Effect of Horizontal-Agency-Costs and Managerial Ownership on Monitoring Mechanisms

Rachael Oluyemisi Arowolo¹*, Ayoib Che-Ahmad²

1School of Accountancy, College of Business, Universiti Utara Malaysia, Kedah, Malaysia, ²School of Accountancy, College of Business, Universiti Utara Malaysia, Kedah, Malaysia. *Email: aroldaot@gmail.com

ABSTRACT

There is a level of information asymmetry between the agents (management and the board of directors) and the principal (shareholders) in every company. The purpose of this study is to examine the scope of monitoring mechanisms in non-financial listed companies of Nigeria. This paper also investigates the impact of managerial ownership (MO) and horizontal-agency-costs on the mechanisms. Panel-corrected standard errors in Stata 12 application was used to test the hypotheses. The result suggests that the horizontal-agency-cost positively relates to monitoring mechanisms. It also provides evidence that MO has a significant negative impact on monitoring mechanisms. These findings suggest policy implications to the board of directors, the internal and external auditors on their monitoring roles. Likewise, the findings are beneficial to the government and regulatory agencies for possible further review of the guidelines on corporate governance. This paper contributes to knowledge in Sub-Saharan Africa by combining directorship, internal and external auditing as dimensions of monitoring mechanisms in a single study. Also, it examines horizontal-agency-cost, which is an emerging topic in Nigeria.

Keywords: Monitoring Mechanisms, Horizontal-Agency-Costs, Managerial Ownership

JEL Classifications: M40, M41, M42

1. INTRODUCTION

The code of corporate governance for each country is designed to resolve agency problems through sound monitoring mechanisms. Monitoring mechanisms are expedient for aligning the activities of the management and the interests of the controlling shareholders with the interests of other shareholders (Kao et al., 2004). The study of Huson et al. (2001) classified monitoring mechanisms into internal and external mechanisms. Moral hazard, information asymmetry, and conflict of interests prevail in the relationship between the management and shareholders of a company (Slyke, 2006). The agency cost is very high where the interests of the management, the board of directors, the controlling shareholders, and other investors fail to align. Dissimilarities in the interests of the principal (shareholders) and the agents (management) or interests among shareholders are responsible for the frequency of the financial crisis and business failure (Mustapha and Che-Ahmad, 2011a). The incessant occurrence of business failures and financial crisis suggest the need for investors’ protection (Mustapha and Che-Ahmad, 2011a). Therefore, monitoring mechanisms are designed to restrain ineffectiveness that can emanate from agency problems (He and Ho, 2010). Shareholders require monitoring mechanisms to lessen the agency costs (Jensen and Meckling, 1976).

The extant literature reveal that good corporate governance heightens both internal and external monitoring mechanisms (Huson et al., 2001). Therefore, governments and regulatory authorities continually review codes of corporate governance to ensure that monitoring mechanisms are adequately applied to protect the interests of the shareholders in companies (Huson et al., 2001).

However, the increased attention that intellectuals, government, and regulators are giving to the importance of monitoring mechanisms and persistent review of codes of corporate
governance notwithstanding, the occurrence of governance failures and reduced economy and corruption persist in the Sub-
Saharan Africa (Nworji et al., 2011). There are extant literature on monitoring mechanisms (Choi and Lee, 2014; Choi et al.,
2013; Azim, 2012; Rodriguez and Alegria, 2012; Sanda et al.,
2011; Che-Ahmad et al., 2006; Slyke, 2006; Kao et al., 2004;
Anderson et al., 1993; Anderson et al., 1993). However, most of
these studies are from advanced and transiting countries like U.S,
U.K, and Malaysia, leaving the developing countries like Nigeria
far behind. Many of these studies are only on one or two of the
three dimensions of the monitoring mechanisms (directorship,
internal auditing, and external auditing).

In Nigeria, the study on monitoring mechanisms is scarce. Also,
studies on ownership (Fodio et al., 2013; Adeyemi and Fagbemi,
2010; Ehikioya, 2009; Uadiale, 2010) are few in Nigeria. To the
best of the knowledge of the researchers, there is little or no studies
on horizontal-agency-costs in Nigeria. Neither is there any study
that tested total monitoring mechanisms combining directorship,
internal auditing and external auditing in Nigeria.

2011 Securities and Exchange Commission (SEC) code of
corporate governance recognizes that there is a need for the three
dimensions of monitoring mechanisms (directorship, internal
auditing, and external auditing). Nigerian SEC maintains that
some corporate failures in Nigeria are the outcome of weak
corporate governance. Hence, it plans to enforce fully the new
code of corporate governance having made provisions for good
corporate governance, accountability, and transparency in Nigerian
companies.

Reports of business mergers, bankruptcy, and failures within the
last decade have been very alarming. The occurrence of these
miseries is due to insufficient monitoring, and enforcement
of the code of corporate governance (Nworji et al., 2011).
Therefore, this paper empirically tests the relationship between
organizational attributes (in the context of managerial ownership
[MO] and horizontal-agency-costs) and monitoring mechanisms
(directorship, internal auditing, and external auditing). However,
this is the first published study, to the best of the knowledge of
the researchers that examines monitoring mechanisms from this
perspective in Nigeria. Likewise, this will be the first to test
horizontal-agency-costs in Nigeria.

Next section reviews existing literature and hypotheses
development. The study discusses methodology hereafter, while
results, discussion, and conclusion sections follow.

2. LITERATURE REVIEW

The Nigerian SEC bears an oversight function over all listed
companies in Nigeria. The companies’ incorporation is handled by
the Companies and Allied Matters Act (1990 and as amended
in 2004). However, SEC regulates the activities of the companies
(financial and non-financial) especially the capital market
activities. SEC’s main objective is to ensure investors’ protection.
For this purpose, SEC revised 2003 code of corporate governance
to inject efficiency, transparency, and fairness into the capital
market, thereby reducing the systematic risks of the market. 2011
SEC Code of Corporate Governance was approved for this purpose
(SEC, 2011). SEC, by this code encouraged companies (both the
public and private) to apply the principles in the code of corporate
governance as appropriate in their affairs. SEC aligns with agency
theory and seeks to reduce information asymmetry, heightened by
corruption through expropriation of assets by one party at the loss
of the interests of others. In line with stakeholders theory, it also
seeks to ensure that a company makes adequate provisions for the
interests of all parties to the contracts of the company.

Extant literature are with diverse definitions for monitoring
mechanisms (Mustapha and Che-Ahmad, 2011a; Slyke, 2006;
Kao et al., 2004; Huson et al., 2001). However, all the definitions
clearly portray the fact that shareholders count on the monitoring
mechanisms to solve agency problems. Azim (2012), examines how
corporate governance impacts mechanisms on the performance of
companies. The study claims that monitoring mechanisms can
meritoriously lessen agency problem. The study of Choi et al.
(2013), investigates the factors that regulate investments on human
resource in the internal controls of companies. The study finds
that good monitoring mechanisms are the basis through which a
company reduces the need to invest greatly in intellectual capital
to have an internally operative control. Anderson et al. (1993),
examine the relationship of auditing and directorships to the
demand for monitoring. The study claims that the monitoring
mechanisms many companies use for good corporate governance
include directorship, internal and external monitoring. In general,
monitoring mechanisms helps to reduce agency costs by aligning
the interests of the management and shareholders, thereby paving
ways for good corporate governance by Choi et al. (2013), SEC

Therefore, this paper examines how monitoring mechanisms
directorship, internal and external auditing) can resolve agency
problems in the non-financial sector of Nigeria through MO and
horizontal-agency-costs.

3. HYPOTHESES DEVELOPMENT

3.1. THE PROPOSED CONCEPTUAL MODEL

Agency theory suggests that management is characterized by
cold-hearted behaviors that may encourage the expropriation of
company assets as well as information asymmetry. Extant literature
reveal that attitudes of a staff-manager and an owner-manager
vary (Jensen and Meckling, 1976; Jusoh and Che-Ahmad, 2014).
These studies suggest that MO is one of the incentives by which
management is encouraged to align its interests with that of the
shareholders. The alignment of the interests of management and
shareholders yields less demand for monitoring. However, the
degree of the ownership determines the extent of the alignment
(Jusoh and Che-Ahmad, 2014). The greater the MO, the less the
agency problem (Amran and Che-Ahmad, 2013). However, it may
not favor the minority shareholders if above a certain threshold
(Fama and Jensen, 1983).

The study of Mustapha and Che-Ahmad (2011b), examines MO
and agency theory with 235 Malaysian listed companies’ data. The
study reveals that MO relates inversely to total monitoring costs (MCs). The study suggests that the demand for monitoring may be less in a company with owner-manager. However, the study of Jusoh and Che-Ahmad (2014), finds that MO significantly relates to company performance but negatively.

It is therefore expected that MO may align the interests of the shareholders and the agents, and therefore, reduces the MCs. This study, therefore, hypothesize that:

H$_{1\alpha}$: MO negatively impacts the demand for monitoring mechanisms (directorship, internal and external auditing).

H$_{1\beta}$: MO negatively impacts the demand for directorship as a monitoring mechanism.

H$_{1\gamma}$: MO negatively impacts the demand for internal auditing as a monitoring mechanism.

H$_{1\delta}$: MO negatively impacts the demand for external auditing as a monitoring mechanism.

3.2. Block-holding (Horizontal-Agency-Costs)

Stakeholders’ theory suggests that all stakeholders should be given equal opportunities and be represented in decision making. Existing literature reveal block-holding as an important feature for effective monitoring of the activities of management of a company (Mustapha and Che-Ahmad, 2013; Reuer et al., 2012). These literature suggest different types of block-holders, such as institutional (Mustapha and Che-Ahmad, 2013); multiple (Connelly et al., 2010); second-largest (Chen et al., 2006); independent/executive (Anderson et al., 2004); individual (Eng and Mak, 2003); inside/outside (Jensen and Meckling, 1976). Each of these block-holdings is with a distinct role that allows for good corporate governance (Hope, 2013).

The study of Jensen and Meckling (1976), investigates the theory of the firm. The study claims that the number of shares held or the spread of the shares among the shareholders defines the magnitude of shareholders’ demand for monitoring. Hope (2013), examines large shareholders. The study claims that an increase in the shares held by the second-largest shareholder endows the second-largest shareholder to prevent the largest shareholder from exploiting the interests of minority shareholders. Such conflicts as may arise among shareholders is otherwise known as horizontal-agency-cost (Lei et al., 2013). It is a situation, whereby, large shareholders are monitoring one another. Monitoring among shareholders helps to improve the company’s performance by reducing assets’ expropriation of the company (Pagano and Roell, 1998). The expectation, therefore, is that an increase in the shares of a second-largest shareholder is likely to enhance the protection of the interests of the minority shareholders. Thereby, demand for monitoring will be greater. This study, therefore, hypothesize that:

H$_{2\alpha}$: Horizontal-agency-costs positively impact the demand for monitoring mechanisms (directorship, internal and external auditing).

H$_{2\beta}$: Horizontal-agency-costs positively impact the demand for directorship as a monitoring mechanism.

H$_{2\gamma}$: Horizontal-agency-costs positively impact the demand for internal auditing as a monitoring mechanism.

H$_{2\delta}$: Horizontal-agency-costs positively impact the demand for external auditing as a monitoring mechanism.

4. METHODOLOGY

4.1. Sample

This study extracted data from the annual reports of 111 Nigerian non-financial listed companies, which were collected from the Nigerian Stock Exchange. The researchers obtained data on internal auditing using questionnaires as the information is not available from the annual reports. Data analysis was performed using a quantitative method. The data for MO and horizontal-agency-costs were obtained from the annual reports and are continuous. The data for the dimensions of monitoring mechanisms with the exception of the internal auditing are available from annual reports and are also continuous.

4.2. Measurement

The dependent variable, monitoring mechanisms is measured by summing up the costs of non-executive directors’ remunerations, the costs of internal auditing and external audit fees all in Nigerian currency, naira (₦).

The MO is measured as the proportion of the shares held by the management to the total shares of the company. The horizontal-agency-costs is measured as the change in the shares of the second largest shareholders (the difference between the current year and the immediately preceding year).

The control variable, company performance is measured as the proportion of the profit before interest and tax to total assets. The company complexity is measured using the number of subsidiaries held by the company including the head office.

The panel data model for this study is as shown below:

$$
MC_n = \alpha + \beta_1 MO_n + \beta_2 BOC_n + \beta_3 FP_n + \beta_4 CY_n + \mu + \epsilon
$$

Where:

- MC = Monitoring cost, MO = Managerial ownership, BOC = Horizontal-agency-costs, FP = Company performance, CY = Company’s complexity.

5. RESULTS

The researchers collected data from 332 questionnaires administered in 166 Nigerian non-financial listed companies. The researchers distributed the questionnaires giving two copies to each company. One questionnaire was given to the internal auditor, and the other one was given to either the head of accounts or the company.
secretary. The expectation was to receive at least one questionnaire back from each company. The annual reports for periods 2010 to 2012 were collected from the Nigerian Stock Exchange.

About 117 questionnaires were received, but only 111 had corresponding annual reports and were used for the empirical tests. The researchers ran the descriptive analysis using SPSS 22 and used Stata for the panel data regression technique. The result shows that 80.2% of the respondents are males while 19.8% are females; the internal auditors among the respondents are 48.6%, the accountants are 38.7%, and the remaining 12.6% are company secretaries. The result also shows that 46.8% of the respondents have been working with their companies for <5 years, and 36% for 6-10 years.

The F-test suggests a statistical significance for the model. The independent variables, MO, and horizontal-agency-costs have the mean values of 0.109 and 3.769 respectively. The two variables are with minimum scores of 0 and −9.26 respectively and 59.17 and 13.09 maximum scores. The model, therefore, meets the minimum requirement needed for multivariate analysis. The result reveals that 66.4% of the companies have MO in their capital structure. The result also shows that 4.5% changes in the shareholding of horizontal-agency-costs were reducing; 85.6% were with no change possibly due to the persisting financial crisis and 9.9% were increasing.

Tables 1 and 2 show the results from Stata regression for the model. The results present variance inflation factors (VIF) and tolerance which is >0.2. Table 1 reveals that there is no high correlation among the variables. All values for the correlations are well below 0.9. Hence, this study can conclude that the variables that this paper examines are with no multicollinearity problem.

The study analyzed the data using panel-corrected standard errors (PCSEs) regressions. The researchers adopted the results from PCSEs because it is robust in nature (Beck and Katz, 1995). Also, PCSEs model is designed to correct for heteroscedasticity and autocorrelation (Bailey and Katz, 2011). Table 3 presents the result from PCSEs’ regression. The results as shown on Table 3 suggest that the MO, horizontal-agency-costs and the two control variables (company performance and complexity) are significant predictor variables for monitoring mechanisms. The results show that MO (β = 0.046, Z = 12.27) is significant, and it negatively affects the monitoring mechanisms at 1%. It indicates that an increase in MO may result in a decrease of 0.046 in monitoring mechanisms. Horizontal-agency-costs (β = 0.0225, Z = 1.8) significantly and positively affects monitoring mechanisms. It indicates that an increase in the shareholding of the horizontal-agency-costs will produce an increase of 0.0225 in monitoring mechanisms. Also, the two control variables, company performance (β = 2.649, Z = 2.63) and company complexity (β = 0.263, Z = 15.4) significantly affects monitoring mechanisms at 1%. An increase in company performance will increase monitoring mechanisms by 2.649 while a unit increase in complexity births an increase of 0.263 in monitoring mechanisms. The Z-tests are all above the threshold of 1.65. Thus, it further confirms the significant relationship of the variables. The P values are also below 5% for the variables (MO, horizontal-agency-costs, company performance and company complexity).

The results for the relationship of the MO and construct’s dimensions, internal and external auditing are the same as in the relationship with the construct, monitoring mechanisms. MO is negatively significant in the relationship with internal auditing (β = 0.005, Z = 4.55) and external auditing (β = 0.036, Z = 12.71). However, it differs in its relationship with construct’s dimension, directorship (β = 0.001, Z = 0.81) as is neither significant nor negative. Horizontal-agency-costs remains significant and positive in the relationship with directorship (β = 0.040, Z = 2.38) and external auditing (β = 0.203, Z = 1.9) but differs in its relationship with the internal auditing (β = 0.039, Z = 3.06), though significant but negative.

The researchers subjected the data to further tests using the structural equation model. The result confirms further that the variables, MO, horizontal-agency-costs, company performance and company complexity significantly relate to the monitoring mechanisms. All the Z values are above the threshold of 1.65 and P values are significant at 1% except horizontal-agency-costs, which is significant at 10%. The result is consistent with the result from PCSEs.

### 6. DISCUSSION

The results support hypotheses H1, H2, and H3 that MO negatively impacts the demand for construct, monitoring mechanisms, and...
Table 3: Panel data regression results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>Z</th>
<th>P&gt;Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel 1 Monitoring mechanisms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>-0.046</td>
<td>0.004</td>
<td>-12.27</td>
<td>0.000</td>
</tr>
<tr>
<td>Horizontal-agency-costs</td>
<td>0.225</td>
<td>0.125</td>
<td>1.8</td>
<td>0.036</td>
</tr>
<tr>
<td>Company performance</td>
<td>2.649</td>
<td>1.007</td>
<td>2.63</td>
<td>0.009</td>
</tr>
<tr>
<td>Company’s complexity</td>
<td>0.263</td>
<td>0.017</td>
<td>15.4</td>
<td>0.000</td>
</tr>
<tr>
<td>_cons</td>
<td>2.76</td>
<td>0.216</td>
<td>12.78</td>
<td>0.000</td>
</tr>
<tr>
<td>Panel 2 Directorship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>0.001</td>
<td>0.001</td>
<td>0.81</td>
<td>0.208</td>
</tr>
<tr>
<td>Horizontal-agency-costs</td>
<td>0.04</td>
<td>0.017</td>
<td>2.38</td>
<td>0.009</td>
</tr>
<tr>
<td>Company performance</td>
<td>1.343</td>
<td>0.512</td>
<td>2.62</td>
<td>0.009</td>
</tr>
<tr>
<td>Company’s complexity</td>
<td>0.104</td>
<td>0.008</td>
<td>12.39</td>
<td>0.000</td>
</tr>
<tr>
<td>_cons</td>
<td>2.602</td>
<td>0.084</td>
<td>30.95</td>
<td>0.000</td>
</tr>
<tr>
<td>Panel 3 Internal auditing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>-0.005</td>
<td>0.001</td>
<td>-4.55</td>
<td>0.000</td>
</tr>
<tr>
<td>Horizontal-agency-costs</td>
<td>-0.039</td>
<td>0.013</td>
<td>-3.06</td>
<td>0.001</td>
</tr>
<tr>
<td>Company performance</td>
<td>-0.289</td>
<td>0.119</td>
<td>-2.42</td>
<td>0.015</td>
</tr>
<tr>
<td>Company’s complexity</td>
<td>-0.016</td>
<td>0.001</td>
<td>-14.62</td>
<td>0.000</td>
</tr>
<tr>
<td>_cons</td>
<td>2.693</td>
<td>0.023</td>
<td>118.03</td>
<td>0.000</td>
</tr>
<tr>
<td>Panel 4 External auditing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>-0.036</td>
<td>0.003</td>
<td>-12.71</td>
<td>0.000</td>
</tr>
<tr>
<td>Horizontal-agency-costs</td>
<td>0.203</td>
<td>0.107</td>
<td>1.9</td>
<td>0.029</td>
</tr>
<tr>
<td>Company performance</td>
<td>1.844</td>
<td>0.75</td>
<td>2.46</td>
<td>0.014</td>
</tr>
<tr>
<td>Company’s complexity</td>
<td>0.19</td>
<td>0.012</td>
<td>16.11</td>
<td>0.000</td>
</tr>
<tr>
<td>_cons</td>
<td>3.082</td>
<td>0.175</td>
<td>17.6</td>
<td>0.000</td>
</tr>
</tbody>
</table>

MO: Managerial ownership

The results fail to support hypothesis $H_1$, that MO negatively impacts directorship. The results of $H_2$, $H_3$, and $H_4$ conform to the earlier studies in the developed and transiting countries (Mustapha and Che-Ahmad, 2011b; Eng and Mak, 2003). The same individual plays the roles of the owner and acts as the controller at the same time. Hence, the need to be monitored by another party does not arise as the principal and the agent are the same person, and he has full information needed for necessary action(s) per time. The results show that the stake of 89.5% MO in the study is below 5%. Hence, the demand for monitoring may be very low because it is likely that the owner-manager becomes more efficient and controls the company assets effectively. The owner-manager is also with less information asymmetry because he has more information as may be required to run the affairs of the company. However, the non-executive directors may still demand more monitoring to ensure no misappropriation of their assets as the owner-manager is likely to place his interest above the interests of other shareholders. Also, MO may not completely remove the selfish attitude of management; hence, other shareholders may still demand more monitoring especially when the MO is too low or very large. This is consistent with the findings of Amran and Che-Ahmad (2013).

The results also support hypothesis $H_5$, $H_6$, and $H_7$, that horizontal-agency-costs positively impact the demand for the construct, monitoring mechanisms and its dimensions, directorship, and external auditing except internal auditing. The results conform to the findings of Hope et al. (2012). An increase in the shareholding of the second-largest shareholder increases the ability and willingness of the second-largest shareholder to monitor the largest shareholder. Thereby, MCs will likely increase with the increase in the shareholding of the second-largest shareholder and his demand for more monitoring of the activities of the largest shareholder. Nigerian SEC 2011 lay emphasis on protection of minority shareholders, and monitoring of the largest shareholder by the second-largest shareholders is a good tool to achieve this. The results fail to support $H_8$ that horizontal-agency-costs positively impact the demand for internal auditing. This is not unlikely as practically more than 50% of the internal auditor reports to either the Chief Accounting Officer or Chief Executive Officer or through either of the two to the board of directors or its committees. Management are privileged to interfere in the activities of the internal auditor. Hence, the second-largest shareholder will rather demand to monitor through other dimensions of monitoring mechanisms (Wright, 2012).

There are extant literature on monitoring mechanisms (Hope, 2013; Ali and Lesage, 2013; Anderson et al., 1993). However, none except (Mustapha and Che-Ahmad, 2011b) tests the impact of MO on monitoring mechanisms combining the costs of directorship, internal and external auditing. None, to the best of the knowledge of the researchers, has tested the impact of the second-largest shareholders on monitoring mechanisms as a summation of the costs of directorship, internal and external auditing. The academic community is positioned to investigate more into this as it affects Sub-Saharan Africa giving consideration to the peculiarity of their culture, economy, politics, and other possible endogeneity factors that may affect this result.

7. CONCLUSION

This study adds to the literature on MO and agency conflicts among shareholders due to the likelihood that it may be the first paper that combines the three dimensions of monitoring mechanisms (directorship, internal and external auditing) in Sub-Saharan Africa, Nigeria in particular. The study finds that MO is negatively significant while horizontal-agency-cost is positively significant in the relationship with monitoring mechanisms (directorship, internal and external auditing). The primary contribution of the study is that MO and horizontal-agency-costs significantly impact monitoring mechanisms and also complement the monitoring mechanisms in Nigerian non-financial listed companies. These findings are useful for the investors, board of directors, regulatory bodies and government to ensure the protection of minority shareholders. The data used for this study is limited to non-financial listed companies. Future studies may, therefore, consider financial listed companies.

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