Corporate Governance and Modified Audit Opinion: Evidence from State Owned Enterprises in Kenya

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\textbf{Abstract}

\textbf{Purpose:} The purpose of the study was to examine the relationship between corporate governance practices and modified audit opinion in the commercial and manufacturing sector of state owned enterprises in Kenya.

\textbf{Design/Methodology/Approach:} The study collected data from 25 companies in the commercial and manufacturing sector covering the period 2013 to 2016. Logistic regression technique was adopted to analyze the variables.

\textbf{Findings:} The study findings established negative and significant effect of both board size and board independence on modified audit opinion. This results suggest board size and percentage of independent directors significantly influenced the likelihood of state owned enterprises receiving modified opinion. Results on the effect of control variables; leverage and return on assets were statistically insignificant.

\textbf{Originality/Value:} This study contributes to both theoretical literature and empirical evidence in the corporate governance in public sector context.
1.0 Introduction

The subject of transparency accountability is a topic of great interest in both private and public sectors. Different countries have attempted to improve corporate governance in order to advance accountability and transparency. Sarbanes Oxley act (2002) put the responsibility of quality in financial reporting in United states on the board of directors. The world Bank (2014) tool kit for corporate governance argues that external audit can ensure transparency and accountability in state owned enterprises. In Kenya Mwongozo (2015) code of corporate governance for state corporation similarly puts the responsibility of accountability and transparency in the board of directors. Mwongozo (2015) outlines how boards of state corporation should be structured to ensure transparency and accountability in state owned enterprise in Kenya. A world Bank report (2014) indicated that SOEs greatly contributed to the economy of many countries including provision of critical services. Boards of directors are responsible for monitoring and supervision of information presented by management. Consequently, if done correctly it could lead to improved quality of financial reporting. This means that well managed enterprises are less likely to receive modified audit opinion from independent auditors. Tian and Xin (2017) observed that audit opinion was important because it offered a reflection, whether financial statements presented by management offered a true and fair view. This information would be beneficial to diverse stakeholders. Farinha and Viana (2009) observed that modification of audit reports was a sign of poor quality in financial reporting. Hsiao, Lin and Hsu (2010) observed that various forms of modification include; qualified opinion, adverse opinion and disclaimer opinion. Unmodified audit opinion can bring trust and confidence in financial reporting by the agent. This is likely to convince investors and lenders to provide more finances (Green & Singleton, 2009). In the public sector the public who pay taxes and investors may want to know through audit reports how the state owned enterprises use their taxes and investments.

Empirical evidence on the effect of corporate governance practices on modified opinion was mixed and inconclusive. Saaydah (2019) established positive association between board size and modified opinion, however the results on effect of independent directors was insignificant. In contrast Farinha and Viana (2009) established negative effect of board
independence on modified opinion while the results for board size were insignificant. Ishak and Yusof (2015) established board independence had a negative association, with modified audit opinion in Malaysia. The contrasting findings on the determinants of audit modification means that the subject remains unsettled hence the need for further research. This study aims to establish the effect of corporate governance variables of board size and percentage of independent directors on modified audit opinion.

1.1 State owned enterprises in Kenya

According public financial management act 2012 state owned enterprises (SOEs) in Kenya are entities where the government of Kenya has a controlling state or a case whereby there is specific legislation classifying the entity as state owned entity. The control and direction of SOEs in Kenya is guided by Mwongozo (2015) code of governance of state corporations. In terms of board independence Mwongozo code guidelines requires that at least thirty percentage of board members be non-executive board members. In terms of board size Mwongozo guidelines recommends a board size of 7-9 members to govern these entities effectively. Article 229 (6) of constitution of Kenya 2010 puts the office of the auditor – general of Kenya as the supreme audit institution (SAI) responsible for checking for accountability in SOEs in Kenya.

1.3 Study Objectives

I. To establish the effect of board size on modified audit opinion in commercial and manufacturing state owned entities in Kenya.

II. To establish the effect of board independence on modified audit opinion in commercial and manufacturing in state owned entities in Kenya

III. To establish the effect of leverage as a controlling variable on relationship between corporate governance and modified audit opinion.

IV. To establish the effect of return on assets as a controlling variable on relationship between corporate governance and modified audit opinion.

2. Literature Review

2.1 Theoretical Foundation

Hay and Cordery (2017) reviewed history of public sector audit and observed that agency theory was the dominant theory guiding of audit and corporate governance in both public
and private sectors. Board of directors are responsible for monitoring and supervising management of SOEs. If done effectively it will result to quality financial reporting that will attract unmodified audit reports from independent auditors.

The agency theory as argued by Ross (1973); Jensen and Meckling (1976) holds that as result of separation of ownership and control managers are likely to make decisions that maximize their own utility at expense of owners. This arises due to information asymmetry between management and the owners. Agency theory proponents argue that through corporate governance mechanisms including independent audit and board structure the agency costs can be reduced. Independent board, large boards with independent auditors will bring trust and confidence by reducing information asymmetry between management and the agent. If done correctly this is likely to results to quality in financial reporting, Stream (1994) observed that the agency problem was more complex in the public sector when compared with private sector due multiple relationships. Between the citizens and Legislation, Legislations and executive and between the executive and CEOs of various entities. Wallace (1980) observed that even in the public sector auditing was valued because it helped reduce the agency costs. Hermalin and Weisbach (1998) observed that board effectiveness in terms of monitoring was a function of board independence.

Stakeholder theory as argued by Freeman (1984) offers another perspective in corporate governance and audit opinion. The theory holds that through governance mechanisms including board of directors’ interest of diverse stakeholders would be protected. Based on stakeholders’ theory perspective audit opinion will be of great interest to various stakeholders to ensure their interests are protected.

### 2.2 Empirical review

Saaydah (2019) examined the relationship between corporate governance and audit modification in Jordanian securities market. The study analyzed data from 104 firms using logistic regression. The study established significant positive relationship between board size and modified audit opinion. The study established insignificant relationship between board independence and modified audit opinion.
Jouri (2016) examined the relationship between auditors opinion and corporate governance in Tehran securities market. Data was collected from 90 listed companies covering the period 2001 to 2008. The study findings established significant relationship between weak corporate governance and qualified opinion. However, no significant relationship was established between strong governance and unqualified audit opinion.

Ishak and Yusof (2015) in a study in Malaysia examined the impact of board independence in modification of audit reports. The study sampled 300 financial companies covering the period 2004 to 2009. Regression analysis was used to examine the relationship between the variables. The study established that board independence was negatively related to modified audit opinion. In addition the study established that firm characteristics variables including leverage influenced audit modification. Other board characteristics variables including board size and return on assets size were statistically insignificant.

Tsipouridou and Spathis (2014) examined the effect of earnings management on audit opinion in Athen stock exchange. The study concluded that earnings management did not influence the modification of audit opinion in Greece. However financial characteristics including firm size and profitability significantly influenced modification of audit opinion.

Kangarlouei, Jam and Motavassel (2013) examined the effect of sound corporate governance practices on the quality of financial reporting in Tehran securities market. The study collected and analysed data covering the period 2013 to 2012. The study established that firms with weak corporate governance practices were more likely to receive modified audit opinion in Tehran.

Habib (2013) using meta-analysis technique examined propensity for modified audit opinion. 72 articles were examined from the 1982-2011. The study established that firm specific characteristics influenced the propensity to issue modified audit opinion. Firms that received modified opinion shared same characteristics in terms profitability, leverage, Size and profitability.

Hsiao, Lin and Hsu (2010) in a study in Taiwan examined financially distressed firm, earnings management corporate governance and audit opinion. The study collected data covering the period 1997 to 2007. The study used regression analysis to draw conclusions.
study findings established that distressed companies were more likely to manipulate financial information resulting to modified audit opinion. Further, entities dominated by executive directors had higher ratio of qualified opinion.

Farinha and Viana (2009) in a study in Portoguese securities market examined modified opinion and board structure. Data was analysed using logistic regression covering the period 2002 to 2003. The study established that board independence was negatively related with modified opinion. This means that companies with independent directors were less likely to receive modified audit opinion. The result for board size were statistically insignificant. In addition the study established that other control variables including growth, performance and financial health contributed to the probability of firm receiving modified opinion.

Caramanis and Spathis (2006) examined determinants of audit qualification in Athens securities market. The study tested and analyzed data from 185 companies using logistic regression. The study established that audit qualifications was significantly related to financial metrics including profit margin, as ratio to current and total assets.

Ballesta and Garcia-Meca (2005) in a study using Spanish listed companies examined audit qualifications and corporate governance. Data was collected for the period 1999 to 2002 and analysed using regression analysis. The study established that higher ownership concentration resulted to effective corporate governance leading to better supervision on management. This resulted to quality financial reporting thus reducing the chance of receiving qualified opinion. Family ownership increased the chances of modification of audit opinion.
2.3 Conceptual Framework

Based on empirical and theoretical framework. The study conceptualized relationship as depicted in Figure 1. Sound corporate governance mechanisms could lead to quality financial reporting hence determining the type of audit opinion to be issued by the independent auditor. Leverage and return of assets were used as control variables.

2.4 Study Hypothesis

\( H_1: \) Board size has a negative and significant effect on modified opinion.

\( H_2: \) Board independence has negative and significant effect on modified opinion.

\( H_3: \) Leverage as control variable has positive effect on the relationship between corporate governance modified audit opinion.

\( H_4: \) Return on assets as control variable has a negative effect on the relationship between corporate governance with modified audit opinion.
3.0 Methodology

3.1 Research Design

This study employed correlational research design. Correlational research design uses statistics to describe and measure the degree of association among the study variables (Cresswell, 2014).

3.2 Data collection

The study collected data from 25 companies of the 33 enterprises in commercial and manufacturing sector as categorized by (SCAC,2020). The data was obtained from annual reports covering the period 2013 to 2016. Data on board size, and non-executive directors was obtained from governance statements in the annual reports. Data on the audit opinion was obtained from audit reports published by the auditor general of Kenya. Data on leverage and return on assets were calculated from financial data obtained from financial statements in the annual reports.

3.3 Operationalization of Study Variables

Table 1: Operationalization of study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Opinion</td>
<td>Coded &quot;0&quot; = unmodified &quot;1&quot; = Modified Opinion</td>
</tr>
<tr>
<td>Board Size</td>
<td>Total member of board members</td>
</tr>
<tr>
<td>Board Independence</td>
<td>Number of non-executive directors as percentage to total number of directors</td>
</tr>
<tr>
<td>Leverage</td>
<td>Ratio of debt to equity</td>
</tr>
<tr>
<td>Return on assets</td>
<td>Ratio of net income to total assets</td>
</tr>
</tbody>
</table>
3.3 Model Specification

To measure the level of association among the study variables the study adopted logistic regression. A logistic regression model is an extension of generalised model. Logit models are flexible and able to accommodate categorical dependent variable (Francis, 2017).

$$\text{AO} = \alpha + \beta_1 \text{BDsize} + \beta_2 \text{PerIND} + \beta_3 \text{ROA} + \beta_4 \text{Leverage} + \epsilon$$

4.0 Results and Discussion

4.1 Frequency Distribution Audit Opinion

Table 2: Distribution of Audit Opinion

<table>
<thead>
<tr>
<th>Audit Opinion</th>
<th>Frequency %</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmodified</td>
<td>32</td>
<td>32.0</td>
</tr>
<tr>
<td>Modified</td>
<td>68</td>
<td>68.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2 presents the distribution of audit opinion in commercial and manufacturing sector of state owned enterprises from 2013 to 2016. The results show that 32% of SOEs received unmodified audit opinion. While 68% of SOEs received modified audit opinions. This results indicates more SOEs received modified opinions compared to clean reports. This results suggest corporate governance challenges in majority of SOEs in Kenya.
4.2 Descriptive Statistics

Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>BdSize</td>
<td>100</td>
<td>10.08</td>
<td>1.988</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>PerIND</td>
<td>100</td>
<td>0.340</td>
<td>0.189</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Leverage</td>
<td>100</td>
<td>0.29645</td>
<td>1.686</td>
<td>-11.127</td>
<td>6.692</td>
</tr>
<tr>
<td>ROA</td>
<td>100</td>
<td>1.485</td>
<td>10.153</td>
<td>-1.158</td>
<td>93.631</td>
</tr>
</tbody>
</table>

Table 3 presents the descriptive statistics of the research variables. The results on the board size indicate mean board size of 10.08 with maximum of 16 with minimum of 4, Mwongozo (2015) code of corporate governance for state corporations 2015 recommends board size of 7-9 members. Percentage of non-executive directors indicate a mean of 34% with a maximum of 100 with a standard deviation of 18.9%. Results Leverage indicates a mean of 0.29645 with a maximum of 6.692. Return on assets as a measure of performance results indicate a mean of 1.485 minimum of -1.158 and maximum of 93.63.

4.3 Pearson Correlations

Table 4: Pearson Correlations

<table>
<thead>
<tr>
<th></th>
<th>Audit Opinion</th>
<th>Bdsze</th>
<th>PerIND</th>
<th>Leverage</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion</td>
<td>1</td>
<td>-0.2540</td>
<td>-0.2277</td>
<td>-0.0424</td>
<td>0.0404</td>
</tr>
<tr>
<td>Bdsze</td>
<td>-0.2540</td>
<td>1</td>
<td>-0.3951</td>
<td>0.0217</td>
<td>0.0490</td>
</tr>
<tr>
<td>PerIND</td>
<td>-0.2277</td>
<td>-0.3951</td>
<td>1</td>
<td>-0.0886</td>
<td>0.0725</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.0424</td>
<td>0.0217</td>
<td>-0.0886</td>
<td>1</td>
<td>0.0116</td>
</tr>
<tr>
<td>ROA</td>
<td>0.0404</td>
<td>0.0490</td>
<td>0.0725</td>
<td>0.0116</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4 presents the Pearson correlation results. The results indicate negative correlation between corporate governance variables board size, percentage of independent directors and modified audit opinion. Further, the results indicate negative correlation between leverage as control variable and audit opinion. The results indicate positive correlation between modified opinion and return on assets.
4.3 Diagnostic Test

4.3.1 Multicollinearity

Table 5: Collinearity Statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bsize</td>
<td>.838</td>
</tr>
<tr>
<td></td>
<td>PerIND</td>
<td>.829</td>
</tr>
<tr>
<td></td>
<td>Leverage</td>
<td>.992</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>.987</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Opinion

Table 5 presents collinearity statistics. Multicollinearity problem occurs when the explanatory variables are highly correlated. This creates a problem in the relationship between the response and explanatory that will be distorted leading to incorrect interpretation. Multicollinearity problem is tested using the variance inflation factor whereby VIF > 5 will mean highly correlated. The results reveal VIF values below < 5 meaning the no multicollinearity problem (Mela & Kopalle, 2002).

4.3.2 Omnibus Tests of Model Coefficients

Table 6: Omnibus Test Model Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Chi-square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block</td>
<td>22.238</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>22.238</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 6 presents the omnibus tests of model coefficients results. The results of the model indicate model value Chi-square 22.238 statistically significant with p value < 0.05 meaning that current model is better than null model.
4.3.4 Model Accuracy Prediction Statistics

Table 7: Classification Table

<table>
<thead>
<tr>
<th>Predicted</th>
<th>Unmodified Opinion</th>
<th>Modified Opinion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmodified Opinion</td>
<td>10</td>
<td>22</td>
<td>31.3</td>
</tr>
<tr>
<td>Modified Opinion</td>
<td>7</td>
<td>61</td>
<td>89.7</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td>71.0</td>
</tr>
</tbody>
</table>

Table 7 presents the classification results that shows the prediction accuracy of the model. The result indicates overall prediction accuracy of 71%. This proves that the model had high prediction success.

4.4 Hypothesis Testing

Table 8: Model Summary

| Number of obs | 100 |
| LR chi2(3) | 21.42 |
| Prob > chi2 | 0.0001 |
| Pseudo R2 | 0.1708 |

Table 8 presents the model summary results the results Chi-square value of 21.42 with p value < 0.05 statistically significant. This suggest that the model is more accurate compared to null model. The table also indicate pseudo R of 17.08% indicating that changes audit opinion could be explained by changes in corporate governance variables.

Table 9: Logistic Regression Results

<table>
<thead>
<tr>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bsize</td>
<td>-.540</td>
<td>.153</td>
<td>12.408</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>PerIND</td>
<td>-5.757</td>
<td>1.657</td>
<td>12.063</td>
<td>1</td>
<td>.001</td>
</tr>
<tr>
<td>ROA</td>
<td>.021</td>
<td>.027</td>
<td>.606</td>
<td>1</td>
<td>.436</td>
</tr>
<tr>
<td>Leverage</td>
<td>-.071</td>
<td>.140</td>
<td>.260</td>
<td>1</td>
<td>.610</td>
</tr>
<tr>
<td>Constant</td>
<td>8.335</td>
<td>2.008</td>
<td>17.233</td>
<td>1</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: Bsize, PerIND, ROA, Leverage.

Table 9 presents the logistic regression results. Board size indicates negative coefficient $\beta = -0.540$ Exp value $\beta = 0.583$ that is statistically significant as p value < 0.05. This means negative
relationship between board size and modified audit opinion. The results suggest that a unit increase in board size lowered the odds of a firm receiving modified opinion by a factor of 0.583. This finding is not in agreement with a study by Saaydah (2019) that established significant positive relationship between board size and modified audit opinion. Board independence results indicates negative coefficient $\beta$ value -6.757 with $\text{Exp} \beta$ 0.003 that is also statistically significant as the $p$ value <0.05. This means negative relationship between percentage non-executive directors and modified audit opinion. A unit increase in percentage of non-executive director lowered the odds of a firm receiving modified opinion by a factor of 0.003. This findings agreement with previous studies by (Ishak & Yusof, 2015; Farinha & Viana, 2009). The results for ROA as control variable shows positive relationship $\beta$ 0.021 that is statistically insignificant as $p$ value >0.05. This means that ROA as measure of firm performance did not influence odds of receiving modification of audit opinion. The results for Leverage shows $\beta$ -0.071 $\text{Exp}$ 0.931 also statistically insignificant $p$ value > 0.05. This means that leverage as control variable did not significantly influence the odds of SOEs Kenya receiving modified audit opinion. These findings are not in agreement with (Habib, 2013; Tsipouridou & Spathis, 2014) that related firm characteristics variables with modification of audit opinion.

**Conclusions**

The study examined the relationship between board structure and modified opinion in commercial and manufacturing state owned entities in Kenya. The results reveal board size has negative and significant association with modified audit opinion. This finding suggest that the size of the board will influence the likelihood of a firm receiving modified opinion. Consequently, firms with large boards were less likely to receive modified opinion due monitoring effectiveness of large boards. Similarly, the results indicate negative and significant relationship between board independence and audit opinion. This finding suggest that enterprises with more independent directors were less likely to receive modified audit opinion. The negative association between both board size, board independence and modified opinion is in agreement with Agency theoretical perspective on importance corporate governance practices. The results effect of controlling variables; leverage and return of assets was statistically insignificant. This means that both leverage and return on
assets as control variables did not influence the odds of state owned enterprises receiving modified audit opinion in Kenya.

The findings in this study will prove useful to those charged with corporate governance in SOEs in Kenya. There is evidence that board size and independent directors significantly influenced the likelihood of a firm receiving modified audit opinion. This study significantly contributed to development of literature on effectiveness corporate governance practices in the public sector in Kenya. In addition, the study contributed to methodology on operationalization and testing variables in the public sector context.

References


