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**PRACTICES INFLUENCING CREATIVE ACCOUNTING AMONG CORPORATIONS LISTED IN
NAIROBI SECURITIES EXCHANGE**

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Abstract

Creative accounting is a vice that has led to collapse of several companies both in internationally and here in Kenya. The raison d'être for this study was to assess the practices influencing creative accounting among listed on the Nairobi Securities Exchange (NSE) in Kenya. The study was based on the existing theories, more so on the positive accounting theories, which were used to identify these practices. Systematic sampling method was applied in selecting the sample for the study. The research design used in this study was a cross sectional survey design which assessed data for the year 2014. Data was acquired through administering questionnaires and interviews to a sample of managers, accountants and internal auditors of companies publicly listed on the NSE. A sample of thirty nine out of a target population of sixty four Companies publicly listed was extracted from the Nairobi Securities Exchange website. Analysis of variance (ANOVA) was used to establish if there is a statistical significance between the observed and expected values. Regression analysis together with the Pearson coefficient of correlation, were used to test hypothesis. The results indicated the level significant influence on creative accounting among the companies listed on the NSE for practices such as Managements compensation, contractual obligation, tax management, share price performance and insider dealings.

Key Words: *Creative accounting, Managers compensation, contractual obligations, tax management, Insider dealings, Nairobi Securities Exchange*

Introduction

Gosh (2010) defines creative accounting as modification of accounting figures to what the organizations managers and directors desire by exploiting the loopholes of the existing rules and/or ignoring some of them. Baralexis, (2004) also defines creative accounting as the process of intentionally exploiting or violating the law or the GAAP to present financial statements according to predetermined self interests. The definition indicates that creative accounting may be legitimate or illegitimate. This study adopted Gosh (2010) as the working definition of creative accounting.

Creative accounting is often referred to also as earnings management, income smoothing, earnings smoothing, aggressive accounting, financial engineering accounting manipulations and cosmetic accounting. The most commonly used term in most of the literature on the subject in USA is 'earnings management', but in Europe the most preferred term is 'creative accounting' (Amat and Gowthorpe, 2004). This study prefers the term creative accounting since it is all inclusive.

Beaudoin, Cianci and Tsakumis (2015) stated that despite regulatory reforms aimed at inhibiting aggressive financial reporting, earnings management continues to be practiced thus still raising concern to practitioners, regulators, and standard setters. Pereira and Souza (2014) observed that building effective and autonomous institutions is critical in managing creative accounting. Their study demonstrated that level of firm's independence and autonomy is associated with the degree of creative accounting.

Mulford and Comiskey (2002) stated some of the motivations behind creative accounting which were favorable effect on share prices, management compensation and debt covenants. Gosh (2010) further re emphasized on the determinants of creative accounting which included effect on share prices, lower corporate borrowing costs as a result of

improved credit rating, incentive compensation plans for corporate officers and key employees which are based on corporate performance and political gains. Sawicki & Shrestha (2008) described insider trading as a factor that contributes to creative accounting among corporations.

Dechow et al (1995) explained relationships which are central to an understanding of earnings management as accrual management. The approach that is generally used for estimating discretionary accruals is to regress total accrual on variables that proxy for normal accruals. Unexpected accruals or discretionary accruals are considered to be the unexplained (the residual) components of total accruals. The two formulas that are used are: Total accruals equals to Reported net income plus cash flows from operations; and Total accruals equals to Non- discretionary accrual plus discretionary accruals.

A study carried out by Iraya, Mwangi and Muchoki (2015) recommended for the need for effective corporate governance practices at senior managerial level of listed companies in Kenya. This according to their research would contribute to reduced earnings management and hence improve on actual firm liquidity and avert possible collapse of public organizations in Kenya. The recommendation implies that there is some level of creative accounting being practiced by the listed companies. Further institutional investors' may also focus on short-term earnings performance which could pressure management into boosting reported earnings through aggressive accounting (Katuse et al, 2013).

The study employed these formulae to detect the presence of creative accounting in the firm. The likert scales were also used to corroborate the information derived from the formulas.

Theoretical Framework

A theory is a system of ideas intended to explain something, particularly one based on

general principles (Becket, 2006). Theories explain relationships between variables. The following accounting theories are closely related to creative accounting. The theories discussed in the subsequent sections were the ones mostly applied by the researchers in the accounting field and hence dominated in the literature reviewed.

Positive Accounting Theories

One of the theories associated with creative accounting is the positive accounting theory. Positive Accounting Theory attempts to make predictions of real world happenings and interprets them to accounting transactions. Whereas normative accounting theories tend to suggest what ought to be done, Positive Accounting Theories try to give explanation and envisage actions such as which accounting policies firms will choose and why (Scott, 2000). Positive accounting theory rides on a set of three hypotheses which are; bonus plan hypothesis where the managers chose policies which increases their bonuses; Debt covenant hypothesis where the directors will be in favor of those policies that increases current earnings; and political cost hypothesis where the managers may make use of the policies that reduces political heat and political costs such as taxes (Watts and Zimmerman, 1990). Creative accounting involves the use of management's judgment to make accounting choices or to design transactions so as to affect the possibilities of wealth transfer between the company and society via political cost hypothesis, funds providers via debt covenant hypothesis or managers via bonus plan hypothesis (Diana and Madalina, 2007)

Several researches have been based on the positive accounting theories. Collin et' al (2009) articulated that the choice of accounting standards follow two theories which rarely meet. These theories are the positive accounting theories and the institutional theories. Modell (2010) also articulated that the accounting research is based on dialogue and

can partly be traced to the intellectual roots which revolve around 'mainstream' conceptions of the possibilities (and desirability). Positive accounting theories therefore are better placed to deal with the issue of desirability. The study on determinants of different accounting methods choice by Waweru, Prot Ntui and Mangena (2011) was also based on the positive accounting theories. In summary normative theories relates to the Choice of accounting policies on the basis of the available standards. Positive accounting theories on the other hand relates to choice of accounting policies depending on the expected or desired outcomes. This therefore implies that creative accounting rides more on the positive accounting theories. Researchers have established that Positive Accounting theories center on three hypotheses of bonus plans, debt covenants, and political costs.

Resource Dependency Theory

Managers are viewed by Pfeffer and Salancik's (1978) to be reasonably dependent on shareholders given that managerial compensation is often based on stock price and investors have a great deal of discretion over where they invest their capital. Schlachter (1990) argue that managers can create a false impression of control by taking credit for the business successes and at the same time accepting responsibility for negative outcomes. This gives confidence to investors and shareholders that the managers are in control. Hillman, Withers, and Collins (2009) explains that the resources dependency theory has been applied broadly across the research domain to explain how organizations reduce environmental interdependence and uncertainty. Nienhüser (2008) stated that resources dependency theory can be used to explain the organizational processes and structures to a certain extent. Bryant and Davis (2012) also confirmed that both the Agency theory and resources dependency theories can

be used to explain the actions of the board and management.

Resources dependency theory is widely applied in the area of Supply chain management (Hillman et' al, 2009; Carter and Rogers, 2008; Hofer et' al, 2012) as compared to the accounting field. This theory is quite relevant to the creative accounting since the theory seeks to explain why management prefers certain actions including the creative accounting actions.

Agency Theory

Stephen Ross and Barry Mitnick, independently and almost concurrently developed this theory. Ross is responsible for the origin of the economic theory of agency, and Mitnick for the institutional theory of agency, though the basic concepts underlying these approaches are similar (Mitnik, 2011). The theory explains the relationship between principals, such as shareholders, and agents, such as a company's executives. In this relationship the principal delegates or hires an agent to perform work. The theory attempts to deal with two specific problems: first, that the goals of the principal and agent are not in conflict (agency problem), and second, that the principal and agent reconcile different tolerances for risk.

Agency theory holds that a company comprises of contracts between the owners of economic resources (the principals) and managers (the agents) who are entrusted with responsibility of using and controlling those resources (Jensen and Meckling, 1976). Jensen and Meckling (1976) further argue that conflicts of interest exist between the management and owners of businesses in such cases where owners are not managers. Agency theory assumes a model of a manager that is individualistic, self serving and opportunistic in nature. The managers contemplated under agency theory prefer to maximize their own interests at the expense of the owners (Adelopo, 2010).

This is one of the most applied theories in the accounting research (Raith, 2009; Kholeif, 2008,

Chen and Deng, 2010; Bryant and Davis, 2012). Majority of these studies concur that first, agency problem actually exists between the owners of the organization and its managers, and secondly that the agency problem has a bearing on the actions of the management. This study analyzed some of the actions relating to creative accounting and which were associated with the agency problem.

Information Theory

There exists an information asymmetry in corporate structures between a privileged management and a more remote body of stakeholders. Managers may choose to misuse their privileged position to exploit shareholders by managing financial reporting disclosures to their advantage (Schipper, 1989). It may be quite difficult for individual stakeholders to detect accounting manipulation practices by management due to their insufficient personal skill and indifference or unwillingness to engage in a detailed financial analysis (Effiok and Eton, 2012).

Wittenberg-Moerman, (2008) suggests that conservative reporting decreases information asymmetry regarding a borrower and increases the efficiency of the secondary trading of debt securities. Gigler et' al (2009) explains that accounting conservatism affects the efficiency of debt contracts. Their study was based on the information theory on the premise that financial statements are one way of giving information to the relevant parties. Accounting conservatism has direct effect on the financial statements since it's a way of dealing with doubtful situations in accounting. Conservatism and accrual accounting can also be a tool of creative accounting.

In summary all the theories discussed above are related and they all have a bearing on the creative accounting concept. Normative theories advocates for standards creation to guides financial reporting, positive accounting theories on the other hand forecasts the future happenings and expectations of the

stakeholders and makes a choice of standards that favor their desired outcome. Positive accounting theories supports creative accounting which follows a pattern of three hypotheses namely bonus plan hypothesis, debt covenant hypothesis and political cost hypothesis. The conceptual framework is based on these three features. The resource dependency theory argues that manager's compensation is dependent upon the shareholders and/or investors actions (share prices) while on the other hand shareholders are dependent on manager's actions. This theory supports both the bonus plan hypothesis and debt covenant hypothesis under the positive accounting theories. Under the agency theory, managers are viewed as agents of the shareholders while information theory suggests that there is a possible information asymmetry between the agent and the principal. This information asymmetry coupled with the agency problem where managers who are agents seeks their personal gain, is the recipe for creative accounting. Creative accounting follows the three hypotheses referred to by the positive accounting theories.

Conceptual Framework

Conceptual framework is a visual or written product that explains graphically or in narrative form, the main things to be studied. It describes the key factors, concepts, and variables and the presumed relationship among them (Maxwel 2005). The variable that the researcher wishes to explain is the dependent variable. The independent variable causes or explains changes in the dependent variable (Nachmias, 1996). In this research, creative accounting is the dependent variable.

The conceptual framework was developed on the basis of the theoretical framework explained in the immediate previous section and the literature reviewed. The conceptual framework is in line with the positive accounting theory which operates within three hypotheses of bonus plan, debt covenant and

public costs. In addition the literature also provides that insider dealings as a reason for creative accounting.

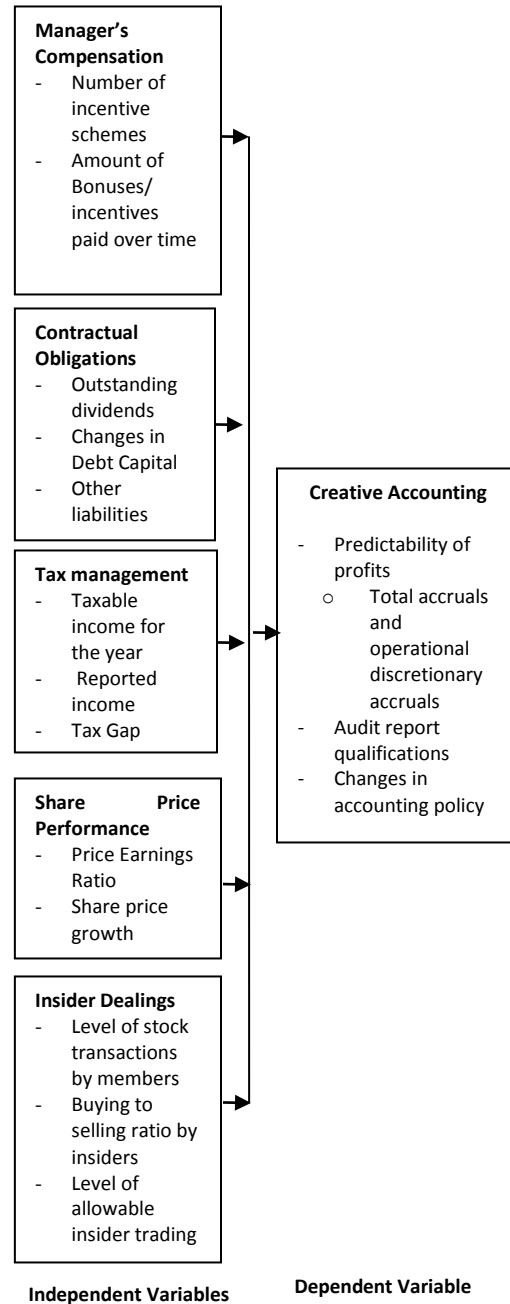


Fig 2.1 Conceptual Framework

Methodology

Research Design

This research employed a mixed research design which is a combination of descriptive design, causal design and cross-sectional survey design. Research design is defined as the conceptual structure within which research is conducted; it comprises of the overall plan for the collection, measurement and analysis of data (Kothari, 2008). It assists the researcher to determine the objectives of research, subjects of research, the sample size, the data to be collected, the procedures for collecting and recording that data, the procedures for analyzing that data and how the data is interpreted and presented (Nachmias, 1996). Descriptive design advocates for measurement of variables and hence will form the basis for causal analysis. According to Shukla (2008) causal design is most appropriate when the research objectives include the need to understand why certain phenomena happen as they do. The research design employed by the study was a cross-sectional survey.

Sample size

The target population for the study was three members of senior management from 64 Firms listed in NSE. The sample was picked on the basis of a formula by Morris (2004), which was in line with the Central Limit Theorem in statistical theory which implies that any sample equal to or greater than 30 is representative enough irrespective of the population size. Consequently, the research targeted a sample of 39 companies listed in the Nairobi Securities Exchange. Interviews were conducted and questionnaires distributed to accountant, internal auditor and a manager in each of the company. The researcher managed to obtain responses from the targeted sample. The response rate therefore represents 100% of the originally targeted sample. Therefore sample size for this study for the purpose of analysis is 3 questionnaires in each of 39 companies sampled totaling to 117 responses.

Table 4.1 Responses as per Sector of the Firm

SECTOR	NO. OF LISTED FIRMS	NO. OF RESPONDENTS	PERCENT
Agricultural	4	12	10.26
Automobiles & Accessories	2	6	5.13
Banking	7	21	17.95
Commercial & Services	6	18	15.38
Construction & Allied	3	9	7.69
Energy and Petroleum	3	9	7.69
Insurance	4	12	10.26
Investment	3	9	7.69
Manufacturing & Allied	6	18	15.38
Telecommunication & Technology	1	3	2.56
Total	39	117	100.00

The study showed that 12 (10.26%) of the respondents were from Agricultural sector, 6 (5.13%) from Automobile and Accessories, 21 (17.95%) from Banking sector and 18 (15.58%) from Commercial and Services sector. Nine (7.69%) were from Construction and Allied, 9 (7.69%) from Energy and Petroleum, 12 (10.26%) from Insurance sector. Nine (7.69%) were from Investment and 18 (15.38%) from Manufacturing and Allied sector. Telecommunication and Technology accounted for 3 (2.56%) of the sample. The respondents were from varied sectors, both service providers and commodity providers, therefore giving a good representation for firms engaging in creative accounting. The sample size per sector was dependent on the number of companies in the sector.

Research Findings

Regression analysis

This section describes the linear regression models the relationship between the dependent variable Creative accounting and the

independent variables Managements compensation, Contractual Obligations, Tax Management, Share Price Performance and Insider dealings.

The Original Model

The results in table 4.41 indicate coefficient of determination (R^2) of 0.5003 and coefficient of correlation (R) of 0.7073. R value points to a strong linear relationship between Managements compensation, Contractual Obligations, Tax Management, Share Price Performance and Insider dealings on one side, and creative accounting among companies listed on the NSE. The R^2 indicates that explanatory power of the independent variables is 0.5003. This means that about 50.03% of the variation in Creative Accounting is explained by the study model

$$CA = \beta_0 + \beta_1(MC) + \beta_2(CO) + \beta_3(TM) + \beta_4(SPP) + \beta_5(ID)$$

However, 49.97% of the variation in creative accounting is unexplained by the model. Adjusted R2 is a modified version of R2 that has been adjusted for the number of predictors in the model by less than chance. The adjusted R2 of 0.4778 which is slightly lower than the R2 value is a precise indicator of the relationship between the independent and the dependent variable because it is sensitive to the addition of irrelevant variables. The adjusted R2 of indicates that 47.78% of the changes in Creative accounting is explained by the model and 52.22% is not explained by the model

$$CA = \beta_0 + \beta_1(MC) + \beta_2(CO) + \beta_3(TM) + \beta_4(SPP) + \beta_5(ID)$$

This means that the influence of all the independent variables that is Managements compensation, Contractual Obligations, Tax Management, Share Price Performance and Insider dealings on Creative accounting among

listed companies on the NSE is somehow strong.

Table 4.41 – Overall Model of Dependent and independent variables

Model	R	R square	Adjusted R Square
1	0.7073	0.5003	0.4778

The ANOVA test in table 4.42 on the overall model indicates that the independent Managements compensation, Contractual Obligations, Tax Management, Share Price Performance and Insider dealings have a significant effect on creative accounting among companies listed on the NSE since the p value is actual 0.000 which is less than 5% level of significance. The linear regression model

$$CA = \beta_0 + \beta_1(MC) + \beta_2(CO) + \beta_3(TM) + \beta_4(SPP) + \beta_5(ID)$$

Where CA = Creative Accounting, MC = Management Compensation, CO = Contractual Obligations, TM = Tax Management, SPP = Share Price Performance, ID = Insider Dealings. The P value was 0.000 implying that the model was significant. This therefore implies that the factors significantly affect Creative Accounting among listed companies on the NSE in Kenya.

Table 4.42 – ANOVA of Dependent and independent variables

	df	SS	MS	F	Significance F
Regression	5	59.6106	11.92212	22.2283021	0.0000
Residual	111	59.5347	0.536349		
Total	116	119.1453			

a. predictors: (constant), Managers compensation, Contractual Obligations, Tax Management, Share Price Performance, Insider Dealings
b. dependent variable: Creative Accounting

Table 4.43 – Model Testing – Multiple regression analysis

Model		Un-standardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-.883	.374	-2.363	.019
	Management compensation	.258	.075	3.445	.001
	Contractual Obligations	.217	.071	3.044	.003
	Tax Management	.256	.069	3.723	.000
	Share price performance	.111	.076	1.475	.143
	Insider dealings	.179	.079	2.251	.026

The researcher used the results on table 4.43 to decide on whether to accept or reject the study hypothesis.

H₀₁: Manager’s compensation has no significant influence on creative accounting among Corporations listed in NSE.

For the first hypothesis the null hypothesis was rejected and the alternative hypothesis taken that the Managers compensation significantly influences creative accounting among the listed companies on the NSE. This is because the p-value 0.001 <0.05 making the coefficient of Managers compensation significant in the model.

H₀₂: Contractual obligations does not significantly influence creative accounting among Corporations listed in NSE

For the second hypothesis the null hypothesis was rejected and the alternative hypothesis taken that Contractual obligations significantly influence Creative accounting among listed companies on the NSE. This is because the p-

value 0.003 <0.05 making the coefficient of contractual obligations significant in the model.

H₀₃: Tax management does not significantly influence creative accounting among Corporations listed in NSE.

For the third hypothesis the null hypothesis was rejected and the alternative hypothesis taken that Tax Management significantly influences creative accounting among listed companies on the NSE. This is because the p-value 0.000<0.05 making the coefficient of Tax management significant in the model.

H₀₄: Share price performance does not significantly influence creative accounting among Corporations listed in NSE.

For the fourth hypothesis the alternative hypothesis was rejected and the null hypothesis taken that Share price performance does not significantly influence creative accounting among listed companies on the NSE. This is because the p-value 0.143 >0.05 making the coefficient of Share price performance not significant in the model.

H₀₅: Insider dealings have no significant influence on creative accounting among Corporations Listed in NSE.

For the fifth hypothesis the null hypothesis was rejected and the alternative hypothesis taken that Insider dealings significantly influence creative accounting among listed companies on the NSE. This is because the p-value 0.026 <0.05 making the coefficient of Insider dealings significant in the model. With the results, the original conceptual framework was modified and Share Price Performance dropped from the model.

The Modified Model

After dropping one of the independent variables which is Share Price Performance, new regression analysis was carried out on the relationship between the dependent variable Creative accounting and the independent variables Managements compensation, Contractual Obligations, Tax Management and Insider dealings.

The results in table 4.44 indicate coefficient of determination (R²) of 0.6180 (an improvement from the earlier one of 0.5003) and coefficient of correlation (R) of 0.7861 (an improvement from the earlier one of 0.7073). R value points to a strong linear relationship between Managements compensation, Contractual Obligations, Tax Management and Insider dealings on one side, and creative accounting among companies listed on the NSE. The R² indicates that explanatory power of the independent variables is 0.6180. This means that about 61.80% of the variation in Creative Accounting is explained by the study model

$$CA = \beta_0 + \beta_1(MC) + \beta_2(CO) + \beta_3(TM) + \beta_4(ID)$$

However, 38.20% of the variation in creative accounting is unexplained by the model. Adjusted R² is a modified version of R² that has been adjusted for the number of predictors in the model by less than chance. The adjusted R² of 0.6044 (an improvement from the earlier one of 0.4778) which is slightly lower than the R² value is a precise indicator of the relationship between the independent and the dependent variable because it is sensitive to the addition of irrelevant variables. The adjusted R² of indicates that 60.44% of the changes in Creative accounting is explained by the model and 39.56% is not explained by the model

$$CA = \beta_0 + \beta_1(MC) + \beta_2(CO) + \beta_3(TM) + \beta_4(ID)$$

This means that the influence of all the independent variables that is Managements compensation, Contractual Obligations, Tax Management and Insider dealings on Creative accounting among listed companies on the NSE is strong.

Table 4.44 – Modified Model of Dependent and independent variables

Model	R	R square	Adjusted R Square
1	0.7861	0.6180	0.6044

The researcher used the results on table 4.46 to decide on whether to accept or reject the modified study hypothesis.

H₀₁: Manager’s compensation has no significant influence on creative accounting among Corporations listed in NSE.

For the first hypothesis the null hypothesis was rejected and the alternative hypothesis taken that the Managers compensation significantly influences creative accounting among the listed companies on the NSE. This is because the p-value 0.000 <0.05 making the coefficient of Managers compensation significant in the model.

H₀₂: Contractual obligations does not significantly influence creative accounting among Corporations listed in NSE

For the second hypothesis the null hypothesis was rejected and the alternative hypothesis taken that Contractual obligations significantly influence Creative accounting among listed companies on the NSE. This is because the p-value 0.002 <0.05 making the coefficient of contractual obligations significant in the model.

H₀₃: Tax management does not significantly influence creative accounting among Corporations listed in NSE.

For the third hypothesis the null hypothesis was rejected and the alternative hypothesis taken that Tax Management significantly influences creative accounting among listed companies on the NSE. This is because the p-value 0.000<0.05 making the coefficient of Tax management significant in the model.

H₀₄: Insider dealings have no significant influence on creative accounting among Corporations Listed in NSE.

For the fourth hypothesis the null hypothesis was rejected and the alternative hypothesis taken that Insider dealings significantly influence creative accounting among listed companies on the NSE. This is because the p-value 0.047 <0.05 making the coefficient of Insider dealings significant in the model. With the results, the original conceptual framework was modified and one of the practices

influencing creative accounting among listed companies on the NSE was removed.

Since the modified linear multiple regression model of the study was

$$CA = \beta_0 + \beta_1(MC) + \beta_2(CO) + \beta_3(TM) + \beta_4(ID)$$

Table 4.45 – ANOVA of Dependent and independent variables

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	73.6331	18.4083	45.3005	0.0000
Residual	112	45.5122	0.4064		
Total	116	119.1453			

a. predictors: (constant), Managers compensation, Contractual Obligations, Tax Management, Insider Dealings
 b. dependent variable: Creative Accounting

The estimated value of the model was found by inserting the unstandardized beta coefficients values in the modified study model. The Constant was -0.579, showing that even in the absence of the determinants of financial risk of listed companies on NSE, there is an inherent degree of creative accounting which is constant to all the firms. The β_1 gave a value of 0.383, β_2 gave a value of 0.199, β_3 a value of 0.244 and β_4 a value of 0.139. To find the estimated value of the model hence;

$$CA = -0.579 + 0.383(MC) + 0.199(CO) + 0.244(TM) + 0.139(ID)$$

Table 4.45 shows results of ANOVA test which reveal that the independent variables (Managers compensation, Contractual Obligations, Tax Management and Insider Dealings) have significant effect on creative accounting since P-value is .000 which is less than 5% level of significance.

Model Testing

The model was tested using three scenarios, that is, the worst case, best case and the moderate case scenarios. In the worst case scenario the study assumes very high degree of practices influencing creative accounting (at a measure of 5). The results under the worst case scenario were as computed below and also represented by figure 4.6

$$CA = -0.579 + 0.383(MC) + 0.199(CO) + 0.244(TM) + 0.139(ID)$$

$$CA = -0.579 + 0.383(5) + 0.199(5) + 0.244(5) + 0.139(5) = 4.25$$

The results of the worst case scenario fall between 4 and 5 which means, the resultant level of creative accounting is between very high and high.

The results of a best case scenario the where the study assumes very low degree of practices influencing creative accounting (at a measure of 1) are as calculated below.

Table 4.46 – Model Testing – Multiple regression analysis

Model		Un-standardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-.579	.272	-2.127	.036
	Management compensation	.383	.051	7.451	.000
	Contractual Obligations	.199	.061	3.235	.002
	Tax Management	.244	.055	4.448	.000
	Insider dealings	.139	.069	2.007	.047

$$CA = -0.579 + 0.383(MC) + 0.199(CO) + 0.244(TM) + 0.139(ID)$$

$$CA = -0.579 + 0.383(1) + 0.199(1) + 0.244(1) + 0.139(1) = 0.39$$

The best case scenario results fall between 0 and 1 which means, the resulting level of creative accounting is between very low and none.

The results of a moderate case scenario where the study assumes medium degree of practices influencing creative accounting (at a measure of 3) are as calculated below.

$$CA = -0.579 + 0.383(MC) + 0.199(CO) + 0.244(TM) + 0.139(ID)$$

$$CA = -0.579 + 0.383(3) + 0.199(3) + 0.244(3) + 0.139(3) = 2.39$$

The moderate case scenario results fall between 2 and 3 which means, the resulting level of creative accounting is between low and medium.

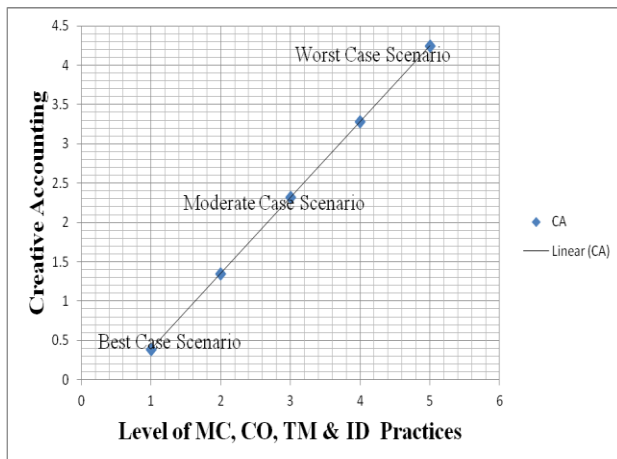


Fig 4.6 - Model testing

In the worst case scenario, creative accounting is high due to very high level of management's compensation, contractual obligations, tax management and insider dealings. In moderate case scenario, creative accounting is average as a result of medium level of management's

compensation, contractual obligations, tax management and insider dealings. Finally best case scenario, creative accounting is very low due to very level of management's compensation, contractual obligations, tax management and insider dealings. This therefore indicates that, the practices under the study are quite a significant influence on creative accounting among the companies listed firm on the NSE in Kenya.

Discussion of key findings

The results of the study point out to some key findings which answer the research questions;

Research question one: To what extent does manager's compensation influence creative accounting among Corporations listed in NSE?

The results indicate that Managers compensation positively influences Creative Accounting among companies listed on the NSE more than Contractual obligations, Tax management, Share Price Performance and insider dealings as shown by the unstandardized beta coefficients. The table 4.43 and Table 4.46 of regression analysis show that the managers compensation has a positive and significant influence on creative accounting as shown by a t value of 7.45 (3.44 in table 4.43), which is greater than the critical t of 1.99 and a p value of 0.00 ($p < 0.05$) at 95% level of confidence.

The Pearson coefficient of correlation (R) also indicated a strong positive relationship between Managers compensation and creative accounting. Through R it was evident that increase in manager's compensation which pegged on firms profitability leads to an increase in creative accounting. These results are corroborated by the findings of Njogu et al (2014) who expressed that there was a correlation between executive compensation and creative accounting. Moreover the Bonus Scheme Hypothesis which is one of the premises under Positive Accounting Theories presumes a connection between bonus schemes used to compensate and motivate

managers and directors with creative accounting (Scott, 2000).

Most respondents agree that managers have inducements to manipulate earnings in order to maximize either the firm's or manager's wealth and this is consistent with the findings by Becker et al, (2010). Additionally, most of the respondents link the incentive compensation plans for corporate officers and key employees to increased creative accounting and this may facilitate financial decisions which regulate firm's earnings. The results are in line with the findings by Gosh, (2010). The majority of the respondents indicate that manager's compensation depends on firm's profitability. These results are corroborated by the findings by Dutta & Qintao (2014) and Assih et' al (2013), who suggested that management bonus schemes are pegged on profitability, may lure management into creative accounting via earnings management. Further managers use accounting

discretion to manage earnings in order to maximize cash bonuses (Beaudion et' al, 2015). According to Ordóñez and Welsh (2015), Performance-based compensation system with random bonuses increased dishonesty since there is a temptation to engage in earnings management involving 'the strategic exercise of managerial discretion in influencing the earnings figure reported

Most of the respondents agree that manager's compensation have been stable for the last ten years. This was corroborated by the analysis of secondary data. The stability in managements earning could also have been necessitated by presence of the fixed salary component in the compensation package. All the respondents picked the fixed salary as one of the compensation component. Overall therefore, the findings indicate that manager's compensation significantly affects creative accounting among listed companies on the NSE and there is evidence that pegging management's incentive on firm's profitability

is one of the practices influencing creative accounting.

Research question two: How do contractual obligations influence creative accounting among Corporations listed in NSE?

The results indicate that Contractual obligations positively influences creative accounting among companies listed on the NSE just like the other variables. All of which positively influence creative accounting as shown by the unstandardized beta coefficients. The table 4.43 of regression analysis shows that contractual obligations has a positive and significant influence on creative accounting as shown by a t value of 3.235 (more than critical t of 1.99) and a p value of 0.002 ($p < 0.05$) at 95% level of confidence.

The Pearson coefficient of correlation (R) also indicated a strong positive relationship between Managers compensation and creative accounting. Through R it was evident that increase in contractual obligations on the firms profitability leads to an increase in creative accounting. These results were corroborated by Omoro et' al (2015) who expressed that, higher net earnings will reduce the probability of technical default on the debts as proposed by debt covenant hypothesis, one of the premises of positive accounting theories.

The results show that most of the respondents agree that contractual obligations lead to creative accounting. According to Cotlet et' al (2012), debt covenants and credit ratings are some of the management decisions are necessary in a strategy of avoiding the entities' rules and boundaries both organizational and legal. The Financial Numbers Game, creative accounting could be employed in exchange for lower corporate borrowing costs due to an improved credit rating (Gosh, 2010). These two researches confirm the finding that creative accounting is influenced by debt covenants and firms contractual obligations.

In addition, most respondents indicate that contractual obligations depend on the firm's profitability. They agree that high profits

increase the firm's credit rating and hence increased possibility of debt covenants. These results were in line with Njuguna and Moronge (2013), who established that a relationship exists between agency cost of ownership and some other factors associated with managerial behavior among them debt contracts.

The results are also corroborated by the study by Olouch et' al (2013) who expressed that there is an effect on the overall accruals quality (an indicator of creative accounting) on the cost of capital(including cost of debt) among the various segments of the NSE. These results indicate that debt covenants, credit ratings, cost of debt and other contractual obligations related practices influence creative accounting among the listed Companies.

Research question three: How does tax management influence creative accounting among Corporations listed in NSE?

The results indicate that Tax management positively influences creative accounting among companies listed on the NSE more than Contractual obligations, Share price performance and insider dealing. Its influence is however less than that of managers compensation as shown by the unstandardized beta coefficients. The table 4.43 of regression analysis shows that the capital structure has a positive and significant influence on financial risk as shown by a t value of 3.723 (greater than critical t of 1.99) and a p value of 0.000 ($p < 0.05$) at 95% level of confidence.

The Pearson coefficient of correlation (R) also indicated a strong positive relationship between Managers compensation and creative accounting. Through R it was evident that increase in tax management such as tax avoidance and/or evasion leads to an increase in creative accounting. This is in line with the political cost hypothesis one of the prepositions of positive accounting theories and also findings by Cotlet et' al (2012), who observed that taxation is a major factor encouraging creative accounting since taxable profit is calculated

based of the accounting figures in developing countries.

Results indicate that most respondents agreed that tax avoidance and/or evasion can lead to creative accounting. This was in line with observations by Kuria (2013) and Kamau et' al (2012) who affirmed that tax avoidance is one of the motivations of creative accounting in Kenya. In addition, most respondents indicate that tax management depends on the firm's profitability. They agree that high profits lead to increase in taxation and hence for the purposes of tax, firms prefer lower profits. These results were in line with Cotlet et' al (2012) and Sanusi and Izedonmi (2014) enlisted the various reasons why firms engage in creative accounting and among them include tax evasion which is based on the profits of the firm.

Study results indicated that the majority of the respondent found that tax payable by the firm has been steady just as the profits. However the results of secondary data analysis showed otherwise. The findings based on the secondary data are corroborated by the findings by Lin, Lu and Zhang (2012) who alluded to the fact that, tax induced earnings management is on the increase. The results therefore conclusively indicate that tax management has a significant influence on creative accounting among listed Companies on the NSE.

Research question four: To what extent does share price performance influence creative accounting among Corporations listed in NSE?

The results indicate that share price performance has an insignificant positive influence on creative accounting among companies listed on the NSE as shown by the unstandardized beta coefficients. The table 4.43 of regression analysis shows that the share price performance has a positive and insignificant influence on financial risk as shown by a t value of 1.475 (Less than the critical t of 1.99) and a p value of 0.143 ($p > 0.05$) at 95% level of confidence.

The Pearson coefficient of correlation (R) also indicated a weak positive relationship between

share price performance and creative accounting. Through R it was evident that increase in share prices does not lead to an increase in creative accounting.

Majority of the respondents disagreed that share price performance leads to creative accounting. These findings contradict several studies such as Adibah Wan Ismail et' al (2013) who expressed that IFRS-based earnings explain more of the variation in share values; Effiok and Eton (2012) who established that a positive relationship between accounts manipulation and management decisions measured by share price performance exists; and Gosh, 2010 who expressed that indeed firms perform accounts manipulations in order to portray a favorable financial position which will have an effect on the share prices.

On the other hand a majority of the respondents were of the view that share prices in the market are dependent on the firms profitability, the findings are in line with Ouma (2012) who found out that there was a correlation between dividend payout which is dependent on profits and the market share prices. Akenbor & Ibanichuka (2012) correlated creative accounting with a desire by management to boost up the market value of shares. This was also explained in the case of fall of Enron (Omurgonulsen & Omurgonulsen, 2009)

The results of the study therefore indicated that the majority of the respondents agree that market share prices are dependent on the firm's profitability. However share price performance is not a significant motivator for firms to engage in creative accounting. These results therefore conclusively indicate that although the market share prices of the listed Companies are influenced by profits, the performance of share prices does not significantly influence creative accounting among the listed Companies on the NSE.

Research question five: To what extent does insider dealings influence creative accounting among Corporations listed in NSE

The results indicate that insider dealings positively influences creative accounting among the companies listed on the NSE more than share price performance. Its influence is however less than that of management compensation, contractual obligations and tax management as shown by the unstandardized beta coefficients. The table 4.43 of regression analysis shows that insider dealings has a positive and significant influence on financial risk as shown by a t value of 2.251 (greater than the critical t of 1.99) and a p value of 0.026 ($p < 0.05$) at 95% level of confidence.

The Pearson coefficient of correlation (R) also indicated a strong positive relationship between insider dealings and creative accounting. Through R it was evident that increase in insider dealings lead to an increase in creative accounting.

The majority of the respondents agreed that insider dealings can lead to creative accounting even though a majority expressed those insider dealings was not a practice in their organizations. This finding that creative accounting may be motivated by insider dealings was consistent with Waweru (2014) who observed that insider dealing activities are related to creative accounting, all of which reduces the quality of corporate governance in Sub-Saharan Africa and Iraya et, al (2015) who affirmed that the shareholding by insiders has a negative effect on earnings management, hence implying a clear relationship between the two. Results of the study show that there are changes in the employee's and director's shareholding. Change in the shareholdings may be an indicator of insider trading. Amat and Gowthorpe (2004) explained that directors engaging in 'insider dealing' in their company's shares may use creative accounting as a strategy to delay the release of information for the market, thus enhancing their opportunity to gain advantage from inside knowledge. The respondents also indicated that there is stability in employees and directors share transactions, however the secondary data confirmed that

there were changes in the shareholdings. According to Bewaji (2012), insider trading is a recipe for creative accounting. These findings are corroborated by the findings by Beneish et' al (2012) established a correlation between insider trading incentives for income and increasing earnings management. In addition, Sawicki & Shrestha (2008) confirmed the relationship between insider trading and earnings management by analyzing the association between discretionary accruals and insider trading and firm valuation.

The results of the study conclusively indicate that insider dealings are a practice that significantly influences creative accounting among listed Companies on the NSE in Kenya.

Conclusions

Findings indicate the relationship between four independent variables and the dependent variable is significant, hence the conclusion that management compensation, contractual obligations, tax management and insider dealings are practices that significantly influence creative accounting among companies listed on the NSE in Kenya. On the other hand

there was no significant relationship between Share price performance and creative accounting among the listed companies. Management compensation and tax management are the highest influencers of creative accounting among the listed companies; this may be because these two factors have a direct benefit to either the forms directors and management or the firm itself. Contractual obligations also has a significant influence on creative accounting, however the influence is not high probably due to the fact that there is no personal benefit for the directors and managers of the firm. Insider dealings have the second lowest influence on creative accounting among the independent variables; this may be as a result of its infrequent occurrence despite the personal benefit attached to the employees, managers or directors involved in such practices. Lastly, share price performance was found to be an insignificant influencer of creative accounting despite its dependence on profits. This could be due to the fact that share price performance may not have a direct benefit to the directors or managers of the organization.

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