiveness, the results indicated that: First, association between corporate governance and earnings management was negative, secondly, big firms exhibit high earnings smoothing practices in comparison to small firms but there is no evidence of how size relates to earnings aggressiveness, third, earnings smoothing is more for higher leveraged firms when the market is performing well as compared to when the market performance is poor.

Most studies as reviewed in literature analyzed pair wise connection between corporate governance and individual components of firm characteristics (firm

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profitability, leverage and size) or individual components of firm's characteristics (firm profitability, leverage and size) and earnings management. These Pair wise studies indicated possible correlation exists between firm characteristics, corporate governance and earnings management. This study therefore analyzed the moderating effect of firm characteristics on the relationship between corporate governance and earnings management.

4. Research Methods, Data Collection and Operationalization of Variables

Research philosophy is associated with nature and development of knowledge (Saunders, Lewis, & Thornhill, 2009). It is the belief of how research data is collected, examined and utilized. It has the following perspectives realism, positivism, interprevistism and pragmatism. The research philosophy that one adopts is influenced by practical considerations or a specific opinion of the link between knowledge and its development. Since positivism philosophy is dependent on observations that can be quantified and which leads to statistical analysis, this philosophy was exploited to statistically establish the association between corporate governance, executive compensation, firm characteristics and earnings management of listed firms at the Nairobi Securities Exchange (NSE) using multiple regression models. A deduction approach was adopted as the study was based on testing four hypotheses and it also entailed quantitative data due to numerical nature of the phenomenon under study.

Panel data methodology was utilized hence secondary data collection approach was considered appropriate. For this study, we collected data for years 2008 to 2017 for computation of earnings management, corporate governance measures and firm characteristics from corresponding companies' financial reports which were available at Capital Market Authority website and NSE handbook. Earnings management was operationalized as discretionary accruals which was computed using Modified Jones model. This measure is supported by studies which regard modified Jones models as the most effective way of identifying discretion by managers over accounting choices (Gulzar & Wang, 2011).

The composite of corporate governance (CG) variables were computed as geometric mean of corporate governance components which are board composition, board size, diversity and remuneration committee independence (Ondigo, 2019). Firm characteristics was operationalized to include firm size which was measured as logarithm of total asset of the firm (Ahmad et al., 2014), leverage which was measured using debt equity ratio that is total debt (current and non-current liabilities) divide by total equity (Uwuigbe et al., 2015) and profitability was measured using return on asset ratio that is operating profit divide by total asset (Ghaffar, 2014).

Descriptive analysis was adopted as variables of the study are known and measurable. The measures of means, median, maximum, minimum and standard deviations was used to describe the variables. Regression analysis was utilized to determine effect of moderating variables relationship on the relationship between dependent and independent variable.

5. Descriptive, Data Analysis and Findings

This section discusses result of descriptive research, data analysis and findings of

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study. They include computation of earnings management, diagnostic tests, descriptive statistics of variables summarized into means, medians, standard deviation, kurtosis and skewness. In addition, the chapter also covers correlation analysis using Pearson Product-Moment Correlations.

5.1 Descriptive Statistics

Table 1 and 2 summarizes mean, minimum values, median, maximum values, kurtosis, skewness and standard deviation for the study variables from the sample of 56 listed companies at NSE

Table 1: Earnings Management and Corporate Governance Descriptive Statistics

	Earnings Management	Board Composition	Remuneration Committee	Board Size	Board diversity	CG Composite
Mean	(0.0025)	0.7666	0.8081	0.9042	0.1406	0.6547
Median	(0.0151)	0.8182	0.8000	0.9031	0.1250	0.6686
Maximum	0.9385	1.0000	1.5000	1.1761	0.6667	0.8232
Minimum	(0.7152)	0.0909	0.000	0.4771	0.000	0.2747
Std. Dev.	0.1269	0.1698	0.2476	0.1385	0.1228	0.1016
Skewness	1.5729	(1.7775)	(1.0603)	(0.6149)	0.6734	(1.4415)
Kurtosis	15.5543	6.8912	6.2618	3.0566	3.4042	5.6500
N	517	517	517	517	517	517

The results of Table 1 reveal mean value of earnings management for the companies is -0.0025 with a standard deviation of 0.13. The value of mean average implies that earnings management practices in the listed firms, are taking downward direction (-0.0024) that is firms are practicing income decreasing earnings management. The kurtosis of 15.55 implies that some firms engage more in earnings management practises. The mean average of board composition was 0.767 implying that 77% of board ,embers are independent.

The mean average of remuneration committee independence (RCOM) of 0.808 imply that the committee composition is made up of 80% of independent members while minimum value of zero indicate that some firms did not have remuneration committee as place of board of directors committees. Board size (BSIZE) had mean of 90% with maximum of 1.18, and minimum of 0.48 which indicates that 90% of the firms had large board size. For the board diversity (BDIV) its minimum value of 0 indicate that some firm shad n female

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representation on the board and on average 14% of the listed firms had female representation.

Table 2: Firm Characteristics Descriptive Statistics

	Firm Size	Firm Leverage	Firm Profitability
Mean	7.1751	0.8550	0.0323
Median	7.1740	1.1382	0.0670
Maximum	8.8107	568.71	5.6881
Minimum	4.7007	(1,020.88)	(42.0428)
Std. Dev.	0.8534	52.5735	1.9616
Skewness	(0.3361)	(11.8603)	(19.1775)
Kurtosis	2.6974	303.68	411.7506
N	517	517	517

As per Table 2 the mean average of firm size was 7.18 with maximum of 8.81 and a minimum of 4.7 this implies that the listed firms have varied sizes in terms of its total assets. Firm leverage mean average of 0.85 with minimum of -1020 and maximum of 568.72 implies that on average 85% of listed firms depend on debt as source of its financing. The mean average of firm profitability was 0.03 with minimum of -42.04 and a maximum of 5.68 this indicates that there is a significant variation on the profitability of listed firms.

5.2 Correlation between Corporate Governance, Firm Characteristics and Earnings Management

The strength of relationship among corporate governance, firm characteristics and earnings management were established using Pearson product moment correlation. The results are summarized in Table 3

Table 3: Correlation between Corporate Governance, Firm Characteristics and Earnings Management

	DA	BCOM	BDIV	BREM	BSIZE	FS	FLEV	FP
DA	1.0000	(0.0780)	(0.0690)	0.0615	(0.1250)	(0.1490)	0.0024	0.0758
BCOM		1.0000	0.0137	0.1785	0.2755	0.2784	0.0230	(0.0020)
BDIV			1.0000	(0.0750)	0.3260	0.3008	0.0235	(0.0400)
BREM				1.0000	0.1220	(0.1610)	(0.046)	0.0115
BSIZE					1.0000	0.6598	0.0447	(0.0450)

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FS	1.0000	0.0634	(0.0530)
FLEV		1.0000	0.0284
FP			1.0000

Table 3 shows that a negative correlation exists between firm size and earnings management (*r* = -0.15) this means as the size of firm increases practices of earnings management decreases. The correlation between earnings management and profitability (*r* = 0.075) was positive meaning an increase in profitability results to a rise in earnings management. Firm leverage and earnings management have positive correlation (*r* = 0.002) this implies an increase in leverage results to a positive change in earnings management. The correlation between board composition, board diversity, board size and firm size was positive this imlies that an increase in size of firm has pooitive impact on the size of board, its compoistion and diversity. The correlation between firm leverage and board independence remuneration was negative (*r* = -0.046) this implies that an increase in leverage may be as a result of having more members on the remuneration committee who are not independent. The correlation between board composition, board diversity, board size and firm profitability was negative implying that when board size is large and it has more female directors the practises of manipulating profitability is reduced.

5.3 Hypothesis Testing and Discussion of Findings

The objective of the study was to assess the moderating effect of firm characteristics on the association between corporate governance and earnings management. The study predicted that the relationship between corporate governance and earnings management was not moderated by firm characteristics. The following null hypothesis was formulated:

H_{01}: The moderating influence of firm characteristics on relationship between corporate governance and earnings management of companies listed at Nairobi Securities Exchange is not significant

In order to test for moderation effect, the technique proposed by Baron and Kenny (1986) was adopted. This technique involved testing how corporate governance (independent variable), firm characteristics (moderating variable) and interaction term of corporate governance and individual firm characteristics components (CG*FC) influences earnings management (dependent variable). The first step in creation of interaction term entailed centering of CG and individual firm characteristics components i.e. firm size, firm leverage and firm profitability. After centering the two measures were then multiplied to create a single item that represents their product.

The corporate governance composite was determined by getting the geometric mean of the four measures of corporate governance i.e. board composition, independence of remuneration committee, board size and board diversity. For this

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study the aspects of firm characteristics were three and test of moderation of firm characteristics on relationship between corporate governance and earnings management was done for the individual components of firm characteristics. The three sub hypotheses 1 (a, b and c) were developed and results of moderation regression model are shown in 5.3.1 to 5.3.2

5.3.1 Relationship between Corporate Governance, Firm Size and Earnings Management

Sub hypothesis (H_{01a}) was used to test moderating effect of firm size on association between corporate governance and earnings management of listed companies at Nairobi Securities Exchange. The null hypothesis tested was as follows:

H_{01a}: The moderating influence of firm size on relationship between corporate governance and earnings management of companies listed at Nairobi Securities Exchange is not significant.

Inorder to establish moderation effect of firm size on relationship between corporate governance and earnings management regression model 1 was utilized. The results are summarized in Table 4

$$DA_{jt} = \beta_{0jt} + \beta_1 CG_{jt} + \beta_2 FS_{jt} + \beta_3 (CG \times FS)_{jt} + \varepsilon_{jt}$$

-----------------------(1)

Where : DA_{jt} is discretionary accruals of firm j in year t

CG_{jt} is composite of corporate governance of firm j in year t

FS_{jt} is size of firm j in year t

$(CG*FS)_{jt}$ is the interaction term of CG and FS of firm j in year t

j is the firm

t is time/ period of study

β_0, - is constant

β_1, -β_7 are coefficients

ε is error term that describes unexplained variation

Table 4 : Regression Result of Moderation Effect of Firm Size on Relationship between Corporate Governance and Earnings Management

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.768734	0.272268	2.823444	0.0049
CG	-0.945388	0.415094	-2.277526	0.0232
FS	-0.114006	0.041091	-2.774443	0.0057
CG*FS	0.140890	0.061919	2.275393	0.0233
R-squared	0.032072			
Adjusted R-squared	0.026412			
S.E. of regression	0.125195			
Sum squared resid	8.040666			
Log likelihood	342.6815			
F-statistic	5.666047			
Prob(F-statistic)	0.000800			

Dependent Variable: DA
Method: Panel Least Squares
Sample: 2008- 2017
Periods included: 10

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Cross-sections included: 56
Total panel (unbalanced) observations: 517

As per Table 4 corporate governance, firm size and product of corporate governance and firm size had a significant influence on earnings management ($P < 0.05$). The overall model indicated a statistically significant relationship exists between earnings management, corporate governance, firm size and interaction term with Adjusted R-squared of .0026, F = 5.657, and $p < 0.05$. The test of slope as reported in Table 5.5 showed corporate governance had regression coefficient (β) value of -0.945 with p-value of 0.0232, firm size regression coefficient (β) value was -0.11 with p value of 0.0057 while the regression coefficient (β) value of interaction term (CG*FS) was 0.14 with a significance level (p-value) of 0.0233. The results as Table 4 show indicate that composite of corporate governance attributes has statistically significant negative association with earnings management, association between firm size and earnings management is negative and statistically significant while interaction term (CG*FS) has a positive but statistically significant association with earnings management since $p < 0.05$.

The findings imply that when firm size is large practices of earnings management is minimal. The results are consistent with studies which concluded that larger firms had lower practices of earnings management (Abbadi et al., 2016) but contradicts studies whose results stated when size of a firm is large the practises of earnings management is high (Enofe et al., 2017) and study findings which revealed that firm size had no significant effect on earnings management (Waweru & Riro, 2013). Although firm size had a negative significant effect on earnings management, when its moderation effect was tested through interaction term (CG*FS) the results as shown by Table 4 indicated that firm size moderates the relationship between corporate governance and earnings management as the coefficient of the interaction term was significant. Since all variables were significant the best predicting equation was: $DA_{jt} = 0.7687_{jt} - 0.9454CG_{jt} - 0.11401FS_{jt} + 0.14088 (CG*FS)_{jt} + \varepsilon$.

Null hypothesis (H_{03a}) which state moderating influence of firm size on relationship between corporate governance and earnings management of companies listed at NSE is not significant was rejected implying that firm size moderates the relationship between corporate governance and earnings management.

5.3.2 Relationship between Corporate Governance, Leverage and Earnings Management

Second sub hypothesis was to test moderating effect of firm leverage on asscoiation between corporate governance and earnings management. The null hypothesis tested was as follows:

H_{01b}: The moderating influence of firm leverage on the relationship between corporate governance and earnings management of companies listed at Nairobi Securities Exchange is not significant

Inorder to determine moderation influence of firm leverage on the relationship between corporate governance and earnings management multiple regression model 2

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was utilized for analysis and its results is summarised in Table 5.

$$DA_{jt} = \beta_{0\,jt} + \beta_1 CG_{jt} + \beta_4 FLEV_{jt} + \beta_5 (CG \times FLEV)_{jt} + \varepsilon_{jt}$$
------------------(**2**)

Where : DA_{jt} is discretionary accruals of firm j in year t

CG_{jt} is composite of corporate governance of firm j in year t

$FLEV_{jt}$ is leverage of firm j in year t

$(CG*FLEV)_{jt}$ is the interaction term of CG and FLEV of firm j in year t

j is the firm

t is time/ period of study

β_0, - is constant

β_1, -β_7 are coefficients

ε is error term that describes unexplained variation

Table 5: Regression Result of Moderation Effect of Firm Leverage on Relationship between Corporate Governance and Earnings Management.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.042001	0.037127	1.115310	0.2507
CG	-0.067947	0.056088	-1.195301	0.2184
FLEV	0.000696	0.005928	0.117411	0.9827
CG* FLEV	-0.001059	0.009096	-0.116415	0.9074
R-squared	0.003021			
Adjusted R-squared	-0.002809			
S.E. of regression	0.127060			
Sum squared resid	8.281994			
Log likelihood	335.0372			
F-statistic	0.518200			
Prob(F-statistic)	0.669919			

Dependent Variable: DA
Method: Panel Least Squares
Sample: 2008 - 2017
Periods included: 10
Cross-sections included: 56
Total panel (unbalanced) observations: 517

As per Table 5 the test of slope as reported shows that regression coefficient (β) value of corporate governance was -0.067, significance level (p-value) 0.2184, regression coefficient (β) value of firm leverage was -0.0006, significance level (p-value) 0.9827 while the regression coefficient (β) value of interaction term (CG*FLEV) was -0.0011, significance level (p-value) of 0.9074. All coefficients of the variables were not significant in influencing earnings management since $p > 0.05$. The regression model 2 was presented as follows: $DA_{jt} = 0.042001_{jt} - 0.06794CG_{jt} + 0.000696FLEV_{jt} - 0.001058 (CG*FLEV)_{jt}$.

Corporate governance components have negative but not statistically significant relationship with earnings management, firm leverage had positive but not

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significant relationship with earnings management while the interaction term (CG*FLEV) had negative but non statistically significant relationship with earnings management. The overall model revealed coefficient of corporate governance, firm leverage and interaction term were insignificant as p value was 66.9% which is greater than 5%. This indicates that firm leverage has no moderation effect on the relationship between corporate governance and earnings management.

The results of Table 5 reveal that firm leverage had a positive non-significant effect on earnings management. This result was consistent to the studies by Uwuigbe et al. (2015); Ardison et al., (2012) whose studies concluded that firm leverage had no significant effect on earnings management but contradicts studies by Abbadi et al.(2016); Nalarreason et al.(2019); Waweru and Riro (2013) whose findings show that financial leverage had a positive significant relationship with earnings management. As per the results of this study firm leverage had no significant moderation effect on the relationship between corporate governance and earnings management hence H_{03b} was rejected. This implies that as much as leverage has been debated to be key element of earnings manipulation the effect was different in Kenyan companies meaning that presence of good corporate governance regulates the debt financing decisions of a firm hence limit managers engagement in debt covenants that could result in earnings manipulation.

5.3.3 Relationship between Corporate Governance, Firm Profitability and Earnings Management

Third sub hypothesis (H_{01c}) was to test moderating effect of firm profitability on relationship between corporate governance and earnings management. Null hypothesis tested was as follows:

H_{01c}: The moderating influence of firm profitability on the relationship between corporate governance and earnings management of companies listed at Nairobi Securities Exchange is not significant

When establishing the moderation effect of firm profitability on relationship between corporate governance and earnings management regression model 3 was utilized. The results of this analysis is summarized in Table 6

$$DA_{jt} = \beta_{0\,jt} + \beta_1 CG_{jt} + \beta_6 FP_{jt} + \beta_7 (CG \times FP)_{jt} + \varepsilon_{jt} \text{-------------------(3)}$$

Where: DA_{jt} is discretionary accruals of firm j in year t

CG_{jt} is composite of corporate governance of firm j in year t

FP_{jt} is profitability of firm j in year t

$(CG*FP)_{jt}$ is the interaction term of CG and FP of firm j in year t

j is the firm

t is time/ period of study

β_0, - is constant

β_1, -β_7 are coefficients

ε is error term that describes unexplained variation

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Table 6: Regression Result of Moderation Effect of Firm Profitability on Relationship between Corporate Governance and Earnings Management

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.006001	0.038900	-0.154258	0.8775
CG	-0.000657	0.058146	-0.011302	0.9910
FP	0.032173	0.009017	3.568138	0.0004
CG*FP	-0.702462	0.220093	-3.191663	0.0015
R-squared	0.027876			
Adjusted R-squared	0.022191			
S.E. of regression	0.125466			
Sum squared resid	8.075523			
Log likelihood	341.5633			
F-statistic	4.903492			
Prob(F-statistic)	0.002279			

Dependent Variable: DA
Method: Panel Least Squares
Sample: 2008 2017
Periods included: 10
Cross-sections included: 56
Total panel (unbalanced) observations: 517

As per Table 6 the results of overall model showed a statistically significant relationship exists among earnings management, corporate governance, firm profitability and interaction term (CG*FP) as p value was 0.002. Tests of the slope was also performed. Regression coefficient (β) value of corporate governance was -0.0006, significance level (p-value) 0.99, the regression coefficient (β) value of firm profitability was 0.032, significance level (p-value) 0.0004 while the regression coefficient (β) value of interaction term (CG*FP) was -0.702, significance level (p-value) 0.0015. The relationship of corporate governance and earnings management was not significant. The relationship between firm profitability and interaction term (CG*FP) on earnings management was significant. The regression model 3 was presented as $DA_{jt} = -0.0060006_{jt} - 0.00065716CG_{jt} + 0.032172669FP_{jt} - 0.702461982028\ (CG*FP)_{jt.}$

The regression coefficient for corporate governance was insignificant (β=-0.0006, $p > 0.05$) but the ones of firm profitability (β= 0.032, $p < 0.05$) and product of corporate governance and firm profitability (β=-0.702, $p < 0.05$) were significant implying that firm profitability moderates the relationship between corporate governance and earnings management. The findings revealed that firm profitability had a positive significant relationship with earnings management. The findings are consistent with results of studies by Trisnawati, Sasongko and Fauzi (2015) whose results indicate companies with high profits engage in earnings management but contradicts studies by Latridis and

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Kadorinis(2009); Abbadi et al.(2016) whose results show that when firms have low profits they tend to engage in earnings management. This result also differs with findings of studies that concluded firm profitability do not affect earnings management (Waweru & Riro, 2013). The moderation effect of firm profitability on the relationship between corporate governance and earnings management results is summarised in Table 6. The results reveal that when interaction term (CG*FP) was included in the model the relationship was significant. From this results H_{03c} was rejected implying that firm profitability moderates the relationship between corporate governance and earnings management.

From the findings it can be concluded that from the three attributes of firm characteristics used in this study, size and profitability were significant in their moderation influence on the relationship between corporate governance and earnings management while firm leverage was not a significant moderator in that relationship.

6. Conclusions of the Study

Rejection of hypothesis one (H_{01a}) and (H_{02b}) implies that relationship between corporate governance and earnings management is moderated by firm size and profitability. The findings revealed firm size had negative significant association with earnings management. This means firm size negatively influences companies participation in practices of earnings management. When firm size is large, earnings management is low and when it is small earnings management practices is high. Moderation of firm profitability on association between corporate governance and earnings management shows that it is fundamental for caution to be placed when firms are preparing their financial statement so as to ensure that managers are not using accounting policies that will increase its profitability with the intention of misleading the stakeholders. BOD mandate is to observe managers practices during financial reporting inorder to ensure they don't manipulate earnings just to show that firm is being profitable. This can be achieved through a good corporate governance system.

7. Contribution of the Study

The findings add to current body of knowledge on corporate governance, firm characteristics and earnings management. No documentation for combined effect of these variables is present. Results of this study therefore, will be benchmark for future studies in the aforementioned areas. The study showed that board size, firm size and profitability influences earnings management.

The moderating effect of firm size and profitability on the relationship between corporate governance and earnings management will help policy makers when improving the corporate governance guidelines as it will provide information on how corporate governance effectiveness is influenced by the size of firm and profits so there is need to consider such factors in the guidelines.

The study results contribute to literature on positive accounting theory. The theory states that opportunistic behaviours of managers to participate in earnings management can be monitored when company adheres to effective corporate governance practises. The findings that board size (corporate governance) has significant negative effect on earnings management supports this proposition.

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Additionally, findings on the moderating effect of firm size supports the political size hypothesis that states firm size influences level of earnings management.

8. Suggestions for Future Research

This study used companies listed at Nairobi Securities exchange as its context. Future studies could concentrate on companies that are not listed at securities market. This may be important especially because as per Kenyan guidelines on corporate governance it is a requirement for all companies whether listed or non-listed to comply to the guidelines.

The study only focused on three items as elements of firm characteristics that is firm size, firm leverage and profitability as moderating variables. Future research can be done to include other variables as moderators in the relationship such as industry peculiarities and sectorial analysis of firms.

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