Corporate Governance and Firm Financial Performance
(A Case Study on EFFORT Conglomerate Companies)

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ABSTRACT

Corporate governance is considered nowadays as the prominent factors for the growth and development perspective of an economy. Sound corporate governance practices leads the economy towards the achievement of higher performance, provide sources for capital investment by increasing the creditability of shareholders. The purpose of this study is to empirically investigate the relationship of corporate governance and firm performance in terms of accounting performance measured by Return on asset, Return on equity and Corporate Social Responsibility.

To achieve the purpose 13 companies were selected from all sectors out of 14 EFFORT conglomerate companies. Both primary and secondary data were used. The primary data were collected using questionnaire and interview and the secondary data was gathered from annual reports of the companies for the period of 2009 to 2015. Descriptive statistics, correlation analysis and regression estimation using pooled, fixed effect, random effect and Hausman specification test were carried out after developing a composite index based on 6 proxies for corporate governance practices. The random effect regression result entails that ROA has significant relationship with transparency and disclosure, board structure scores and stakeholders’ right. Similarly, transparency and disclosure, stakeholders right and board structure were significantly associated with ROE. In addition, the corporate social responsibility expenditure to earnings ratio (CSR) was positively and significantly related with stakeholders’ right and board structure scores and negatively and significantly associated with transparency and disclosure. However, pooled OLS regression result indicated that the overall corporate governance index (score) and firm performance has no significant association.

Keywords: Corporate Governance, Financial Performance, Board of Directors, Shareholders, Stakeholders

1. INTRODUCTION

Many empirical studies have been conducted over the last two decades to describe corporate governance practice and investigate the relationship between corporate governance practices and firm’s performance in the world both in mature markets and emerging markets.

From empirical point of view various studies ascertained that sound corporate governance has remarkable effect on corporate performance predominantly considered by market measures (Tobin Q) and accounting measure (ROA or ROE). Most of the study results consistently revealed that companies adopting the recommended corporate governance practices have been strongly associated with performance considering their corporate ownership structure, board structure, board and committee compensation structures and capital structures.
Numerous research outputs show that corporate governance practices have positive impact on performance irrespective of the variables adopted by researchers under different circumstance. The studies conducted in Jordanian industrial companies (Tornyeva & Wereko, 2012), insurance sector of Ghana (Mahmoud, 2006), Saudi listed firms (Mohammed, 2014), In Africa (Kyereboah, 2007), Ahmad, et al., (2014), empirical study on Vietnamese Banks (Thanh, et al., 2014), Hong and Minh, (2014) and Sri Lanka (Achchuthan, and Kajananthan, 2013) revealed similar results that corporate governance has positive impact on firm performance.

In the contrary, innumerable study findings noted that corporate governance practices have limited impact on both the share prices of the companies as well as on their financial performance in India and South Korean companies (Gupta, & Mehta, 2014), Kaur, (2014). Moreover, the study conducted by Peters, and Bagshaw (2014) in listed firms in Nigeria disclosed that there was no significant difference between the performances of firms with high corporate governance scores compared to those with low corporate governance score.

Therefore, the relationship between corporate governance qualities expressed in terms of the scores and the firm performances measured in accounting based and market based measures provide diversified results all over the world. However, most of the studies were conducted in developed or emerged markets where the corporate governance rules, regulations were enacted, sophisticated financial markets were functional and many corporate governance regulators, initiatives and stakeholders were in place.

Though the endowment conglomerates in Ethiopia particularly, the EFFORT play crucial role in the country’s economy in job creation, and nurturing manufacturing capacity, as per the knowledge of the researcher no research has been done on corporate governance practices and financial performance of the endowment fund conglomerates. Off course (Vaughan & Gebremichael, 2011) have conduct a research on “business and politics in Ethiopia” focusing on EFFORT conglomerates and come up with the finding that the role that EFFORT owned companies play a great role in Ethiopia.

Besides, (Negash, 2013) has also studied on corporate governance and ownership structure in Ethiopia in general but one of the findings were related with those endowment fund conglomerates. This study highlights that the Ethiopian business was experience ownership concentration. Accordingly, Most of the companies were family owned, State owned enterprises and political party owned business and the ruling party has dual ownership i.e both the state owned and the party owned businesses were under the control of the ruling government.

This makes it very crucial and important to study the existence of the influence of corporate governance compliances on the performance of firms on countries where there is no strong financial market, the corporate governance practice is in its infant stage as well as on businesses having distinct ownership structure and formation i.e endowment fund-owned companies.

The aim of the study therefore, is to examine the relationship between corporate governance scores and firms’ financial performance of endowment fund conglomerate companies in Ethiopia.

### 2. LITERATURE REVIEW

Organization for Economic Cooperation and Development (OECD) becomes almost the generally accepted corporate governance principles throughout the world. Every country corporate governance codes captured the OECD principles even in the non-member countries. Hence, scholars investigate how the level of compliance of those principles which could be measured in terms of indices affects firm financial performance. Various studies tried to investigate the scores in company level measurements with regard to board responsibility, transparency and disclosure, companies’ commitment to stakeholders and environment, shareholders right, audit committee and board structure on the financial performance of a company. The study by (Noorina & Muktiyano, 2015) proved that the higher the commitment of the board to discharge their responsibilities to supervise the firm, the better the performance of the firm. As for the indicators of corporate governance, the higher the audit committee supervising the firm also has led for better performance of the firm. However, corporate governance indicators of audit quality have a positive relationship to the performance of the firm but not significantly, meaning the quality audit of a firm doesn’t affect the firm’s performance.
Similarity, Zheka (2002)\textsuperscript{15} pointed out that the effects of shareholder rights, transparency, and board independence were statistically and economically strong on performance. But, the independence of the board chairman found to have negative effect on performance.

On the other research findings, the relationship between corporate governance ratings and performance significantly positive. However, the strength of this relationship seems to depend on the quality of the institutional environment. Improvements in corporate-governance ratings over time resulted in decreasing marginal benefits in terms of performance (Renders, et al., 2010)\textsuperscript{16}.

To evaluate the quality of corporate governance practices of given companies, most of the time score indices (ratings) were used. Accordingly, results show that; there was a statistically meaningful and positive relationship between corporate governance rating score and Tobin’s q value and also leverage ratio. On the same way, Bauer, et al., (2008)\textsuperscript{17} findings come up with well governed firms significantly outperform than poorly governed firms by up to 15% a year. In addition, using indices for various governance categories that not all categories were affect corporate performance. Governance provisions that deal with financial disclosure, shareholder rights, and remuneration do affect stock price performance but the provisions that deal with board accountability, market for control, and corporate behavior was limited. Based on annual questionnaires of corporate governance code of the study by (Korent, et al., 2014)\textsuperscript{18} stated that the Croatian corporate governance index has a positively significant correlation with company performance. Moreover, the study by (Javaid & Saboor, 2015)\textsuperscript{19} also consistently state that corporate governance index (CGI) and firm performance has positive and significant association but the relationship for each specific index is dependent upon the measure of firm performance. The result also shows that companies having strong corporate governance mechanism has greater chances to acquire finance. On other study the Audit Committee scores has a positive association with firm performance but the shareholding index was statistically insignificant (Palaniappan & Rao PVVS, 2016)\textsuperscript{20}.

The study by Ben (2014)\textsuperscript{21} was used to test whether corporate governance index (CGI) has a significant impact on two measures of firm performance – 1) Price-to-book value, a market based measure and 2) Return on Capital Employed (ROCE), an accounting based measure. The study found evidence of a weak, yet significant relationship between the corporate governance index and the market value of firms. However, the index has no impact on the accounting performance of firms. Similarly, a study by Renders, et al., (2010)\textsuperscript{16} found a significant positive relationship between corporate-governance ratings and performance. But, the strength of this relationship seems to depend on the quality of the institutional environment.

The study in Slovenia revealed that corporate governance indices were important in measuring and improving governance quality. The results of the research based on the SEECCGAN Index methodology indicated that mandatory requirements and voluntary recommendations of high governance standards had a positive impact on the corporate governance practice in the country (Djokić & Duh, 2016)\textsuperscript{22}. However, the study aimed by Arioglu, et al., (n.d)\textsuperscript{23} to investigate the market reaction to the increases and decreases in corporate governance ratings of public firms quoted at the Borsa Istanbul, as well as the market reaction to the increases and decreases in the scores for the sub components of the total ratings was come up with unexpected result. Investors reacted negatively to the announcements of both decreases and increase in the overall corporate governance ratings and the scores for shareholders, public disclosure and transparency, stakeholders and board of directors.

To the contrary, The Corporate Governance Scores of the Thai Institute of Directors (IOD) shows association with earnings quality. In this study, the firm which has a high IOD score, which means high corporate governance scores, has enhanced earnings quality (Meeampol, et al., 2013)\textsuperscript{24}.

On the contrary, results were showing that there was no meaningful relationship between corporate governance level and return on equity ratio, return on assets ratio, return on sales ratio and net profit (Kara, et al., 2015)\textsuperscript{25}.

3. OBJECTIVES OF THE STUDY

The study aims to achieve the following objectives
1) To investigate the relationship between individual corporate governance scores and firm financial performance
2) To evaluate the overall impact of corporate governance index on firm performance
3) To forward practicable recommendations to the firms based on the findings of the study

4. HYPOTHESES

Based on the above review of various scholars’ studies, the following hypothesis was drawn.

**Ho$_1$:** The overall corporate governance score has a positive association with the firm financial performance of EFFORT conglomerate companies.

**Ho$_2$:** Board responsibility score is positively correlated with firm financial performance

**Ho$_3$:** Transparency and disclosure score has positive relationship with firm financial performance

**Ho$_4$:** The higher the scores of the stakeholders right the higher will be the financial performance of the firms.

**Ho$_5$:** The shareholders right scores and firm financial performance are positively correlated.

**Ho$_6$:** Board structure score is positively correlated with firm financial performance.

5. RESEARCH METHODOLOGY

5.1. Research Design

To achieve the primary objective of this study, the research design was drafted from different dimensions: from the depth of the research, the research design was employed mixed method involves both qualitative and more of quantitative data for its convenience in providing better (stronger) inferences on top of its importance to capitalize the strength of quantitative over qualitative approach and to avoid limitations that could be come across due to concentration on single research method. Quantitative method espoused the collection of objective data, rigorous measurement and the use of statistical methods of analysis which enabled to generalize the results to large populations. From the view point of the purpose of the research, it is explanatory type of research design that helped to identify and evaluate the causal relationships between the different variables under consideration. According to the time dimension of the research, a panel data study design which combines the attributes of cross-sectional (inter-firm) and time series data (inter-period) was used. On the other hand, some issues primarily concerned with this research current phenomenon about corporate governance were important to attain the objective of the research so; the data was collected at single period. Hence, this research was adopted a longitudinal research design. Furthermore, the data administered through a survey method which was collected using ex-post controlled variables on the study area via actual participations in the field in order to reduce the probability of committing errors during the time of data collection due to negligence of data enumerators.

5.2. Data Sources

This study used both primary and secondary data sources. To investigate the relationship between corporate governance scores and financial performance measures, two different types of data were used both from primary and secondary data sources: (i) corporate governance variables; and (ii) firms’ financial performance variables. First, the data related with corporate governance variables were manually extracted from different literatures and the corporate governance scores were collected through questionnaire.

Second, firm financial performance variables were obtained from audited financial statements of each firm which cover seven consecutive years i.e 2009-2015.

The questionnaire were distributed to the board members, the EFFORT Corporate Management Committees, the general managers, deputy managers and Internal Audit head of each of the firms distributed both through email and self-administered whichever was suitable in the time of collection. Questions related with corporate governance practices which were developed based on the OECD codes of corporate governance was delivered to all participants. These questionnaires were designed in open ended and close ended formats.

In such cases, the methodology consisted in the creation of a questionnaire reflecting the corporate governance principles which basically replicate the structure of the OECD principles (2004, 2008, and 2015). The answers to this questionnaire were integrated into a number of indicators, which did not have a 1:1 correspondence to the questions. The indicators were then assigned with weightings, depending on their priority, so that a composite final overall score could be obtained. More specifically the
questionnaire consisted of six main dimension-indicators:

- Board of Directors responsibility,
- Board structure
- Audit committee
- Transparency, disclosure of information and auditing.
- Corporate governance commitment, the role of stakeholders and corporate social responsibility and
- The rights and obligations of shareholders.

The total number of questions were 90, categorized into questions which directly lead to indicators suitable for the corporate governance rating of which 25 were for Board of Directors responsibility, 24 for Transparency and disclosure of information, 11 for Board structure and 16 for Audit committee, 9 for Corporate governance commitment, the role of stakeholders and corporate social responsibility and 5 related with shareholders’ rights.

5.3. Study Population and Sample Size

The population for this study consisted of 14 Endowment Fund Companies found in Tigray Region, Ethiopia in 2015. The time frame considered for this study covered from 2009-2015. Those 14 companies were taken as target population for the study. However, certain restrictions were imposed on these group of companies in order to reach into a complete set of conclusions such as the companies must have seven years consecutive audited financial statements and must have corporate governance structures otherwise they were not included in the study. Accordingly, almost all of the firms administered under endowment fund except one company were included in the study based on the prescribed inclusion criteria. In other words 13 companies (93%) which fulfil the selection criteria were included in the study.

5.4. Data Analysis Methods

In analysing the relationship that exists between corporate governance and the financial performance of the firms, a panel data regression analysis method was adopted. The Pearson correlation was also employed to measure the degree of association between variables under consideration. Consequently, the proxies that were used in corporate governance scores were: board responsibility scores, transparency and disclosure score, stakeholders’ right score, audit committee score, board structure score and shareholders right scores. Whereas the proxies for the financial performance of the firms also included the accounting measure of performance; return on equity (ROE), return on asset (ROA) and corporate social responsibility (CSR).

Most of the corporate governance ratings (ASEAN, SAHA and CGITT) were used to assign weight to the main components of corporate governance to indicate the relative importance of each of these components to the overall adherence of the corporate governance principles. Accordingly, in consistency with CGITT board responsibility was given the largest weight since it is the most important component to corporate governance; the other components have also assigned weight according to their importance with the specific companies’ perspective under investigation.

Hence, in this research, the following weight has been given to the principles.

<table>
<thead>
<tr>
<th>Corporate Governance Principles</th>
<th>Weight in Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors responsibility</td>
<td>25</td>
</tr>
<tr>
<td>Board Structure</td>
<td>10</td>
</tr>
<tr>
<td>Transparency, disclosure of information and auditing.</td>
<td>20</td>
</tr>
<tr>
<td>Corporate governance commitment, the role of stakeholders and corporate social responsibility.</td>
<td>15</td>
</tr>
<tr>
<td>The rights and obligations of shareholders.</td>
<td>15</td>
</tr>
<tr>
<td>Audit Committee</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
and Corporate Governance index of Trinidad & Tobago. Therefore, this study used the ASEAN weight assignment approach for its comprehensiveness.

The weight given by all of these above mentioned bodies were almost similar. They use the OECD principles as main indicators for evaluating the extent of a given company corporate governance practices following those principles. For this research a combination of three types of the rating methods were considered. Each of these three methods was not adopted as it is. But, the limitations existed in each approaches were identified. As a result this study was adopted methods that are used to evaluate corporate governance practices in conformity with OECD principles to some extent reflect the combination of Institutional shareholders Service ratings, SAHA corporate governance rating method and the Corporate Governance index of Trinidad & Tobago. SAHA rating mechanisms was considered for its additional qualities. Firstly, SAHA rating does not analyse only the listed companies but also it computes the rate and rank of the unlisted companies and rate them in a scale of 1 to 10. Secondly, it provides an access to define the scales of the rating values to reflect very well, well, fair, weak and very weak. However, for the sake of convenience, this study used the scale of “not Existed” as an additional to the above scales. Hence, all these indicators were assigned scores against a scale ranging from zero to 5 i.e 0=not existed, 1= very weak, 2=Weak, 3= fair, 4= well and 5 very well. Zero means worst or not existed and 5 means best (perfectly complies with the principles). The components of the corporate governance and the weight were adopted from ISS and CGITT with some modifications to match with the companies under study.

In order to ease understanding of the analysis, the scores were converted into mean percentages with designated qualitative expressions 90-100 per cent of mean score represents very well, 70-80%, well, 60% fair, 40-50% weak and less than 40% very weak in consistency with SAHA rating definitions of the scores.

After the data was executed through statistical tools called STATA Version 12, the results were presented using tables.

5.5. Model Specification

Estimation of the basic model is an integral part of quantitative research which could be done through several methodologies depending on the behaviour of the component of the error term and whether there exist serial correlation between the dependent variable and the disturbance term. Thus, the Ordinary Least Squares (OLS) estimation, the Random Effects (RE), the Fixed Effects (FE), or employ the Dynamic panel estimation methods can be used. In fact there are also other estimation methods in using panel data; however, invariably they all represent variants of the basic estimation methods. However, to gain the advantages of the use of Panel data over the time series data, this research employed the panel data to control individual heterogeneity, to give more informative data, more variability, less collinearity among the variables, more degrees of freedom and more efficiency as well as to adapt the ability to study dynamics.

Accordingly, this research was applied the Panel data regression technique, involving the combination of cross-sectional and time series data.

A Pooled Ordinary Least Square was also employed to investigate the relationship between firm financial performance measures and overall corporate governance score measure by controlling variables such as firm size, leverage and industry dummy. The reason was the within-panel correlation of observations was negligibly small and the researcher wants to understand relationships between the panel's mean outcome of firm financial performance measures and the mean values of the panel's predictor variables i.e the overall corporate governance scores and the control variables. Moreover, the literature driven hypothesis test and the correlation among variables were executed using Pearson’s correlation coefficient method because all the variables were continuous.

Hence, two models were formulated. One to show the relationship of individual corporate governance scores with firm financial performance which could measure based on return on asset (ROA) , return on equity (ROE) and corporate social responsibility(CSR) as the dependent variables on the other hand to investigate the relationship between the aggregate corporate governance indexes and the firm financial performance measures. The two models are specified below.
Model 1:
\[ FP_{it} = \alpha_0 + \beta_1 br_{it} + \beta_2 td_{it} + \beta_3 str_{it} + \beta_4 ac_{it} + \beta_5 bs_{it} + +\beta_6 shr_{it} + \epsilon_{it} \]

Where;
FP= Financial performance to be measured by ROE, ROA and CSR
br= Board responsibility
td= transparency and disclosure
str =stakeholders right
ac= Audit committee
bs = board structure
shr= Shareholders right

Model 2:
\[ FP_{it} = \alpha_0 + \beta_1 CGI_{it} + \sum_{t=1}^{n} \beta_t CONTROL_{it} + \epsilon_{it} \]

Where;
FP= Financial performance measured by ROE, ROA and CSR
CGI= Corporate governance index determined by;\[ \frac{R}{M} * W \]
Where
R = Marks received based on Response to the questions under the Principle
M = Maximum Possible score for the questions under the Principle
W = Weightage assigned to the Principle

Control Variables: Firm size, leverage and type of industry

Before the data were regressed, the data passed through different tests which determine the accuracy and reliability of the data so as to reach into meaningful conclusions as per the prescribed objectives. For that matter the data were tested for the possible econometric tests; Breusch and Pagan Lagrangian multiplier test was employed for random effects. Besides Absence of multicollinearity among independent variables was checked using Pearson’s Correlation Matrix. Finally, Hausman test has been conducted to choose the appropriate panel regression model (i.e. fixed effects model (FEM) or random effects model (REM).

6. RESULTS AND DISCUSSION

The level of compliance of the companies’ corporate governance practices with reference to the generally accepted corporate governance principles (OECD) was analysed in this section. In connection to this a question can be provoked in such a way that: Does the scores given by each respondents in each company matter the financial performance of the firms?

On the above section, the corporate governance index was grouped into six sub-indices based on the OECD (2004) corporate governance principles. The scores that each respondent possibly can give were ranged from zero to five for each sub component under board responsibilities (BR), Transparency and disclosure (TD), the right of shareholders (SHR), Stakeholders right (STR), Audit committee (AC) and board structure (BS).

Each point given by the respondents were summarized for each sub components and a mean result was taken considering the given weights accompanied with each sub component according to the rating methods. Furthermore, overall corporate governance score was determined by calculating the weighted mean scores of all the sub components. Therefore, in this section the relationship of firm financial performance with both individual corporate governance principles sub components scores as well as the overall corporate governance score were mainly analysed.

6.1. Descriptive Statistics

Table number 2: Summary mean values of dependent variables

<table>
<thead>
<tr>
<th>Year</th>
<th>Return on Asset</th>
<th>Return on</th>
<th>Corporate Social Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: Equity Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Equity</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>.0119</td>
<td>.0959</td>
</tr>
<tr>
<td>2010</td>
<td>-.0161</td>
<td>-.0146</td>
</tr>
<tr>
<td>2011</td>
<td>.0152</td>
<td>.0292</td>
</tr>
<tr>
<td>2012</td>
<td>-.0004</td>
<td>.2826</td>
</tr>
<tr>
<td>2013</td>
<td>.0161</td>
<td>.0775</td>
</tr>
<tr>
<td>2014</td>
<td>-.0101</td>
<td>-.6722</td>
</tr>
<tr>
<td>2015</td>
<td>.0326</td>
<td>.1498</td>
</tr>
</tbody>
</table>

Source: Survey computation (2016)

Table number 2 reports the descriptive statistics of the dependent variables of the study. On average, most of the companies achieved return on asset that ranges from -0.016 to 0.033, during the seven consecutive years, 2009-2015. The average return on asset on the seven years is about 0.7%. The mean value of the return on equity was marked -0.67 to 0.28 during the seven years and the cumulative average result is about -0.7%. The negative value on return on asset during 2010 and 2014 were resulted because of some firms were encountered huge losses during that period. Noteworthy, during 2014, the annual average ROE is about -67.22%. This implies that the equity of the companies was reduced by a large amount. It was ensued due to the effect of the huge accumulated losses which has been closed to equity at the end of every period since 2013. Prior to 2013, the net income or net losses of the companies were neither closed to capital nor declared as dividends. Simply, the net income or net loss was accumulated for years in a separate ledger. The accumulated net income or net loss was closed to capital as a result of the government regulation enactments that enforce such companies to pay tax on their dividends declared or shall inform the government as if the companies were retained all the net income or losses. As a result the companies’ general managers, the CEO and the shareholder companies were passing almost the same decision in all companies with regard to the accumulated net income and net losses. It has been decided that the accumulated either net income or net loss was capitalized to equity of the companies. Mainly, the huge accumulated losses were significantly affecting the average return on equity because there were companies which scored net loss for many years continuously.

In terms of CSR ratio, the mean values were assorted 0.98% during 2009 to 7.38% during 2012. The ratio indicates how much per cent of their annual earnings were actually spent in corporate social responsibility activities. So, the above result revealed that in 2009, on average, 0.98% of their net income was invested on social and economic affairs in their surroundings and on the region. During 2010, 2011, 2012, 2013, 2014, and 2015 their expenditure on corporate social responsibility activities were similarly 1.5%, 6.4%, 7.34%, 1.6%, 4.15% and 4.38% respectively. On average the companies’ contribution to corporate social responsibilities during the seven consecutive years is valued as 3.8% of their net income. This implies that by comparing the two accounting based financial performance measure results with CSR ratio, the companies were contributing to social and environmental affairs even when the companies were bearing losses. This indicates in return that corporate social responsibility expenditures were not depending on the earning potential of the companies. Simply it is part of their organizational mandate to help for social and environmental activities.

6.2. Summary of mean and standard deviation, minimum and maximum of independent variables

Table number 3: Summary Mean and Standard Deviation of Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Responsibility</td>
<td>3.2</td>
<td>.63</td>
<td>2.3</td>
<td>4.4</td>
</tr>
</tbody>
</table>
The above table number 3 indicates the mean, the standard deviation, and the maximum and minimum value scores given by respondents based on 6 point likert scale questionnaire. Accordingly, the mean score of board responsibility, transparency and disclosure, stakeholders’ right, shareholders right, audit committee and board structure are 3.2, 3.5, 4.1, 3.0, 1.0 and 3.7 respectively with associated standard deviation of 0.63, 0.55, 0.60, 0, and 0.53 correspondingly. The highest score belongs to stakeholders’ right and the lowest score is associated with audit committee. This indicates that how each corporate governance practices of EEFOFT conglomerate companies comply with the OECD corporate governance principles. The higher the scores are the more the compliance and applicability of the principles in the organizations under study.

6.3. Pearson correlation among corporate governance principles indices and firm financial performances Indicators

The strengths of association between two variables and the direction of the relationship was determined using Pearson correlation. In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1.

Table number 4: Pearson Correlation among Corporate Governance Principles Indices and Performance Indicators

<table>
<thead>
<tr>
<th>Variables</th>
<th>roa</th>
<th>roe</th>
<th>csr</th>
<th>br</th>
<th>td</th>
<th>str</th>
<th>bs</th>
<th>shr</th>
</tr>
</thead>
<tbody>
<tr>
<td>roa</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>roe</td>
<td>0.0008</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>csr</td>
<td>0.3853* (0.0154)</td>
<td>-0.0241</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>br</td>
<td>-0.1140</td>
<td>0.0479</td>
<td>-0.2883*** (0.0751)</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>td</td>
<td>0.1101</td>
<td>0.1205</td>
<td>-0.0295</td>
<td>0.2640</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>str</td>
<td>0.3690** (0.0208)</td>
<td>0.2723*** (0.0935)</td>
<td>0.2618</td>
<td>0.1255</td>
<td>0.6852* (0.000)</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bs</td>
<td>0.1111</td>
<td>0.1179</td>
<td>-0.0273</td>
<td>0.2641</td>
<td>1.0000* (0.000)</td>
<td>0.6858* (0.000)</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>shr</td>
<td>0.1744</td>
<td>-0.2495</td>
<td>0.1346</td>
<td>0.1083</td>
<td>.2978*** (0.0656)</td>
<td>0.2553</td>
<td>0.3000*** (0.0636)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note:  * Correlation is significant at the 0.01 level (2-tailed)

** Correlation is significant at the 0.05 level (2-tailed)

*** Correlation is significant at the 0.10 level (2-tailed)
Table number 4 shows the results of the Pearson correlation of financial performance with the independent variables. ROA is positively correlated at the p < .05 confidence level with corporate social responsibility and stakeholders right, (Pearson’s correlation coefficient = 0.3853, and 0.3690, respectively). However, the finding discloses that there is no significant correlation between ROA and, board responsibilities, transparency and disclosure, audit committee, board structure and rights of shareholders, which are not significantly correlated at 1%, 5% and 10% levels. In addition ROA has no significant association with ROE.

According to the results of the Pearson correlation, ROE is positively correlated at p < 0.1 with only stakeholders right (Pearson’s correlation coefficient = 0.2723.). Further, corporate social responsibility expenditure was positively correlated with board responsibility at p < 0.10 (Pearson’s correlation coefficient = 0.2883).

On the other hand, the Pearson correlation also shows the relationship among the corporate governance principles indices. According to the correlation coefficients, illustrated in Table number 4, there is a correlation between the transparency and disclosure with sub indices, right of stakeholders, board structure and rights of shareholders, at p < 0.01 & p<0.10 (Pearson’s correlation coefficient = 0.6852, 1.000, and 0.2978, respectively). Moreover, board structure is significantly correlated with shareholders right at p < 0.10 (Pearson’s correlation coefficient = 0.3000). However, there are no significant associations among the remaining either dependent or independent variables and among each other.

### 6.4. Regression Analysis

Before the data were regressed, the data were passed through different tests which determine the accuracy and reliability of the data so as to reach in to meaningful conclusions as per the prescribed objectives. Absence of multicollinearity among independent variables was checked using Pearson’s Correlation Matrix and Hausman test was conducted to choose the appropriate panel regression model (i.e. fixed effects model (FEM) or random effects model (REM), and REM was selected based on the decision rule of the Hausman specification test.

**Decision Rule:** The strength of relationship between the corporate governance scores and the firm financial performance were identified by using the p-value of the random effect model. Therefore, if the p-value of the random effect model is less than or equal to 1%, it has significant relationship at 1% significance level, if p-value is greater than 1% but less than or equal to 5%, it has significant relationship at 5% significance level, and there is significant relationship at 10% significance level if p-value is between 5% and 10%. However, if p-value is greater than 10%, the dependent variable and independent variables have not significant relationship. Furthermore, coefficient of random effect model does not show degree of relationship, rather it shows the direction of relationship between the dependent and independent variables. Accordingly, a coefficient with a negative sign shows the opposite relationship (the probability of increase in independent variable leads to decrease the dependent variable) and a positive sign of coefficient shows that the increase in independent variables results an increase in the dependent variable.

### Table number 5: Panel Regression Results on Corporate Governance Principles Score and Firm Financial Performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Fixed Effect</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROE</td>
<td>CSR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coefficient</td>
<td>P&gt;</td>
<td>t</td>
<td></td>
<td>Coefficient</td>
</tr>
<tr>
<td>Constant</td>
<td>-.3145</td>
<td>0.145</td>
<td>-2.0888</td>
<td>0.317</td>
<td>-.0207</td>
</tr>
<tr>
<td>Board responsibility score</td>
<td>-.0288</td>
<td>0.488</td>
<td>0.1986</td>
<td>0.623</td>
<td>-.0175</td>
</tr>
</tbody>
</table>
Transparency and Disclosure  -1.5645  0.795  125.1745  0.040  -4.0443  0.009* 
Stakeholders right score  0.12708  0.029**  1.1418  0.043  0.0502  0.050** 
Audit committee score  0  0  0 
Board Structure score  1.6675  0.804  -139.717  0.039  4.4675  0.009* 
Shareholders right score  0.0373  0.432  -0.4693  0.313  -0.0059  0.720 

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA (Robust)</th>
<th>ROE</th>
<th>CSR (Robust)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>P&gt;</td>
<td>t</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.2943</td>
<td>0.565</td>
<td>-1.6662</td>
</tr>
<tr>
<td>Board responsibility score</td>
<td>-.0299</td>
<td>0.572</td>
<td>.1417</td>
</tr>
<tr>
<td>Transparency and Disclosure</td>
<td>-2.3307</td>
<td>0.000*</td>
<td>116.5215</td>
</tr>
<tr>
<td>Stakeholders right score</td>
<td>0.1283</td>
<td>0.029**</td>
<td>1.1275</td>
</tr>
<tr>
<td>Audit committee score</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Board Structure score</td>
<td>2.5225</td>
<td>0.000***</td>
<td>130.043</td>
</tr>
<tr>
<td>Shareholders right score</td>
<td>0.0265</td>
<td>0.325</td>
<td>-.5909</td>
</tr>
</tbody>
</table>

Hausman Specification Test

| Chi | 2.50 | 2.22 | 2.91 |
| Prob >chi| 0.99200 | 0.8181 | 0.7144 |

Note:* Indicate significant at 1%, ** Significant at 5% and *** Significant at 10%

Source: Own Computations Based on the survey Data (2016)

All the dependent variables were regressed against their explanatory variables to see their association among themselves based on the data obtained from secondary sources and surveys. The regression results were depicted on the above table number 5. In order to identify appropriate regression model between fixed effect and random effect models of OLS, the Hausman Specification Test was employed. According to the decision rule of the Hausman specification test, the random effect model was the appropriate regression model in this analysis for all dependent variables because the Prob> chi² was greater than 5% in all cases. So the results given by RE regression estimation are more dependable than FE.

Hence, the regression results revealed the relationship among the dependent and independent variables. Accordingly, regarding the ROA, there is a significant relationship with transparency and disclosure, and board structure scores at 1% level of significance with the exception of stakeholders’ right which is significant at 5% level of significance. The results also show that the ROA is positively correlated with the two significant variables and negatively related with transparency and disclosure. The negative correlation could be due to the fact that improving quality of transparency and disclosure will tend to bear additional expenses in a less competitive environment.

On the contrary, ROA is not significantly associated with board responsibility; audit committee and shareholders right scores.

ROE has positively significant relationship with transparency and disclosure, stakeholders’ right and board structure scores at 5% level of significance and insignificant in relation to board responsibility, shareholders’ right and audit committee scores.

Finally, the corporate social responsibility expenditure to earnings ratio (CSR) was regressed against the
independent variables. Accordingly, the result indicates consistently with the other results that it has positively significant association with stakeholders’ rights and board structure scores conversely negative correlation with transparency and disclosure at 1% level of significance.

Generally, the regression result revealed that stakeholders’ right and board structure scores has positively significant with ROA, ROE and CSR but, transparency and disclosure has negatively related with each of the dependent variables. Notably, the significant result of stakeholders’ relationship with ROA, ROE and CSR is consistent with descriptive and qualitative analysis results of this study. Moreover, it is similar with finding of (Zheka, 2002).

The below table was intended to analyse the relationship between the overall corporate governance scores and the dependent variables, ROA, ROE and CSR using pooled ordinary least square (OLS) estimation method.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th></th>
<th>ROE</th>
<th></th>
<th>CSR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>P&gt;</td>
<td>t</td>
<td></td>
<td>Coef.</td>
<td>P&gt;</td>
</tr>
<tr>
<td>Corporate Governance Index</td>
<td>-2.92E-04</td>
<td>0.861</td>
<td>8.46E-03</td>
<td>0.2</td>
<td>1.64E-04</td>
<td>0.889</td>
</tr>
<tr>
<td>Firm Size</td>
<td>2.31E-11</td>
<td>0.048**</td>
<td>3.24E-11</td>
<td>0.479</td>
<td>3.44E-12</td>
<td>0.674</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.000577</td>
<td>0.736</td>
<td>-0.10085</td>
<td>000*</td>
<td>-0.00053</td>
<td>0.658</td>
</tr>
<tr>
<td>Industry Type</td>
<td>0.0281001</td>
<td>0.056**</td>
<td>-0.0451</td>
<td>0.433</td>
<td>0.00382</td>
<td>0.710</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.061489</td>
<td>0.565</td>
<td>-0.4325</td>
<td>0.306</td>
<td>0.01577</td>
<td>0.835</td>
</tr>
</tbody>
</table>

Note:* Indicate significant at 1%, ** Significant at 5% and *** Significant at 10%

Source: Own Computations Based on the survey Data (2016)

Pooled OLS regression indicated that all overall corporate governance score has almost neutral relationship with ROA, ROE and CSR as evidenced from value of the coefficient and also it does not have significant relationship with firm performance as p-values for all dependent variables are 0.861, 0.20 and 0.889 respectively. However, some of the control variables particularly, firm size and industry types have significant relationship with ROA at 5% and 10% significance level respectively. Moreover, leverage and ROE are significantly and positively correlated at 1% significance level. This implies that as the ratio of debt to equity increases, ROE will also tend to increase. This could be because theoretically the cost of debt financing is less than cost of equity financing. Then, other things remained constant, the lesser the equity the higher will be the leverage. On the contrary the higher the debt the higher will be the leverage. On the other hand, the lesser the equity the higher will be the return on equity. It can be inferred from this that, the higher the leverage the higher will be the ROE. Therefore, the result of the study is consistent with the basic theory of capital structure.

On the contrary, CSR has no significant relationships with any of the dependent variables since all the probability values are higher than the maximum threshold of significance level (10%).

6.5. Hypotheses testing

On the above section, literature driven hypotheses were tentatively proposed relating to the relevant variables. So, after the data were collected and analysed a Pearson’s correlation test was used to reject or accept the null hypotheses. To reject or accept the null hypothesis the Pearson’s r value and the probability of ‘critical’ value has to be compared. The r value has to be higher than ‘critical’ value (for a 95% confidence level) to reject the
null hypothesis otherwise accept whenever r value is less than the ‘critical’ value. If r value is greater than ‘critical’ value, then it is possible to say that the variable has a significant influence on dependent variable. The higher the r value, the higher will be the relevance of the variable.

### Table 7: Pearson's Correlation and Regression Hypothesis Testing on Corporate governance scores and Firm Financial Performance

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Pearson’s r value</th>
<th>Critical Values (95%)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho1: The overall corporate governance score has a positive association with the firm financial performance of EFFORT conglomerate companies.</td>
<td>-0.0161</td>
<td>0.0206</td>
<td>0.0179</td>
</tr>
<tr>
<td>Ho2: Board responsibility score is positively correlated with firm financial performance</td>
<td>-0.1140</td>
<td>0.0479</td>
<td>-0.2883</td>
</tr>
<tr>
<td>Ho3: Transparency and disclosure score has positive relationship with firm financial performance</td>
<td>0.1101</td>
<td>0.1205</td>
<td>-0.0295</td>
</tr>
<tr>
<td>Ho4: The higher the scores of the stakeholders right the higher will be the financial performance of the firms.</td>
<td>* 0.3690</td>
<td>0.2723</td>
<td>0.2618</td>
</tr>
<tr>
<td>Ho5: The shareholders right scores and firm financial performance are positively correlated.</td>
<td>0.1744</td>
<td>-0.2495</td>
<td>0.1346</td>
</tr>
<tr>
<td>Ho6: Board structure score is positively correlated with firm financial performance.</td>
<td>0.1111</td>
<td>0.1179</td>
<td>-0.0273</td>
</tr>
</tbody>
</table>

Source: Survey (2016)

### 7. CONCLUSIONS AND SUGGESTIONS

#### 7.1. Conclusions

The financial performance of the companies measured in terms of return on asset revealed 0.7% average mean value of the seven consecutive years and the performance measured in terms of return on equity was determined a mean value of -0.7%. The negative value on the return on equity was resulted from apportionment of the large accumulated losses to shareholders capital during 2013 onwards based on the agreement of the shareholders to retain the net income or net loss for tax advantages.

The average contribution of the companies to corporate social responsibility (CSR) was 3.8% which implies that the companies were spending on CSR even when the companies were bearing losses.

A Pearson correlation was used to determine the association between corporate governance principle variable scores and the firm financial performance variables. As a result return on asset has a significant positive association with corporate social responsibility and stakeholders right and return on equity was significantly positively correlated with stakeholders right similarly corporate social responsibility has a significant positive relationship with board responsibility. On the other hand Pearson correlation showed relationship among the corporate governance principles. Accordingly, transparency and disclosure has a significant positive relation correlation with right of stakeholders, board structure and right of shareholders scores. Moreover, board structure was significantly correlated with shareholders right score.
The three dependent variables, ROA, ROE and CSR were regressed against their explanatory variables such as board responsibility, transparency and disclosure, stakeholders right, shareholders right, audit committee and board structure scores using, fixed effect and random effect estimation methods. However, based on the result of the Hausman specification test result the random effect model was employed to estimate the relationship among the variables.

The regression result showed that ROA has significant relationship with transparency and disclosure and board structure scores at 1% level of significance and stakeholders’ right at 5% level of significance. Similarly, transparency and disclosure, stakeholders right and board structure were significantly associated with ROE at 5% level of significance. In addition, the corporate social responsibility expenditure to earnings ratio (CSR) was positively and significantly related with stakeholders’ right and board structure scores and negatively and significantly associated with transparency and disclosure. In general, transparency and disclosure, board structure and stakeholders’ right scores have relationships with the firm financial performance measures.

The Pooled OLS regression result indicated that overall corporate governance score have no relationship with ROA, ROE and CSR but the control variables such as firm size and industry type have positive and significant relationship with ROA and leverage was significant when ROE was regressed against the explanatory variables.

7.2. Suggestions

From the statistical analysis, the companies’ financial performance is measured in terms of return on asset and return on equity revealed weak performance. On top of that the companies’ contribution to corporate social responsibility was not considered the earning potential of the organizations. Hence, setting a minimum amount of contributions which cannot hurt the companies sustainability based on earning capability of the companies should be maintained. Of course, the companies’ sustainability and continuous commitment is one of the principles of corporate social responsibility, because companies should be first ensure their sustainability then after it can offer social benefits effectively.

On the other finding, corporate governance qualities reflected in transparency and disclosure, board structure and stakeholders’ right have an impact on the financial performance of the companies. Therefore continually improving the corporate governance practices by adopting internationally accepted corporate governance principles such as OECD principles and implementing corporate governance best practices could further enhance the performance of these companies.

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