THE EFFECT OF CORPORATE GOVERNANCE AND CAPITAL STRUCTURE ON PERFORMANCE OF FIRMS LISTED AT THE EAST AFRICAN COMMUNITY SECURITIES EXCHANGE

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Abstract
The purpose of the study was to establish the effect of corporate governance and capital structure on performance of firms listed at the East African community securities exchange. Specifically the study sought to establish the effect of capital structure on the relationship between corporate governance and firm performance of listed companies in Kenya, Tanzania, Uganda, Rwanda and Burundi. Based on the agency theory this study builds a comprehensive framework to answer the research question on whether good corporate governance affects firms performance by integrating capital structure into the governance model. A census survey was carried out on all the 98 listed companies between 2009 and 2013 in Nairobi Securities Exchange, Uganda Securities Exchange, Dar es Salaam Stock Exchange and Rwanda Stock Exchange. Out of the 98 firms that were targeted, 56 were analyzed constituting 57%. The findings revealed that the there was a significant positive relationship between corporate governance and firm performance. The study also confirmed that there is a positive significant intervening effect of capital structure (leverage) on the relationship between corporate governance and firm performance. From a theoretical perspective, this study not only explains how corporate governance affects firm performance, but also uncovers the importance of capital structure in a corporate governance system.

Keywords: Corporate governance, capital structure and firm performance
Introduction

Corporate Governance (CG) and Capital Structure (CS) plays a big role in the maximization of shareholders’ wealth and good CG is important in increasing the market value of a firm while higher financial leverage decreases a firm value by increasing bankruptcy risk (Sheifer and Vishny, 1997). Sound CG governance mechanisms help assure investors that they will get their capital back and receive an adequate return on their investment. Firms with good CG provide transparent disclosures and are investor friendly therefore are able to access capital markets on better terms. A well-developed financial system provides a market for corporate control while a strong legal system protects investors’ contractual rights by minimizing the risk of loss from managerial opportunism. CG is defined as the system by which business corporations are directed and controlled (Cadbury, 1992), and it encompasses rules as well as the framework of relationships and processes designed to ensure that directors act in the interest of the company. An optimal capital structure is the debt/equity ratio for the firm that minimizes the cost of financing and reduces the chances of bankruptcy.

There has been a great deal of empirical work providing evidence that CG, corporate financial decisions and firm performance are affected by the presence of agency conflicts between managers and shareholders. CG activities enhance the efficiency and effectiveness of organizations with the help of proper supervision and control; thereby playing a very important role in aligning the interest of shareholders and management to reduce agency conflicts (Shleifer and Vishny, 1997). With sound governance structure, it is much easier for organizations to obtain loans from investors as a functional corporate structure protects the interest of shareholders, increases transparency and reduces the agency conflicts. Firms with poor governance practices face more agency problems as managers of those firm’s can easily obtain private benefits due to poor CG structure.

Corporate Governance

CG is the system by which companies are directed and controlled. It specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. It also provides the structure through which company objectives are set and monitoring performance attained (OECD, 1999).

Craig (2005) stated that CG is defined and practiced in different ways globally depending upon the relative power of owners, managers and provider of capital. It entails the procedures, customs, laws and policies that affect the way corporations are directed, administered or controlled. An
important objective of CG is to ensure accountability and transparency for those who are involved in the policy implementation of organizations through mechanisms that will reduce principal agent conflict. Keasey and Wright (1993) define CG as a framework for effective monitoring, regulation and control of companies which allows alternative internal and external mechanisms for achieving the laid down objectives. The internal mechanisms include the board composition, managerial ownership, and non-managerial shareholding including the institutional shareholding while external mechanisms includes; the statutory audit, the market for corporate control and stock market evaluation of corporate performance.

Capital Structure

CS refers to the way a corporation finances its assets through a combination of equity and debt. The landmark studies of Modigliani and Miller (1958; 1963) about CS irrelevance and tax shield advantage paved way for the development of other theories. According to Jensen and Meckling (1976) a firm’s optimal CS will involve the trade-off among the effects of corporate and personal taxes, bankruptcy costs and agency costs.

The separation of ownership and control in a professionally managed firm may result in managers exerting insufficient work effort, indulging in perquisites, choosing inputs or outputs that suit their own preferences, or otherwise failing to maximize firm value. In effect, the agency costs of outside ownership equal the lost value from professional managers maximizing their own utility, rather than the value of the firm. Theory suggests that the choice of CS may help mitigate these agency costs. Under the agency costs hypothesis, high leverage or a low equity/asset ratio reduces the agency costs of outside equity and increases firm value by constraining or encouraging managers to act more in the interests of shareholders (Harris and Raviv, 1991 and Myers, 2001).

Firm Performance

Firm performance in the literature is based on the value of the firm. CG affects value as a result of reduced expropriation by insiders and improvement in the expected cash flow that can be distributed to investors (Black et al., 2006). To evaluate performance, it is necessary to determine the constituents of good performance using performance indicators. To be useful, a performance indicator must be measureable, relevant and important to the organization. Financial performance used in empirical research on CG fit into both accounting-based measures and market-based measures. The most commonly used accounting-based measures include the return on assets (ROA) while the most commonly used market-based measure includes the
Tobin Q (Baysinger and Butler, 1985). In order to analyze the relationship between the variables, firm performance was measured by ROA.

ROA is used to measure operating performance based on the shareholders equity and it explains the efficiency of the management. ROA shows how profitable company’s assets are in generating revenue. It is given by the ratio between net income and total assets. It indicates the unit amount of earning derived from each unit of assets used. It is a useful in comparing competing companies in the same industry (Black et al., 2006).

East African Community Securities Exchange

There are currently four securities exchanges forming the East African Community Securities Exchange (EACSE) market namely the Nairobi Securities Exchange (NSE), Dar es Salaam Stock Exchange (DSE), Uganda Securities Exchange (USE) and Rwanda Stock Exchange (RSE). NSE was formed in 1954 and it is one of the active capital markets in Africa and the largest in East Africa and there are 61 companies listed at this exchange. The DSE was incorporated in September 1996 as a private limited company and it has 16 listed companies. The USE was launched in June 1997, is run under the jurisdiction of the Capital Markets Authority, which reports to the Central Bank of Uganda and it has 16 listed companies. The Rwanda Stock Exchange (RSE) is the youngest exchange in EAC, having opened for business on 31st January 2011. The RSE took over from the operations of the Rwanda over the Counter Exchange (ROTCE), which began business in bond trading in January 2008. There are 5 companies listed at RSE. Burundi does not have a security exchange and firms finance their financial needs through commercial banks (CMA 2012).

The EAC countries have developed and gazetted the guidelines for good CG practices for listed companies and this was in response to the growing importance of governance issues both in emerging and developing economies and for promoting growth in domestic and regional capital markets. It is also in recognition of the role of good governance in corporate performance, capital formation and maximization of shareholders value as well as protection of investor’s rights. The development of the guidelines took into account work that had been undertaken extensively by several jurisdictions through many task forces and committees including OECD and the Commonwealth Association for Corporate Governance (CACG).

Research Problem

The impact of CG on firm performance has been a subject of great empirical investigations in finance. CG has been part of research in business economics since Adam Smith’s 1776 seminal publication of an inquiry into the nature and causes of the wealth of nations and undoubtedly given impetus
through classic publication of the separation of corporate ownership from control (Berle and Means, 1932). The separation of ownership and control in a firm may result in managers exerting insufficient work effort, indulging in perquisites, choosing inputs or outputs that suit their own preferences, or otherwise failing to maximize firm value. In effect, the agency costs of outside ownership equal the lost value from professional managers maximizing their own utility, rather than the value of the firm. CG and the choice of capital structure may help mitigate these agency costs. CG is an important factor in improving the value and performance of the firm and the impact differs country to country because of different structures resulting from dissimilar social, economic, and regulatory conditions. CS also has different impacts on the value of the firm country to country because of the different regulations.

The collapse of major corporations such as Enron, WorldCom and the Bank of Credit and Commerce International (BCCI) in the UK and US has stimulated the recent interest in CG. The Asian economic crisis also has contributed to the raising profile of CG. In the EAC, governance has been debated in the context of state ownership of corporations where corruption, mismanagement and government subsidization of failing enterprises have been the defining features. There has been an attempt to address CG challenges in EAC by the privatization policy and the capital markets authorities. There has also been a worldwide effort to improve the effectiveness of CG. These include the OECD and CACG which have led to the development of principles for effective CG. The issues that have stimulated interests in the phenomenon of CG, point to particular causes of governance crises. These include weak legal and regulatory systems, inconsistent accounting and auditing standards, and poor banking practices. Thin and poorly regulated capital markets, ineffective oversight by corporate boards of directors, and little regard for the rights of minority shareholders are also problems with respect to CG (World Bank, 2000).

Aduda and Musyoka (2011) evaluated the relationship between executive compensation and firm performance in the Kenyan banking industry between 2004 and 2008. The study found a negative relationship between executive compensation and the bank size and this was attributed to the diminishing influence of key owners as the bank grows in size. The study did not consider the intervening effects of other variables on the relationship between CG and firm performance. Lishenga (2012) also evaluated the effect of board meetings as proxy for CG on firm performance. The study found that the frequency of board meetings increases following poor performance and as a consequence of such meetings performance of firms improved because frequency of board meetings allows for better communication between management and directors. The study only considered one CG
governance mechanism and did not consider the effects of CG when measured as an index incorporating all the variables.

The above studies yielded mixed results and also did not consider the combinative effect of CS on the relationship between CG and firm performance. Most of the studies were done in developed economies therefore contextual differences may yield different results thus findings and conclusions of these studies may not apply to firms operating in the East African community context. Some of the studies also utilized small samples, while the current study used a large sample which comprised all the firms listed at the East African community exchanges. Specifically, the study investigated the influence of CS on the relationship between CG and firm performance. The study therefore attempted to answer the research question, what is the effect of capital structure on the relationship between CG and performance of firms in EACSE?

Research Objectives
The broad objective of this study is to investigate how capital structure affect the relationship between corporate governance and firm performance:

i. To examine the effect of corporate governance on firm performance among the listed companies in East African Community Securities Exchange.

ii. To evaluate the effect of corporate governance on capital structure among companies listed at the East African Community Securities Exchange.

iii. To determine the effect of capital structure on firm performance among the listed companies in the East African Community Securities Exchange.

iv. To determine the intervening effect of capital structure on the relationship between corporate governance and firm performance among the companies listed at the East African Community Securities Exchange.

Theoretical Foundation
The theoretical framework upon which CG and CS is based includes the agency theory free cash flow theory. Evidence from previous empirical studies has sought to confirm the effect of CG on firm performance and reviewed the theories.

Agency Theory
CG has traditionally been associated with the “principal-agent” or “agency” paradox. A “principal-agent” relationship arises when the person who owns a firm is not the same as the person who managers or controls it. Agency theory has its roots in economic theory and was developed by Jensen and Meckling (1976) and it states that shareholders who are the owners or
principals of the company delegate the running of business to the managers or agents. The shareholders expect the agents to act and make decisions in the principal’s interest but the agents may make contrary decisions.

Jensen and Meckling (1976) argued that the separation of ownership and control has resulted in an agency problem as the managers who act as agents might not always act in the best interests of the shareholders or owners, who are the principals of the firm. This might be due to the interests of both parties which are not aligned. Agency problem results in agency costs, which are the costs of the separation of ownership and control. Agency costs have been defined as the sum of the monitoring expenditures by the principal, the bonding expenditures by the agent and the residual costs.

**Free Cash Flow Theory**

According to free cash flow theory (Jensen, 1986), leverage itself can also act as a monitoring mechanism and thereby reduces the agency problem hence increasing firm value by reducing the agency costs of free cash flow. There are some consequences derived if a firm is employing higher leverage level in that managers of such firm will not be able to invest in non-profitable new projects, as doing so the new projects might not be able to generate cash flows to the firm, hence managers might fail in paying the fixed amount of interest on the debt or the principal when it’s due. It also might cause the inability to generate profit in a certain financial year that may result in failing to pay dividends to firm shareholders.

Leverage might not only be able to reduce the agency costs of free cash flow, but also can increase the efficiency of the managers. This is due to the debt market that might function as a more effective capital market monitoring. In addition, in order to obtain the debt financing, managers must show their abilities and efficiencies in managing the firm. Empirically, it has been proven that leverage proxied by bank lenders, can be substitute monitoring mechanism especially in weak CG firms, but not in the more active merger environments.

**Empirical Studies**

**Corporate Governance and Firm Performance**

The study builds on the agency theory by Jensen and Meckling (1976) who evaluated the relation between the principal and the agent. The principals who are the owners hire the agents to manage the firm and they may not necessary make decisions that are in the best interest of the owners. The value decreasing activities by the managers’ decreases profitability therefore CG plays an important role in enhancing firm value by reducing such activities. Shleifer and Vishny (1997) also indicated that better-
governed firms are more likely to invest in profitable projects, resulting in more efficient operations and higher expected future cash flows.

Hermalin and Weisbach (2001) conducted a study on the relationship between board composition and board size on firm performance. They focused on one of the board tasks of hiring and firing CEOs. Board independence depends on the bargain between the board and the CEO. The CEO prefers a less independent board while the board prefers to maintain its independence. Firms have been pressured by institutional investors and shareholder activists in the recent years to appoint directors with different backgrounds and expertise, under the assumption that greater diversity of the BODs should lead to less insular decision making processes and greater openness to change. A diverse workforce and leadership within the firm can increase its competitiveness as a great variety of ideas and viewpoints are available for decision-making, attract a large base of shareholders and employees, and help retain existing as well as potentially gain new consumers. They concluded that board composition is not related to firm performance, while board size has a negative relation to corporate performance. Both board composition and size do appear to be related to the quality of the board’s decisions regards CEO replacement and executive compensation.

Aduda and Musyoka (2011) while looking at CG mechanisms among commercial banks in Kenya found a negative relationship between executive compensation and bank size and this has been attributed to the diminishing influence of key owners as the bank grows in size. Performance ratios and opportunity only appear to be inversely related to big banks, as their executives appear to subordinate their immediate financial interests to that of the overall goal of the firm, which is to maximize profitability. The emphasis of the study was the banking sector in Kenya.

Himmelfarb et al. (2002) further argued that CG and firm performance may be driven by common firm characteristics, some of which are neither clearly observable nor measurable. Managers tend to hold large ownership stakes (which is commonly viewed in the literature as a mechanism to combat agency problems) in high-risk and high-growth firms to signify their commitment and with the use of equity-based remuneration; insider ownership may automatically increase after periods of strong performance. However, this spurious correlation does not offer any insight into the impact of insider ownership in reducing agency problems and improving firm performance. The results confirm the results of Cremers and Neir (2005) that both internal and external CG has a positive significant relationship with firm performance. Thus, the first hypothesis stated in the null form is:
**H1**: There is no significant relationship between corporate governance and firm performance

**Corporate Governance and Capital Structure**

Empirical studies between CG and CS appear to be varied and inconclusive. According to Lipton and Lorsch (1992), there is a significant relationship between capital structure and board size. Berger and Lubrano (2006) found that firms with larger board membership have low leverage or debt ratio. They assume that larger board size translates into strong pressure from the corporate board to make managers pursue lower leverage or debt ratio rather than have larger boards. Their findings suggest that large board size which are more entrenched due to superior monitoring by regulatory bodies, pursue higher leverage to raise company value. Berger et al (1997) argues that firms with higher leverage rather have relatively more outside directors, while firms with low percentage of outside directors experience lower leverage.

Capital structure of a company is based on the board of director’s decision and in compliance to CG code of best practices. According to Hart (1995) there exist a significant negative relationship between board size and capital structure and opposite finding on the association between CEO duality and leverage where it implies that larger boards adopt low debt policy and CEO as the board chairman tend to employ high proportion of debt. Jensen (1986) explains the benefits of debt in reducing agency costs of free cash flow, in situations where the firm generates substantial free cash flow making the conflict of interest among shareholders and managers especially severe.

Debt serves as a bonding or commitment device by reducing the free cash flow available to managers. In this respect, debt limits inefficiency of management, at least if managers want to repay the debt. Berger et al. (1997) find that entrenched CEOs seek to avoid debt. When managers do not experience discipline from CG and control mechanisms, including monitoring by board, the threat of dismissal or takeover, and compensation-based performance incentives, managers may prefer less leverage or adjusting it more slowly since they dislike performance pressures associated with commitment to repay the debt and interests on it in the future.

Berger (1997) finds that firms with larger board of directors generally have low debts equity levels. He argues that larger boards exert pressure on managers to follow lower gearing levels and enhance firm performance. Abor (2007) examined the relationship between corporate governance and capital structure decisions of Ghanaian Small and Medium Enterprises (SME) by using multivariate regression analysis. The results provide evidence about negative relationship between board size and leverage ratios and SMEs with larger boards generally have low level of gearing.
Thus, the second hypothesis stated in the null form is:

\[ H2: \text{There is no significant relationship between corporate governance and capital structure.} \]

**Capital Structure and Firm Performance**

Capital structure is the mix of debt and equity capital maintained by a firm, Modigliani and Miller (1958) stated that an organization financing is of paramount importance to both the managers of firms and providers of funds. Brigham and Gapenski (1996) argued that an optimal capital structure can be attained if there exists a tax sheltering benefits provided an increase in debt level is equal to the bankruptcy costs. They suggested that managers of the firm should be able to identify when the optimal capital structure is attained and try to maintain it at that level.

Jensen and Ruback (1983) argue that managers do not always manage the firm to maximize returns to shareholders. As a result of this, managers may adopt non-profitable investments, even though the outcome is likely to be losses for shareholders. They tend to use the free cash flow available to fulfil their personal interests instead of investing in positive Net Present Value projects that would benefit the shareholders. Jensen (1986) argues that the agency cost is likely to exacerbate in the presence of free cash flow in the firm. In order to mitigate this agency conflict, Pinegar and Wilbricht (1989) argue that capital structure can be used by increasing the debt level and without causing any radical increase in agency costs. This will force the managers to invest in profitable ventures that will be of benefit to the shareholders. If they decide to invest in non-profitable projects and they are unable to pay the interest due to debt holders, the debt holders can force the firm to liquidation and managers will lose their decision rights or possibly their employment. Thus, the third hypothesis stated in the null form is:

\[ H3: \text{There is no significant relationship between capital structure and firm performance.} \]

**Corporate Governance, Capital Structure and Firm Performance**

Capital structure can be analysed not only in purely financial terms but can also be analysed by looking at the rights and attributes that characterise the firm’s assets and that influence, with different levels of intensity, governance activities. Equity and debt, therefore, must be considered as both financial instruments and CG instruments: debt subordinates governance activities to stricter management, while equity allows for greater flexibility and decision making power. Jensen and Meckling (1976), by making a distinction between internal and external equity, contextualize the relation between ownership and capital structures. It can thus be inferred that when capital structure becomes an instrument of CG,
not only the mix between debt and equity and their well-known consequences as far as taxes go must be taken into consideration. The way in which cash flow is allocated and, even more importantly, how the right to make decisions and manage the firm (voting rights) is dealt with must also be examined.

Developments in the agency theory suggest that CG, together with capital structure decisions, influences firm value, in that it mitigates agency conflicts between managers, shareholders and debt holders (Putnan 1993). Williamson (1988) evaluated the relation between debt and equity in terms of CG and firm performance, and affirmed that capital structure is able to influence management activity and performance. Coase (1991), stated that it is important to pay more attention to the role of capital structure as an instrument that can mediate and moderate governance structure within the firm and, consequently, firm performance. Thus, the fourth hypothesis stated in the null form is:

_H4: There is no significant intervening effect of capital structure on the relationship between corporate governance and firm performance._

**The Conceptual Framework**

The conceptual framework seeks to link CG with firm performance. The agency theory analyses the internal CG mechanisms while the free cash flow theory looks at how the leverage and external environment effect on firm performance.

Figure 2.1 shows the conceptual model.

![Conceptual Framework Diagram](image-url)

Source: Author 2014
Research Hypotheses

The study will seek to test the following hypotheses:

H1: There is no significant relationship between corporate governance and firm performance among the listed companies at the East African community securities exchange.

H2: There is no significant relationship between corporate governance and capital structure.

H3: There is no significant relationship between capital structure and firm performance among the companies listed at the East African community securities exchange.

H4: There is no significant intervening effect of capital structure on the relationship between corporate governance and firm performance.

Research Design

The research design that was used is descriptive cross-sectional design. The study seeks to explain the relative influence of CG on firm performance; therefore it employed a descriptive cross-section research design, which involves the collection of data to assess the hypothesized relationship among variables. The design was also chosen considering the type of data and the analysis that was carried out. Aduda and Musyoka (2011) used a similar research design, where they investigated the relationship between executive compensation and firm performance of the Kenyan banks.

Target Population and Sampling

The target population for this study comprised all the listed companies at the East African Securities Exchange. There were a total of ninety eight (98) companies listed at the East African Securities Exchange as at 31st December 2013 (61 companies listed NSE, 16 in DSE, 16 in USE and 5 in RSE). The intention was to include all the 98 listed companies in the study but only 56 firms were finally included in the analysis, because not all the companies had full financial reports for the study period. The study only considered firms which had been listed and had full financial statements from 2009 to 2013. The list of quoted companies has been obtained from NSE, DSE, USE, RSE and CMA websites.

Data Collection

The study used secondary data which was obtained through a review of financial statements where an index was constructed both for CG. For firm performance the financial statements were reviewed to get Return on Assets (ROA). Capital structure data for calculating leverage was gotten from the same financial statements. The period of study was 2009, 2010, 2011, 2012
and 2013. This period is significant because it signifies when the RSE first listed companies.

A standardized structured CGI index was used and the questions were constructed using information obtained from the best code of practice of CG from the regulatory authorities in the EAC exchanges. The CGI (See Appendix I) was constructed as a proxy for governance and it is based on 56 binary objective survey questions obtained from secondary data. CGI has a value of between 0 and 100, and it is expected that poorly governed firms will have lower scores, while better governed companies will have higher scores (Brown and Caylor, 2004)

**Relating the Variables**

Multiple regression analyses were used to assess the strength of the relationship between dependent, independent and intervening variables. Dependent variables being ROA, the independent variables being the determinants of CG

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \]

\[ Y = \text{ROA} \]

\[ \beta_0 = \text{intercept}, \ X_1 = \text{CG}, \ X_2 = \text{CS}, \ \beta_1, \ \beta_2 = \text{coefficients}, \ \varepsilon = \text{Error term} \]

**Descriptive Analysis and Results**

Descriptive measures involved mean, maximum, minimum, standard error of estimate, skewness and kurtosis. The pertinent results are presented in Table 4.1

<p>| Table 4.1: Descriptive statistics results of the main variables included in the model |
|-----------------------------------|-----------|----------------|--------------|----------------|----------------|----------------|--------------|----------------|</p>
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Std. Error of Skewness</th>
<th>Kurtosis</th>
<th>Std. Error of Kurtosis</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>280</td>
<td>0.2943</td>
<td>0.2426</td>
<td>2.05</td>
<td>0.14</td>
<td>6.81</td>
<td>0.2</td>
<td>0.001</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td>280</td>
<td>0.2051</td>
<td>0.1677</td>
<td>0.48</td>
<td>0.14</td>
<td>0.2</td>
<td>0.440</td>
<td>-</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>280</td>
<td>0.7268</td>
<td>1.0149</td>
<td>0.12</td>
<td>0.14</td>
<td>1.27</td>
<td>0.2</td>
<td>0.54</td>
<td>0.9</td>
</tr>
<tr>
<td>Return on Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Governance index</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

The results showed that leverage had a mean of 0.2943 with a minimum of 0.001, a maximum of 1.6845, skewness 2.055 and kurtosis of +6.813. Comparatively, Return on Assets had a mean of 0.2051, minimum of -0.4404, maximum of 0.6018, skewness of 0.487 and kurtosis of +0.482.
Corporate governance index had a mean of 0.7268, minimum of 0.54, maximum of 0.90, skewness of 0.124 and kurtosis of -1.27. Analysis of skewness shows that leverage, Return on Assets and Corporate Governance index are asymmetrical to the right around its mean, therefore it means that most of the firms are doing well when the above measures are considered. Regulatory compliance index is asymmetrical to the left around its mean, which means that most of the index score were less than the mean in the four of the EAC countries and additionally, leverage is highly peaked compared to other regressors.

**Corporate governance**

The study determined the CG among the companies listed at the East Africa Communities Securities Exchange among the East African countries i.e. Kenya (NSE), Tanzania (DSE), Uganda (USE) and Rwanda (RSE). The constructs of CG determined comparatively are Board structure and composition, ownership and shareholding, board role and responsibilities, board remuneration, disclosure and transparency and corporate ethics. The comparative results of the four countries are as indicated in figure 4.1.

**Figure 4.1 Corporate Governance Indicators per Securities Exchange**

Results from figure 4.1 indicate that the companies listed at the EACSE have high scores in all the various indicators of CG measured by board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics. Under the board structure and composition companies listed at NSE, DSE and USE tend to have a board size of between 6 and 9 members, role and functions of the board are clearly spelt out. There are also indications that most of the companies have the chairman and the CEO functions clearly separated. The boards also consist of the independent directors. The score for companies listed at RSE was 69.8% which was lower than for the other securities
exchanges because most of the firms actually started listing from 2009. The ownership and shareholding score among the listed companies is also high except in RSE where the score is low at 58.1%.

Table 4.2: Overall Corporate Governance Index (2009-2013)

<table>
<thead>
<tr>
<th>YEARS</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSE</td>
<td>63.6</td>
<td>69.1</td>
<td>72.7</td>
<td>81.8</td>
<td>81.8</td>
</tr>
<tr>
<td>DSE</td>
<td>70.9</td>
<td>72.7</td>
<td>80</td>
<td>90.9</td>
<td>90.9</td>
</tr>
<tr>
<td>USE</td>
<td>70.9</td>
<td>74.5</td>
<td>78.2</td>
<td>85.5</td>
<td>87.3</td>
</tr>
<tr>
<td>RSE</td>
<td>54.5</td>
<td>61.8</td>
<td>67.3</td>
<td>83.7</td>
<td>87.3</td>
</tr>
<tr>
<td>Average score</td>
<td>64.975</td>
<td>69.525</td>
<td>74.55</td>
<td>85.475</td>
<td>86.825</td>
</tr>
</tbody>
</table>

The finding indicates that the average score of corporate governance index for the year 2009 was 64.975%, 2010 was 69.525%, 2011 was 74.55%, 2012 was 85.475% with 2013 having the highest 86.825%. In 2009 DSE and USE had the highest corporate governance index of 70.9%, followed by NSE with RSE having the lowest index. In 2010, USE had the highest CGI of 74.5%, followed by DSE with an index of 72.7%, NSE with 69.1% with RSE having the lowest CGI of 61.8%. Further in 2011, DSE had the highest CGI of 80%, USE had 78.2%, and NSE had 72.7% with RSE having the lowest CGI of 67.3%. In 2012, DSE had the highest CGI of 90.9%, USE had 85.5%, and RSE had 83.7% with NSE having the lowest CGI of 81.8%. In 2013, DSE had the highest CGI of 90.9%, USE and RSE had 87.3% with NSE having the lowest CGI of 81.8%.

Figure 4.2 Corporate Governance Index per Country

Results in figure 4.2 indicate that CG score has been improving for the last five years since 2009 as indicated in Table 4.2. In 2009 the CGI score was 64.775% and in 2013 it was 86.825%. The improvements in the score are brought about by the information a awareness i.e. the companies are now more informed about CG.
Table 4.3: Capital structure and firm performance

<table>
<thead>
<tr>
<th></th>
<th>Kenya (NSE)</th>
<th>Tanzania (DSE)</th>
<th>Uganda (USE)</th>
<th>Rwanda (RSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Capital Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>0.324</td>
<td>0.021</td>
<td>0.225</td>
<td>0.012</td>
</tr>
<tr>
<td>Firm performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Assets (ROA)</td>
<td>0.415</td>
<td>0.032</td>
<td>0.316</td>
<td>0.043</td>
</tr>
</tbody>
</table>

The study further compared the firms listed at the East African Community Securities Exchange i.e. Kenya (NSE), Tanzania (DSE), Uganda (USE) and Rwanda (RSE) in terms of their capital structure (leverage and firm’s performance (Return on Assets (ROA)).

The study findings reveals that the overall average score for capital structure as far as leverage is concerned for NSE firms (Mean=0.475, SD=0.031), Tanzania (Mean=0.376, SD=0.022), Uganda (Mean=0.238, SD=0.048) and Rwanda (Mean=0.454, SD=0.041). As far as firm performance is concerned, Return on Assets (ROA) for Kenya (NSE) (Mean=0.455, SD=0.105), Tanzania (DSE) (Mean=0.391, SD=0.129), Uganda (USE) (Mean=1.288, SD=0.177), Rwanda (RSE) (Mean=0.440, SD=0.586).

Corporate Governance and Firm performance

The first objective of this study was to examine how CG affects firm performance among the listed companies in EAC securities exchanges. The influence of CG was evaluated based on dimensions of board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics. These were evaluated against the indicators of firm performance in order to test the influence on dimensions, various regressions were done to find out if the combined effects were sufficient or not to support the hypothesis. Thus, the first hypothesis stated in the null form is as follows:

**H1: There is no significant relationship between CG and firm performance among the listed companies at the EAC securities exchanges**

Hypothesis 1 sought to establish the influence of CG on firm performance. This hypothesis was tested by regressing CG and firm performance guided by the equation

\[ Y = \beta_0 + \beta_1X \]

Where X represented CG and Y denoted ROA. The results of the regression are presented in table 4.4 below.
Table 4.4: Effect of corporate governance on ROA

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.782*</td>
<td>.611</td>
<td>.610</td>
<td>.1047843</td>
<td>1.597</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CGI
b. Dependent Variable: ROA

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGI</td>
<td>-.703</td>
<td>.044</td>
<td>-16.015</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>1.249</td>
<td>.060</td>
<td>20.901</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td></td>
<td>.011</td>
<td>436.858</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>7.849</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA
b. Predictors: (Constant), CGI

Residuals Statistics

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>-0.28314</td>
<td>.421485</td>
<td>.205132</td>
<td>.1311186</td>
<td>280</td>
</tr>
<tr>
<td>Residual</td>
<td>-.4120858</td>
<td>.2454981</td>
<td>0E-7</td>
<td>.1045964</td>
<td>280</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>-1.780</td>
<td>1.650</td>
<td>.000</td>
<td>1.000</td>
<td>280</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-3.933</td>
<td>2.343</td>
<td>.000</td>
<td>998</td>
<td>280</td>
</tr>
</tbody>
</table>

The results presented in table 4.4 show that the influence of CG and ROA was significant (R=.782). This was an indication that corporate governance dimensions explained 61.1% (R² = .611) of ROA. The other variables in the firms explained the remaining 38.96%. The analysis from the model had the F value of 436.8. At p-value less than 0.05, the findings thus were sufficient to support influence of CG dimensions, implying that CG had statistically significant effects on firm performance. The hypothesis that there is no significant relationship between CG and firm performance was therefore not confirmed for ROA.

The results indicate that there is a positive significant relationship between CG and firm performance as measured by ROA. The listed companies with high CGI score tended to have higher performance. The results were consistent with the study conducted by Shleifer and Vishny (1997) who reported that there is a positive relation between ownership concentration and firm performance.

**Corporate Governance and Capital Structure**

The second objective of this study was to assess the relationship between CG and capital structure among the listed companies in EAC
securities exchanges. The influence of corporate governance was evaluated based on certain dimensions (board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics). These were evaluated against the indicators of capital structure. To test the influence on dimensions, various regressions were done to find out if the combined effects were sufficient or not to support the hypotheses. Thus, the second hypothesis stated in the null form is as follows:

**H2: There is no significant relationship between corporate governance and capital structure**

Hypothesis 2 sought to establish the relationship between corporate governance and capital structure. This hypothesis was tested by regressing corporate governance and capital structure guided by the equation \( Y = \beta_0 + \beta_1 X \)

Where \( X \) represented corporate governance and \( Y \) denoted capital structure. The results of the regression are presented in table 4.5 below.

**Table 4.5: Relationship between corporate governance and capital structure**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.600(^a)</td>
<td>.360</td>
<td>.292</td>
<td>.53541</td>
</tr>
</tbody>
</table>

Predictors: (Constant), board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics

**ANOVA\(^a\)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9.173</td>
<td>1</td>
<td>1.529</td>
<td>5.333</td>
<td>.000(^a)</td>
</tr>
<tr>
<td>1</td>
<td>16.340</td>
<td>278</td>
<td>.287</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.513</td>
<td>279</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: capital structure

**Coefficients\(^a\)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.328</td>
<td>.117</td>
</tr>
<tr>
<td>Corporate governance</td>
<td>.623</td>
<td>.111</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: capital structure

The study observed that the results had a relationship between CG and capital structure (\( R = .600 \)). This was an indication that corporate governance explained 36.0% (\( R^2 = .360 \)) of capital structure. The other variables affecting capital structure explained the remaining 64.0%. The analysis from the model
had the F value of 5.333 at p-value <0.05, the findings were sufficient to support the relationship between corporate governance and capital structure, implying that corporate governance had statistically significant effects on capital structure.

The results indicate that there is a positive significant relationship between CG and capital structure. The debt/equity ratio increases as CG increases. Although in the literature there are varied results but the study is consistent with the study by Berger and Lubrano (2006) who found that firms with larger boards that is weak CG tend to have higher leverage. Their result suggest that large board as proxy for CG which are more entrenched due to superior monitoring by regulatory bodies pursue higher leverage to raise company value.

**Capital Structure and Firm Performance**

The third objective of this study was to assess the relationship between capital structure and firm performance among the listed companies in EAC securities exchanges. The influence of capital structure was evaluated based on leverage while firm performance was evaluated by considering ROA. Thus, the third hypothesis stated in the null form is as follows:

**H3: There is no significant relationship between capital structure and firm performance among the listed companies at the EAC securities exchanges**

Hypothesis 3 sought to establish the influence of capital structure on firm performance. This hypothesis was tested by regressing capital structure and firm performance guided by the equation \( Y = \beta_0 + \beta_1X \)

Where \( X \) represented capital structure and \( Y \) denoted ROA. The results of the regression are presented in table 4.6 below.

**Table 4.6: Effect of capital structure on ROA**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.416(^a)</td>
<td>.173</td>
<td>.157</td>
<td>.62228</td>
</tr>
<tr>
<td></td>
<td>a. Predictors: (Constant) Leverage</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.054</td>
<td>1</td>
<td>4.054</td>
<td>10.470</td>
<td>.002(^a)</td>
</tr>
<tr>
<td>1 Residual</td>
<td>19.361</td>
<td>278</td>
<td>.387</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23.416</td>
<td>279</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Predictors: (Constant) Leverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dependent Variable: Return on Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.996</td>
<td>.712</td>
<td>2.804</td>
<td>.007</td>
</tr>
<tr>
<td>Leverage</td>
<td>.940</td>
<td>.256</td>
<td>.651</td>
<td>.001</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on Assets

The results of analysis to establish the effects of capital structure dimensions on return on assets are shown in Table 4.6. Results indicate relative relationship between capital structure and ROA (R= .416). The results indicate that a relationship exists between capital structure and ROA. Capital structure as a variable explained 17.3% (R² = .173) of return on assets with the remaining 82.7% explained by other variables. The corresponding F value for the model was 10.470 at p-value greater than 0.05 (p<0.5), hence implying that capital structure variable was statistically significant effects on return on assets. The analysis of significance of capital structure dimensions on return on assets is summarized in Table 4.6 above. The hypothesis that there is no significant relationship between CG and ROA was therefore not confirmed.

The results indicate that there is a positive significant relationship between capital structure and firm performance as measured by ROA. The results were consistent with the study conducted by Pinegar and Wilbricht (1989), they argued that capital structure can be used by increasing debt level without increasing agency costs and this will force the managers to invest in profitable ventures that will benefit the shareholders, because if they decide to invest in non-profitable ventures they will be unable to pay debt interest.

**Intervening effect of capital structure on the relationship between corporate governance and firm Performance**

The fourth objective of the study sought to establish whether there is a significant intervening effect of capital structure on the relationship between corporate governance and firm performance. The hypothesis is divided into three sub hypothesis to consider the individual effects of firm performance as measured by ROA. Thus, the first hypothesis stated in the null form is as follows:

**H4.** There is no significant intervening effect of capital structure on the relationship between corporate governance and firm performance

First, ROA was regressed on corporate governance and the standardized regression coefficients (beta) examined to determine the size and direction of the relationship and whether it was statistically significant. If
this relationship is not statistically significant, there can be no intervened effect. The pertinent results are summarized in Table 5.39

Secondly, a regression analysis was performed and the betas examined for the strength, direction and significance of the relationship. In step one, firm performance was regressed on the capital structure and in step two, and firm performance was regressed on corporate governance to assess if there was a significant change. When controlling for the effects of the capital structure on firm performance, the effect of the corporate governance on the firm performance should no longer be statistically significant at α=.05. The relevant results are summarized in Table 4.7

Table 4.7: Regression results of ROA on capital structure and corporate governance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG</td>
<td>.782(.000)</td>
<td>.776(.000)</td>
<td>.770(.000)</td>
</tr>
<tr>
<td>CS</td>
<td>-</td>
<td>-.066(.050)</td>
<td>-.058(.115)</td>
</tr>
<tr>
<td>CG*CS</td>
<td>-</td>
<td>-</td>
<td>-.108(.004)</td>
</tr>
<tr>
<td>R Square</td>
<td>.611</td>
<td>.615</td>
<td>.627</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>.610</td>
<td>.613</td>
<td>.623</td>
</tr>
<tr>
<td>F Statistics</td>
<td>436.858</td>
<td>221.696</td>
<td>154.708</td>
</tr>
<tr>
<td>Significance</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Df1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Df2</td>
<td>278</td>
<td>277</td>
<td>276</td>
</tr>
</tbody>
</table>

The results in Table 4.7 show that capital structure explain 62.7% of the variation in firm performance (R² =.627). At step 2, corporate governance, adds to the ROA as the variation increased from .611 to .627 (R² change=.627 p-value=.000). The results reveal that the variance explained by capital structure is significant (p-value=.050) for CS. The results revealed that the regression coefficients for corporate governance decreased from β=.782, p-value=.000 to β=.770, p-value=.000 when capital structure were added to the regression.

The hypothesis that there is no significant intervening effect of capital structure on the relationship between CG and firm performance was therefore not confirmed. The results indicate that there is an insignificant intervening effect of capital structure on the relationship between CG and firm performance as measured by ROA.

Discussion of the hypotheses tests and research findings

The influence of CG on firm performance

The CG was sub-divided into five sub-indices i.e. board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics. The results of the correlation show that there is a significant positive relationship between CG characteristics and firm performance of listed companies. The results
evidenced a statistically significant influence of CG on firm performance in so far as ROA is concerned. Hypothesis (H1) was therefore not confirmed by the study. The results indicated that good CG influences firm performance, therefore it can be concluded that higher profitability for firms listed at East African securities exchange is due to better CG practices.

The above results were supported by prior research on the relationship between CG and firm performance. The results were consistent with the study conducted by Shleifer and Vishny (1997) who reported that there is a positive relation between ownership concentration and firm performance. It is confirmed further by (Ashbaugh et al., 2004) who found a positive relationship between CG and firm performance as measured by COC. However, other scholars have different views on the relationship between CG and firm performance. Cremers and Ferrell (2009) examined the effects of corporate governance on the firm’s operational performance and found a negative association between corporate governance and firm performance. Hermelin and Weisbach (1996) on the other hand evaluated the effects of board composition and effects of direct incentives on firm performance and found no relationship. Daily and Dalton (1992) used both accounting based measures and market based performance measures and they found no association between CG and financial performance.

The results about the significance of the relationship between CG and firm performance in East Africa securities exchange based on ROA is supported by agency theory. According to the literature, the relationship between CG and firm performance is grounded on agency theory, which is concerned with aligning the interest of shareholders and managers to maximize the wealth of the company. Therefore, advocates of agency theory argue that the position of CEO and the chairman should be separated, as the combined structure can reduce the effectiveness of monitoring (Donaldson 1990). In support of the agency theory, the separation of the two roles has been adopted by companies around the world (Banks 2004).

The results also revealed an increase in firm performance for companies for the period under review. Therefore, the main purpose of the CG mechanism is to provide reassurance to shareholders that managers will achieve results which are in the best interest of the shareholders (Shleifer & Vishny 1997). One way in which this can be achieved is through an effectively structured board that ensures the interests of the managers are in line with those of the shareholders. The practice of separation of the leadership roles is becoming increasingly common among listed companies in the East Africa securities exchange.

The results of this study also indicated that boards dominated by NEDs are significantly related to performance for both accounting-based measures and market-based measures. This implies that the companies that
complied with the recommendations of code of best practice on corporate governance performed well. The Cadbury Report (1992), Hampel Report (1998) and OECD principles recommended that boards comprised of a majority of non-executive directors. The CMA listing requirements in the East Africa community exchanges have also incorporated the above principles in their governance practices, NEDs bring independence of mind and judgment on issues of strategy and governance on running the business, and also see themselves as assisting in enhancing prosperity of the companies and play an important part in improving the performance of the business (Cadbury 2002). The results also imply that to be effect, a board must have the right mix of skills and experience and work together as a team, which will encourage diverse and healthy debate in the interest of the investors and the company (Roche 2005).

The effect of CG on capital structure

The second objective of the study was to establish the relationship between CG and capital structure. On the basis of this objective, the study hypothesized that there is no relationship between CG and capital structure. The assessment of CG and capital structure was done by reviewing the financial statements of companies listed at the East Africa community security exchanges. The hypothesis that there is no relationship between CG and firm performance was therefore not confirmed. These results are in line with existing literature which links CG and capital structure.

The study indicates that CG is positively correlated to capital structure. Capital structure as measured by leverage shows the relationship between long term liabilities and shareholder’s equity and it can be a powerful tool to implement CG. According to CG principles shareholders equity should be greater than the long term liabilities to create value (Lipton and Lorsch, 1992). The correlation coefficient between CG and capital structure was a positive correlation ($\beta=0.623$). The study results are supported by literature although there are varied results. Berger and Lubrano (2006) found that firms with larger board membership have lower leverage or debt ratio and they assumed that larger board’s size translates into strong pressure from the corporate board to make managers pursue lower leverage due to superior monitoring. The results were also supported by Berger et al., 1997 who stated that firms with higher leverage rather have relatively more outside directors. According to Abor (2007) there exist a significant negative relationship between CEO duality and leverage where it implies that larger boards adopt low debt policy. The second hypothesis (H2) was to test whether there is no significant relationship between CG and capital structure is. H2 was rejected in that there was a significant positive relationship between CG and capital structure (Table 6.37).
The effect of capital structure on firm performance

The third objective of the study was to determine the relationship between capital structure and firm performance of listed companies at the East African securities exchange. The firm performance was measured by ROA. The study results indicated that there is a positive significant relationship between capital structure and firm performance for all the three indicators of measurements used in the study. The hypothesis that there is no relationship between capital structure and firm performance was therefore not confirmed. These results are in line with existing literature which links capital structure and firm performance.

The literature reviewed indicated that there are positive and negative significant relationship between capital structure and firm performance. The study findings is supported by Harris and Raviv (1991) and Stulz (2004) who stated that there is a positive significant relationship between capital structure firm performance. There are also other studies who found a negative significant relationship. Jensen and Meckling (1976) found that there is a negative significant relationship between capital structure and performance which is associated with growth opportunities, interest coverage and probability of reorganization following default. There are also earlier studies by Modigliani and Miller (1958) which pointed out that capital structure is irrelevant i.e. Leverage has no significant relationship with firm value which depends only on the assets held by the firm. The third hypothesis (H3) is therefore rejected in that there is a positive significant relation between capital structure and firm performance.

The intervening effect of capital structure on the relationship between CG and firm performance

Objective four sought to establish whether capital structure was intervening on the effect of CG on firm performance. The Baron and Kenny (1986) approach was used to test the hypothesis that there is no significant intervening effect of capital structure on the relationship between CG and firm performance. The results yielded a significant intervening effect between CG, capital structure and firm performance as measured by ROA. The hypothesis that there is no significant intervening effect of capital structure on the relationship between CG and firm performance was therefore not confirmed. Firm performance is enhanced when there is good CG which will also influence the capital structure of the listed companies.

There is empirical evidence that the firm performance depends on CG and capital structure decisions. The agency theory suggest that CG together with capital structure decisions influences firm performance, in that it mitigates agency conflicts between managers, shareholders and debt holders (Putnan ,1993). The firm’s financial choice that alters ownership assets
modifies the importance and the intensity of some of the primary stakeholders’ interest in firm governance. Capital structure can be analysed not only in purely financial terms it can also be analysed by looking at the rights and attributes that characterise the firm’s assets and that influence, with different levels of governance activities. Equity and debt, therefore, must be considered as both financial instruments and CG instruments: debt subordinates governance activities to stricter management, while equity allows for greater flexibility and decision making power. Jensen and Meckling (1976), by making a distinction between internal and external equity, contextualize the relation between ownership and capital structures. It can thus be inferred that when capital structure becomes an instrument of CG, not only the mix between debt and equity but how to make decisions and manage the firm must be dealt with (Zingales, 2000).

Conclusion and recommendations

The main objective of this research study was to examine the effect of capital structure on the relationship between CG and firm performance among the listed companies at the EACSE. To address this objective, a checklist based on the CG principles and Corporate Laws was compiled and a comprehensive analysis of the financial statements done.

The study has indicated that good CG enhances firm performance and this has supported the existing literature. The inclusion of capital structure as an intervening variable has influenced the interactions between CG and firm performance which was positively significant. Therefore the importance of CG cannot be over-emphasized since it enhances the organizational climate for the internal structures and performance of a company. Indeed, CG brings to bear through external independent directors, new dimension for effective running of a corporate entity thereby enhancing a firm’s corporate entrepreneurship and competitiveness. The adoption of corporate principles is a giant step towards creating safeguards against corruption and mismanagement, promoting transparency in economic life and attracting more domestic and foreign investment. In addition an effective program to combat corruption is also capable of protecting shareholder value is an important requirement for improvement of CG practices in East Africa.

Limitations of the study

First, the study was based on the listed companies at the East African securities exchange which may limit the generalisation of results to other jurisdictions such as to developed countries or to the non listed companies. The population from which the sample is drawn was all the listed companies therefore, results of this study may not be generalised to smaller and non-listed companies.
Secondly, study only integrated only five important variables of CG: board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics. However, there is a variety of other important governance variables that have important effects on financial performance and are not included in this framework, such as state owned shares. In addition, this study only investigated some the board of directors' characteristics including board size, share ownership, frequency of board meeting and board remuneration; however, other characteristics (such as age, education, gender and so on) might also strongly influence the relationship between CG and firm performance.

Thirdly, the study has assessed the interactive relationship between the CG and capital structure; however, I also acknowledge the possibility that capital structure decisions characteristics can influence the individual governance variables.

Finally, the capital markets developments in the EAC are at different levels. Kenya has got sixty one (61) listed companies while Tanzania and Uganda have got sixteen (16) each while Rwanda have got only five (5) listed companies. Burundi still does not have a security exchange; most of their funds are generated through loans from commercial banks. The cross-sectional analysis was not very effective in that some of the companies had not implemented the CG guidelines fully due to the stage of capital markets developments.

Despite the above limitations, the quality of the study was not compromised. The study has made an immense contribution to the existing body of knowledge, especially in the area of CG which has not been fully exploited.

References:

Vol.1
### Appendices

**Appendix i: data capture form: corporate governance index (cgi)**

**Name of the company:…………………………………serial no/001/2014**

<table>
<thead>
<tr>
<th>CORPORATE GOVERNANCE INDEX (CGI)</th>
<th>“1” if is yes and “0” if the response is no</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td><strong>Sub Index A: Board Structure and Composition</strong></td>
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<td>1. Board size is between 6-9</td>
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<td>2. Role and functions of board is stated</td>
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<td>3. Chairman and CEO separation</td>
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<td>4. Information about independent directors</td>
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<td>5. Board meeting attendance</td>
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<td>6. Outside directors attendance in meetings</td>
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<td>7. Existence of the position of CFO</td>
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<td>8. Directors representing minority shareholders</td>
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<td>9. Biography of the board members</td>
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<td>10. Changes in the board structure is indicated</td>
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<td><strong>Sub Index B: Ownership and Shareholding</strong></td>
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<td>1. Presence of outside blockholders (more than 10%)</td>
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<td>2. The CEO own shares</td>
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<td>3. Directors ownership (block ownership) other than the CEO and Chairman</td>
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<td>4. Chairman or CEO is block holder (10%)</td>
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<td>5. Concentration of ownership (top five)</td>
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<td>6. Dividend policy</td>
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<td>7. Disclosure of staff benefits other than wages and salaries</td>
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<td>8. Disclosure of company secretary in annual report with description of duties and roles</td>
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<td><strong>Sub Index C: Transparency, Disclosures and Auditing</strong></td>
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<td>1. The company have full disclosure of CG practices</td>
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<td>2. Disclosure of payment to auditors for consulting and other work</td>
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<td>3. Internal audit committee</td>
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<td>4. Board of directors and executive staff members remuneration</td>
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<td>5. Annual report of share ownership</td>
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</tbody>
</table>
6. Employee ownership  
7. Auditor appointment and rotation  
8. Annual reports through internet  
9. Disclosure of other events in the internet  
10. Chairman’s statement

**Sub Index D: Board Remuneration**

1. Remuneration committee  
2. Composition of the remuneration committee  
3. Policy framework for the remunerating committee  
4. Remuneration committee comprises non-executive board members  
5. CEO compensation is disclosed  
6. Compensation in form of stock bonus  
7. Loans or advances to board members not provided  
8. Balance between guaranteed salary and performance element (share option)  
9. Remuneration policy disclosed in annual report  
10. Majority of the remuneration committee members are non-executive

**Sub Index E: Corporate Ethics**

1. Corporate ethics committee in place  
2. Code of ethical conduct  
3. Code of conduct is published  
4. Notice of annual general meeting  
5. Agenda of the annual general meeting  
6. Compliance with CMA guidelines  
7. Environmental and social responsibility  
8. Disclosure of adherence to the company’s code of ethics

Source: Black et al. (2006)